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DAY
ENGINEERING, P.C.
ROCHESTER, NEW YORK

CONSTRUCTION DOCUMENTATION REPORT
INTERIM REMEDIAL MEASURE
STRIPPIT, INC.
AKRON, NEW YORK

Prepared By: Day Engineering, P.C.
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Rochester, New York 14623

Project #: 94-2430R

Date: December, 1994

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1.0 INTRODUCTION

This document presents a summary of the Interim Remedial Measure (IRM) construction performed to close a former disposal area at the Strippit, Inc. facility located at 12975 Clarence Center Road in Akron, New York (see Figure 1, Project Locus). Closure of the disposal area was done in general accordance with the procedures outlined in an October 1993 IRM workplan (Reference 1) prepared by Day Engineering, P.C. (DAY) and approved by the New York State Department of Environmental Conservation (NYSDEC). The IRM was implemented in accordance with the requirements of a NYSDEC "Order on Consent, Index #B9-398-92-03" (Reference 2).

1.1 Background

The approximately 2.3-acre former disposal area is located in the southwest corner of the Strippit, Inc. property (see Figure 2, Site Location Map). Available historic information indicates that this disposal area was used from approximately 1940 to 1975 to dispose of waste materials generated at the Strippit, Inc. facility or its predecessors. In 1979, materials generated during a building expansion (e.g., native soils, building debris, etc.) were placed in the disposal area creating the grades that existed at the time that the IRM was initiated.

Prior to 1956, the Strippit, Inc. facility (including the disposal area) was owned and operated by Buffalo Arms Corporation. Since that date, Strippit, Inc. and its corporate predecessors have owned the site.

A review of historical records and interviews with past and current employees were conducted by Strippit, Inc. to assess the specific types and amounts of materials placed in the disposal area. The results of this evaluation are included in a July 1993 report by DAY (Reference 3). As indicated, it appears that from 1956 to 1975 heat treat sludge was disposed of in the disposal area with volumes equalling three tons/year (12 drums @ 500 pounds/drum), consistent with the manufacturing process in existence at the time. Chemical analysis reports of the sludge samples indicate contents of sodium chloride, barium chloride, potassium nitrate, sodium nitrite, sodium nitrate compounds and metal scale. The sludge was apparently taken to the disposal area and disposed of in an open pit located near the western boundary.

Statements from interviews indicate that during the 1956-1970 time period, paint thinner was poured onto trash for use as a fire starter. The approximate location of this burning was northwest of a former railroad spur within the disposal site. Aerial photographs from the 1960s time period seem to confirm this location. There is no indication that any thinner was ever put into the landfill in drums or poured onto the ground as a means of disposal.

Available information indicates that an estimated 20,000 gallons/year of water-soluble coolants (e.g., Norton 203 grinding soil and trimsoil) were apparently disposed of at the disposal area by discharging to the ground surface near the former railroad spur.

The disposal of cutting oils is somewhat unclear because conflicting information indicates that cutting oils were burned along with trash at the site, while eyewitness interviews indicate that waste oil was taken off site since 1956. It seems most likely that the routine disposal method for cutting oils was removal off site by a used oil hauler. However, some oil-containing filters and other refuse could have been disposed of within the disposal area.

According to a report by Engineering-Science, Inc. (Reference 4), Buffalo Arms Corporation manufactured machine guns for the U.S. government. The disposal area was reportedly used by Buffalo Arms Corporation to discard spent cartridges, scrap lead and steel from manufacturing processes.

To date, various studies have been completed to characterize conditions at and around the former disposal area. These include Phase I and Phase II studies summarized in the March 1991 report by Engineering-Science, Inc. (Reference 4) and supplemental studies by DAY in the July 1993 report (Reference 3). These studies determined that the fill within the disposal area consists of a heterogeneous mixture of clayey silts, sand, gravel, cobbles, isolated pockets of grinding fines, metal pieces, slag, wood debris, brick fragments, concrete fragments, rusted and broken 55-gallon drums and electrical wiring. Underlying the fill material, the native soils consist of lacustrine silts and sands with varying amounts of gravel and clay. The uppermost water bearing zone was encountered at a depth of 50 to 55 feet beneath the fill. Based upon measurements made in monitoring wells sealed within this zone, groundwater flow is from the south to the northwest.

Observations made during the previous studies indicate that the disposal area is generally bound by the asphalt drive and parking lot for the Strippit, Inc. facility to the north, the property line to the east, a former railroad right-of-way to the south and a property line and agricultural lands, owned by others, to the west. With the exception of some fill that appeared to extend approximately 20 feet beyond the western property line, the fill materials appeared to be entirely on property owned by Strippit, Inc.. Based upon the previous studies, it also appears that the fill was placed on the original ground surface without excavating native soils. The resulting fill configuration, prior to IRM closure, was a northerly sloping area having relatively steep slopes along the northern and western sides.

Analytical testing performed during the previous studies measured detectable concentrations of volatile and semi-volatile organic (base/neutrals) compounds and metals in soil and surface water/sediment samples from the site. Several of the metals were measured at elevated concentrations (e.g., aluminum, barium, iron and zinc). Based upon screening with a photoionization detector (PID) during a test pit excavation study by DAY (Reference 3) slightly elevated PID readings were obtained within the native soils in an approximate 50-foot by 50-foot area adjacent to the southern and western property lines. Subsequent analytical testing of a soil sample from this area indicated a tetrachlorethene concentration of 360 parts per billion (ppb). No source of this contamination (e.g., leaking drums) was definitively established.

Groundwater samples were obtained from on-site monitoring wells (GW-1 through GW-5) on two occasions (June 1990 and February 1993). As presented in the previous reports (see Reference 3 and 4), the groundwater does not appear to have been impacted by contaminants within the disposal area. This judgment is based upon the general absence of contaminants identified within the disposal area in downgradient monitoring wells.

An explosive gas survey consisting of eighteen (18) monitoring points around and within the fill was done on August 19, 1993 by DAY. Two of the 18 points exhibited readings of 0.2 and 2.0 percent of the Lower Explosive Limit (LEL). No measurements were obtained at the remaining 16 points. Based on this study, it was determined that decomposition gases were not being generated at the disposal area. As such, the subsequent IRM design did not include a gas collection system.

In conjunction with the explosive gas survey, a reconnaissance was conducted to observe the disposal area for the presence of leachate outbreaks. No such outbreaks were encountered and as such, leachate collection was not included in the subsequent IRM design.

1.2 IRM Design Rationale

In accordance with the NYSDEC "Order of Consent, Index #B9-398-92-03" (Reference 2) and as outlined in the IRM workplan (Reference 1), an IRM was implemented for the disposal area. Essentially, this IRM consisted of the placement of a cap over the disposal area designed to isolate waste materials from infiltrating precipitation. The cap was graded to promote drainage into a surrounding trench which directed surface water away from the disposal area. Generally, the cap design was consistent with the criterial requirements contained in 6NYCRR Part 360-2.15: Landfill Closure and Post-Closure Criteria for Solid Waste Management Facilities" (effective December 31, 1988; revised May 28, 1992).

The design of the cover system for the IRM at the Strippit, Inc. site included the initial preparation of the site. This involved elements such as; clearing and grubbing, and regrading of fill materials to establish suitable grades for drainage and slope stability, and to collect fill materials that were apparently placed on adjacent property to the west. Following site preparation, a cover system that included the following components was installed on the prepared sub-grade.

- Six (6) additional inches of select fill, which according to the requirements of the IRM Workplan (Reference 1), was comprised of a mixture of "clay, silt and sand free form debris, organic and frozen materials, with no material greater than five millimeters (5 mm) in size"
- A high density polyethylene (HDPE) geomembrane with a thickness of 40-mil
- Six (6) additional inches of select fill

- Eighteen (18) inches of barrier protection fill, which according to the requirements of the IRM Workplan (Reference 1), was comprised of "clay loam, sand, gravel and similar material which shall be free from debris, organic and frozen materials, and may contain some stones, pebbles lumps and rock fragments up to seventy-five millimeters (75 mm) in greatest dimension"

- Six (6) inches of topsoil, which according to the requirements of the IRM Workplan (Reference 1), was comprised of material "free from refuse, and any material toxic to plant growth, subsoil, woody vegetation, stumps, roots, brush, stones, clay lumps and similar objects larger than two inches in dimension". Additionally the topsoil's pH was between 5.5 and 7.6 and it had on organic content between 2% and 20%. Following placement of the topsoil it was hydro-seeded with a mixture of fertilizer, mulch, perennial grasses and crown vetch.

The design criteria required that soil materials within the cap system be placed in maximum six (6) inch compacted lifts and that various in-situ and laboratory tests be done on cap materials (soil and geomembrane). The cover system for the disposal area was designed to promote drainage off the completed cap to a perimeter drainage system that transmitted water away from the closed disposal area.

To assure the proper function of the IRM, post-closure monitoring and maintenance is required. A post-closure monitoring and maintenance plan for the site was prepared by DAY and submitted to NYSDEC for review and comment (Reference 5). Generally, this includes the collection and analysis of groundwater samples from existing monitoring wells (GW-1 through GW-5) on a regular basis and the monitoring of the cap's integrity. In the event this monitoring determines a problem, subsequent maintenance/remediation will be required to correct the identified problem.

1.3 IRM Construction Organization

Strippit, Inc. retained Day Engineering, P.C. (DAY) Rochester, New York to design the IRM closure and oversee its construction. Strippit, Inc. retained Haseley Trucking, Co., Inc. (Haseley), Niagara Falls, New York as the general contractor for the project. Ancillary services were provided by Malcolm Pirnie, Inc., Buffalo, New York (soils and geomembrane testing); SJB Services, Inc., Buffalo, New York (in-place density and soils testing); Environmental Security Services, Inc., Wexford, Pennsylvania (geomembrane installation and testing); Wolf's Nursery, Lockport, New York (hydro-seeding); Field Service, Inc., West Seneca, New York (gas well retrofitting); and Matthew F. Wilson, North Tonawanda, New York (surveying).

1.4 IRM Construction Submittals

Prior to and during the implementation of IRM construction various submittals were required. The documents which were submitted under separate cover include:

- a construction health and safety plan and community or monitoring plan (Reference 6);
- a construction quality control/quality assurance (QA/QC) plan (Reference 7); and
- a post-closure monitoring and maintenance plan (Reference 5).

2.0 IRM CONSTRUCTION PROCESS

IRM construction was performed in accordance to the plans and specifications included in the IRM workplan (Reference 1) as modified by the QA/QC plan (Reference 6) and various field decisions (as documented in correspondence included in Appendix A and construction meeting minutes, Appendix B). An overview of the construction process is discussed in this section.

2.1 Site Preparation

This work included mobilization of manpower and equipment to the site beginning on July 11, 1994 and the completion of the following tasks.

- Clearing and grubbing: This work performed between July 13 and 16, 1994 included the removal of brush and smaller trees (maximum trunk diameter less than 12 inches) that covered approximately 1.5 acres of the disposal area prior to IRM construction. The cleared and grubbed material that could not be chipped was subsequently disposed off-site at a construction and demolition debris landfill by Haseley.

- Erosion Control, Cleaning of Existing Drainage Trench, Fence Removal and Miscellaneous Site Preparation: These activities were performed between July 14 and July 22, 1994.

  The work included such items as the excavation of temporary drainage ditches around the periphery of the site and a siltation basin located northwest of the site. Haybales, temporary berms and silt fences were also installed at this time. The existing drainage trench along the western edge of the Strippit, Inc. parking lot was cleared of vegetation and accumulated sediments. These materials were placed on top of the disposal area and they were ultimately disposed beneath the completed cap. The chain-link fences along the northern edge and within the disposal area (including a fence around the existing gas well in the center of the disposal area) were removed. The fence and concrete anchors were ultimately disposed off-site.

- Existing Gas Well: In conjunction with other site preparation activities, Field Services, Inc. extended the existing gas well (see Figure 2) casing and temporarily capped the well. [Note: Subsequent to the placement of the bottom twelve (12) inches of barrier protection material, Field Services, Inc. reconnected the well, via a plastic pipe, to the Strippit, Inc. plant. Barrier protection material and topsoil was placed above the plastic pipe.]

2.2 Subgrade Preparation

This work commenced on July 25, 1994, following NYSDEC's approval of the site specific health and safety plan (Reference 6), and it was completed on August 14, 1994. Generally, this work included the regrading of the former disposal area to; 1) return waste materials encroaching on property to the west and (2) establish a minimum slope of about 4 percent and

maximum side slope grades of about 25 percent. During this work, construction operations were performed by individuals trained in OSHA regulations relating to work on an inactive hazardous waste site and specific provisions of the health and safety plan were followed. This included the use of personnel protective equipment and the implementation of a community air monitoring program to measure organic vapors and fugitive dust concentrations.

During subgrade preparation five (5) buried drums of various solid material were encountered. The approximate location of these drums is depicted on Figure 3 (Buried Drum Location Sketch). A general description of the material within these drums is presented below:

D-1 Green granular material suspected to be a grinding sludge
D-2 Green granular material suspected to be a grinding sludge
D-3 White/tan material suspected to be a heat treating salt
D-4 Petroleum-contaminated soil
D-5 Petroleum-contaminated soil

Following discovery of the drums, the drum and adjacent spilled material were collected and placed in overpack drums. The suspected grinding sludge from D-1 and D-2 was placed in overpack drums designated OP#1 through OP#3. The suspected heat treating salt from D-3 was placed in OP#4 and the petroleum-contaminated soils in D-4 and D-5 was placed in an overpack drum designated OP#5. These overpack drums were then taken to a temporary staging area (i.e., a bermed area lined and covered with plastic sheeting) located northwest of the former disposal area. Waste Technology Services (WTS), Niagara Falls, New York was retained to characterized the contents of the drums and coordinate their disposal. The drums were removed from the Site on October 20, 1994 for disposal at Wayne Disposal, Belleville, Michigan. Copies of the generator waste characterization report for these materials are included in Appendix C.

Following preparation, the subgrade was proof-rolled by making several passes with a Bomag Model BW-213 D-2 smooth drum vibratory roller. A DAY representative monitored the proof-rolling and a soft/wet area was observed near the top of slope on the west side of the disposal area. Subsequently, a dozer was used to scarify this area and it was allowed to dry. Following drying, it was recompacted and proof-rolled. Observation of the subsequent proof-rolling indicated the area was sufficiently compacted. Observations made by DAY during the proof-rolling did not reveal other soft/wet areas requiring re-working. DAY also visually observed the surface of the subgrade to assure that it was generally smooth and uniform and that it did not contain sharp changes in elevation. Additionally, obstructions which could prove to be detrimental to the geomembrane (e.g., pieces of wood, tree roots, scrap metal, etc.) were removed from the subgrade surface for off-site disposal.

The elevation of the prepared subgrade was measured by a surveyor retained by Haseley (i.e., Matthew F. Wilson) at various locations throughout the subgrade. Copies of the surveyor's as-built drawings, showing the measured subgrade elevations, have been submitted under separate cover.

2.3 Select Fill Placement

Following subgrade preparation and proof-rolling, the bottom six (6) inches of the select fill was placed between, August 15 and August 25, 1995. [Note: The upper six (6) inches of select fill was placed after the geomembrane was installed (i.e., between September 1 and September 7, 1994.] A total of an estimated 1300 cubic yards (yd^3) of select fill was placed within the cover system. A gradation curve for the material used as select fill is included in Appendix D.

The select fill was placed in approximate eight (8) inch loose lifts and graded/compacted to a thickness of six (6) inches. To achieve the required thickness, grade markers, set by the surveyor, were placed throughout the disposal area. A DAY representative was on-site throughout the select fill placement to observe the material as it was brought to the site for consistency with the specifications and to monitor the compaction process. On occasion, larger pieces of material and/or organic debris (e.g., roots) were observed. These materials were removed by hand as necessary as the select fill was graded. Also, on occasion the select fill was determined to be dry (i.e., either through elevated dust measurements or observation of the relative degree of compaction obtained). On those occasions, water was added to assist in the compaction process.

Following compaction, DAY observed proof-rolling of the select fill layers. Proof-rolling consisted of a minimum of three (3) passes with a BOMAG Model BW-213 D-2 smooth drum vibratory roller. Additionally, the select fill layer was observed as loaded dump trucks brought additional fill onto the cap. Isolated areas were identified as insufficiently compacted (i.e., typically along the northern slope and an area in the west central portion of the site). Generally these areas were soft due to rains that occurred during placement. These areas were scarified and allowed to dry. Thereafter they were re-compacted until proof-rolling indicated sufficient compaction.

In addition to the proof-rolling, a DAY representative observed the select fill for evidence of materials which could potentially damage the geomembrane (e.g., larger pieces of stone). If encountered such pieces were removed by hand. The grade of the select fill beneath the geomembrane was also observed and surveyed to assure that it did not contain abrupt changes in elevation which could be detrimental to the integrity of the geomembrane. Furthermore, the select fill was observed/surveyed to assure it was graded in accordance to design specifications to promote drainage. As-built survey maps of the select fill layers have been submitted under separate cover.

It is noted that the original plans included the field density testing of the select fill. However, it was mutually decided by DAY and NYSDEC that such testing was unnecessary since the intent of the select fill was primarily to protect the geomembrane from puncture and not to reduce infiltration or to support the cap. Therefore, this testing was deferred to the barrier protection layer (see Section 2.5).

2.4 Geomembrane Placement

A 40-mil thick geomembrane manufactured by National Seal Company was installed by Environmental Security Services, Inc. between August 25, 1994 and September 1, 1994. Specifications/certification documents for the geomembrane and applicable in-situ and laboratory test results for the seams are included in Appendix E. Additional discussion regarding the geomembrane and its placement/testing is included in Section 3.4.

During installation of the anchor trench along the western side of the site on August 29, 1994, petroleum-contaminated soil was encountered between an approximate depth of 2.5 and 5± feet below the ground surface. The approximate location of this material is depicted on Figure 4 (Petroleum-Contaminated Soil Location). To allow construction of the anchor trench in this area, petroleum-contaminated soil from within the trench was excavated until "clean" soil (i.e., based upon visual observation and measurement with a HNU Model 101 Photoionization Detector and a Century Systems Model 128 organic vapor analyzer Flame Ionization Detector) was encountered. The petroleum-contaminated soil was placed on plastic sheeting within a bermed temporary containment area. Additionally, samples of the petroleum-contaminated soil and a confirmatory sample from the invert (i.e., a "clean" sample) of the anchor trench were tested by ACTS Testing Laboratories, Inc., Buffalo, New York (ACTS). A discussion of the in-situ evaluation of the petroleum-contaminated soil and a copy analytical test reports, prepared by ACTS, are included in Appendix F.

Upon receipt of the analytical test results petroleum-contaminated soil west of the anchor trench was excavated and placed within the stockpile area. The resulting excavation was backfilled with the same material used for the barrier protection layer. An estimated 120 cubic yards of petroleum-contaminated material was stockpiled at the site. WTS was retained by Strippit, Inc. to dispose of this material at Modern Disposal, Inc. Lewiston, New York. This soil was removed from the site on October 19, 1994 (see documentation in Appendix F).

2.5 Barrier Protection Layer

An eighteen (18) inch thick layer of barrier protection material, consisting of about 5,900 yd^3, was placed above the uppermost layer of select fill between September 3 and September 15, 1994. Two (2) gradation curves (i.e, one completed by Malcom Pirnie, Inc. at the start of the job and a second by SJB Services, Inc. collected at the approximate mid-point of barrier protection placement) and a moisture density curve for the barrier protection material are included in Appendix D. This material was placed and compacted to six (6) inch lifts. The in-place density of the compacted bottom six (6) inch lift of barrier protection material was tested using a nuclear density gage and these test results are included in Appendix H and discussed further in Section 3.5.

The uppermost twelve (12) inches of the barrier protection layer was compacted and proof-rolled via a BOMAG Model 213 D-2 smooth drum vibratory roller and loaded dump trucks. DAY observed this work and any areas deemed too wet and/or soft were reworked or replaced until the compaction effort was determined to be satisfactory. As discussed in the daily field

reports (Appendix G) the proof-rolling did not indicate areas requiring reworking. However, heavy rains on September 13 and 14, 1994 (i.e., during placement of the final lift of barrier protection material) caused some erosion and created wet areas within portions of the barrier protection material as it was placed. Therefore, some re-working to expedite drying (e.g., cutting open areas of the barrier protection to facilitate drying) and repair of the erosion areas was done. Following this work and recompaction of the soil, proof-rolling indicated satisfactory compactive effort.

2.6 Topsoil

A six (6) inch thick topsoil layer was placed above the barrier protection soil between September 15 and 21, 1994. Applicable test results for this topsoil are included in Appendices D and I. Hydroseeding of the site was performed on September 22, 1994 by representatives of Wolf's Nursery. Information regarding the seed mixture is included in Appendix I.

2.7 Runoff Controls/Drainage

In conjunction with the topsoil placement, a drainage trench was constructed around the periphery of the closed site. Essentially, this drainage trench was constructed in accordance with the requirements of the IRM Workplan by excavating soil to an approximate depth of one (1) foot and creating a bermed area on the outside of the trench. The periphery drainage trench was graded such that surface water flowed into an existing drainage trench along the western edge of the Strippit, Inc. parking lot. Ultimately, water within this trench discharges under Clarence Center Road and to Murder Creek which is about 0.75 miles away from the Strippit, Inc. facility.

The NYSDEC collected sediment samples from drainage trenches north of the disposal area. As shown on the sample location map included in Appendix J, two (2) samples were collected from the trench west of the Strippit, Inc. parking area (i.e., SED #1 and SED #2) and one (1) sample was collected from the apparent discharge location of this trench on the north side of Clarence Center Road (SED #3). These samples were analyzed by the NYSDEC for the metals barium, cadmium and lead via USEPA Method 3051 Microwave Digestions and Method 6010 - Inductivity Coupled Plasma Atomic Emission. A copy of the NYSDEC test results is included in Appendix J.

2.8 Site Clean-Up/Demobilization

Following removal of the petroleum-contaminated soil and the overpack drums, IRM construction activity was completed on November 8, 1994. Prior to this work, DAY representatives visited the site to observe conditions and to establish a "punch list" of items that Haseley had to correct/resolve. Items identified and completed during the November 8, 1994 work included:

- grading, topsoil placement and seeding in the area of the former petroleum-contaminated soil stockpiles;

- cleaning of drainage control structures;
- repairing/re-seeding of erosion areas noted within the IRM Cap;
- removal of debris and general site clean-up;
- placement of siltation fences and erosion control structures; and
- completion of associated demobilization activities.

A copy of a field report describing the specific work completed is included in Appendix G.

2.9 Construction Modifications

Several modifications from the specifications presented in the IRM Workplan (Reference 1) were required to effectively implement the IRM. Some of these modifications were summarized in the August 2, 1994 letter to the NYSDEC (see Appendix A). Modifications not discussed in this letter were discussed in the weekly construction meeting minutes (Appendix B). Major modifications to the IRM Workplan are summarized in this section.

- Anchor Trench

  The original design required an anchor trench around the entire perimeter of the disposal area. However, along the southern side of the former disposal area (i.e., near the railroad right-of-way) access restrictions prevented installation of the anchor trench as depicted on the construction plans. Specifically construction of the anchor trench as depicted on the plans would have required the placement of soil beneath overhead Niagara Mohawk power lines to create the outside berm for the drainage trench. Since the clearance beneath the lines is currently at Niagara Mohawk's allowable limit, additional soil placement was not possible. Therefore, DAY developed three (3) alternative schemes for geomembrane construction in this area. NYSDEC reviewed these schemes and selected the alternative depicted on Figure 5, Geomembrane Configuration along Railroad Right-of-Way. This scheme required the geomembrane to be extended throughout the drainage trench without an anchor trench.

- Seed Mixture

  Due primarily to the time of year, the seed schedule shown in the project specifications was modified to essentially eliminate annual grasses and to replace them with perennial grasses. The rationale for this change being that annual grasses would die out during initial frosts and their placement would not provide a long-term benefit. The seeding schedule used for this site included:

- 50 pounds of Crown vetch per acre; and
- 200 pounds per acre of:
  creeping red fescue 50%
  perennial rye grass 45%
  white clover 5%

The amounts of water, mulch and fertilizer used were comparable to the requirements in the IRM Workplan. It is expected that the seed mixture used will result in an 8 to 10 inch high growth of perennial grasses during the 1995 growing season. Beginning in late 1995 and ultimately by the 1996 growing season the crown vetch should predominate.

- Compaction Testing

  As discussed previously, the in-place density testing was performed on the bottom six (6) inch layer of the barrier protection layer rather then the bottom six (6) inch layer of the select fill, as outlined in the August 2, 1994 letter. The rationale for this change was discussed previously.

  Based upon the use of a "finer" barrier protection material than that specified in the IRM Workplan the compaction testing method was altered. Specifically AASHTO T-99-90 Method B rather than Method C was used. While each method uses a similar compactive effort, the size of the mold and the blows per layer are modified to account for larger size particles in Method C.

Other variations or modifications which may have occurred are summarized in the weekly construction meeting minutes (Appendix B) and/or the daily field reports (Appendix G).

3.0 CONSTRUCTION DOCUMENTATION

This section presents documentation obtained during the construction process to indicate that the IRM was constructed as designed except as modified with concurrence with the NYSDEC; see Section 2.8.

3.1 Construction Meetings

A pre-construction meeting was held on June 17, 1994 to discuss the IRM construction process and schedule. This meeting was attended by representatives of Strippit, Inc., NYSDEC, DAY and Haseley. A copy of the minutes for this meeting is included in Appendix B. Following initial site preparation activities, a construction progress meeting was held on the Monday of each week. This meeting was typically attended by representatives of NYSDEC, DAY and Haseley. Copies of these meeting minutes are included in Appendix B.

3.2 Construction Progress Reports

Daily field summary reports prepared by DAY's site representative are included in Appendix G. These reports are brief summaries of the equipment and manpower on-site as well as an overview of the work completed each day. Additionally, a photographic record and a detailed account of field activities were maintained. This information has been retained in DAY's job files for this project.

3.3 Air Monitoring

As required by the health and safety plan, monitoring of the air quality was required throughout the subgrade preparation and placement of the bottom six (6) inch layer of select fill (i.e., until the entire site was covered with "clean" fill). This monitoring included regular monitoring with a PID (HNU Model PID 101) and a "real time" particulate dust meter (PPM, Inc. Model 1005 HAM). The results of this monitoring are summarized on site maps, depicting monitoring locations and test results. These maps are included with the appropriate daily field reports (Appendix G). As indicated, PID measurements above background levels were not measured. In the event of the elevated instantaneous dust measurements, Haseley was instructed to stop work in the area and wet down the area prior to commencing. This resulted in all the average dust levels being less than the allowable limit (i.e., 150 $\mu g/m^3$ averaged over a 15 minute period).

3.4 Geomembrane Placement and Testing

The material specifications for the 40-mil HPDE geomembrane installed are included in Appendix E. A diagram showing the layout and designation of individual panels is included as Figure 6, Geomembrane Panel Layout and Destructive Seam Test Locations.

During geomembrane installation field seams were cleaned and free of moisture, dust, dirt, debris and foreign material prior to sealing. As shown on Figure 6, the seams were oriented

parallel to the line of maximum slope. Field seaming was not performed above 110°F, during precipitation, or when winds were in excess of 20 miles per hour. The geomembrane liner was continuously inspected for uniformity, damage and imperfections (e.g., tears, punctures and blisters). As documented in Appendix E and the daily field reports in Appendix G, imperfections and damaged areas were repaired and reinspected.

Tests performed on the seams during the installation of the geomembrane included a non-destructive air test (see test procedures included in Appendix E) and in-situ destructive tests. These test results, completed by Environmental Security Services, Inc. and summarized in Appendix E, indicate the seams were constructed within allowable tolerances. In addition to these tests, an 18 inch wide by 2 foot long sample was collected at minimum of every 500 lineal feet of seam length and tested by Malcolm Pirnie, Inc. Sample locations are depicted on Figure 6. This destructive testing was done via ASTM Method D413 (peel testing) and ASTM Method D3083 (shear testing). A copy of Malcolm Pirnie's report is included in Appendix E. As indicated, all destructive tests passed (i.e., failure was within the required tolerances).

A copy of a report prepared by Environmental Security Services, Inc., summarizing the geomembrane placement and test results is included in Appendix E.

3.5 Compaction and In-Place Density Testing

Malcom Pirnie, Inc and SJB Services, Inc. tested the barrier protection material to determine its grain size via ASTM Method C-136: Sieve Analysis of Fine and Coarse Aggregates. Upon determination that this material was suitable for use as a barrier protection material, SJB Services, Inc. tested it via AASHTO T-99-90 Method B: Moisture-Density Relations of Soils using a 5.5 lb. Rammer and a 12" Drop. Copies of these test results are included in Appendix D.

Following the determination of the maximum dry density and optimum moisture content, SJB Services, Inc. completed in-situ field density tests in accordance with AASHTO Standard T191. This testing was done with a Troxler nuclear moisture density gage in accordance to ASTM D2922-01. As required by the specifications, these tests were made at a frequency of nine (9) per acre throughout the compacted bottom six (6) inches of the barrier protection layer. The location of these tests and their designation are depicted on Figure 7, In-Place Soil Density Test Locations.

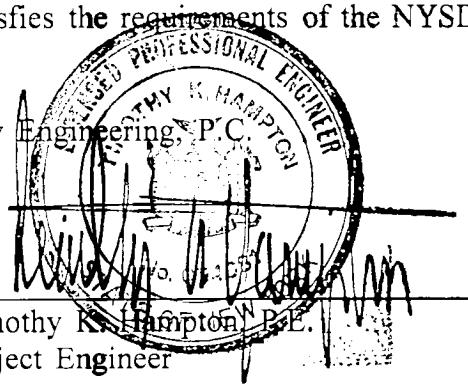
The results of the field density testing are included in Appendix H. As shown, this testing indicates that the barrier protection material was compacted to 95 percent or more of its maximum dry density as determined by the AASHTO T-99-90 Method B testing.

3.6 As-Built Conditions

Survey measurements were completed at various stages of the IRM construction process. These include prior to and following subgrade preparation, following placement of the bottom six (6) layer of select fill, at interim points during the placement of barrier protection soils and upon obtaining the final grades (including the surrounding drainage trench). This survey was completed by Matthew E. Wilson and copies of his drawings have been submitted under separate cover. As indicated by these drawings, fill thicknesses and configurations required by the IRM Workplan were achieved.

4.0 STATEMENT OF COMPLIANCE

Based upon the field observations and in-situ testing discussed herein, and to the best of our knowledge, the IRM construction at the Strippit, Inc. site was performed in accordance to the requirements of specifications presented in the IRM workplan as subsequently modified by discussions with the NYSDEC. As such, it is DAY's opinion that the IRM Construction satisfies the requirements of the NYSDEC "Order on Consent, Index #B9-398-92-03".



Day Engineering, P.C.

Timothy K. Hampton, P.E.
Project Engineer

12/29/94
Date

Raymond L. Kampff
Project Manager

Date

LIST OF REFERENCES

Reference 1: "Interim Remedial Measure Workplan; Strippit, Inc.; Akron, New York; DEC Site No. 915053" October 1993, prepared by Day Engineering, P.C.

Reference 2: State of New York: Department of Environmental Conservation "Order to Consent; Site #915053, Index #B9-398-92-03; Strippit, Inc.; Respondent" dated December 3, 1992.

Reference 3: "Field Investigation Report; Strippit, Inc.; Akron, New York; DEC Site No. 915053" July 1993, prepared by Day Engineering, P.C.

Reference 4: "Engineering Investigations at Inactive Hazardous Waste Sites; Phase II Investigations; Houdaille-Industries-Strippit Division; Village of Akron; Site No. 915053; Erie County" March 1991, prepared by Engineering-Science.

Reference 5: "Post-Closure Monitoring and Maintenance Plan; Interim Remedial Measure; Strippit, Inc.; Akron, New York" Draft October 1994; prepared by Day Engineering, P.C.

Reference 6: "Site Specific Health & Safety Plan; Strippit, Inc.; Akron, New York; DEC Site No. 91503" July 1994; prepared by Haseley Trucking Co., Inc.

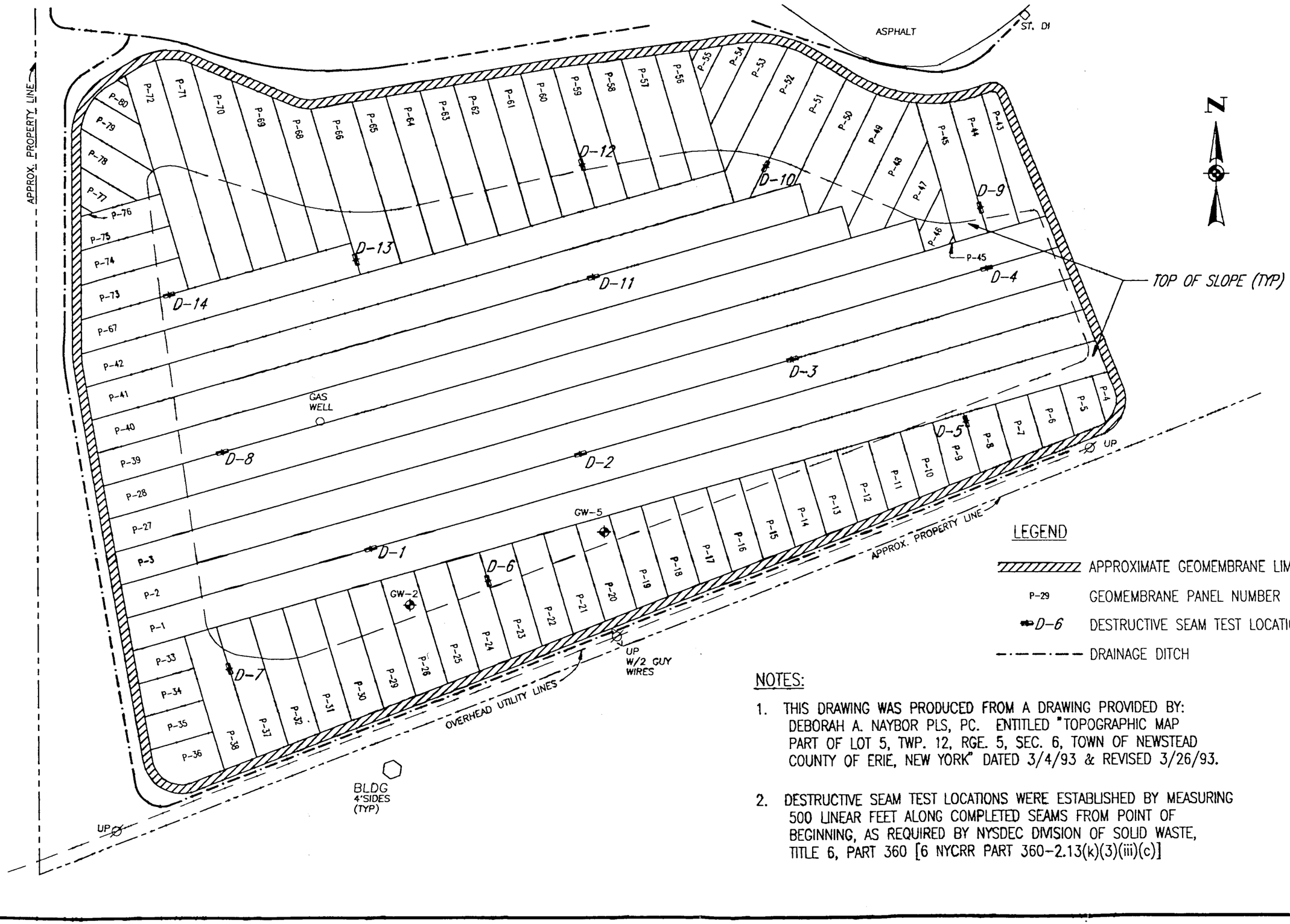
Reference 7: "Quality Assurance/Quality Control; Interim Remedial Measure; Strippit, Inc.; Akron, New York" August 1994; prepared by Day Engineering, P.C.

ENVIRONMENTAL SECURITY SERVICES, INC.

GEOMEMBRANE INSTALLATION
SUMMARY REPORT

FIGURES

REF1: BORDER5
REF2: STRIP100
REF3: REF3



LEGEND

- APPROXIMATE GEOMEMBRANE LIMITS
- P-29 GEOMEMBRANE PANEL NUMBER
- D-6 DESTRUCTIVE SEAM TEST LOCATION
- DRAINAGE DITCH

NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE. 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/26/93.

2. DESTRUCTIVE SEAM TEST LOCATIONS WERE ESTABLISHED BY MEASURING 500 LINEAR FEET ALONG COMPLETED SEAMS FROM POINT OF BEGINNING, AS REQUIRED BY NYSDEC DIVISION OF SOLID WASTE, TITLE 6, PART 360 [6 NYCRR PART 360-2.13(k)(3)(iii)(c)]

DESIGNED BY	DATE
LRF	8/25/93
DRAWN BY	DATE DRAWN
JJD	9/23/94
SCALE	DATE ISSUED
1" = 40'	11/21/94

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

PROJECT TITLE
STRIPPIT, INC.
12975 CLARENCE CENTER ROAD
AKRON, N.Y.

DRAWING TITLE
GEOMEMBRANE PANEL LAYOUT WITH DESTRUCTIVE SEAM TEST LOCATIONS

PROJECT NO.
94-2430R

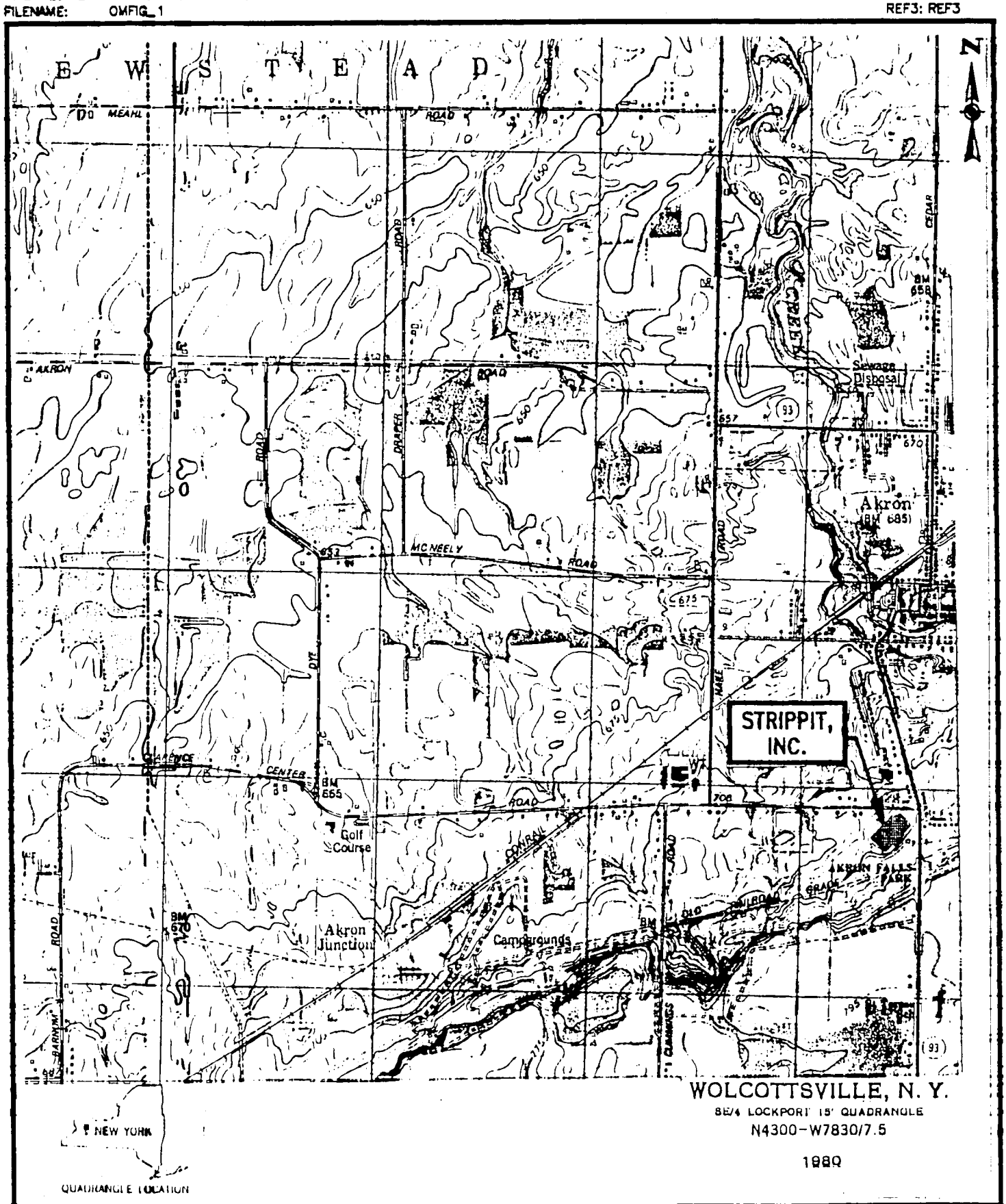
FIGURE
6

SHEET 1 OF 1

TIME PLOTTED: MON NOV 21, 10:30:00 1994
FILENAME: STRIP101

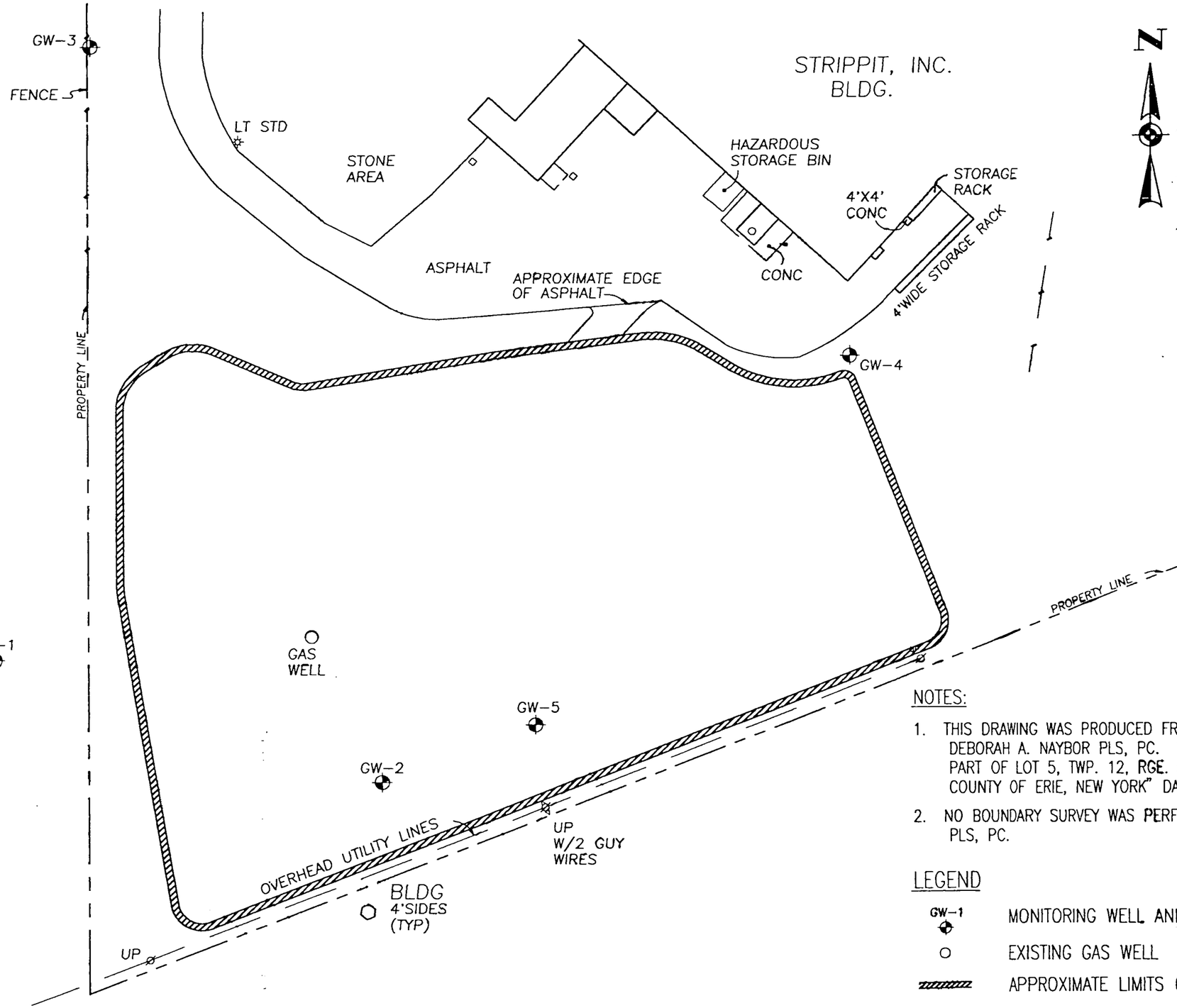
TIME PLOTTED: MON OCT 3 14:00:00 1994
FILENAME: OMFIG_1

REF1: REF1
REF2: REF2
REF3: REF3



PROJECT NO. 94-2430R FIGURE 1	PROJECT TITLE STRIPPIT, INC. 12975 CLARENCE CENTER ROAD AKRON, NEW YORK DRAWING TITLE LOCUS PLAN	**DAY ENGINEERING, P.C.** *ENVIRONMENTAL ENGINEERING CONSULTANTS* *ROCHESTER, NEW YORK*	DATE 10/3/94 DRAWN BY JJD SCALE 1" = 2000'

REF1: BORDER5
REF2: STRIP208
REF3: REF3



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE. 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/26/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

GW-1	MONITORING WELL AND DESIGNATION
○	EXISTING GAS WELL
▨	APPROXIMATE LIMITS OF FORMER DISPOSAL AREA

DESIGNED BY RLK	DATE 10/3/94	
DRAWN BY JJD	DATE DRAWN 10/3/94	
SCALE 1"=60'	DATE ISSUED 12/1/94	

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

PROJECT TITLE
STRIPPIT, INC.
12975 CLARENCE CENTER ROAD
AKRON, N.Y.

DRAWING TITLE SITE LOCATION MAP

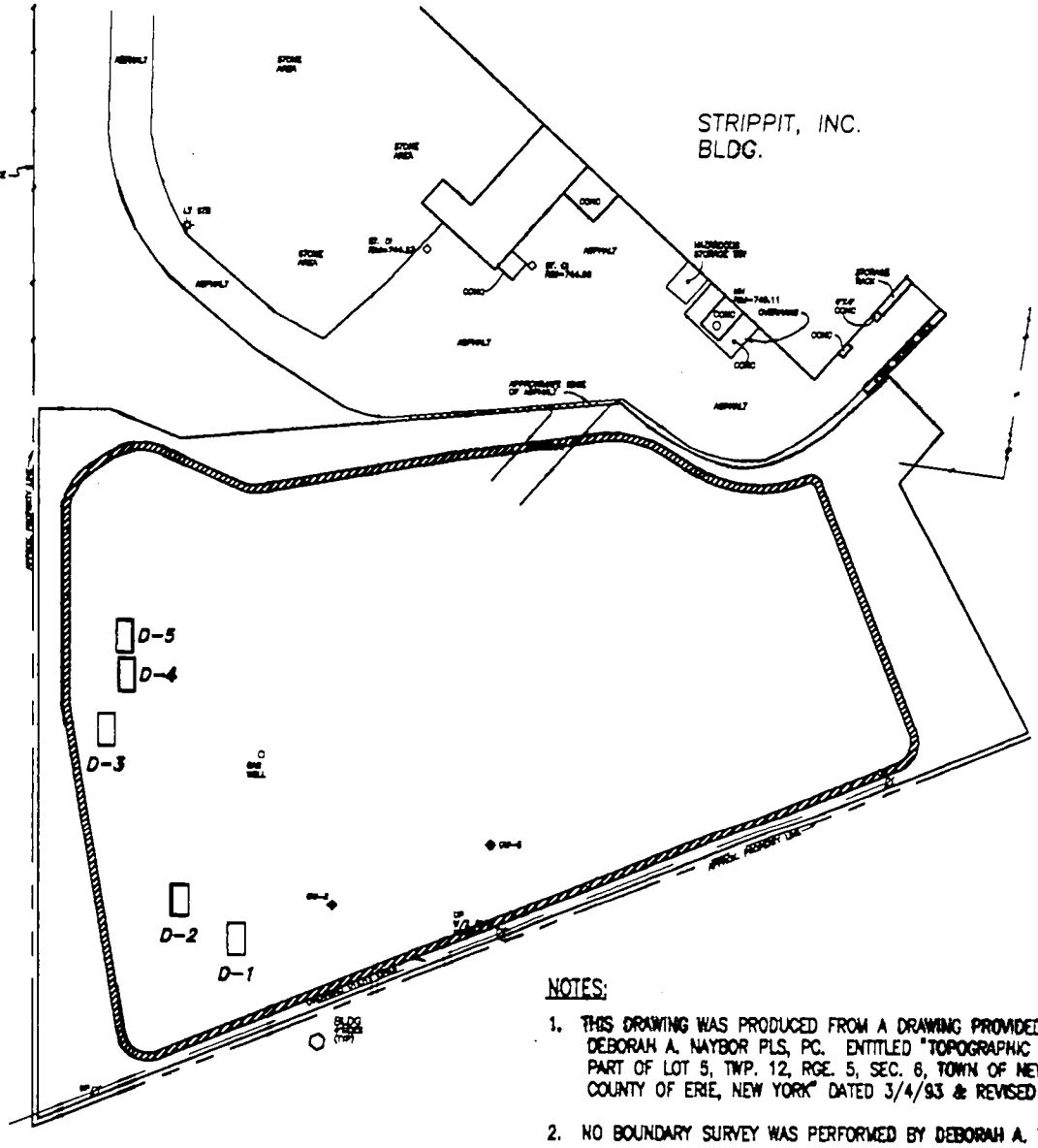
PROJECT NO.
94-2430R

FIGURE
2

TIME PLOTTED: THUR DEC 1, 11:30:00 1994
FILENAME: STRIP207

TIME PLOTTED: Wed Nov 31 00:00:00 1994
FILENAME: STRIP201

REF1: BORDER7
REF2: STRIP200
REF3: REF3



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE. 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/26/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.
3. DRUM LOCATIONS WERE ESTIMATED BY REFERRING TO EXISTING SITE FEATURES. LOCATIONS SHOWN SHOWN SHOULD BE CONSIDERED ACCURATE IMPLIED BY THE METHOD USED TO DETERMINE LOCATIONS.

BURIED DRUM CONTENTS

D-1 GREEN GRANULAR MATERIAL (SUSPECTED GRINDING SLUDGE)

D-2 GREEN GRANULAR MATERIAL (SUSPECTED GRINDING SLUDGE)

D-3 WHITE/TAN GRANULAR MATERIAL (SUSPECTED HEAT TREATING SALT)

D-4 PETROLEUM CONTAMINATED SOIL

D-5 PETROLEUM CONTAMINATED SOIL

LEGEND

—— EXISTING FENCE LOCATION

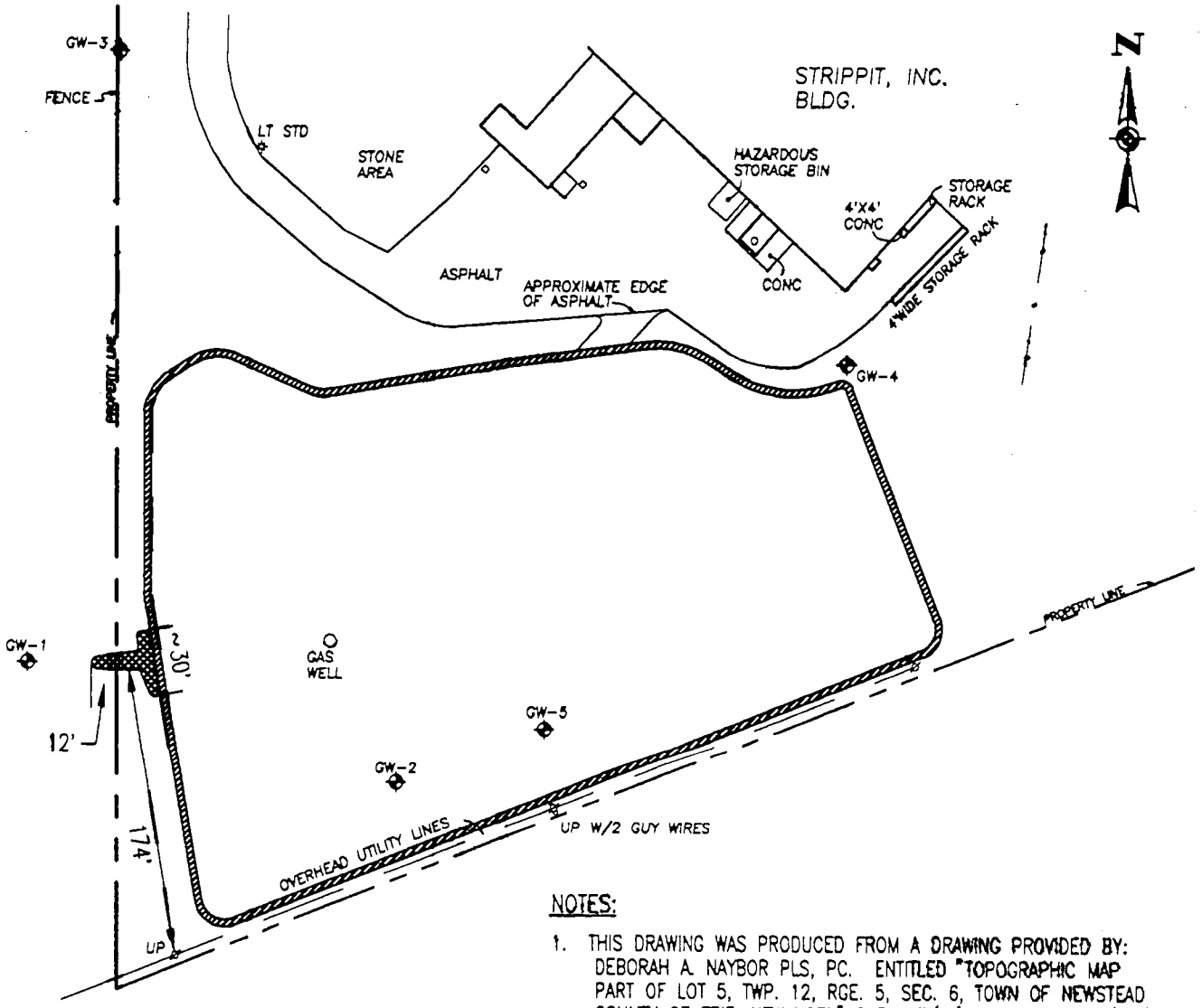
APPROXIMATE LIMITS OF FORMER DISPOSAL AREA

D-1 APPROXIMATE LOCATION OF BURIED DRUM AND DESIGNATION

PROJECT NO. 94-2430R FIGURE 3	PROJECT TITLE STRIPPIT, INC. 12975 CLARENCE CENTER ROAD AKRON, NEW YORK DRAWING TITLE BURIED DRUM LOCATION	DAY ENGINEERING, P.C. ENVIRONMENTAL ENGINEERING CONSULTANTS ROCHESTER, NEW YORK	DATE 11/01/94 DRAWN BY JJD SCALE NONE

TIME PLOTTED: Wed Nov 2 00:00:00 1994
FILENAME: STRIP205

REF1: BORDER7
REF2: STRIP204
REF3: REF3



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE. 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/26/93.

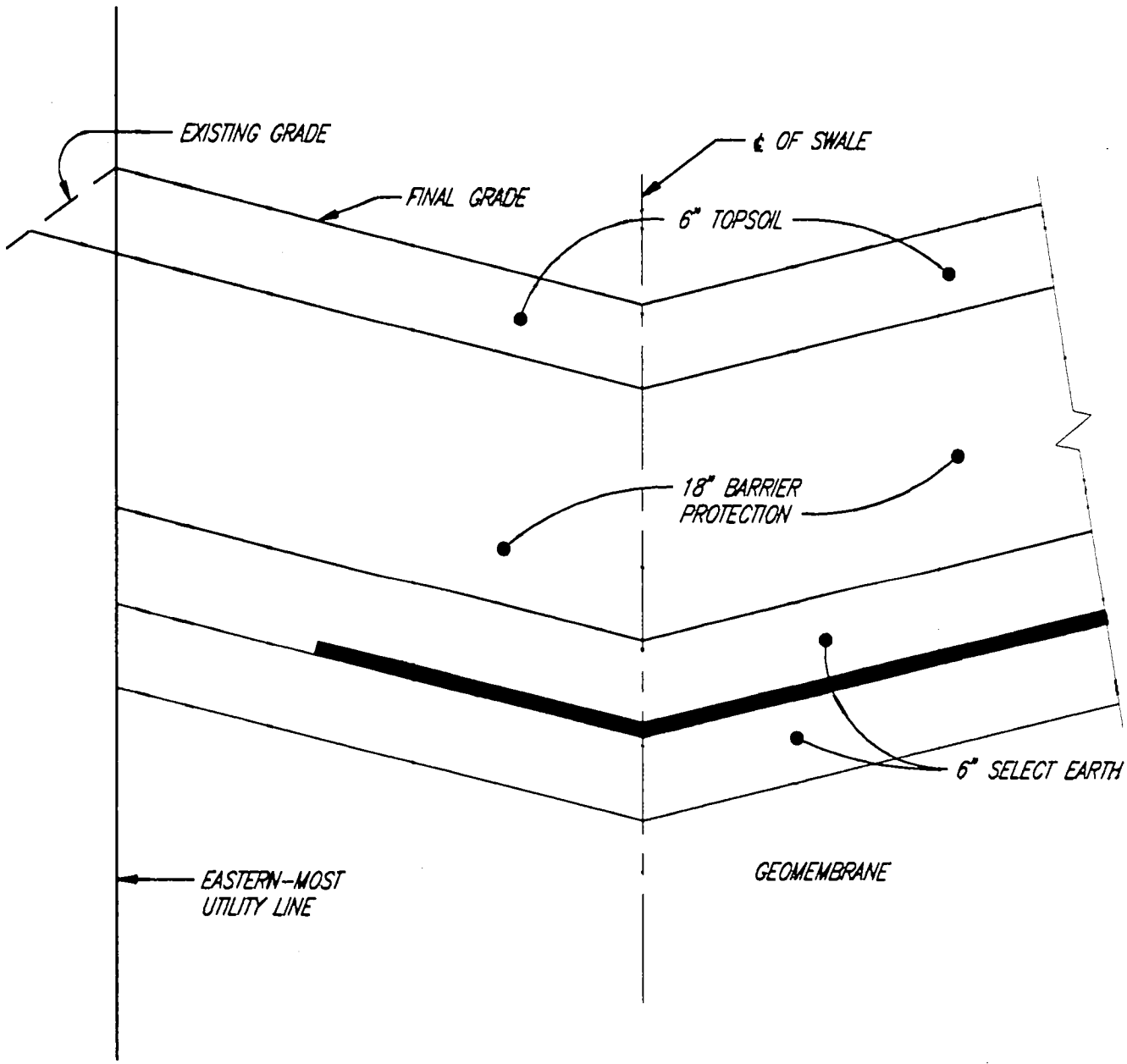
2. LOCATION OF THE EXTENT OF PETROLEUM-CONTAMINATED SOIL WAS DETERMINED BY TAPE MEASUREMENTS FROM EXISTING SITE FEATURES. LOCATION SHOWN SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

LEGEND

- GW-1 — MONITORING WELL AND DESIGNATION
- ○ — EXISTING GAS WELL
- APPROXIMATE LIMITS OF FORMER DISPOSAL AREA
- APPROXIMATE LIMITS OF PETROLEUM-CONTAMINATED SOIL

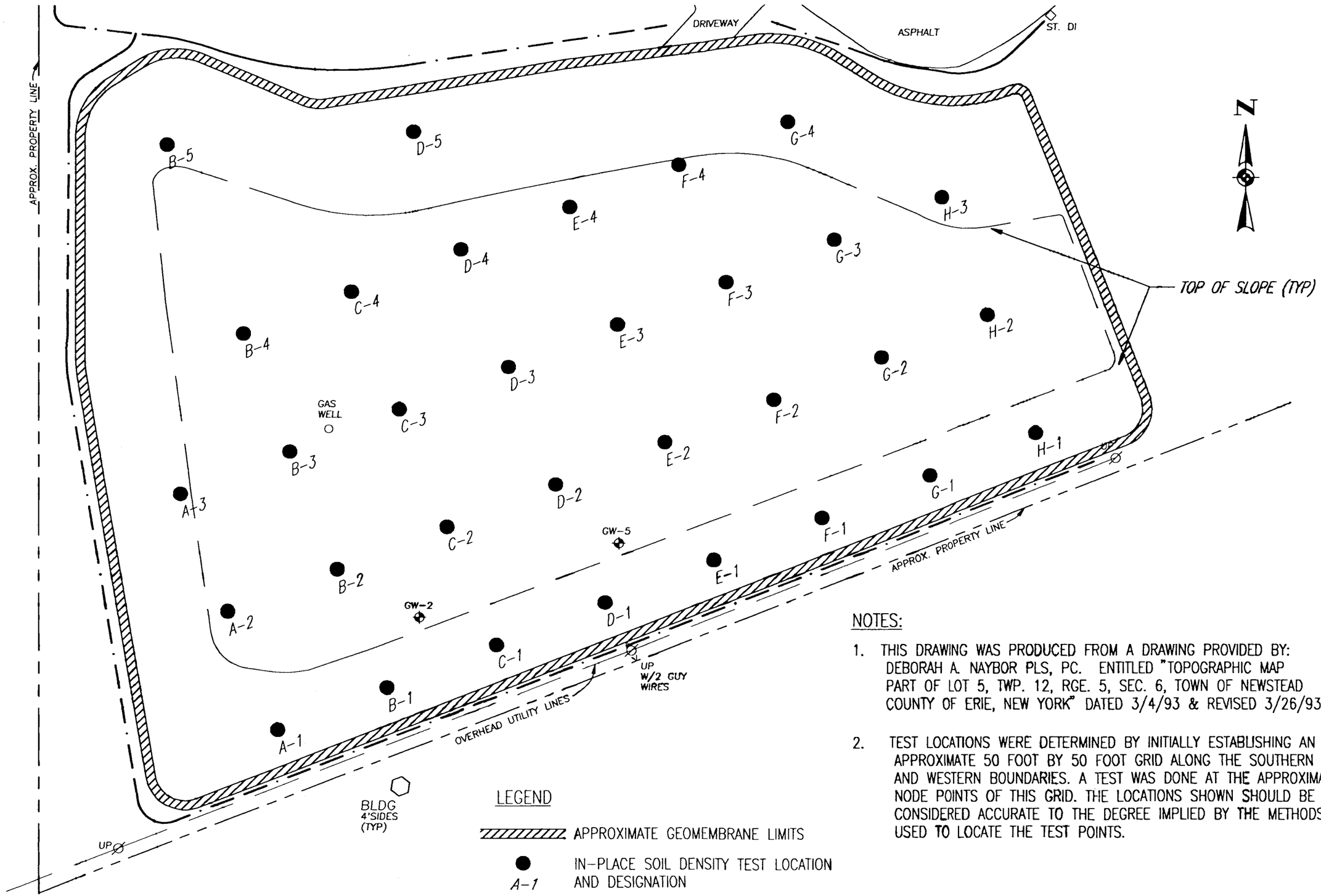
PROJECT NO. 94-2430R FIGURE 4	PROJECT TITLE STRIPPIT, INC. 12975 CLARENCE CENTER ROAD AKRON, NEW YORK DRAWING TITLE PETROLEUM-CONTAMINATED SOIL LOCATION	DAY ENGINEERING, P.C. ENVIRONMENTAL ENGINEERING CONSULTANTS ROCHESTER, NEW YORK	DATE 11/02/94 DRAWN BY JJD SCALE 1"=100'

TIME PLOTTED: Wed Nov 2 00:00:00 1994
FILENAME: STRIP203
REF1: BORDER7
REF2: STRIP202
REF3: REF3



PROJECT NO. 94-2430R FIGURE 5	PROJECT TITLE STRIPPIT, INC. 12975 CLARENCE CENTER ROAD AKRON, NEW YORK DRAWING TITLE GEOMEMBRANE CONFIGURATION ALONG RAILROAD RIGHT-OF-WAY	**DAY ENGINEERING, P.C.** *ENVIRONMENTAL ENGINEERING CONSULTANTS* *ROCHESTER, NEW YORK*	DATE 11/02/94 DRAWN BY JJD SCALE NONE

REF1: BORDER5
REF2: STRIP208
REF3: REF3



LEGEND

- APPROXIMATE GEOMEMBRANE LIMITS
- IN-PLACE SOIL DENSITY TEST LOCATION AND DESIGNATION (A-1)
- DRAINAGE TRENCH

NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE. 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/26/93.

2. TEST LOCATIONS WERE DETERMINED BY INITIALLY ESTABLISHING AN APPROXIMATE 50 FOOT BY 50 FOOT GRID ALONG THE SOUTHERN AND WESTERN BOUNDARIES. A TEST WAS DONE AT THE APPROXIMATE NODE POINTS OF THIS GRID. THE LOCATIONS SHOWN SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHODS USED TO LOCATE THE TEST POINTS.

DESIGNED BY RLK	DATE 8/25/93
DRAWN BY JJD	DATE DRAWN 9/23/94
SCALE 1"=40'	DATE ISSUED 11/3/94

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

PROJECT TITLE
STRIPPIT, INC.
12975 CLARENCE CENTER ROAD
AKRON, N.Y.

DRAWING TITLE IN-PLACE SOIL DENSITY TEST LOCATIONS

PROJECT NO.
94-2430R
FIGURE
7

TIME PLOTTED: Wed Nov 2 00:00:00 1994
FILENAME: STRIP209

APPENDICES

APPENDIX A

August 2, 1994 Letter to NYSDEC
Re: Work Plan Modifications

DAY ENGINEERING, P.C.

ENVIRONMENTAL ENGINEERING CONSULTANTS

August 2, 1994

Mr. Jaspal Walia, P.E.
New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: Interim Remedial Measure (IRM) Work Plan
Strippit, Inc.
Akron, New York

Dear Mr. Walia:

The purpose of this letter is to summarize modifications to the above-referenced IRM Work Plan and bidding process. The following modifications have been discussed and agreed upon by the New York State Department of Environmental Conservation (NYSDEC). As was previously discussed, instead of submitting written confirmation for each agreed upon modification, one letter summarizing the modifications would be submitted. Following are the previously agreed upon modifications to the IRM Work Plan and bidding process.

Bid Specifications

Day Engineering, P.C. (Day) initially proposed preparing formal Bid Specification packages for release to potential bidders. As was discussed with NYSDEC, Day requested which was subsequently agreed upon by the NYSDEC that the approved IRM Work Plan be submitted to the potential bidders as the bid documents.

Clearing and Grubbing

In the IRM Work Plan on Drawing C-1 under "General Notes", Item 10 states that "All trees, stumps, bush and cut limbs shall be removed and buried off-site".

This item was amended and agreed upon by the NYSDEC to reflect that brush, tree trunk and limbs will be chipped and incorporated/buried into the fill prior to establishing the subgrade. Small stumps will also be incorporated into the fill. Large stumps which could effect the integrity of the liner will be removed from the landfill area.

Drainage Ditch

Although the drainage ditch adjacent to the northwest property line was not specifically addressed in the IRM Work Plan, activities associated with the drainage ditch were discussed with and agreed upon by NYSDEC.

2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623-2700 716-292-1090 FAX 716-292-0425

In order to promote drainage, the drainage ditch will be cleaned of vegetation and sediment. Material removed during the clean-up of the drainage ditch will be placed on the landfill and incorporated/buried into the fill prior to obtaining the subgrade elevation.

Field Density Testing

In the IRM Work Plan a Drawing C-1 under "Material Notes", Item 4 address compaction of select earth subgrade and barrier protective layer. Although not clearly stated Item 4 could be interpreted that field density tests will be performed on each six-inch lift associated with the select earth subgrade and barrier protective layer.

As discussed with and agreed upon by the NYSDEC, field density tests will be performed, at a minimum frequency of nine per acre, on the select earth subgrade to assure a competent layer for placement of the liner. Placement of the remaining six-inch lifts associated with the barrier protective layer will not be permitted until the fill material has been consolidated to the satisfaction of the engineer.

Subbase and Final Grade Contour Elevations

Quantity takeoff following submittal and approval of the IRM Work Plan indicated excess of soil/fill material altering the subbase contour elevations. This excess requires an adjustment to the subbase elevation of approximately two feet. Thus, increase in contour elevations will occur incorporated during construction still maintaining the required slopes. The revised contours will be shown on the as-built drawings submitted in the Certification Report.

Should you have any questions concerning the above modifications, please do not hesitate to contact this office.

Yours truly,

Richard L. Crouch

RLC/bb

cc: Mr. Robert Johnson, Strippit, Inc.

RC166
93-2166R

APPENDIX B

Pre-Construction Meeting Minutes and Weekly Construction Meeting Minutes

DAY ENGINEERING, P.C.

ENVIRONMENTAL ENGINEERING CONSULTANTS

August 2, 1994

Mr. Jaspal Walia, P.E.
New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: Minutes of Preconstruction Meeting
Strippit, Inc.
Akron, New York

Dear Mr. Walia:

A preconstruction meeting associated with the approved Interim Remedial Measure for Strippit, Inc. (Strippit) Landfill was held on June 17, 1994, at 10:00 a.m. Personnel in attendance were:

- Lyle Emerson, Haseley Trucking Co., Inc. (Haseley)
- Nate Rowles, Haseley
- M.L. Doster, New York State Department of Environmental Conservation (NYSDEC)
- Jaspal S. Walia, NYSDEC
- Jim Tuk, NYSDEC
- Robert Johnson, Strippit, Inc. (Strippit)
- Greg Selip, Strippit
- Tom Hoag, Strippit
- Rick Crouch, Day Engineering, P.C. (Day)

The items discussed were:

1) Sign in/out for personnel associated with landfill construction will be controlled at the trailer provided by Haseley.

2) The gas well and lighting on the landfill have been extended or removed.

3) NYSDEC requested advanced notification when liner testing is to be performed.

4) It was identified by Haseley that the source of the select fill was Pine Hill.

5) NYSDEC recommended that the Village of Akron, New York, Police Department be notified of the increase in truck traffic associated with the transport of fill material to the site.

2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623-2700 716-292-1090 FAX 716-292-0425

6) The issue of dust control was identified by the NYSDEC and Haseley responded that they will have a water truck on-site to address this issue.

7) During the discussion, Day stated that a letter was being prepared for submittal to the NYSDEC discussing modifications to the approved IRM Work Plan which have been previously discussed and agreed upon by Mr. Jaspal Walia, NYSDEC.

8) NYSDEC suggested a preconstruction groundwater monitoring well sampling event. In subsequent discussion between Day and NYSDEC it was agreed upon that due to the depth of the monitored water bearing zone below the site (i.e., approximately 40 feet) the water quality should not be affected due to construction activity, hence, preconstruction sampling of the ground water monitoring wells was not necessary.

9) A Health and Safety Plan is being prepared by Haseley for submission to the NYSDEC for their review prior to construction start-up.

10) Mr. Marty Dozier, NYSDEC, asked about the Bid Specification Package. Day's representative noted that with concurrence from Mr. Jaspel Walia, NYSDEC, the IRM Work Plan was submitted to the bidders for the preparation of their bids.

11) NYSDEC requested a Job Performance Meeting to be held weekly and Day providing the minutes of the meeting to the NYSDEC. Bob Johnson also requested a copy of the weekly minutes.

12) Haseley noted that their work schedule would be 7:00 a.m. to 3:30 p.m., five days a week.

13) NYSDEC requested that the documents prepared during the investigative phases and the IRM design phase be submitted to the Village of Akron library and that the NYSDEC be copied on which documents were available in the library.

14) It was discussed that PPE would be placed in lined container and subsequently disposed of as a solid waste.

15) The existing fence along the northern edge of the landfill and around the gas well would be removed and placed in a roll-off and removed from site as scrape metal.

16) Day stated that the IRM Certification Report would be submitted to the NYSDEC within thirty days following completion of construction, excluding seeding. Once seeding was completed, an addendum to the Certification Report addressing seeding would be submitted.

17) NYSDEC noted that they could review and comment on the Certification Report within thirty days following receipt.

18) The Post Closure Operation and Maintenance Plan would be prepared and submitted during construction of the IRM.

19) Perched water, if encountered, during excavations for the liner trench would be placed back on the landfill.

20) Water generated during steam cleaning would be placed on the landfill.

21) Strippit noted that an access agreement was in place for the property adjacent to and west of the landfill.

22) NYSDEC will provide Strippit with written notification to proceed with construction.

23) Strippit stated that payment of the NYSDEC's invoice has been previously submitted.

24) During the meeting and the follow-up site visit, Day noted that the drainage ditch adjacent to the western property line would be cleaned out and that the sediment removed from the drainage ditch would be placed on the landfill.

The meeting and site visit concluded at approximately 12:30 p.m.

Should you have any questions and/or comments, please do not hesitate to contact this office.

Yours truly,

Richard L. Crouch

RLC/bb

cc: Robert Johnson, Strippit, Inc.

RC165
93-2166R

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716)292-1090

MEMO
Job No. / RK116
Date: August 4, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #1

MEETING DATE: August 1, 1994

TIME: 13:05 - 13:25

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
J. Tuk - NYSDEC
R. Kampff - Day
J. Dorety - Day

I. Job Progress Since Last Meeting:

This was the first site meeting thus the following is a brief account of work completed to date.

Haseley Trucking Company, Inc. (Haseley) the contractor, mobilized to the site on July 11, 1994. Haseley's initial activities included site preparation (i.e., placement of an office trailer, development of equipment staging area, etc.). In conjunction with site preparation, an existing drainage trench, located along the western edge of Strippit's parking lot, was cleared of vegetation and debris. Additionally, a temporary sedimentation basin and connecting drainage way were constructed and silt fences/hay bails were placed.

Clearing and grubbing was completed between July 13 and 16, 1994. Trees/brush were chipped and stockpiled for future use. At this time, an existing chain link fence was removed from around the landfill.

In conjunction with site preparation, an existing electrical line and poles were removed from the site by the utility company. A gas well within the limits of the landfill was temporarily closed and its casing extended by Field Service, Inc. Following cap construction the well will be put back into service for use by Strippit.

Beginning on July 25, 1994, subgrade preparation was started. Generally this included the set up of a decontamination area and the completion of a cut and fill operation to obtain a desired subgrade contour. Side slopes were cut (i.e., primarily along the western and northern borders of the site) to remove fill that was apparently placed on the property to the west and to achieve an approximate grade of 1:4 (i.e., 25%). Material cut from the side slopes was pushed on top of the landfill to fill low areas.

The work completed to date including the approximate limits of cut and fill areas through August 1, 1994, are shown on the attached sketch.

II. Problems/Resolution

Problems identified during the work period and their resolution are discussed below.

1. Two buried drums were encountered in two separate locations during subgrade preparation (see attached sketch). The drum designated D-1 was encountered on July 25, 1994, and it consisted of a rusted drum shell broken in half and filled with a green granular material. [Note, based upon subsequent conversations with Strippit representatives, this material is potentially residue from metal grinding operations.] The second drum (designated D-2) was about 2/3 full of a white granular material. This drum was rusted and the end was broken off. Some of the white material was apparent outside the drum. Also approximately 25 feet to the south, a pile of bricks and brick fragments (similar to bricks used to line a wood stove) were encountered during subgrade preparation. [Note, based on subsequent discussions with Strippit representatives the white material is suspected to be a heat treatment salt and the bricks are from furnaces used to treat metals.]

   Resolution: A sample of each drum was collected and the contents of each drum and the drum shells were placed into overpack drums. These overpack drums were then placed in a fenced drum storage area, constructed near the temporary sedimentation basin. Upon completion of the subgrade preparation the contents of the overpack drums will be characterized and removed from the site. The bricks encountered will be spread out in low areas to the landfill beneath the area to be capped.

2. During initial subgrade operations on July 25, 1994, a gas odor was observed n the vicinity of the gas well.

   Resolution: Work in the immediate vicinity of the gas well was halted and Field Service, Inc. was contacted to investigate/repair the leak. Field Service, Inc. visited the site on July 26, 1994, and determined that the leak was the result of a malfunctioning valve. The valve was repaired and the gas odor was not perceptible.

3. Based on a construction schedule prepared by the contractor (Haseley Trucking Co., Inc.), work is approximately 1 to 1.5 weeks behind schedule.

Resolution: Haseley will be contacted to determine how they will adjust their work effort to get back on schedule. Also, a Haseley representative will be in attendance at subsequent site meetings to discuss scheduling and other construction related issues. [Note, additional equipment was brought to the site late on August 1, 1994. This equipment should help to speed up subgrade preparation.]

4. A strong septic type odor was observed emanating from the drainage trench along the western edge of Strippit's parking lot. Pipes along the western bank of this trench indicate the residence along Clarence Center Road may be discharging into this trench.

   Resolution: J. Walia (NYSDEC) will discuss this matter with representatives of NYSDEC and advise Day on how to proceed with this issue.

5. NYSDEC has requested permission from Strippit to video tape the liner installation process. Presumably, this video tape will be used as an instructional video for NYSDEC and as a demonstration of landfill capping procedures at public meetings. Strippit has requested more information about this video tapping and its ultimate use.

   Resolution: J. Walia will contact B. Johnson of Strippit to discuss this matter further.

III. Work Planned Through Next Meeting

Continuation of subgrade preparation.

IV. Next Scheduled Meeting

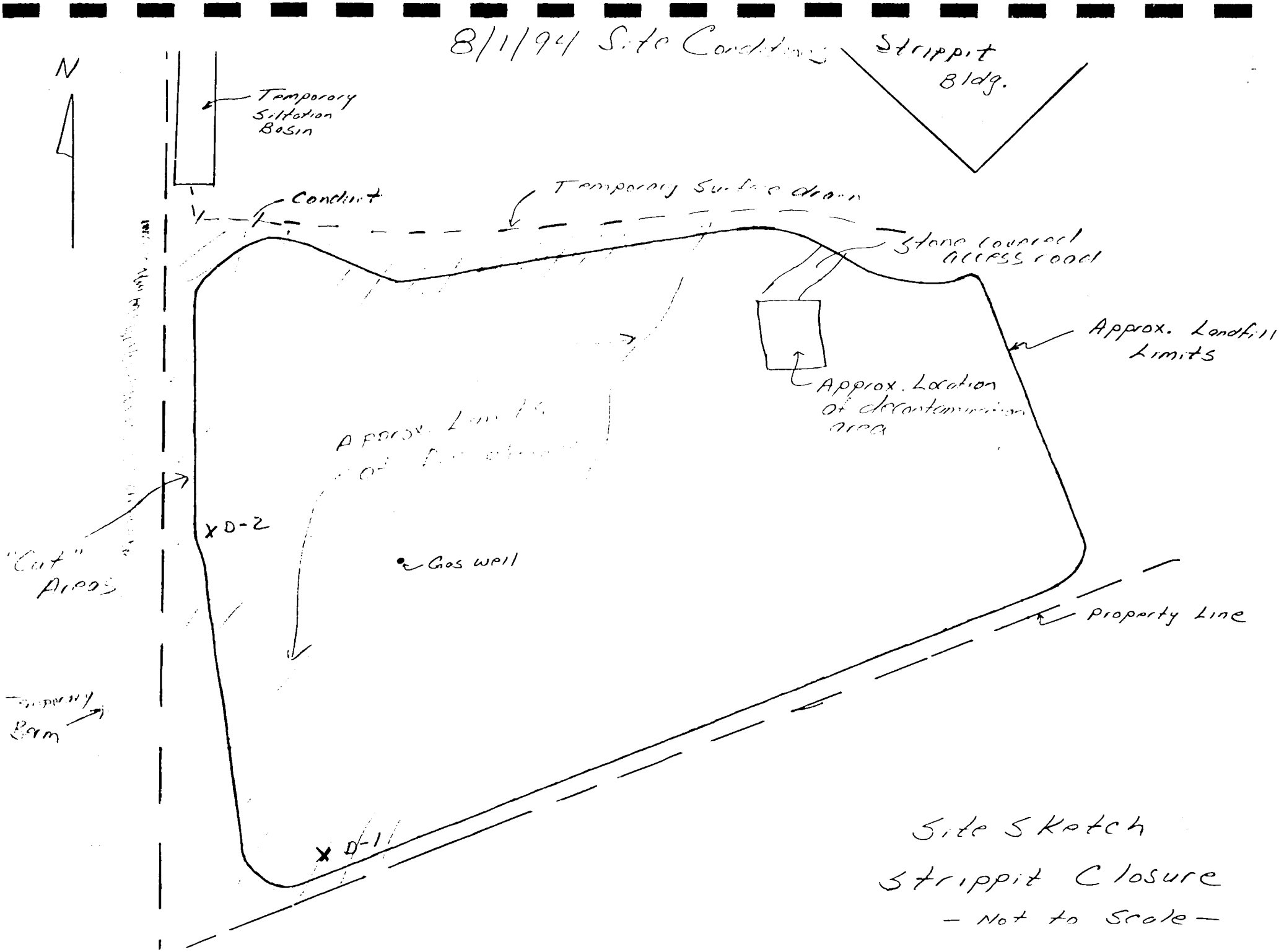
August 8, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File


8/1/94 Site Condition
Strippit Bldg.
N
Temporary Siltation Basin
Conduit
Temporary Surface drain
Stone covered access road
Approx. Landfill Limits
Approx. Location of decontamination area
Approx. Limits of Excavation
D-2
Gas well
"Cut" Areas
Property Line
Temporary Berm
D-1
Site Sketch
Strippit Closure
- Not to Scale -

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716)292-1090

MEMO
93-1998R / RK119

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #2

MEETING DATE: August 8, 1994

TIME: 13:15 - 14:10

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
J. Tuk - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

Grading and contouring at the existing landfill continued throughout the period. Primarily this included the excavation of fill material from the northern and western slopes and the placement of this material in the central portion of the site (see attached site sketch).

During excavation along the western slope three (3) additional 55-gallon drums containing waste material (D-3, D-4 and D-5, see attached sketch) were encountered. These drums contained the following materials.

Drum Designation	Description
D-3	Green granular material
D-4	Petroleum products and petroleum soaked soils
D-5	Petroleum products and petroleum soaked soils

The drum carcasses and contents, as well as adjacent visually contaminated soil, were collected and placed in overpack drums. These overpack drums were then moved to the temporary drum staging area. Testing/removal of the overpack drums will be done following subgrade preparation.

Work during the period also included moving of the decontamination area from its previous location in the central portion of the site to the location shown on the attached sketch.

II. Problems/Resolution

Problems identified during the work period and their resolution are discussed below.

1. Based upon the schedule provided by Haseley on July 15, 1994, grading and contouring of the existing landfill should have been completed by July 25, 1994. What is the current anticipated schedule for remaining work?

   Resolution: L. Emerson indicated subgrade preparation should be complete by August 11 or 12, 1994. The duration of the remaining work tasks should be consistent with that outlined in the original schedule. L. Emerson will supply an updated construction schedule.

2. The project plans specify that the select material shall be compacted to a density of 95 percent of the maximum dry density as determined by AASHTO Standard T99, Method C. R. Kampff indicated that compaction of this material to a specified density may not be appropriate since this layer's primary function is to serve a protective layer for the geomembrane. Observation of the material as it is placed should be sufficient to assure that it does not include larger stones and that it is placed and compacted so as to preclude "soft" areas.

   Resolution: It was agreed that field density testing of this layer was not necessary, and that such testing may be appropriate for other materials within the cover system.

3. The select material specified, and approved by NYSDEC, is described in the project plans as "...clay, silt, and sand which shall be free from debris, organic, and frozen materials, with no material greater than five millimeters (5 mm) in size". The material obtained by Haseley meets these specifications, but based on a gradation curve it is primarily a sand with about 86% greater than the No. 200 sieve. J. Walia suggested that the select material beneath the liner should be a clay based material so as to provide additional protection in the event of a breach in the geosynthetic liner.

   Resolution: It was agreed that Haseley would initially attempt to locate a clay based material for use as the select fill. It was pointed out by R. Kampff that it was unlikely that a switch in material could be made at this time, and that the material provided by Haseley appears to satisfy the specifications. Alternatively, since the soil covering the existing landfill is a sandy silt with some intermixed clay, it was decided to evaluate this material to assess its extent and constancy. R. Kampff suggested that following grading and contouring operations, auger probes would be made at regularly spaced intervals. The purpose of these probes would be to evaluate the thickness of the soil fill. If it appears that sandy silt is present throughout the site and that it is at least one (1) foot thick, then in-place density tests/moisture content measurements would be made at a rate of nine (9) per acre. Additionally, a representative sample of this material would be tested for grain size and maximum dry density optimum moisture content. If the subgrade material did not appear adequate, and Haseley was unable to locate a clay-based material for the select fill, compaction testing of the bottom 6-inch layer of the barrier protection layer would be done. [Note: The intent of the testing of these layers is to provide a compacted layer with a lower permeability to serve to impede water infiltration into waste materials].

5. J. Tuk was concerned that all the silt fences and erosion control systems included in the specifications were not installed. Thus, in the event of heavy rains, erosion could be a problem.

   Resolution: Since erosion has not yet been a problem, due primarily to the nature of the soils at the site, the silt fences and erosion control systems shown on the plans may not be necessary. Thus, it was decided that these systems would only be required if the site were to be left unattended for an extended period of time prior to liner placement or if it was deemed necessary based upon observation of a problem area.

6. Haseley has not yet submitted their proposed barrier protection material gradation.

   Resolution: L. Emerson indicated that this information will be submitted in the near future.

7. The QA/QC plan has not yet been submitted.

   Resolution: R. Kampff indicated he was awaiting some information from National Seal (which has now been submitted) and resolution of soil testing requirements before submitting this plan. It is expected the plan will be submitted the week of August 15, 1994.

III. Work Planned Through Next Meeting

Completion of grading and contouring of the existing landfill, ground surface elevation survey of the completed survey, observation/testing of the compacted subgrade and the start of select fill placement. Also monitoring wells within the landfill limits are scheduled to be extended.

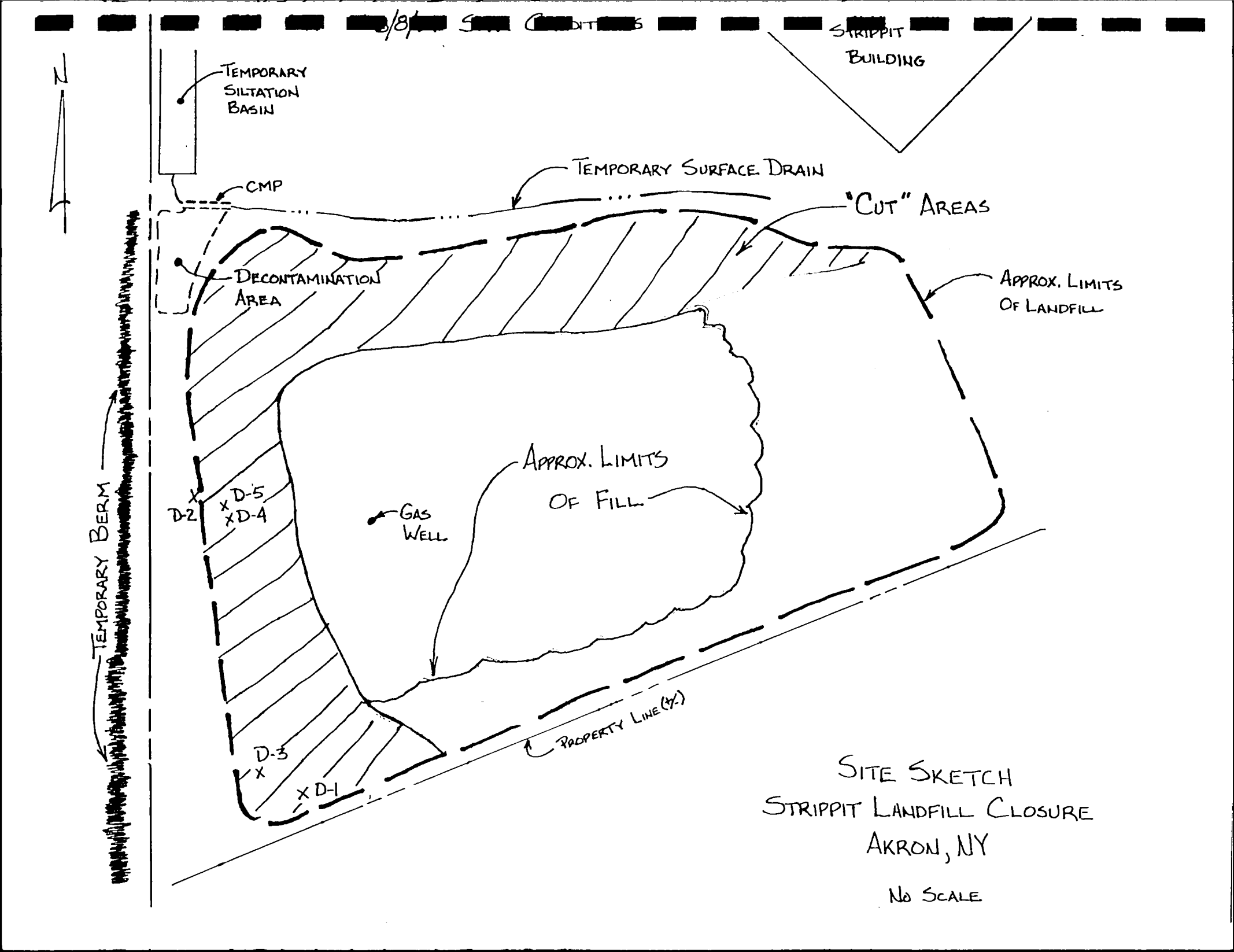
IV. Next Meeting

August 15, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File



SITE SKETCH
STRIPPIT LANDFILL CLOSURE
AKRON, NY

NO SCALE

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716) 292-1090

MEMO
94-2430R / RK123
August 18, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #3

MEETING DATE: August 15, 1994

TIME: 13:10 - 14:50

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
J. Tuk - NYSDEC
K. Glaser - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

Grading and contouring at the existing landfill has been completed except for minor grading in the southern portion of the site (see attachment site sketch). Proof rolling was done throughout the landfill and a soft area near the top of the slope in the northwest portion of the site was identified and repaired. Survey has been completed and this work indicates the landfill was at the desired grade. Select fill placement began on August 15, 1994.

Work during the period also included extending the riser and protective casings for monitoring wells GW-2 and GW-5 (see attached sketch).

II. Problems/Resolution

Problems identified during the work period and their resolution are discussed below.

1. Haseley has not yet provided an updated construction schedule which accounts for the additional time required to grade and contour the site.

   Resolution: L. Emerson stated that the schedule will be provided in the near future.

2. As requested by J. Walia at the 8/8/94 meeting, select fill sources were evaluated in an attempt to locate a material containing a higher clay fraction. No source could be located for placement within the required time frame. Therefore, as discussed at the 8/8/94 meeting, Day evaluated the thickness of the natural soils covering the regraded landfill. This evaluation indicated that areas of the landfill contained more than one-foot of cover but in other areas less than one foot was present.

Resolution: Based upon these findings it was decided by Day and NYSDEC that the select fill (as provided by Haseley) would be placed and visually observed by Day for material consistency and compaction effort. Concurrent with the select fill placement, Haseley will attempt to locate a barrier protection source that contains a uniform mixture of sand, silt and clay (i.e., a glacial till) and provide a grain size analysis. This material will be tested to determine its maximum dry density and optimum moisture content while select fill and geomembrane placement is being done. The bottom 6 inch layer of the barrier protection material will be compacted and its in-place density and moisture content will be measured with a nuclear density gage. The placement of the top 12 inches of the barrier protection material will be observed by a Day representative.

3. J. Walia requested that Strippit, Inc. provide comments on the NYSDEC's draft document "IRM Decision Document" as soon as possible.

   Resolution: R. Kampff stated that he would contact Strippit and that comments should be provided this week.

4. Haseley has not yet submitted a gradation curve for their proposed barrier protection material.

   Resolution: L. Emerson indicated several potential sources are being tested and results should be available the week of 8/15/94.

III. Work Planned Through Next Meeting

Placement of the bottom 6 inches of the select fill layer will continue through the majority of the week. L. Emerson indicated that the geomembrane liner installer should mobilize to the site on or about 8/22/94.

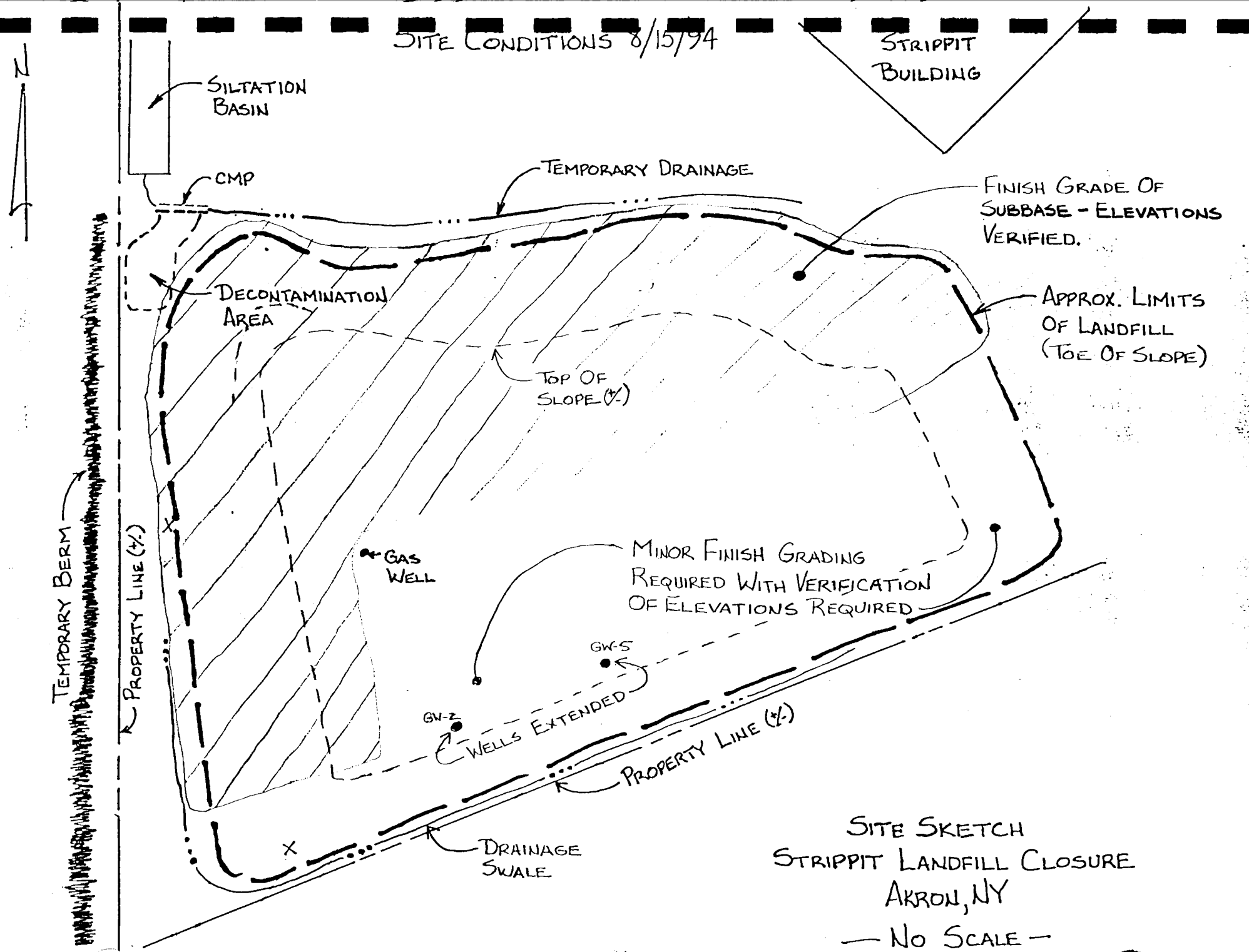
IV. Next Meeting

August 22, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File


SITE CONDITIONS 8/15/94
N
STRIPPIT BUILDING
SILTATION BASIN
CMP
TEMPORARY DRAINAGE
FINISH GRADE OF SUBBASE - ELEVATIONS VERIFIED.
DECONTAMINATION AREA
APPROX. LIMITS OF LANDFILL (TOE OF SLOPE)
TOP OF SLOPE (+/-)
TEMPORARY BERM
PROPERTY LINE (+/-)
GAS WELL
MINOR FINISH GRADING REQUIRED WITH VERIFICATION OF ELEVATIONS REQUIRED
GW-5
GW-2
WELLS EXTENDED
PROPERTY LINE (+/-)
DRAINAGE SWALE
SITE SKETCH
STRIPPIT LANDFILL CLOSURE
AKRON, NY
— NO SCALE —

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716) 292-1090

MEMO
94-2430R / RK125
August 23, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #4

MEETING DATE: August 22, 1994

TIME: 13:00 - 13:30

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
K. Glaser - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

The bottom six (6) inches of select fill has been placed throughout the site except for a small area along the northeast slope. This area should be covered by the end of the work day on August 22, 1994. The landfill has been surveyed to establish grades prior to geomembrane placement and to layout the anchor trench and surface drainage swales.

Additional work completed in the period included the pouring of a concrete pad around the gas well and two existing monitoring wells. The geomembrane will be anchored to these pads.

II. Problems/Resolution

Problems identified during the work period and their resolution are discussed below.

1. Haseley has not yet provided an updated construction schedule which accounts for the additional time required to grade and contour the site.

   Resolution: L. Emerson provide an updated schedule at this meeting. A copy of this schedule is attached to these minutes.

2. It is expected that the geomembrane installer should be on-site beginning on August 24 or 25, 1994. L. Emerson indicated that the installer may desire to work this weekend and wanted to know if this could be done.

Resolution: No concerns were expressed at the meeting but R. Kampff indicated he had to check with Strippit. [Note: During a subsequent conversation, Strippit indicated that they had no problems with working on Saturday provided there would be no additional cost for such work.]

3. Haseley has yet to submit their proposed barrier protection material source.

Resolution: L. Emerson indicated that a decision should be made this week. He did provide a gradation curve for one possible source but he stated negotiations with the owner were still on-going.

4. Based upon survey layout completed for Haseley, there appears to be insufficient room to construct the anchor trench and drainage swale along the southern boundary of the site, as shown on the project plans. This is attributable to a presence of the Niagara Mohawk power lines in this area and their minimum clearance requirements.

Resolution: Day provided a sketch with three (3) possible alternatives for this area (copy attached). J. Walia indicated that he would discuss the situation with other representatives of the NYSDEC and contact Day on August 23, 1994.

III. Work Planned Through Next Meeting

Following proof rolling and observation of the bottom 6-inch layer of the select fill, the geomembrane installation will begin. It is expected that geomembrane installation will begin on August 24 or 25, 1994.

IV. Next Meeting

August 29, 1994 (13:00 hours) in the field office at the Strippit site.

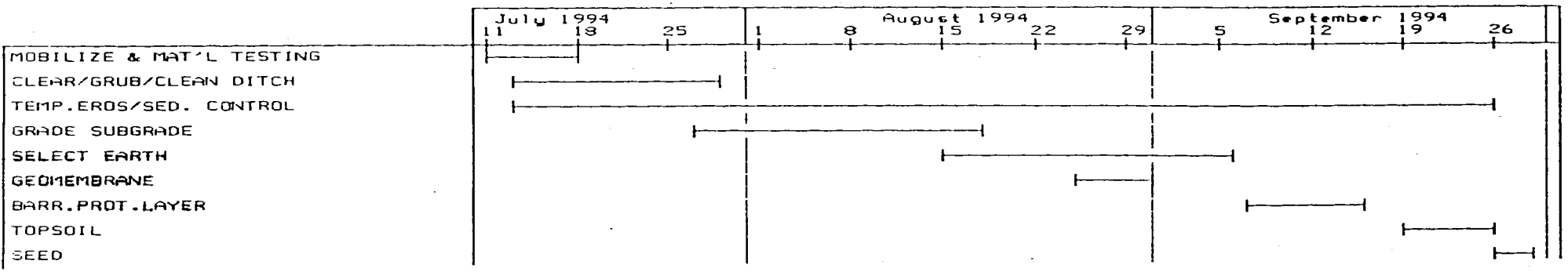
Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

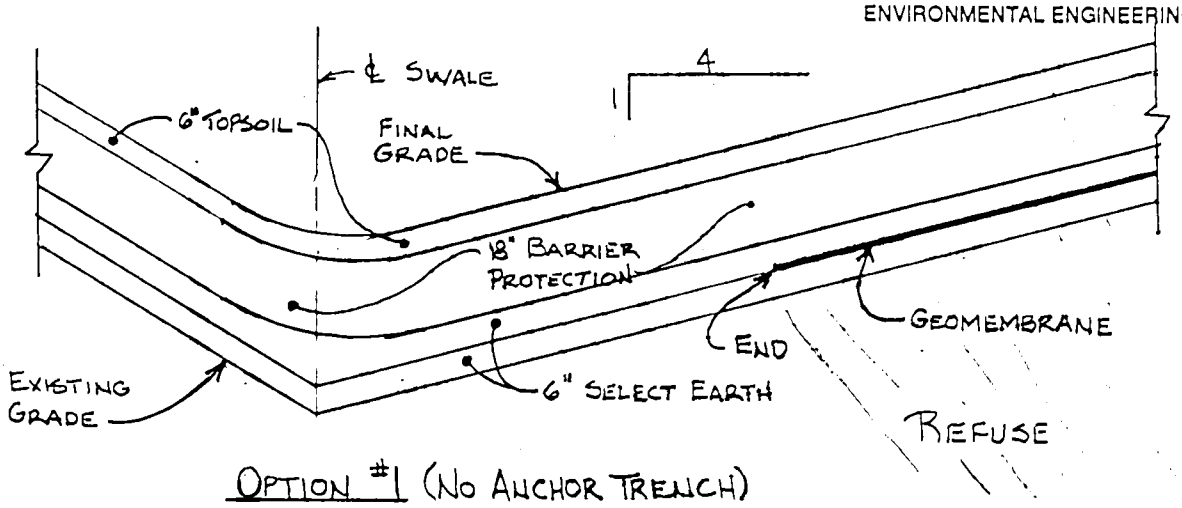
cc: All Attendees
B. Johnson - Strippit
File

HASELEY TRUCKING CO., INC.
10315 LOCKPORT ROAD
NIAGARA FALLS, NY 14304

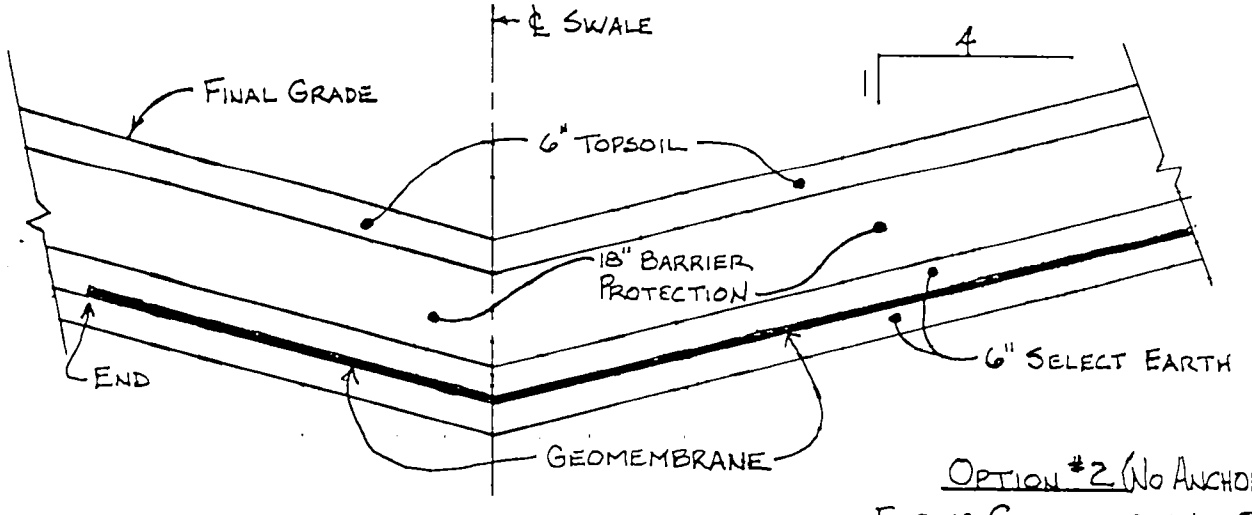
REVISED 08/17/94



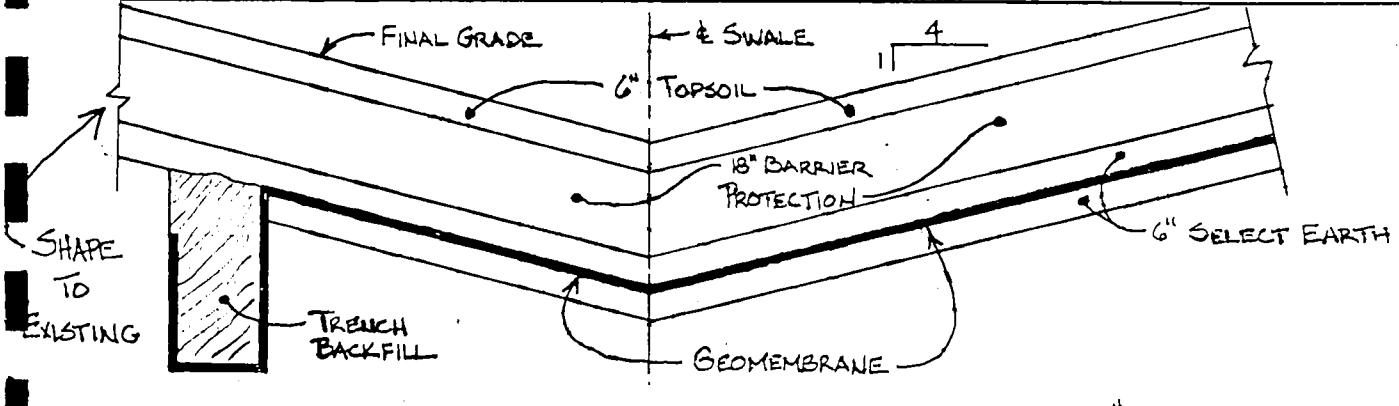
DAY ENGINEERING, P.C. 2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623
ENVIRONMENTAL ENGINEERING CONSULTANTS



OPTION #1 (NO ANCHOR TRENCH)
ENDING GEOMEMBRANE UPSLOPE OF SWALE



OPTION #2 (NO ANCHOR TRENCH)
ENDING GEOMEMBRANE OPPOSITE SIDE OF SWALE



ANCHOR TRENCH

OPTION #3
ANCHOR TRENCH SOUTH OF SWALE

CALC. BY: WD DATE: 8/20/94 PROJECT NO.: STRIPP 94-2430R

CH'KD BY: _____ DATE: _____ DESCRIPTION: SOUTHERN LINER OPTIONS

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716) 292-1090

MEMO
94-2430R / RK129
August 30, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #5

MEETING DATE: August 29, 1994

TIME: 13:05 - 13:25

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
K. Glaser - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

The bottom six (6) inch layer of select fill was placed throughout the site, proof rolled and observed by Day. The geomembrane installer (Environmental Security Services, Inc.) mobilized to the site on August 25, 1994. Geomembrane placement began on August 26, 1994 and continued throughout the period, including Saturday, August 27, 1994. At the time of the meeting, the geomembrane had been placed over the entire site with the exception of the northwestern-most slope. Liner testing (destructive and non-destructive seam tests) was done following seaming operations. To date, all such tests have passed applicable requirements.

Additional work completed in the period included the excavation and backfill of the anchor trench along the western edge of the landfill. During this excavation apparent petroleum stained soil was encountered in an approximate 20-25 foot long portion of this trench (see attached site sketch and discussion below).

II. Problems/Resolution

Problems identified during the work period and their resolution are discussed below.

1. As discussed at the August 22, 1994 meeting, the survey completed by Haseley indicated that there was apparently insufficient room along the southern site boundary to construct the anchor trench and drainage swale as depicted on the project plans.

Resolution: NYSDEC discussed the matter with Day and Haseley representatives and reviewed a site sketch of three (3) possible alternatives provided by Day. Following their review, the NYSDEC selected the second option proposed by Day (i.e., extending geomembrane through the drainage swale, see attached sketch). Thus Haseley constructed the liner in this area in accordance with the approved sketch.

2. Haseley provided a graduation curve for material they propose for use as a barrier protection material. However, compaction test results have not yet been provided.

   Resolution: L. Emerson indicated that compaction test results should be available by August 31, 1994. [Note, since the proposed barrier protection material is a glacial till with about 46% passing the #200 sieve, Haseley proposed to use this material as backfill for the anchor trench. NYSDEC discussed this matter with Day and reviewed available gradation curves. Following their review, NYSDEC approved the use of this material as anchor trench backfill.]

3. During excavation for the anchor trench along the western side of the site on August 29, 1994, stained soil with a distinct apparent petroleum (diesel) type odor was encountered (see attached sketch). Based upon observations made during the excavation for the anchor trench and subsequent test pits, the material visually appeared to extend from about 2.5 feet below the ground surface to a depth of about 5± feet and it appeared to extended a distance of about 20 to 25 feet along the anchor trench. The extent of this material to the west is unknown.

   Resolution: It was mutually decided by Day and NYSDEC that initially the extent of contamination along the anchor trench (laterally and vertically) would be evaluated in the field. This would be done by excavating with a backhoe and screening samples with a Photoionization Detector (PID) and a Flame Ionization Detector (FID). Excavation would continue until "clean" samples, as determined by observation and PID/FID measurements were encountered. The excavated soil will be segregated into piles of apparently contaminated and clean soil. Evaluation of the extent of contamination to the west will be done by excavating a test pit perpendicular to the anchor trench. This trench will extent approximately five (5) feet from the western edge of the anchor trench. In the event apparent contamination extends more than five (5) feet from the trench, the test pit will be backfilled and the anchor trench will be constructed through the area. The extent of contamination to the west would be evaluated at a latter date.

   The apparent contaminated soil excavated from the anchor trench and the test pit will be stockpiled on plastic sheeting and covered with plastic sheeting to preclude rainwater infiltration. Samples of this material will be collected for characterization purposes and the material will be disposed off site.

4. J. Walia indicated the NYSDEC will require that confirmatory samples be taken along the drainage trench located along the western edge of the Strippit parking lot.

Resolution: J. Walia and R. Kampff walked the site to locate potential sampling locations. Two (2) locations (i.e., adjacent to monitoring well GW-3 and about 300 feet down stream) were selected by J. Walia. It is understood that these samples will be collected and tested by NYSDEC and that there would be no additional cost to Strippit for this work. Strippit may or may not collect split samples at the time of the NYSDEC sampling.

III. Work Planned Through Next Meeting

Following receipt of acceptable test results for the geomembrane seams, Haseley will begin to place the top six (6) layer of select fill. To the extent possible, this will be immediately followed by the placement of the bottom six (6) inch lift of barrier protection material. Additional work in the period should include anchor trench construction.

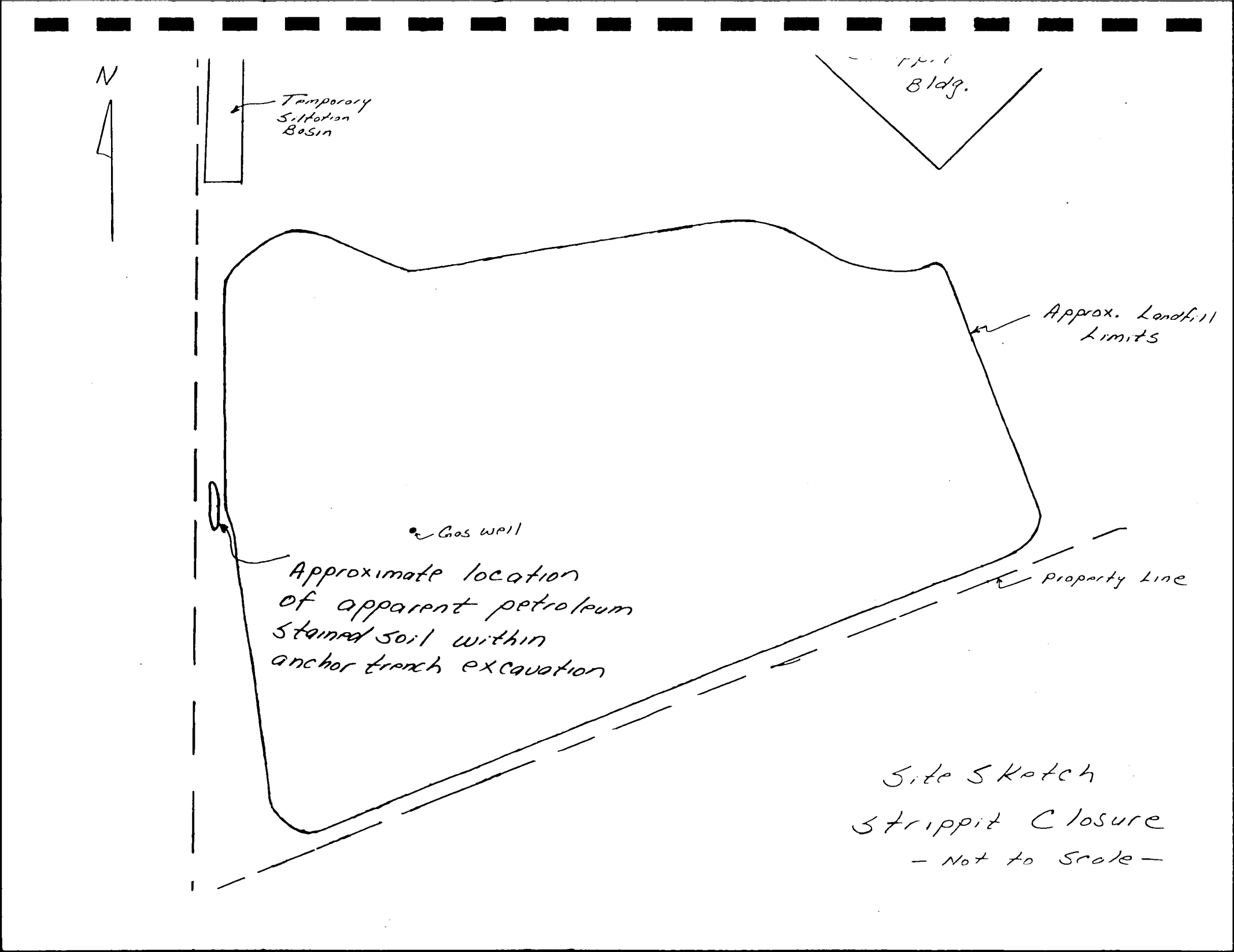
IV. Next Meeting

September 6, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File

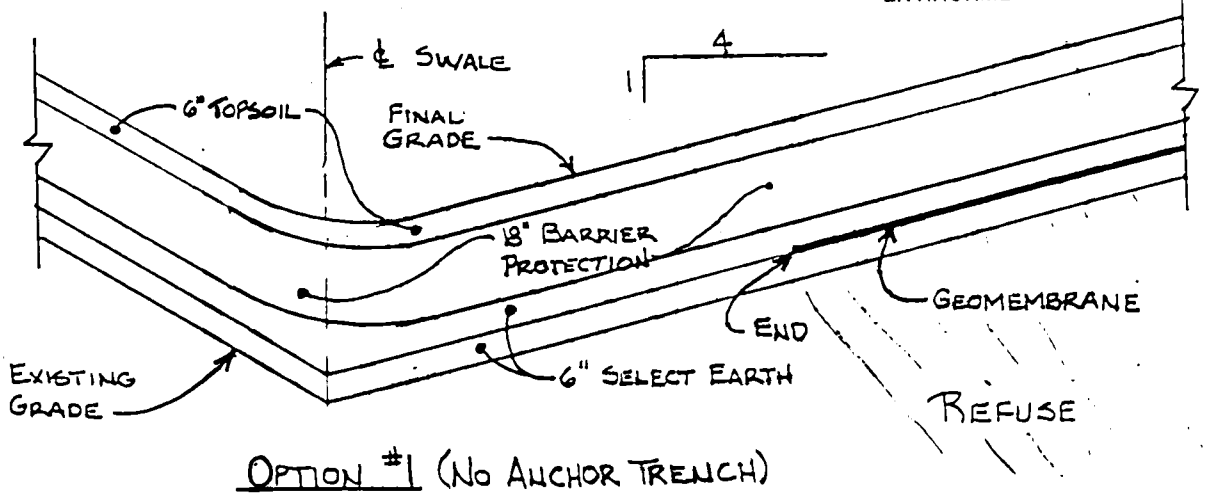


Site Sketch

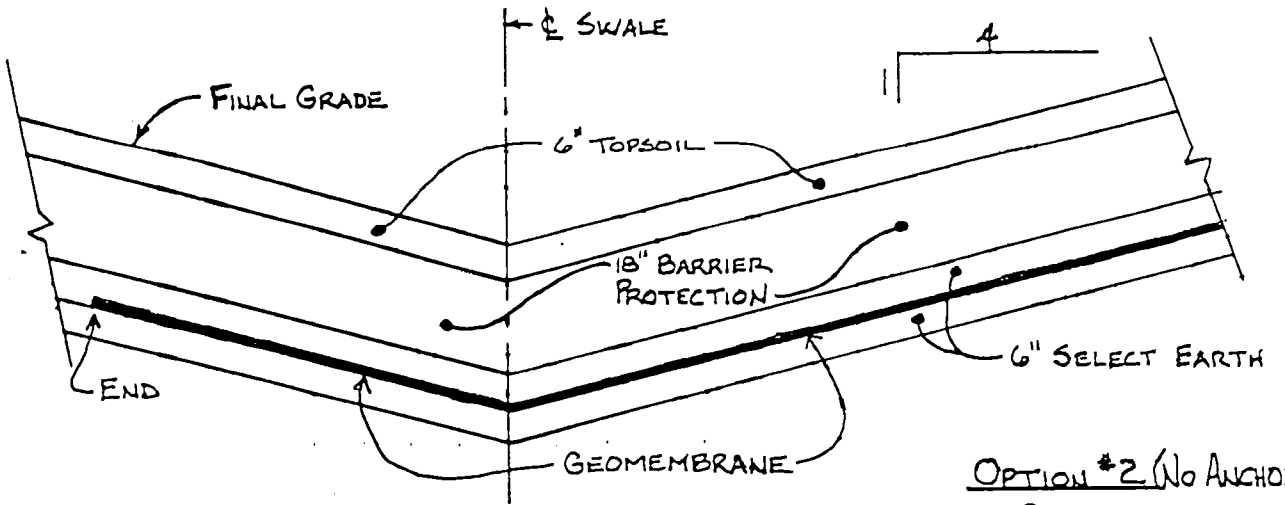
Strippit Closure

– Not to Scale –

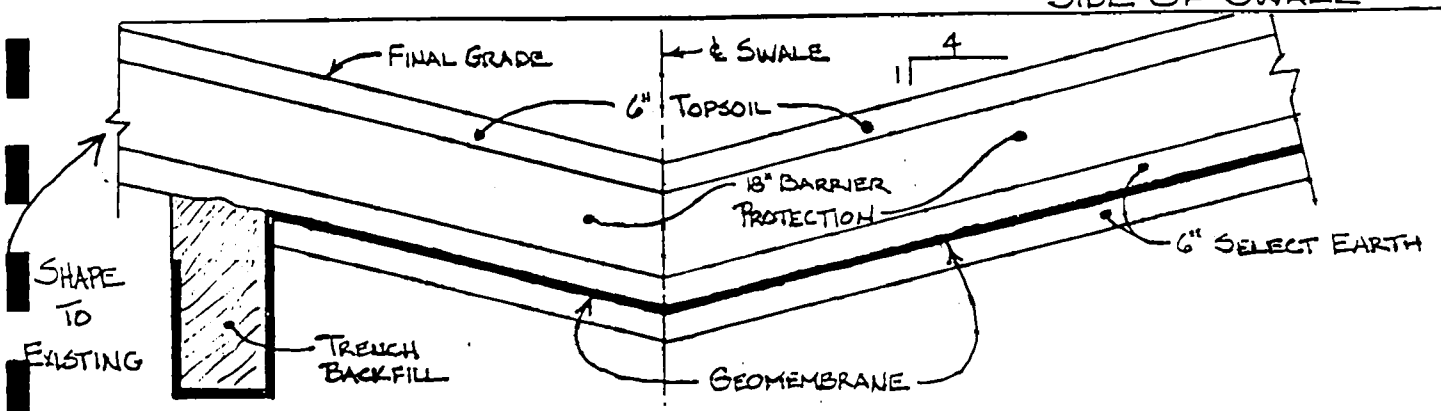
DAY ENGINEERING, P.C. 2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623
ENVIRONMENTAL ENGINEERING CONSULTANTS



OPTION #1 (NO ANCHOR TRENCH)
ENDING GEOMEMBRANE UPSLOPE OF SWALE



OPTION #2 (NO ANCHOR TRENCH)
ENDING GEOMEMBRANE OPPOSITE SIDE OF SWALE



ANCHOR TRENCH

OPTION #3
ANCHOR TRENCH SOUTH OF SWALE

CALC. BY: JJD DATE: 8/20/94 PROJECT NO.: STRIPP 94-2430R

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716) 292-1090

MEMO
94-2430R / RK130
September 7, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #6

MEETING DATE: September 6, 1994

TIME: 13:10 - 13:40

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
K. Glaser - NYSDEC
J. Tuk - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

During this period, geomembrane placement/testing was completed. Non-destructive and destructive test results indicate the geomembrane seams were constructed within the required tolerances. The geomembrane installer (Environmental Security Services, Inc.) demobilized from the site on September 1, 1994. Following receipt of seam test results, Haseley began placement of the top six-inch lift of select fill. At the time of the meeting, approximately 75% of the geomembrane was covered with select fill. Generally, the remaining areas to be covered include the side slopes along the north and west sides of the site.

Additional work completed during the period included the excavation and backfilling of the anchor trench. During this work, apparent petroleum-contaminated soil was encountered on the west side of the site. Material excavated during anchor trench construction within this area was stockpiled on excess geomembrane material and covered with plastic sheeting. Currently, testing is underway to characterize this material (see discussion below).

II. Problems/Resolution:

1. Some of the barrier protection material being brought to the site contains larger rocks. As such, this material does not satisfy the specifications.

Resolution: L. Emerson indicated that he was aware of this problem, and that an alternative source of barrier protection material (i.e., Pine Hill, Genesee Street) will be used. A gradation curve was previously submitted for this material, and it appears satisfactory. L. Emerson will provide proctor test results for this material.

2. Apparent petroleum-contaminated (diesel) soil was encountered during excavation for the anchor trench (see August 29, 1994 meeting minutes).

Resolution: During this period the extent of contaminated material (laterally and vertically) within the anchor trench was evaluated. This was done by excavating with a backhoe and collecting samples for observation and in-situ testing. This testing was done by measuring gases within the headspace of a sample jar using a Photoionization Detector (PID; HNU Model 101) and a Flame Ionization Detector (FID; Model OVA 128 Century Organic Vapor Analyzer). Based on this work, the petroleum-contaminated soil appeared to extend a distance of about 30 feet along the trench, at a depth of between about 2.5 feet and 6.0 feet below ground surface. The maximum concentrations measured in the headspace of samples collected from this portion of the anchor trench were: PID = 38 ppm and FID = 126 ppm. Soils observed within a trench made perpendicular to the anchor trench indicated that the petroleum-related contamination extended a distance of at least 6.0 feet to the west of the anchor trench.

To expedite closure construction, the anchor trench was constructed through this area by attaching additional geomembrane material to the landfill cover so that the geomembrane could be placed throughout the six-foot deep trench. Thereafter, low permeability backfill material was placed and compacted.

Samples of the contaminated material and material from the invert of the anchor trench were also collected for analytical testing. These samples were delivered to ACTS Testing Laboratories for testing of the following parameters:

- VOCs (USEPA Method 8260)
- S-VOCs (USEPA Method 8270 - base/neutral fraction)
- TCLP - metal fraction
- PCBs - (USEPA Method 8080)
- TPH (Method 310-13)

Apparent contaminated material excavated from the trench was stockpiled on sheets of excess geomembrane material and covered with plastic sheeting. Following testing, this material will be handled and disposed. Also, the extent of apparent petroleum-contaminated soil to the west of the anchor trench will be evaluated upon receipt of the analytical results.

3. Drums encountered during grading and contouring of the site have to be characterized and removed/disposed.

Resolution: Strippit has retained Waste Technology Services, Inc. of Niagara Falls, New York to complete this work. Sampling/testing of the overpack drums should begin this week.

4. A post-closure monitoring and maintenance plan for the site has not yet been submitted.

   Resolution: R. Kampff indicated that this document is being prepared and it should be submitted during the week of 9/12/94.

5. Confirmatory soil/sediment samples are required within the drainage trench along the western edge of the Strippit parking lot.

   Resolution: J. Walia indicated that these samples will be collected by the NYSDEC during the week of 9/12/94. R. Kampff indicated that Strippit may want to collect split samples.

III. Work Planned Through Next Week

L. Emerson indicated that the top six-inch lift of select fill should be placed throughout the site by 9/7 or 9/8/94. Barrier protection material placement will continue immediately after the select fill is proof rolled and survey is complete indicating a sufficient thickness. To expedite placement, Haseley will mobilize an additional bulldozer to the site. R. Kampff reminded Haseley that the bottom six-inch lift of barrier protection material will require field density testing, and that additional lifts of barrier protection material could not be placed until passing test results are obtained for the underlying material.

IV. Next Meeting

September 12, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716) 292-1090

MEMO
94-2430R / RK131
September 14, 1994

MEETING MINUTES

SUBJECT: Strippit Landfill Closure
Site Meeting #7

MEETING DATE: September 12, 1994

TIME: 13:30 - 13:55

PLACE: Field office Strippit site

ATTENDEES: J. Walia - NYSDEC
R. Kampff - Day
J. Dorety - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting:

Work completed during the period included the placement of the top six (6) inch lift of select fill and the start of barrier protection material placement. At the time of the meeting, the bottom six (6) inches of barrier protection had been placed and compacted throughout the site. In-situ field density tests on this material indicate that it was compacted to at least 95% of its maximum density, as measured by AASHTO Standard T99, Method C. Additionally, the second six (6) inch lift of barrier protection material was placed over the site except for the northern-most slope.

II. Problems/Resolution:

1. Apparent petroleum-contaminated soil was encountered during excavation of the anchor trench (see meeting minutes for Site Meeting #6).

   Resolution: Two samples of this material were submitted to ACTS Testing Laboratories for analytical testing. One of these samples (a composite of petroleum-contaminated soil currently stored in a stockpile) was tested via an accelerated schedule. The preliminary results of this testing (see attached) analytical report indicate the material contains approximately 0.1 percent petroleum products, that have a molecular weight in the range of kerosene intermixed with low concentrations of solvents such as chloroform (6.7 ppb), tetrachloroethene (8.7 ppb) and methylene chloride (16.0B ppb) and PCBs (Arochlor 1254: 0.91 ppm). Based upon testing completed, it would appear the substance is a waste oil and that it is not hazardous.

Based upon the test results it was mutually decided by J. Walia and R. Kampff that the extent of contamination remaining in place to the west of the trench should be evaluated by excavating additional test pits in the area and making field measurements with a PID (HNu Model 101) and FID (Model OVA-128 Century Organic Vapor Analyzer). Prior to this work, the area will be surveyed by a professional land surveyor to establish the property line in this area. During excavation, contaminated material, as determined by field measurements, will be placed in the on-site stockpile and the excavation will be backfilled with clean fill. In the event contamination extends to the property line, no off-site excavation will be done at this time. Rather, NYSDEC and Strippit will be consulted to determine options for the evaluation and remedation of this material.

2. Compaction test results submitted for the barrier protection material (i.e., a maximum dry density of 131.3 pcf at an optimum moisture content of 9.2%) were in error.

   Resolution: A second sample was collected by SJB Services, Inc. and tested. The results of this testing indicate the maximum dry density is actually 119.7 pcf at an optimum moisture content of 10.7%. It appears that the reason for the error is that the original testing laboratory mistakenly tested the wrong sample.

3. Confirmatory soil/sediment samples are required within the drainage trench along the western edge of the Strippit parking lot.

   Resolution: J. Walia indicated that these samples will be collected on September 14, 1994 by the NYSDEC. He expects these samples will be tested for Target Analyte List (TAL) metals and possibly semi-volatile organic compounds.

III. Work Planned Through Next Week

Barrier protection placement should be completed by September 15 or 16, 1994. Topsoil placement will begin immediately after, the barrier protection material has been proof-rolled to the satisfaction of the Day representative. In conjunction with the topsoil placement, drainage trench construction will be done.

Following placement of the second six (6) inch lift of barrier protection material, Field Services, Inc. will place a plastic pipe from the on-site gas well to a condensation tank located north of the site. This pipe will then be covered by the final lift of barrier protection material and topsoil.

IV. Next Meeting

September 19, 1994 (13:00 hours) in the field office at the Strippit site.

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File

ACTS TESTING LABS, INC.
25 Anderson Road
Buffalo, NY 14225-4928
Tel (716)897-3300
Fax (716)897-0876

PRELIMINARY

Technical Report 4B-4129ER
File # Stripp-94-2430R
REVISED REPORT

September 13, 1994

Mr. Ray Kampff
DAY ENVIRONMENTAL, INC.

SUBJECT

Analysis of one (1) soil sample for various parameters. The sample was received on August 31, 1994.

RESULTS

On Pages Two through Five.

EXPERIMENTAL:

Polychlorinated Biphenyls (PCBs) in soil was determined according to United States Environmental Protection Agency Method 3540: Soxhlet Extraction and Method 8080: Organochlorine Pesticides and PCBs.

Semi-volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8270: Semi-volatile Organics.

Volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8260: Volatile Organics.

The Toxicity Characteristic Leaching Procedure for Metals was determined as defined in Title 40, Code of Federal Regulations, Part 268, Appendix 1. The Toxicity Characteristic Leaching Procedure was conducted according to "Test Methods for the Examination of Solid Waste Physical/Chemical Methods", EPA SW-846.

The remaining analysis was determined according to United States Environmental Protection Agency "Methods for Chemical Analysis of Water and Wastes", March 1983.

Petroleum Products in soil was determined according to New York State Department of Health modified procedure 310-13: Petroleum Products in Water.

ACTS TESTING LABS, INC.
Charles E. Hartke
Charles E. Hartke
Manager, Chemistry Laboratory

ACTS TESTING LABS, INC.
Lisa M. Clerici
Lisa M. Clerici, Supervisor
Wet Chemistry Laboratory

ACTS TESTING LABS, INC.
Elizabeth R. Hausler
Elizabeth R. Hausler, Supervisor
Gas Chromatography Laboratory

cme

ACTS TESTING LABS

PRELIMINARY

RESULTS:	ACTS #4B-4129E 2430-08314-AT1	TCLP Blank	TCLP Limit
TCLP Metals			
Arsenic	LT 0.05	LT 0.05	5.0
Barium	6.22	LT 0.005	100.0
Cadmium	0.010	LT 0.005	1.0
Chromium	0.01	LT 0.01	5.0
Lead	LT 0.03	LT 0.03	5.0
Mercury	LT 0.0002	LT 0.0002	0.2
Selenium	LT 0.12	LT 0.12	1.0
Silver	0.021	LT 0.005	5.0

LT = Less Than
The results are reported as milligrams per liter (mg/L)

Petroleum Hydrocarbons (418.1) 0.085

Result is reported as % by weight.

Petroleum Hydrocarbons (310-13): Gasoline - None detected
Lubricating Oils - None detected
Kerosene 1.39
Fuel Oil LT 0.01

LT=Less Than
Results are repored as microliters per gram (uL/g) or parts per thousand.

EPA 8270	
N-Nitroso-dimethylamine	LT 76.0 (LT 76.0)*
Bis (2-chloroethyl) ether	LT 38.0 (LT 38.0)*
1,3-Dichlorobenzene	LT 38.0 (LT 38.0)*
1,4-Dichlorobenzene	LT 38.0 (LT 38.0)*
1,2-Dichlorobenzene	LT 38.0 (LT 38.0)*
Bis (2-chloroisopropyl) ether	LT 38.0 (LT 38.0)*
N-Nitroso-di-n-propylamine	LT 38.0 (LT 38.0)*
Hexachloroethane	LT 38.0 (LT 38.0)*
Nitrobenzene	LT 38.0 (LT 38.0)*
Isophorone	LT 38.0 (LT 38.0)*
Bis (2-chloroethoxy) methane	LT 38.0 (LT 38.0)*
1,2,4-Trichlorobenzene	LT 38.0 (LT 38.0)*
Napthalene	210.0 (180.0)*
4-Chloroaniline	LT 38.0 (LT 38.0)*
Hexachlorobutadiene	LT 76.0 (LT 76.0)*
2-Methylnaphthalene	1000.0 (910.0)*

ACTS TESTING LABS

PRELIMINARY

EPA 8270 (con't):

	ACTS #4B-4129E 2430-08314-AT1
Hexachlorocyclopentadiene	LT 380.0 (LT 380.0)*
2-Chloronaphthalene	LT 38.0 (LT 38.0)*
2-Nitroaniline	LT 38.0 (LT 38.0)*
Dimethylphthalate	LT 38.0 (LT 38.0)*
Acenaphthylene	LT 38.0 (LT 38.0)*
2,6-Dinitrotoluene	LT 38.0 (LT 38.0)*
Acenaphthene	LT 38.0 (LT 38.0)*
3-Nitroaniline	LT 76.0 (LT 76.0)*
Dibenzofuran	LT 38.0 (LT 38.0)*
2,4-Dinitrotoluene	LT 38.0 (LT 38.0)*
Diethylphthalate	160.0 (180.0)*
Fluorene	LT 38.0 (LT 38.0)*
4-Nitroaniline	LT 76.0 (LT 76.0)*
4-Chlorophenyl phenyl ether	LT 76.0 (LT 76.0)*
N-Nitrosodiphenylamine	LT 38.0 (LT 38.0)*
4-Bromophenyl phenyl ether	LT 38.0 (LT 38.0)*
Hexachlorobenzene	LT 38.0 (LT 38.0)*
Phenanthrene	LT 38.0 (LT 38.0)*
Anthracene	LT 38.0 (LT 38.0)*
Carbazole	LT 38.0 (LT 38.0)*
Di-n-butyl phthlate	LT 38.0 (LT 38.0)*
Fluoranthene	LT 38.0 (LT 38.0)*
Pyrene	LT 38.0 (LT 38.0)*
Butyl benzyl phthalate	99.0 (LT 38.0)*
Benzo(a)anthracene	LT 38.0 (LT 38.0)*
3-3'-Dichlorobenzidine	LT 76.0 (LT 76.0)*
Chrysene	LT 38.0 (LT 38.0)*
Bis (2-ethylhexyl) phthlate	120.0 (70.0)*
Di-n-octyl phthlate	LT 38.0 (LT 38.0)*
Benzo(b)fluoranthene	LT 38.0 (LT 38.0)*
Benzo(k)fluoranthene	LT 38.0 (LT 38.0)*
Benzo(a)pyrene	LT 38.0 (LT 38.0)*
Indo(1,2,3-cd) pyrene	LT 38.0 (LT 38.0)*
Dibenz(a,h)anthracene	LT 38.0 (LT 38.0)*
Benzo(g,h,i)perylene	LT 38.0 (LT 38.0)*

LT = Less Than
* = Duplicate results
Results are reported as micrograms per kilogram (ug/Kg).

EPA 8260

Dichlorodifluoromethane	LT 0.6 (LT 0.6)*
Chloromethane	LT 0.6 (LT 0.6)*
Choroethane	LT 0.6 (LT 0.6)*
Bromomethane	LT 0.6 (LT 0.6)*
Vinyl chloride	LT 0.6 (LT 0.6)*
Trichlorofluoromethane	LT 0.6 (LT 0.6)*
1,1-Dichloroethene	LT 0.6 (LT 0.6)*
Methylene Chloride	16.0B (19.0B)*

B = Found in Method Blank at 19.0 ug/Kg.

ACTS TESTING LABS

PRELIMINARY

EPA 8260 (con't):	ACTS #4B-4129E 2430-08314-AT1
Trans 1,2-Dichloroethene	LT 0.6 (LT 0.6)*
1,1-Dichloroethane	LT 0.6 (LT 0.6)*
Cis 1,2-Dichloroethene	LT 0.6 (LT 0.6)*
2,2'-Dichloropropane	LT 0.6 (LT 0.6)*
Bromochloromethane	LT 0.6 (LT 0.6)*
Chloroform	6.7 (9.9)*
1,1,1-Trichloroethane	LT 0.6 (LT 0.6)*
1,1-Dichloropropene	LT 0.6 (LT 0.6)*
Carbon Tetrachloride	LT 0.6 (LT 0.6)*
1,2-Dichloroethane	LT 0.6 (LT 0.6)*
Benzene	LT 0.6 (LT 0.6)*
Trichloroethene	LT 0.6 (LT 0.6)*
1,2-Dichloropropane	LT 0.6 (LT 0.6)*
Dibromomethane	LT 0.6 (LT 0.6)*
Bromodichloromethane	LT 0.6 (LT 0.6)*
Toluene	8.8 (17.0)*
cis-1,3-Dichloropropene	LT 0.6 (LT 0.6)*
1,1,2-Trichloroethane	LT 0.6 (1.4)*
1,3-Dichloropropane	LT 0.6 (LT 0.6)*
Tetrachloroethene	8.7 (9.2)*
Dibromochloromethane	LT 0.6 (LT 0.6)*
1,2-Dibromomethane	LT 0.6 (LT 0.6)*
Chlorobenzene	LT 0.6 (0.5)*
1,1,1,2-Tetrachloroethane	LT 0.6 (3.2)*
Ethylbenzene	1.0 (12.0)*
M,P-Xylenes	13.0 (15.0)*
O-Xylene	10.0 (13.0)*
Styrene	LT 0.6 (LT 0.6)*
Bromoform	LT 0.6 (LT 0.6)*
Isopropylbenzene	2.4 (2.5)*
1,1,2,2-Tetrachloroethane	LT 0.6 (LT 0.6)*
1,2,3-Trichloropropane	LT 0.6 (LT 0.6)*
Bromobenzene	LT 0.6 (LT 0.6)*
n-Propylbenzene	6.5 (6.8)*
2-Chlorotoluene	LT 0.6 (LT 0.6)*
1,3,5-Trimethylbenzene	50.0 (61.0)*
4-Chlorotoluene	LT 0.6 (LT 0.6)*
tert-Butylbenzene	LT 0.6 (LT 0.6)*
1,2,4-Trimethylbenzene	160.0 (200.0)*
sec-Butylbenzene	14.0 (16.0)*
p-Isopropyltoluene	21.0 (23.0)*
1,3-Dichlorobenzene	LT 0.6 (LT 0.6)*
1,4-Dichlorobenzene	LT 0.6 (1.0)*
n-Butylbenzene	21.0 (24.0)*
1,2-Dichlorobenzene	LT 0.6 (LT 0.6)*
1,2-Dibromo-3-chloropropane	3.3 (3.8)*
1,2,4-Trichlorobenzene	LT 0.6 (LT 0.6)*
Hexachlorobutadiene	LT 0.6 (LT 0.6)*
Naphthalene	70.0 (87.0)*
1,2,3-Trichlorobenzene	LT 0.6 (LT 0.6)*

LT=Less Than
*=Duplicate results
Results are reported as micrograms per kilogram (ug/Kg).

ACTS TESTING LABS

PRELIMINARY

EPA 8080 (PCBs only)

Polychlorinated Biphenyls as:

Arochlor-1016	LT 0.094
Arochlor-1221	LT 0.094
Arochlor-1232	LT 0.094
Arochlor-1242	LT 0.094
Arochlor-1248	LT 0.094
Arochlor-1254	0.91
Arochlor-1260	LT 0.094

LT=Less Than
Results are reported as micrograms per gram (ug/g).

DAY ENGINEERING, P.C.
2144 Brighton-Henrietta Town Line Road
Rochester, New York 14623 (716)292-1090

MEMO
94-2430R / RK134
September 26, 1994

SUBJECT: Strippit Landfill Closure
Site Meeting #8

MEETING DATE: September 19, 1994

TIME: 13:10 - 13:40

PLACE: Field Office Strippit Site

ATTENDEES: J. Walia - NYSDEC
K. Glaser - NYSDEC
R. Kampff - Day
L. Emerson - Haseley

I. Job Progress Since Last Meeting

Since the last meeting, the entire barrier protection layer has been placed and compacted. Proof-rolling indicated that the barrier protection material was sufficiently compacted and the thickness of the barrier protection layer was verified by survey. Following this verification, topsoil placement began. At the time of the meeting, approximately 75% of the site was covered with topsoil.

Other work during the period included the construction of the drainage trench along the northern border of the site. Additionally, petroleum contaminated soil on the west side of the site was excavated between the anchor trench and the property line. This material was stockpiled for subsequent treatment/disposal.

II. Problems/Resolution

1. Apparent petroleum-contaminated soil was encountered during excavation of the anchor trench (see meeting minutes for the site meetings #6 and #7).

   Resolution: Potentially contaminated soil from the anchor trench was excavated and stockpiled on plastic sheeting. During this removal, two samples were collected for analytical testing. One sample of the material determined to be impacted was tested via an expedited schedule. These results were presented with the site meeting minutes #7. The second sample was collected from the invert and the anchor trench (i.e., from soil deemed "clean" based upon field observation and testing). The results of this testing (attached to this submittal) indicate only low concentrations of contaminants related to the apparent petroleum-contaminated soil.

2. During removal of petroleum contaminated materials located on the west side of the anchor trench, petroleum stained soils were encountered extending from the anchor trench to the property line and potentially off-site.

   Resolution: Since the discovery of the of-site contamination was made late in the day on Friday, September 16, 1994, it was decided to backfill the excavation with "clean" low permeability fill. Evaluation of the extent of contaminated material beyond the property line was deferred until Strippit could be consulted. [Note: Subsequent evaluation of this area on 9/21/94 indicated that petroleum stained soil extended about 4 feet beyond the property line at a depth of between about 1.5 and 3.5 feet below the ground surface. These soils were excavated, placed on the existing stockpile and the area was backfilled with clean fill.]

3. An initial test submitted by Haseley indicated the topsoil had a pH of 4.9 (i.e., less than the 5.5 to 7.6 range required by the specifications).

   Resolution: Additional pH tests were made by Wolf's Nursery (the hydroseeding contractor) that indicated the topsoil was suitable. It is suspected the original topsoil sample was mishandled causing a lower pH.

4. L. Emerson indicated that Haseley desired to modify the seed mixture from that proposed in the specifications. Primarily this change included switching from annual grasses and crown vetch to perennial grasses and crown vetch. This change was requested primarily due to the fall seeding schedule.

   Resolution: Day discussed this matter with the hydroseeding contractor and the Monroe County Cooperative Extension. It was determined that the perennial grasses should germinate this year and become established during the next growing season (i.e., 1995). Eventually the crown vetch should overtake the grasses and by 1996 the crown vetch should predominate. Based on these considerations, it was agreed that Haseley could modify the proposed seeding provided the desired vegetative cover was ultimately established and that there would be no additional costs to the project.

5. Confirmatory soil/sediment samples are required within the drainage trench along the western edge of the Strippit parking lot.

   Resolution: NYSDEC collected two (2) samples from this trench and one (1) sample at a discharge location east of Clarence Center Road on September 14, 1994. These samples with the tested for TAL metals by NYSDEC. Analytical results will be submitted when the data becomes available.

III. Work Planned Through Next Week

Topsoil placement and surveying to assure finished grades are planned for the next week. Additionally, drainage trench construction and excavation of petroleum-contaminated soil should be completed in this period. Hydroseeding will be done immediately following placement and surveying of the topsoil layer.

IV. Next Meeting

September 26, 1994 (13:00 hours) in the field office at the Strippit site (if needed).

Respectfully submitted by:
Day Engineering, P.C.

Raymond L. Kampff

cc: All Attendees
B. Johnson - Strippit
File

ACTS TESTING LABS, INC.
25 Anderson Road
Buffalo, NY 14225-4928
Tel (716)897-3300
Fax (716)897-0876

Technical Report 4B-4130E
File # Stripp-94-2430R

September 16, 1994
Page 1 of 4

Mr. Ray Kampff
DAY ENVIRONMENTAL, INC.

SUBJECT:

Analysis of one (1) soil sample for various parameters. The sample was received on August 31, 1994.

RESULTS:

On Pages Two through Four.

EXPERIMENTAL:

Semi-volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8270: Semi-volatile Organics.

Volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8260: Volatile Organics.

The Toxicity Characteristic Leaching Procedure for Metals was determined as defined in Title 40, Code of Federal Regulations, Part 268, Appendix 1. The Toxicity Characteristic Leaching Procedure was conducted according to "Test Methods for the Examination of Solid Waste Physical/Chemical Methods", EPA SW-846.

ACTS TESTING LABS, INC.
Charles E. Hartke
Charles E. Hartke
Manager, Chemistry Laboratory

ACTS TESTING LABS, INC.
Lisa M. Clerici
Lisa M. Clerici, Supervisor
Wet Chemistry Laboratory

ACTS TESTING LABS, INC.
Elizabeth R. Hausler
Elizabeth R. Hausler, Supervisor
Gas Chromatography Laboratory

cme

ACTS TESTING LABS

RESULTS:

	ACTS #4B-4130E 2430-08314-AT2	TCLP Blank	TCLP Limit
TCLP Metals			
Arsenic	LT 0.05	LT 0.05	5.0
Barium	1.35	LT 0.005	100.0
Cadmium	0.009	LT 0.005	1.0
Chromium	LT 0.01	LT 0.01	5.0
Lead	LT 0.03	LT 0.03	5.0
Mercury	LT 0.0002	LT 0.0002	0.2
Selenium	LT 0.12	LT 0.12	1.0
Silver	0.032	LT 0.005	5.0

LT = Less Than
The results are reported as milligrams per liter (mg/L)

EPA 8270	
N-Nitroso-dimethylamine	LT 73.0
Bis (2-chloroethyl) ether	LT 36.0
1,3-Dichlorobenzene	LT 36.0
1,4-Dichlorobenzene	LT 36.0
1,2-Dichlorobenzene	LT 36.0
Bis (2-chloroisopropyl) ether	LT 36.0
N-Nitroso-di-n-propylamine	LT 36.0
Hexachloroethane	LT 36.0
Nitrobenzene	LT 36.0
Isophorone	LT 36.0
Bis (2-chloroethoxy) methane	LT 36.0
1,2,4-Trichlorobenzene	LT 36.0
Napthalene	LT 36.0
4-Chloroaniline	LT 36.0
Hexachlorobutadiene	LT 73.0
2-Methylnaphthalene	LT 360.0
Hexachlorocyclopentadiene	LT 360.0
2-Chloronaphthalene	LT 36.0
2-Nitroaniline	LT 36.0
Dimethylphthalate	LT 36.0
Acenphthylene	LT 36.0
2,6-Dinitrotoluene	LT 36.0
Acenaphthene	LT 36.0
3-Nitroaniline	LT 73.0
Dibenzofuran	LT 36.0
2,4-Dinitrotoluene	LT 36.0
Diethylphthalate	150.0
Fluorene	LT 36.0
4-Nitroaniline	LT 73.0
4-Chlorophenyl phenyl ether	LT 73.0
N-Nitrosodiphenylamine	LT 36.0
4-Bromophenyl phenyl ether	LT 36.0

ACTS TESTING LABS

EPA 8270 (con't):	ACTS #4B-4130E 2430-08314-AT2
Hexachlorobenzene	LT 36.0
Phenanthrene	LT 36.0
Anthracene	LT 36.0
Carbazole	LT 36.0
Di-n-butyl phthlate	LT 36.0
Fluoranthene	LT 36.0
Pyrene	LT 36.0
Butyl benzyl phthalate	LT 36.0
Benzo(a)anthracene	LT 36.0
3-3'-Dichlorobenzidine	LT 73.0
Chrysene	LT 36.0
Bis (2-ethylhexyl) phthlate	LT 36.0
Di-n-octyl phthlate	LT 36.0
Benzo(b)fluoranthene	LT 36.0
Benzo(k)fluoranthene	LT 36.0
Benzo(a)pyrene	LT 36.0
Indo(1,2,3-cd) pyrene	LT 36.0
Dibenz(a,h)anthracene	LT 36.0
Benzo(g,h,i)perylene	LT 36.0

LT=Less Than
Results are reported as micrograms per kilogram (ug/Kg).

EPA 8260	
Dichlorodifluoromethane	LT 0.5
Chloromethane	LT 0.5
Choroethane	LT 0.5
Bromomethane	0.7
Vinyl chloride	LT 0.5
Trichlorofluoromethane	LT 0.5
1,1-Dichloroethene	LT 0.5
Methylene Chloride	18.0B
Trans 1,2-Dichloroethene	LT 0.5
1,1-Dichloroethane	LT 0.5
Cis 1,2-Dichloroethene	LT 0.5
2,2'-Dichloropropane	LT 0.5
Bromochloromethane	LT 0.5
Chloroform	8.5
1,1,1-Trichloroethane	LT 0.5
1,1-Dichloropropene	LT 0.5
Carbon Tetrachloride	LT 0.5
1,2-Dichloroethane	LT 0.5
Benzene	LT 0.5
Trichloroethene	LT 0.5
1,2-Dichloropropane	LT 0.5
Dibromomethane	LT 0.5
Bromodichloromethane	LT 0.5
Toluene	LT 0.5

B=Found in Method Blank at 19.0 ug/Kg.

ACTS TESTING LABS

EPA 8260 (con't):	ACTS #4B-4130E 2430-08314-AT2
cis-1,3-Dichloropropene	LT 0.5
1,1,2-Trichloroethane	LT 0.5
1,3-Dichloropropane	LT 0.5
Tetrachloroethene	LT 0.5
Dibromochloromethane	LT 0.5
1,2-Dibromomethane	LT 0.5
Chlorobenzene	LT 0.5
1,1,1,2-Tetrachloroethane	LT 0.5
Ethylbenzene	1.3
M,P-Xylenes	LT 1.0
O-Xylene	LT 0.5
Styrene	LT 0.5
Bromoform	LT 0.5
Isopropylbenzene	LT 0.5
1,1,2,2-Tetrachloroethane	LT 0.5
1,2,3-Trichloropropane	LT 0.5
Bromobenzene	LT 0.5
n-Propylbenzene	LT 0.5
2-Chlorotoluene	LT 0.5
1,3,5-Trimethylbenzene	LT 0.5
4-Chlorotoluene	LT 0.5
tert-Butylbenzene	LT 0.5
1,2,4-Trimethylbenzene	LT 0.5
sec-Butylbenzene	LT 0.5
p-Isopropyltoluene	LT 0.5
1,3-Dichlorobenzene	LT 0.5
1,4-Dichlorobenzene	LT 0.5
n-Butylbenzene	LT 0.5
1,2-Dichlorobenzene	LT 0.5
1,2-Dibromo-3-chloropropane	LT 0.5
1,2,4-Trichlorobenzene	LT 0.5
Hexachlorobutadiene	LT 0.5
Naphthalene	1.5
1,2,3-Trichlorobenzene	LT 0.5

LT = Less Than
Results are reported as micrograms per kilogram (ug/Kg).

APPENDIX C

Generator Waste Characterization Report
Buried Drums

ENVOTECH.

MANAGEMENT SERVICES, INC.

GENERATOR WASTE CHARACTERIZATION REPORT

TLN

T#066870

An original report form must be completed for each separate waste stream. Do not submit copies. WTS# 8665

Is this a ☒ New Waste for Approval?

or ☐ Waste Stream Reapproval? Previous Approval # _____

Complete all sections of this report, attach laboratory reports required and send with a REPRESENTATIVE ONE-PINT SAMPLE of this waste to the facility. Waste loads will not be scheduled for shipment until 1.) the facility has issued an approval letter and 2.) the customer has signed and returned the quotation agreement.

SECTION I: TREATMENT, DISPOSAL & RECOVERY NEEDS

This waste approval request is being submitted for (check all that apply):

☐ TREATMENT
Michigan Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Hazardous and non-hazardous waste stabilization of solids, semi-solids slurries and liquids. Inorganic waste treatment to BDAT standards.
Customer Service: (313) 699-7120

☐ RECOVERY/FUEL BLENDING
Michigan Recovery Systems, Inc.
36345 Van Born Road
Romulus, MI 48174
ATTN: Technical Review

Hazardous and non-hazardous waste solvent recovery, recycling, and fuel blending. Containerized and bulk waste handling. Technology is BDAT for many organic wastes. Customer Service: (313) 326-3100

☐ LANDFILL
Wayne Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Secure hazardous and non-hazardous waste landfill services. Containerized and bulk waste management.
Customer Service: (313) 697-7830

SECTION II: GENERATOR FACILITY INFORMATION

Generator Name Strippit, Inc.
Plant Name _____
Address 12975 Clarence Center Road
Akron State NY Zip 14001
Contact Robert Johnson
Alternate _____

S.I.C. Codes* _____
US EPA ID #* NYD 002 118 156

Telephone (716) 542-6511 Fax (716) 542-5957
Telephone ( ) _____ Fax ( ) _____

SECTION III: INVOICING INFORMATION

Customer Waste Technology Services, Inc.
Address 640 Park Place
Niagara Falls State NY Zip 14301
Contact T. L. Nebrich

Has an account been opened? Yes ☒ No ☐
If Yes, Account # 583

Telephone (716) 282-4100 Fax (716) 282-6996

SECTION IV: SAMPLING

A sample bearing this label must accompany this report to initiate the approval review process. Complete this label and attach to a REPRESENTATIVE ONE-PINT SAMPLE of the waste.

Record the date and name of person sampling:

Sampling completed by Ray Kampff - Day Engineering

Date sample collected September 12, 1994

Date sample and form sent _____

Waste Common Name:
Soil with petroleum

Generator Site Name:
Strippit, Inc.

Sample Collected By:
Ray Kampff - Day Engineering

Date Collected: T#:
September 12, 1994 066870

SECTION V: SHIPPING AND HANDLING INFORMATION

1. Is this waste: a. Reactive? Yes ☐ No ☒ | d. Pyrophoric? Yes ☐ No ☒
   b. Shock Sensitive? Yes ☐ No ☒ | e. Oxidizer? Yes ☐ No ☒
   c. Explosive? Yes ☐ No ☒ | f. Radioactive? Yes ☐ No ☒

   If yes, contact an Envotech Management Services Representative at (313) 697-7830 before completing this form.
2. Shipping Mode: Bulk Liquid ☐ Bulk Solid ☐ Drums ☒ Other ☐
3. Shipping Volume per Week _____ per Month _____
4. Annual Total Volume _____ One Time Only Volume 1-2 drums overpacked
5. DOT Shipping Name* To Be Determined
   Hazard Class* _____ UN/NA #* _____

SECTION VI: WASTE FINGERPRINT

1. Select one or more general description(s) for the waste at 70°F:
   Powdery Solid ☐ Sludge (non pumpable) ☐
   Other Solid* ☐ Liquid (pumpable) ☐
   Soils ☒ Liquid (multi phase) ☐
   Debris (describe) _____
2. Does the waste have a characteristic odor?* Yes ☐ No ☒ Describe _____
3. Color Description*: Brown
   USEPA SW-846* Method
   Method 9095
4. Are Free Liquids associated with this waste? Yes ☐ No ☒
5. Density: _____ lbs/gallon or lbs/cubic yards or >1.2 specific gravity
6. pH-Range: <2 ☐ 2-4.9 ☐ 5-9.9 ☐ 10-12.4 ☐ >12.5 ☐ (attach lab results) Method 9040 or 9045
7. Flash Point: - Liquid:* <90°F ☐ 90-140°F ☐ 140-200°F ☐ >200°F ☐ (attach lab results) Method 1010
   (If Flash Point <140°F, provide TOC and VOC analytical results.)
   - Solid:* <90°F ☐ 90-140°F ☐ >140°F ☒

SECTION VII: GENERATING PROCESS & HAZARDOUS CHARACTERISTIC(S)

1. Waste Common Name Soil with trace petroleum WIS# 8665
2. Provide a description of the process(es) generating this waste: (A DETAILED EXPLANATION MUST BE PROVIDED. ATTACH ADDITIONAL PAGE(S) SHOWING PROCESS FLOW DIAGRAM AND DETAILS IF NECESSARY*)

   Excavation of drums from old landfill

3. Based upon lab analyses and/or knowledge of the process(es) generating the waste, describe the composition of the waste:

	Minimum		Maximum	
Soils, stone, scale	70	to	90	%
Petroleum Oils	5	to	15	%
Moisture	10	to	30	%
		to		%
TOTAL:			100	%

4. Based upon RCRA Hazardous Waste Regulations (40 CFR 261) and Michigan Act 64 Rules:

	YES	NO	CODES
a. Does this waste meet any F listing description?	☐	☒	
b. Does this waste meet any K listing description?	☐	☒	
c. Does this waste meet any P listing description?	☐	☒	
d. Does this waste meet any U listing description?	☐	☒	
e. Does this waste exhibit Ignitability? (attach lab results) To be Determined	☐	☐	
f. Does this waste exhibit Corrosivity? (attach lab results)	☐	☐	
g. Does this waste exhibit Reactivity? (attach lab results)	☐	☐	
h. Does this waste exhibit Toxicity? (attach lab results)	☐	☐	
i. Does this waste leach Copper > 100ppm? (attach lab results)	☐	☐	
j. Does this waste leach Zinc > 500ppm? (attach lab results)	☐	☐	

5. For hazardous wastes, does the waste exceed any land Disposal restriction treatment standard(s) for the applicable codes?* (attach lab results) ☐ ☒
6. Is this a non-hazardous liquid waste regulated by Michigan Act 136?* ☐ ☒

Attach analytical results for all LDR constituents of concern for waste codes identified in Item 4 (above).

See full instructions on seperate sheet.

SECTION VII - RECLAMATION/RECYCLING/FUEL BLENDING*

Only for Michigan Recovery Systems, Inc. wastes, perform all of the following analyses:

Water (%) _____ Solids (%) _____ Heat value (BTU/lb) _____

Sulfur (%) _____ Chlorine (%) _____ PCBs (total ppm) _____

Enclose lab reports for F001 - F005 solvent scan and TCLP metals:* Ash (%) _____

SECTION X - CERTIFICATIONS

		Yes	No
1.	Does the waste contain cyanide amenable to chlorination above 250 ppm?*	☐	☒
2.	Does the waste contain reactive sulfide above 500 ppm?*	☐	☒
3.	Does this waste contain PCBs greater than 49 ppm?*	☐	☒
4.	Is this a dioxin/furan waste as specified in 40 CFR 261.31 under Hazardous Waste numbers F020, F021, F022, F023, F026, F027, F028?	☐	☒
5.	Is this a California List hazardous waste containing halogenated organic compounds found in Appendix III of 40 CFR Part 268 in total concentration greater than or equal to 1,000 mg/L?	☐	☒
6.	Is this a liquid hazardous waste containing Nickel (>134 mg/L) or Thallium (>130 mg/L)?	☐	☒

7. Mark the "Yes" column to indicate which TCLP testing has been conducted. (attach lab results*)
   For those constituents not tested, mark "No" and sign the certification provided.
   Either "Yes" or "No" MUST be checked for each and every constituent.

	TCLP REGULATORY ACTION LEVELS		CONSTITUENT TESTING CONDUCTED OR CERTIFICATION	
		mg/L	YES	NO
VHE ORGANICS*				
D018	Benzene	0.5	☐	☐
D019	Carbon Tetrachloride	0.5	☐	☐
D021	Chlorobenzene	100.0	☐	☐
D022	Chloroform	6.0	☐	☐
D028	1,2-Dichloroethane	0.5	☐	☐
D029	1,1-Dichloroethylene	0.7	☐	☐
D035	Methyl Ethyl Ketone	200.0	☐	☐
D039	Tetrachloroethylene	0.7	☐	☐
D040	Trichloroethylene	0.5	☐	☐
D043	Vinyl Chloride	0.2	☐	☐
METALS*				
D004	Arsenic	5.0	☐	☐
D005	Barium	100.0	☐	☐
D006	Cadmium	1.0	☐	☐
D007	Chromium	5.0	☐	☐
D008	Lead	5.0	☐	☐
D009	Mercury	0.2	☐	☐
D010	Selenium	1.0	☐	☐
D011	Silver	5.0	☐	☐
001D	Copper	100.0	☐	☐
003D	Zinc	500.0	☐	☐
ACID EXTRACTABLES*				
D023	o-Cresol**	200.0	☐	☒
D024	m-Cresol**	200.0	☐	☒
D025	p-Cresol**	200.0	☐	☒
D026	Cresol	200.0	☐	☒
D037	Pentachlorophenol	100.0	☐	☒
D041	2,4,5-Trichlorophenol	400.0	☐	☒
D042	2,4,6-Trichlorophenol	2.0	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed _____

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed _____

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed XR Johnson

** If o, m and p Cresols cannot be differentiated, use Total Cresol concentration

(Continued)

* See full instructions on separate sheet.

SECTION X: CERTIFICATIONS (continued)

TCLP REGULATORY ACTION LEVELS	mg/L	CONSTITUENT TESTING CONDUCTED OR CERTIFICATION: YES	NO
BASE NEUTRAL EXTRACTABLES*			
D027 1,4-Dichlorobenzene	7.5	☐	☒
D030 2,4-Dinitrotoluene	0.13	☐	☒
D032 Hexachlorobenzene	0.13	☐	☒
D033 Hexachlorobutadiene	0.5	☐	☒
D034 Hexachloroethane	3.0	☐	☒
D036 Nitrobenzene	2.0	☐	☒
D038 Pyridine	5.0	☐	☒
PESTICIDES*			
D020 Chlordane	0.03	☐	☒
D012 Endrin	0.02	☐	☒
D031 Heptachlor (& its Hydroxide)	0.008	☐	☒
D013 Lindane	0.4	☐	☒
D014 Methoxychlor	10.0	☐	☒
D015 Toxaphene	0.5	☐	☒
HERBICIDES*			
D016 2,4-D	10.0	☐	☒
D017 2,4,5-TP (Silvex)	1.0	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."
Signed X R Johnson

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."
Signed X R Johnson

REQUIREMENTS FOR A COMPLETE APPLICATION SUBMITTAL

APPLICATION PACKAGE CONTENTS

All pertinent items must be included together in one application package.

- ☐ 1) Waste Characterization Report Form
- ☐ 2) Lab Reports Required for:
  - ☐ a. Free Liquid Testing
  - ☐ b. pH
  - ☐ c. Flashpoint
  - ☐ d. Cyanide
  - ☐ e. Sulfide
  - ☐ f. Land Disposal Restriction Constituent Levels
  - ☐ g. TCLP testing, including Copper and Zinc
- ☐ 3) Representative Sample of Waste
- ☐ 4) MSDS
- ☐ 5) Other: _____

"I hereby authorize Envotech personnel to add supplemental information to the waste approval file provided I am contacted to give verbal permission. I authorize Envotech personnel to obtain a sample from any waste shipment for purposes of verification and confirmation."

Signed X R Johnson Title MGR MFG ENGR

"I certify that all information (including attached information) is complete and factual and is an accurate representation of the known and suspected hazards, and waste generator regulations, pertaining to the waste described herein."

Signature X R Johnson Printed Name R. JOHNSON Date 9/22/94

Company STERLITE INC Title MGR. MFG. ENGR

From: ENVOTECH MANAGEMENT SERVICES, INC.
ANALYTICAL LABORATORY
49350 N. I-94 SERVICE DRIVE
BELLEVILLE, MI. 48111

October 4, 1994

To: Waste Technology Services
640 Park Place
Niagara Falls, NY 14301

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA01052	CLIENT CODE: 7124
Purchase order number: VERBAL	Tracking number: 65870
Generator name: Strippit	Waste Name: SOIL
Sample collection date: 09/30/94	Time: 02:00
Lab submittal date: 09/30/94	Time: 14:09
Received by: JV	Validated by: CR

Parameter: RCI CHARACTERISTICS
Method reference: SW 846 Unit:
Result: see below
Date started: 10/03/94 Date finished: 10/03/94
Time started: Analyst: AZ

Parameter: TCLP METALS--RCRA/MDNR LIST
Method reference: SW846 6010 Unit: MG/L
Result: see below
Date started: 10/04/94 Date finished: 10/04/94
Time started: Analyst: AZ

Parameter: TCLP ZHE CONSTITUENTS
Method reference: SW8468010-20 Unit: MG/L
Result: see below
Date started: 10/03/94 Date finished: 10/03/94
Time started: Analyst: KMD

Parameter: BASE NEUTRAL ACID EXTRACTIBLES
Method reference: SW8468040/90 Unit: MG/L
Result: see below
Date started: 10/04/94 Date finished: 10/04/94
Time started: Analyst: KMD

Parameter: total organic carbon/halides
Method reference: SW846 9020 Unit: PPM
Result: see below
Date started: 10/04/94 Date finished: 10/04/94
Time started: Analyst: KMD

Parameter: TOTAL PCB
Method reference: SW846 8080 Unit: MG/KG
Result: see below
Date started: 10/03/94 Date finished: 10/03/94
Time started: Analyst: KMD

Data for RCI CHARACTERISTICS :

Component Name	Result	Component MDL
COROSIVITY	7.608	0.01
FLASHPOINT	>140	1 DEG F
CYANIDE, TOTAL	<0.5	0.50
SULFIDE, REACTIVE	<100	1

Data for TCLP METALS--RCRA/MDNR LIST MG/L:

Component Name	Result	Component MDL
ARSENIC	0.22	1.4
BARIUM	16	1.2
CADMIUM	0.02	0.69
CHROMIUM	0.05	0.19
LEAD	0.09	0.37
MERCURY	<0.02	0.205
SELENIUM	0.13	0.82
SILVER	0.01	0.43
COPPER	0.14	0.01
ZINC	0.90	2.61
NICKEL	0.26	5.0

Data for TCLP ZHE CONSTITUENTS MG/L:

Component Name	Result	Component MDL
1,4-DICHLORBENZENE	below rep lims	0.1
MEK	below rep lims	0.1
CHLOROFORM	below rep lims	0.1
BENZENE	below rep lims	0.1
CARBON TETRACHLORIDE	below rep lims	0.1
1,2-DICHLOROETHANE	below rep lims	0.1
1,1-DICHLOROETHYLENE	below rep lims	0.2
VINYL CHLORIDE	below rep lims	0.1
TRICHLOROETHYLENE	below rep lims	0.09
TETRACHLOROETHYLENE	below rep lims	0.05
CHLOROBENZENE	below rep lims	0.05

Data for BASE NEUTRAL ACID EXTRACTIBLES MG/L:

Component Name	Result	Component MDL
1,4-Dichlorobenzene	below rep lims	0.50
2,4- Dintrotoluene	below rep lims	0.10
Hexachlorobenzene	below rep lims	0.10

Data for BASE NEUTRAL ACID EXTRACTIBLES (continued):

Component Name	Result	Component MDL
Hexachloroethane	below rep lims	0.50
Nitrobenzene	below rep lims	0.50
Pyridine	below rep lims	1.0
Hexachlorobutadiene	below rep lims	0.50
o-Cresol	below rep lims	3.4
m-Cresol	below rep lims	5.6
p-Cresol	below rep lims	5.6
Cresol	below rep lims	5.6
Pentachlorophenol	below rep lims	7.4
2,4,5-Trichlorophenol	below rep lims	7.4
2,4,6-Trichlorophenol	below rep lims	7.4

Data for total organic carbon/halides PPM:

Component Name	Result	Component MDL
TOTAL ORGANIC CARBON	65,000	100
TOTAL ORGANIC HALIDES	<100	100

Data for TOTAL PCB MG/KG:

Component Name	Result	Component MDL
AROCLOR 1016	below det lims	1.0
AROCLOR 1221	below det lims	1.0
AROCLOR 1232	below det lims	1.0
AROCLOR 1242	below det lims	1.0
AROCLOR 1248	below det lims	1.0
AROCLOR 1254	below det lims	1.0
AROCLOR 1260	below det lims	1.0
TOTAL PCBS	below det lims	1.0

If there are any questions regarding this data, please call.

Charles E Roberts

CHARLES E. ROBERTS
QA/QC OFFICER

BELINDA PERO
LAB MANAGER

ENVOTECH.

GENERATOR WASTE CHARACTERIZATION REPORT

MANAGEMENT SERVICES, INC.

TLN

T# 066869

An original report form must be completed for each separate waste stream. Do not submit copies. WIS# 6664

Is this a ☒ New Waste for Approval?

or ☐ Waste Stream Reapproval? Previous Approval # _____

Complete all sections of this report, attach laboratory reports required and send with a REPRESENTATIVE ONE-PINT SAMPLE of this waste to the facility. Waste loads will not be scheduled for shipment until 1.) the facility has issued an approval letter and 2.) the customer has signed and returned the quotation agreement.

SECTION I: TREATMENT/DISPOSAL & RECOVERY NEEDS

This waste approval request is being submitted for (check all that apply):

☐ TREATMENT
Michigan Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Hazardous and non-hazardous waste stabilization of solids, semi-solids slurries and liquids. Inorganic waste treatment to BDAT standards.
Customer Service: (313) 699-7120

☐ RECOVERY/FUEL BLENDING
Michigan Recovery Systems, Inc.
36345 Van Born Road
Romulus, MI 48174
ATTN: Technical Review

Hazardous and non-hazardous waste solvent recovery, recycling, and fuel blending. Containerized and bulk waste handling. Technology is BDAT for many organic wastes. Customer Service: (313) 326-3100

☐ LANDFILL
Wayne Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Secure hazardous and non-hazardous waste landfill services. Containerized and bulk waste management.
Customer Service: (313) 697-7830

SECTION II: GENERATOR/FACILITY INFORMATION

Generator Name Strippit, Inc.
Plant Name _____
Address 12975 Clarence Center Road
Akron State NY Zip 14001
Contact Robert Johnson
Alternate _____

S.I.C. Codes* _____
US EPA ID #* NYD 002 118 136

Telephone (716) 542-4511 Fax (716) 542-3957
Telephone ( ) _____ Fax ( ) _____

SECTION III: INVOICING INFORMATION

Customer Waste Technology Services, Inc.
Address 640 Park Place
Niagara Falls State NY Zip 14301
Contact T. L. Nebrich

Has an account been opened? Yes ☒ No ☐
If Yes, Account # 583

Telephone (716) 282-4100 Fax (716) 282-6986

SECTION IV: SAMPLING

A sample bearing this label must accompany this report to initiate the approval review process. Complete this label and attach to a REPRESENTATIVE ONE-PINT SAMPLE of the waste.

Record the date and name of person sampling:

Sampling completed by Ray Kampff - Day Engineering

Date sample collected September 12, 1994

Date sample and form sent _____

Waste Common Name:
Grinding Solids

Generator Site Name:
Strippit, Inc.

Sample Collected By:
Ray Kampff - Day Engineering

Date Collected:
September 12, 1994

T#:
066869

SECTION V - SHIPPING AND HANDLING INFORMATION

1. Is this waste: a. Reactive? Yes ☐ No ☒ | d. Pyrophoric? Yes ☐ No ☒
   b. Shock Sensitive? Yes ☐ No ☒ | e. Oxidizer? Yes ☐ No ☒
   c. Explosive? Yes ☐ No ☒ | f. Radioactive? Yes ☐ No ☒

   If yes, contact an Envotech Management Services Representative at (313) 697-7830 before completing this form.
2. Shipping Mode: Bulk Liquid ☐ Bulk Solid ☐ Drums ☒ Other ☐
3. Shipping Volume per Week _____ per Month _____
4. Annual Total Volume _____ One Time Only Volume 3-5 drums overpacked
5. DOT Shipping Name* To Be Determined
   Hazard Class* _____ UN/NA #* _____

SECTION VI - WASTE FINGERPRINT

1. Select one or more general description(s) for the waste at 70°F:
   Powdery Solid ☐ Sludge (non pumpable) ☐
   Other Solid* ☒ Liquid (pumpable) ☐
   Soils ☐ Liquid (multi phase) ☐
   Debris (describe) _____
2. Does the waste have a characteristic odor?* Yes ☐ No ☒ Describe _____
3. Color Description*: _____
4. Are Free Liquids associated with this waste? Yes ☐ No ☒ ..... USEPA SW-846* Method Method 9095
5. Density: _____ lbs/gallon or lbs/cubic yards or > 1.2 specific gravity
6. pH-Range: <2 ☐ 2-4.9 ☐ 5-9.9 ☐ 10-12.4 ☐ >12.5 ☐ (attach lab results) ..... Method 9040 or 9045
7. Flash Point: • Liquid:* <90°F ☐ 90-140°F ☐ 140-200°F ☐ >200°F ☐ (attach lab results) .. Method 1010
   (If Flash Point <140°F, provide TOC and VOC analytical results.)
   • Solid:* <90°F ☐ 90-140°F ☐ >140°F ☒

SECTION VII - GENERATING PROCESS & HAZARDOUS CHARACTERISTIC(S)

1. Waste Common Name Grinding Solids WIS# 8664
2. Provide a description of the process(es) generating this waste: (A DETAILED EXPLANATION MUST BE PROVIDED. ATTACH ADDITIONAL PAGE(S) SHOWING PROCESS FLOW DIAGRAM AND DETAILS IF NECESSARY*)

   Excavation of drums in old landfill

3. Based upon lab analyses and/or knowledge of the process(es) generating the waste, describe the composition of the waste:

	Minimum		Maximum	
Metal pieces (grindings)	40	to	60	%
Water base coolant	10	to	20	%
Inerts: Fe, AlO_2, SiO_2	10	to	30	%
Moisture	10	to	20	%
TOTAL:			100	%

4. Based upon RCRA Hazardous Waste Regulations (40 CFR 261) and Michigan Act 64 Rules:

	YES	NO	CODES
a. Does this waste meet any F listing description?	☐	☒	
b. Does this waste meet any K listing description?	☐	☒	
c. Does this waste meet any P listing description?	☐	☒	
d. Does this waste meet any U listing description?	☐	☒	
e. Does this waste exhibit Ignitability? (attach lab results)	☐	☒	
f. Does this waste exhibit Corrosivity? (attach lab results) ...To be Determined	☐	☒	
g. Does this waste exhibit Reactivity? (attach lab results)	☐	☒	
h. Does this waste exhibit Toxicity? (attach lab results)	☐	☒	
i. Does this waste leach Copper > 100ppm? (attach lab results)	☐	☒	
j. Does this waste leach Zinc > 500ppm? (attach lab results)	☐	☒	

5. For hazardous wastes, does the waste exceed any land Disposal restriction treatment standard(s) for the applicable codes?* (attach lab results) ☐ ☒ D29L
6. Is this a non-hazardous liquid waste regulated by Michigan Act 136?* ☒ ☒ D29L

Attach analytical results for all LDR constituents of concern for waste codes identified in Item 4 (above).

* See full instructions on separate sheet.

SECTION VIII - RECLAMATION/RECYCLING/FUEL BLENDING

Only for Michigan Recovery Systems, Inc. wastes, perform all of the following analyses:

Water (%) _____ Solids (%) _____ Heat value (BTU/lb) _____

Sulfur (%) _____ Chlorine (%) _____ PCBs (total ppm) _____

Enclose lab reports for F001 - F005 solvent scan and TCLP metals:* Ash (%) _____

SECTION IX - CERTIFICATIONS

	Yes	No
1. Does the waste contain cyanide amenable to chlorination above 250 ppm?*	☐	☒
2. Does the waste contain reactive sulfide above 500 ppm?*	☐	☒
3. Does this waste contain PCBs greater than 49 ppm?*	☐	☒
4. Is this a dioxin/furan waste as specified in 40 CFR 261.31 under Hazardous Waste numbers F020, F021, F022, F023, F026, F027, F028?	☐	☒
5. Is this a California List hazardous waste containing halogenated organic compounds found in Appendix III of 40 CFR Part 268 in total concentration greater than or equal to 1,000 mg/L?	☐	☒
6. Is this a liquid hazardous waste containing Nickel (>134 mg/L) or Thallium (>130 mg/L)?	☐	☒

7. Mark the "Yes" column to indicate which TCLP testing has been conducted. (attach lab results*)
For those constituents not tested, mark "No" and sign the certification provided.
Either "Yes" or "No" MUST be checked for each and every constituent.

	TCLP REGULATORY ACTION LEVELS	CONSTITUENT TESTING CONDUCTED OR CERTIFICATION	
		YES	NO
ZHE ORGANICS*	mg/L		
D018 Benzene	0.5	☐	☒
D019 Carbon Tetrachloride	0.5	☐	☒
D021 Chlorobenzene	100.0	☐	☒
D022 Chloroform	6.0	☐	☒
D028 1,2-Dichloroethane	0.5	☐	☒
D029 1,1-Dichloroethylene	0.7	☐	☒
D035 Methyl Ethyl Ketone	200.0	☐	☒
D039 Tetrachloroethylene	0.7	☐	☒
D040 Trichloroethylene	0.5	☐	☒
D043 Vinyl Chloride	0.2	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed X [signature]

METALS*			
D004 Arsenic	5.0	☐	☐
D005 Barium	100.0	☐	☐
D006 Cadmium	1.0	☐	☐
D007 Chromium	5.0	☐	☐
D008 Lead	5.0	☐	☐
D009 Mercury	0.2	☐	☐
D010 Selenium	1.0	☐	☐
D011 Silver	5.0	☐	☐
001D Copper	100.0	☐	☐
003D Zinc	600.0	☐	☐

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed _____

ACID EXTRACTABLES*			
D023 o-Cresol**	200.0	☐	☒
D024 m-Cresol**	200.0	☐	☒
D025 p-Cresol**	200.0	☐	☒
D026 Cresol	200.0	☐	☒
D037 Pentachlorophenol	100.0	☐	☒
D041 2,4,5-Trichlorophenol	400.0	☐	☒
D042 2,4,6-Trichlorophenol	2.0	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed X [signature]

** If o, m and p Cresols cannot be differentiated, use Total Cresol concentration

(Continued)

* See full instructions on separate sheet

SECTION IX: CERTIFICATIONS (Continued)

	TCLP REGULATORY ACTION LEVELS		CONSTITUENT TESTING CONDUCTED OR CERTIFICATION	
	mg/L	YES	NO	CERTIFICATION
BASE NEUTRAL EXTRACTABLES*				"Based upon my knowledge of the
D027 1,4-Dichlorobenzene	7.5	☐	☒	waste and the process generating
D030 2,4-Dinitrotoluene	0.13	☐	☒	the waste, these constituents are
D032 Hexachlorobenzene	0.13	☐	☒	not present in the waste above
D033 Hexachlorobutadiene	0.5	☐	☒	hazardous classification levels."
D034 Hexachloroethane	3.0	☐	☒	
D036 Nitrobenzene	2.0	☐	☒	Signed X R Johnson
D038 Pyridine	5.0	☐	☒	
PESTICIDES*				CERTIFICATION
D020 Chlordane	0.03	☐	☒	"Based upon my knowledge of the
D012 Endrin	0.02	☐	☒	waste and the process generating
D031 Heptachlor (& its Hydroxide)	0.008	☐	☒	the waste, these constituents are
D013 Lindane	0.4	☐	☒	not present in the waste above
D014 Methoxychlor	10.0	☐	☒	hazardous classification levels."
D015 Toxaphene	0.5	☐	☒	
				Signed X R Johnson
HERBICIDES*				
D016 2,4-D	10.0	☐	☒	
D017 2,4,5-TP (Silvex)	1.0	☐	☒	

REQUIREMENTS FOR A COMPLETE APPLICATION SUBMITTAL

APPLICATION PACKAGE CONTENTS

All pertinent items must be included together in one application package.

- ☐ 1) Waste Characterization Report Form
- ☐ 2) Lab Reports Required for:
  - ☐ a. Free Liquid Testing
  - ☐ b. pH
  - ☐ c. Flashpoint
  - ☐ d. Cyanide
  - ☐ e. Sulfide
  - ☐ f. Land Disposal Restriction Constituent Levels
  - ☐ g. TCLP testing, including Copper and Zinc
- ☐ 3) Representative Sample of Waste
- ☐ 4) MSDS
- ☐ 5) Other: _____

"I hereby authorize Envotech personnel to add supplemental information to the waste approval file provided I am contacted to give verbal permission. I authorize Envotech personnel to obtain a sample from any waste shipment for purposes of verification and confirmation."

Signed X R Johnson Title MGR MFG. ENGR

"I certify that all information (including attached information) is complete and factual and is an accurate representation of the known and suspected hazards, and waste generator regulations, pertaining to the waste described herein."

Signature X R Johnson Printed Name R. JOHNSON Date 9/22/94

Company STRIPPIT, INC. Title MGR. MFG. ENGR

From: ENVOTECH MANAGEMENT SERVICES, INC.
ANALYTICAL LABORATORY
49350 N. I-94 SERVICE DRIVE
BELLEVILLE, MI. 48111

September 26, 1994

To: Waste Technology Services
640 Park Place
Niagara Falls, NY 14301

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA00984	CLIENT CODE: 7124
Purchase order number: VERBAL	Tracking number: 66869
Generator name: Strippit	Waste Name: GRINDING SLDS
Sample collection date: 09/21/94	Time: 01:50
Lab submittal date: 09/21/94	Time: 13:55
Received by: JV	Validated by: CR

Parameter: RCI CHARACTERISTICS
Method reference: SW 846 Unit:
Result: see below
Date started: 09/22/94 Date finished: 09/22/94
Time started: Analyst: JC

Parameter: TCLP METALS--RCRA/MDNR LIST
Method reference: SW846 6010 Unit: MG/L
Result: see below
Date started: 09/26/94 Date finished: 09/26/94
Time started: Analyst: AZ

Parameter: TCLP ZHE CONSTITUENTS
Method reference: SW8468010-20 Unit: MG/L
Result: see below
Date started: 09/23/94 Date finished: 09/23/94
Time started: Analyst: KMD

Parameter: TOTAL PCB
Method reference: SW846 8080 Unit: MG/KG
Result: see below
Date started: 09/23/94 Date finished: 09/23/94
Time started: Analyst: KMD

Data for RCI CHARACTERISTICS :

Component Name	Result	Component MDL
COROSIVITY	7.639	0.01
FLASHPOINT	>140	1 DEG F
CYANIDE, TOTAL	<0.5	0.50
SULFIDE, REACTIVE	<100	1

Data for TCLP METALS--RCRA/MDNR LIST MG/L:

Component Name	Result	Component MDL
ARSENIC	0.08	1.4
BARIUM	10	1.2
CADMIUM	0.02	0.69
CHROMIUM	0.19	0.19
LEAD	0.09	0.37
MERCURY	<0.02	0.205
SELENIUM	0.16	0.82
SILVER	Less than	0.43
COPPER	0.08	0.01
ZINC	1.8	2.61
NICKEL	Less than	5.0

Data for TCLP ZHE CONSTITUENTS MG/L:

Component Name	Result	Component MDL
1,4-DICHLORBENZENE	BELOW DET LIMS	0.1
MEK	BELOW DET LIMS	0.1
CHLOROFORM	BELOW DET LIMS	0.1
BENZENE	BELOW DET LIMS	0.1
CARBON TETRACHLORIDE	BELOW DET LIMS	0.1
1,2-DICHLOROETHANE	BELOW DET LIMS	0.1
1,1-DICHLOROETHYLENE	BELOW DET LIMS	0.2
VINYL CHLORIDE	BELOW DET LIMS	0.1
TRICHLOROETHYLENE	BELOW DET LIMS	0.09
TETRACHLOROETHYLENE	BELOW DET LIMS	0.05
CHLOROBENZENE	BELOW DET LIMS	0.05

Data for TOTAL PCB MG/KG:

Component Name	Result	Component MDL
AROCLOR 1016	BELOW DET LIMS	1.0
AROCLOR 1221	BELOW DET LIMS	1.0
AROCLOR 1232	BELOW DET LIMS	1.0
AROCLOR 1242	BELOW DET LIMS	1.0
AROCLOR 1248	BELOW DET LIMS	1.0
AROCLOR 1254	BELOW DET LIMS	1.0
AROCLOR 1260	BELOW DET LIMS	1.0
TOTAL PCBS	BELOW DET LIMS	1.0

If there are any questions regarding this data, please call.

Charles E. Roberts

CHARLES E. ROBERTS
QA/QC OFFICER

BELINDA PERO
LAB MANAGER

ENVOTECH.

MANAGEMENT SERVICES, INC.

GENERATOR WASTE CHARACTERIZATION REPORT

TLN

T# 066868

An original report form must be completed for each separate waste stream. Do not submit copies. WTS# 8663

Is this a ☒ New Waste for Approval?
or ☐ Waste Stream Reapproval? Previous Approval # _____

Complete all sections of this report, attach laboratory reports required and send with a REPRESENTATIVE ONE-PINT SAMPLE of this waste to the facility. Waste loads will not be scheduled for shipment until 1.) the facility has issued an approval letter and 2.) the customer has signed and returned the quotation agreement.

SECTION I: TREATMENT, DISPOSAL & RECOVERY NEEDS

This waste approval request is being submitted for (check all that apply):

☐ TREATMENT
Michigan Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Hazardous and non-hazardous waste stabilization of solids, semi-solids slurries and liquids. Inorganic waste treatment to BDAT standards.
Customer Service: (313) 699-7120

☐ RECOVERY/FUEL BLENDING
Michigan Recovery Systems, Inc.
36345 Van Born Road
Romulus, MI 48174
ATTN: Technical Review

Hazardous and non-hazardous waste solvent recovery, recycling, and fuel blending. Containerized and bulk waste handling. Technology is BDAT for many organic wastes. Customer Service: (313) 326-3100

☐ LANDFILL
Wayne Disposal, Inc.
49350 N. I-94 Service Drive
Belleville, MI 48111
ATTN: Technical Review

Secure hazardous and non-hazardous waste landfill services. Containerized and bulk waste management.
Customer Service: (313) 697-7830

SECTION II: GENERATOR FACILITY INFORMATION

Generator Name Strippit, Inc.
Plant Name _____
Address 12975 Clarence Center Road
Akron State NY Zip 14001
Contact Robert Johnson
Alternate _____

S.I.C. Codes* _____
US EPA ID #* NYD 002 118 156

Telephone (716) 542-4511 Fax (716) 542-5957
Telephone ( ) _____ Fax ( ) _____

SECTION III: INVOICING INFORMATION

Customer Waste Technology Services, Inc.
Address 640 Park Place
Niagara Falls State NY Zip 14301
Contact T. L. Nebrich

Has an account been opened? Yes ☒ No ☐
If Yes, Account # 583

Telephone (716) 282-4100 Fax (716) 282-6986

SECTION IV: SAMPLING

A sample bearing this label must accompany this report to initiate the approval review process. Complete this label and attach to a REPRESENTATIVE ONE-PINT SAMPLE of the waste.

Record the date and name of person sampling:

Sampling completed by Ray Kampff - Day Engineering

Date sample collected September 12, 1994

Date sample and form sent _____

Waste Common Name:
Heat Treat Salts

Generator Site Name:
Strippit, Inc.

Sample Collected By:
Ray Kampff - Day Engineering

Date Collected: T#:
September 12, 1994 066868

* See full instructions on separate sheet.

Printed on Recycled Paper

Form 911 (11-91)

SECTION V: SHIPPING AND HANDLING INFORMATION

1. Is this waste: a. Reactive? Yes ☐ No ☒ | d. Pyrophoric? Yes ☐ No ☒
   b. Shock Sensitive? Yes ☐ No ☒ | e. Oxidizer? Yes ☐ No ☒
   c. Explosive? Yes ☐ No ☒ | f. Radioactive? Yes ☐ No ☒
   If yes, contact an Envotech Management Services Representative at (313) 697-7830 before completing this form.
2. Shipping Mode: Bulk Liquid ☐ Bulk Solid ☐ Drums ☒ Other ☐
3. Shipping Volume per Week _____ per Month _____
4. Annual Total Volume _____ One Time Only Volume 1-3 drums overpacked
5. DOT Shipping Name* To Be Determined
   Hazard Class* _____ UN/NA #* _____

SECTION VI: WASTE "FINGERPRINT"

1. Select one or more general description(s) for the waste at 70°F:
   Powdery Solid ☐ | Sludge (non pumpable) ☐
   Other Solid* ☒ | Liquid (pumpable) ☐
   Soils ☐ | Liquid (multi phase) ☐
   Debris (describe) _____
2. Does the waste have a characteristic odor?* Yes ☐ No ☒ Describe _____
3. Color Description*: _____
   USEPA SW-846* Method
4. Are Free Liquids associated with this waste? Yes ☐ No ☒ ..... Method 9095
5. Density: _____ lbs/gallon or lbs/cubic yards or >1.2 specific gravity
6. pH-Range: <2 ☐ 2-4.9 ☐ 5-9.9 ☐ 10-12.4 ☐ >12.5 ☐ (attach lab results) ..... Method 9040 or 9045
7. Flash Point: - Liquid:* <90°F ☐ 90-140°F ☐ 140-200°F ☐ >200°F ☐ (attach lab results) .. Method 1010
   (If Flash Point <140°F, provide TOC and VOC analytical results.)
   - Solid:* <90°F ☐ 90-140°F ☐ >140°F ☒

SECTION VII: GENERATING PROCESS & HAZARDOUS CHARACTERISTICS

1. Waste Common Name Heat Treat Salts WTS# 8663
2. Provide a description of the process(es) generating this waste: (A DETAILED EXPLANATION MUST BE PROVIDED. ATTACH ADDITIONAL PAGE(S) SHOWING PROCESS FLOW DIAGRAM AND DETAILS IF NECESSARY*)

   Excavation of drums in an old landfill

3. Based upon lab analyses and/or knowledge of the process(es) generating the waste, describe the composition of the waste:

	Minimum		Maximum	
Heat treat salts (assume Barium Salts)	40	to	60	%
Scale, Fe oxide	10	to	20	%
Soil	10	to	30	%
Moisture	20	to	30	%
TOTAL:			100	%

4. Based upon RCRA Hazardous Waste Regulations (40 CFR 261) and Michigan Act 64 Rules:

	YES	NO	CODES
a. Does this waste meet any F listing description?	☐	☒	
b. Does this waste meet any K listing description?	☐	☒	
c. Does this waste meet any P listing description?	☐	☒	
d. Does this waste meet any U listing description?	☐	☒	
e. Does this waste exhibit Ignitability? (attach lab results) To be Determined	☐	☒	
f. Does this waste exhibit Corrosivity? (attach lab results)	☐	☒	
g. Does this waste exhibit Reactivity? (attach lab results)	☒	☐	D005
h. Does this waste exhibit Toxicity? (attach lab results)	☐	☒	
i. Does this waste leach Copper > 100ppm? (attach lab results)	☐	☒	
j. Does this waste leach Zinc > 500ppm? (attach lab results)	☐	☒	
5. For hazardous wastes, does the waste exceed any land Disposal restriction treatment standard(s) for the applicable codes?* (attach lab results)	☒	☐	D005
6. Is this a non-hazardous liquid waste regulated by Michigan Act 136?*	☐	☒	

Attach analytical results for all LDR constituents of concern for waste codes identified in Item 4 (above).

* See full instructions on separate sheet.

SECTION VIII RECLAMATION/RECYCLING/FUEL BLENDING*

Only for Michigan Recovery Systems, Inc. wastes, perform all of the following analyses:

Water (%) _____ Solids (%) _____ Heat value (BTU/lb) _____

Sulfur (%) _____ Chlorine (%) _____ PCBs (total ppm) _____

Enclose lab reports for F001 - F005 solvent scan and TCLP metals.* Ash (%) _____

SECTION IX CERTIFICATIONS*

	Yes	No
1. Does the waste contain cyanide amenable to chlorination above 250 ppm?*	☐	☒
2. Does the waste contain reactive sulfide above 500 ppm?*	☐	☒
3. Does this waste contain PCBs greater than 49 ppm?*	☐	☒
4. Is this a dioxin/furan waste as specified in 40 CFR 261.31 under Hazardous Waste numbers F020, F021, F022, F023, F026, F027, F028?	☐	☒
5. Is this a California List hazardous waste containing halogenated organic compounds found in Appendix III of 40 CFR Part 268 in total concentration greater than or equal to 1,000 mg/L?	☐	☒
6. Is this a liquid hazardous waste containing Nickel (>134 mg/L) or Thallium (>130 mg/L)?	☐	☒
7. Mark the "Yes" column to indicate which TCLP testing has been conducted. (attach lab results*)		

For those constituents not tested, mark "No" and sign the certification provided.
Either "Yes" or "No" MUST be checked for each and every constituent.

TCLP REGULATORY ACTION LEVELS		CONSTITUENT TESTING CONDUCTED OR CERTIFICATION	
	mg/L	YES	NO
ZHE ORGANICS*			
D018 Benzene	0.5	☐	☒
D019 Carbon Tetrachloride	0.5	☐	☒
D021 Chlorobenzene	100.0	☐	☒
D022 Chloroform	6.0	☐	☒
D028 1,2-Dichloroethane	0.5	☐	☒
D029 1,1-Dichloroethylene	0.7	☐	☒
D035 Methyl Ethyl Ketone	200.0	☐	☒
D039 Tetrachloroethylene	0.7	☐	☒
D040 Trichloroethylene	0.5	☐	☒
D043 Vinyl Chloride	0.2	☐	☒
METALS*			
D004 Arsenic	5.0	☐	☐
D005 Barium	100.0	☐	☐
D006 Cadmium	1.0	☐	☐
D007 Chromium	5.0	☐	☐
D008 Lead	5.0	☐	☐
D009 Mercury	0.2	☐	☐
D010 Selenium	1.0	☐	☐
D011 Silver	5.0	☐	☐
001D Copper	100.0	☐	☐
003D Zinc	500.0	☐	☐
ACID EXTRACTABLES*			
D023 o-Cresol**	200.0	☐	☒
D024 m-Cresol**	200.0	☐	☒
D025 p-Cresol**	200.0	☐	☒
D026 Cresol	200.0	☐	☒
D037 Pentachlorophenol	100.0	☐	☒
D041 2,4,5-Trichlorophenol	400.0	☐	☒
D042 2,4,6-Trichlorophenol	2.0	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed x K Johnson

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed _____

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."

Signed x K Johnson

** If o, m and p Cresols cannot be differentiated, use Total Cresol concentration

(Continued)

* See full instructions on separate sheet.

SECTION X: CERTIFICATIONS (Continued)

	TCLP REGULATORY ACTION LEVELS mg/L	CONSTITUENT TESTING CONDUCTED OR CERTIFICATION YES	NO
BASE NEUTRAL EXTRACTABLES*			
D027 1,4-Dichlorobenzene	7.5	☐	☒
D030 2,4-Dinitrotoluene	0.13	☐	☒
D032 Hexachlorobenzene	0.13	☐	☒
D033 Hexachlorobutadiene	0.5	☐	☒
D034 Hexachloroethane	3.0	☐	☒
D036 Nitrobenzene	2.0	☐	☒
D038 Pyridine	5.0	☐	☒
PESTICIDES*			
D020 Chlordane	0.03	☐	☒
D012 Endrin	0.02	☐	☒
D031 Heptachlor (& its Hydroxide)	0.008	☐	☒
D013 Lindane	0.4	☐	☒
D014 Methoxychlor	10.0	☐	☒
D015 Toxaphene	0.5	☐	☒
HERBICIDES*			
D016 2,4-D	10.0	☐	☒
D017 2,4,5-TP (Silvex)	1.0	☐	☒

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."
Signed X T R Johnson

CERTIFICATION
"Based upon my knowledge of the waste and the process generating the waste, these constituents are not present in the waste above hazardous classification levels."
Signed X T R Johnson

REQUIREMENTS FOR A COMPLETE APPLICATION SUBMITTAL

APPLICATION PACKAGE CONTENTS

All pertinent items must be included together in one application package.

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  - ☐ c. Flashpoint
  - ☐ d. Cyanide
  - ☐ e. Sulfide
  - ☐ f. Land Disposal Restriction Constituent Levels
  - ☐ g. TCLP testing, including Copper and Zinc
- ☐ 3) Representative Sample of Waste
- ☐ 4) MSDS
- ☐ 5) Other: _____

"I hereby authorize Envotech personnel to add supplemental information to the waste approval file provided I am contacted to give verbal permission. I authorize Envotech personnel to obtain a sample from any waste shipment for purposes of verification and confirmation."

Signed X T R Johnson Title MGR. MFG. ENGR

"I certify that all information (including attached information) is complete and factual and is an accurate representation of the known and suspected hazards, and waste generator regulations, pertaining to the waste described herein."

Signature X T R Johnson Printed Name R. JOHNSON Date 9/22/94

Company STRIPPIT INC Title MGR. MFG. ENGR

fax to Mark

From: ENVOTECH MANAGEMENT SERVICES, INC.
ANALYTICAL LABORATORY
49350 N. I-94 SERVICE DRIVE
BELLEVILLE, MI. 48111

September 29, 1994

To: Waste Technology Services
640 Park Place
Niagara Falls, NY 14301

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA00986
Purchase order number: VERBAL
Generator name: Strippit
Sample collection date: 09/21/94
Lab submittal date: 09/21/94
Received by: JV

CLIENT CODE: 7124
Tracking number: 66868
Waste Name: HEAT TRT SALTS
Time: 01:50
Time: 14:00
Validated by: CR

Parameter: RCI CHARACTERISTICS
Method reference: SW 846
Result: see below
Date started: 09/22/94
Time started:

Unit:

Date finished: 09/22/94
Analyst: JC

Parameter: TCLP METALS--RCRA/MDNR LIST
Method reference: SW846 6010
Result: see below
Date started: 09/29/94
Time started:

Unit: MG/L

Date finished: 09/29/94
Analyst: AE

Parameter: TCLP ZHE CONSTITUENTS
Method reference: SW8468010-20
Result: see below
Date started: 09/23/94
Time started:

Unit: MG/L

Date finished: 09/23/94
Analyst: KMD

Parameter: TOTAL PCB
Method reference: SW846 8080
Result: see below
Date started: 09/23/94
Time started:

Unit: MG/KG

Date finished: 09/23/94
Analyst: KMD

Data for RCI CHARACTERISTICS :

Component Name	Result	Component MDL
CORROSIVITY	7.035	0.01
FLASHPOINT	>140	1 DEG F
CYANIDE, TOTAL	<0.5	0.50
SULFIDE, REACTIVE	<100	1

Data for TCLP METALS--RCRA/MDNR LIST MG/L:

Component Name	Result	Component MDL
ARSENIC	0.14	1.4
BARIUM	180	1.2
CADMIUM	<0.01	0.69
CHROMIUM	0.19	0.19
LEAD	0.11	0.37
MERCURY	<0.02	0.205
SELENIUM	0.26	0.82
SILVER	<0.01	0.43
COPPER	0.05	0.01
ZINC	0.98	2.61
NICKEL	<0.08	5.0

Data for TCLP ZHE CONSTITUENTS MG/L:

Component Name	Result	Component MDL
1,4-DICHLOREENZENE	BELOW DET LIMS	0.1
MEK	BELOW DET LIMS	0.1
CHLOROFORM	BELOW DET LIMS	0.1
BENZENE	BELOW DET LIMS	0.1
CARBON TETRACHLORIDE	BELOW DET LIMS	0.1
1,2-DICHLOROETHANE	BELOW DET LIMS	0.1
1,1-DICHLOROETHYLENE	BELOW DET LIMS	0.2
VINYL CHLORIDE	BELOW DET LIMS	0.1
TRICHLOROETHYLENE	BELOW DET LIMS	0.09
TETRACHLOROETHYLENE	BELOW DET LIMS	0.05
CHLOROBENZENE	BELOW DET LIMS	0.05

Data for TOTAL PCB MG/KG:

Component Name	Result	Component MDL
AROCLOR 1016	BELOW DET LIMS	1.0
AROCLOR 1221	BELOW DET LIMS	1.0
AROCLOR 1232	BELOW DET LIMS	1.0
AROCLOR 1242	BELOW DET LIMS	1.0
AROCLOR 1248	BELOW DET LIMS	1.0
AROCLOR 1254	BELOW DET LIMS	1.0
AROCLOR 1260	BELOW DET LIMS	1.0
TOTAL PCBS	BELOW DET LIMS	1.0

If there are any questions regarding this data, please call.

Charles E Roberts

CHARLES E. ROBERTS
QA/QC OFFICER

BELINDA PERO
LAB MANAGER

APPENDIX D

Soils Test Results

Select Fill Material

MALCOLM PIRNIE, INC.

Project..... Day Engineering, P.C.
Project Number.. 2573-00-1
Location..... Strippit Landfill

Sample Number	Moisture Content	Highest Dry Density(1)	Maximum Index Density(2)	Minimum Index Density
	%	pcf	pcf	pcf
SAND SAMPLE	1.5	108.3	121.6 @12.0% Moisture Content	94.2

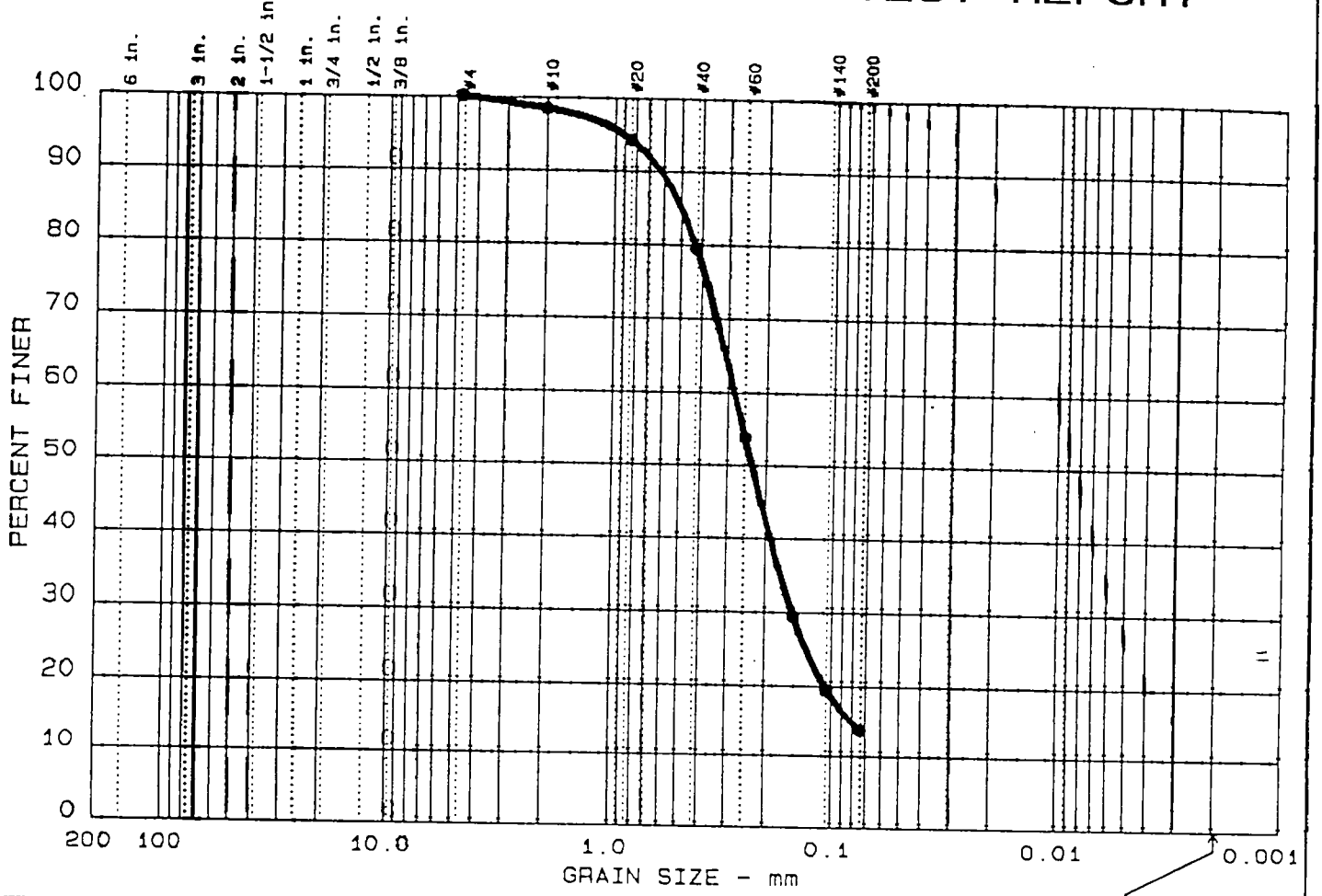
(1) This material did not exhibit a typical moisture-density relationship. The highest density reported was the highest density achieved with the Standard Proctor method (AASHTO T99, Method C)
(2) Maximum Index Density achieved by performing the test in the saturated state.

MALCOLM PIRNIE, INC.

Project..... Haseley Consultants/Constructors
Project Number.. 2159-00-1
Location..... Strippet Landfill

Sample Number	Gravel %	Sand %	Fines %
S-1, Liner Protection Material	0.0	86.3	13.7

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	4	0.0	0.0	86.3	13.7	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.49	0.28	0.23	0.152	0.0805			

	MATERIAL DESCRIPTION	USCS	AASHTO
●			

Project No.:

Project: STRIPPET LANDFILL

● Location: LINER PROTECTION MATERIAL

Date: 6-8-94

Remarks:

LAB I.D.#: 94-137

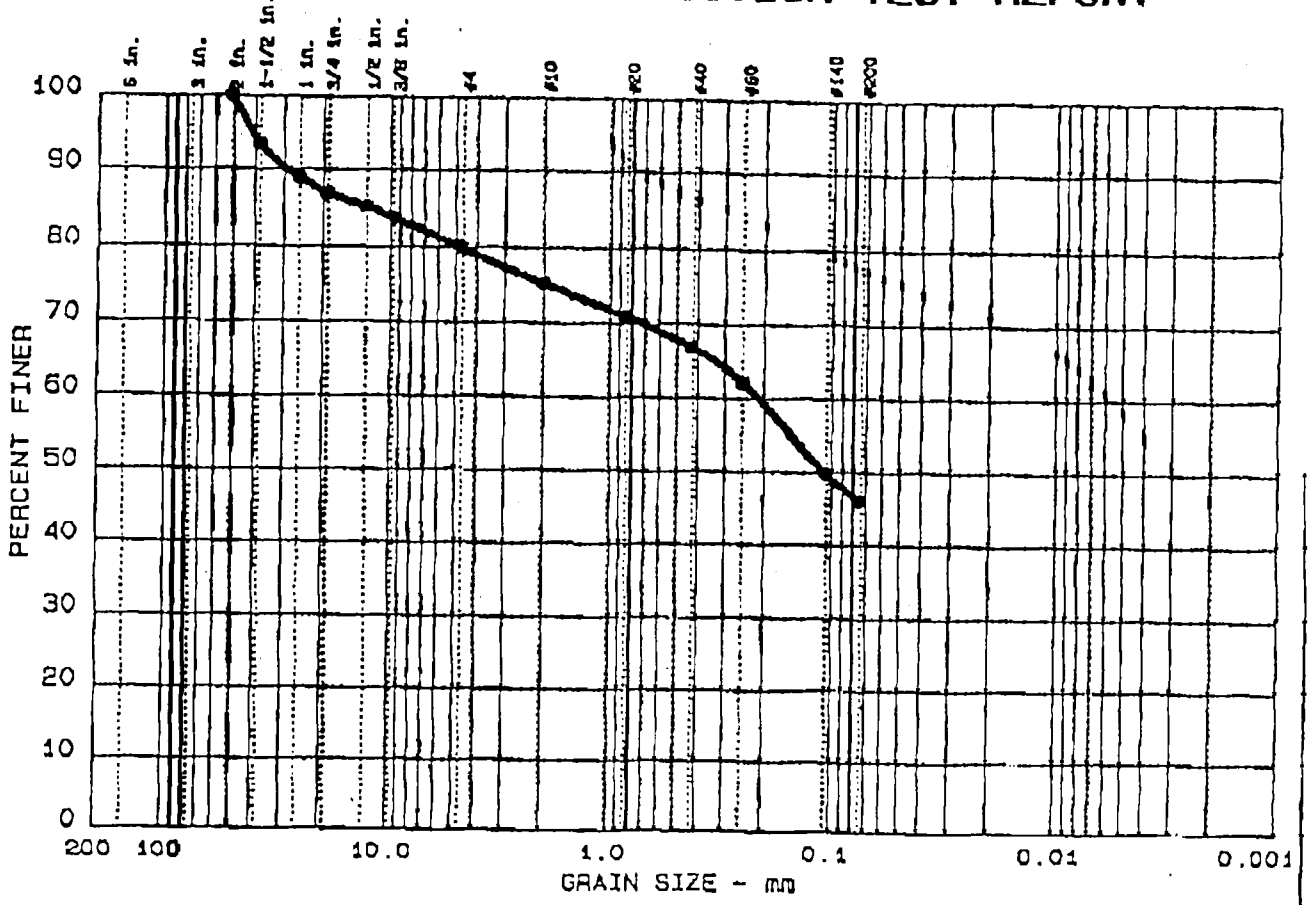
Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT

MALCOLM PIRNIE, INC.

Barrier Protection Material

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	20.0	34.0	45.0				

SIEVE inches size	PERCENT FINER ●
2	100.0
1.5	93.4
1	89.0
0.75	87.0
0.5	85.3
0.375	83.8

GRAIN SIZE	
D_{60}	0.21
D_{30}	
D_{10}	

COEFFICIENTS	
C_c	
C_u	

SIEVE number size	PERCENT FINER ●
4	80.0
10	75.3
20	70.9
40	66.8
60	62.1
140	49.8
200	45.9

Sample information:
● NG#1
North Genesee: Pine Hill

Remarks:

LAB I.D.#: 94-331

MALCOLM PIRNIE, INC.

Project No.: 2159-00-2
Project: HASELEY

Date: 8-16-94 Data Sheet No. ——

SJB SERVICES, INC.
Contract Drilling and Testing

1951-1 Hamburg Turnpike
Buffalo, NY 14218
Phone: (716) 821-5911
Fax: (716) 821-0163

P.O. BOX 515
New Holland, PA 17557
Phone: (717) 354-7389
Fax: (717) 354-7619

Laboratory Test Report

PROJECT : *STRIPPIT LANDFILL CLOSURE*

CLIENT : *DAY ENGINEERING*

DATE : *SEPTEMBER 27, 1994*

PROJECT NO.: SJB-T272
REPORT NO.: LTR-1

SAMPLE INFORMATION :
Sample No. 94-625 was collected from the project site by SJB Services, Inc. on September 9, 1994. Sample is described as a Sand Material from Pine Hill Sand & Gravel.

ASTM C-136 : *Method for Sieve Analysis of Fine and Coarse Aggregates*

Sieve Size	Percent Passing
2"	100.0
1 1/2"	99.0
1"	97.7
3/4"	96.9
1/2"	95.7
1/4"	92.9
#4	91.6
#10	89.3
#20	87.5
#40	84.9
#100	70.6
#200	48.1

AASHTO T-99-90 Method B : *Moisture-Density Relations of Soils Using a 5.5 lb. Rammer and a 12" Drop*
Maximum Dry Density : 119.7 pcf
Optimum Moisture : 10.7 %

SJB Services, Inc.

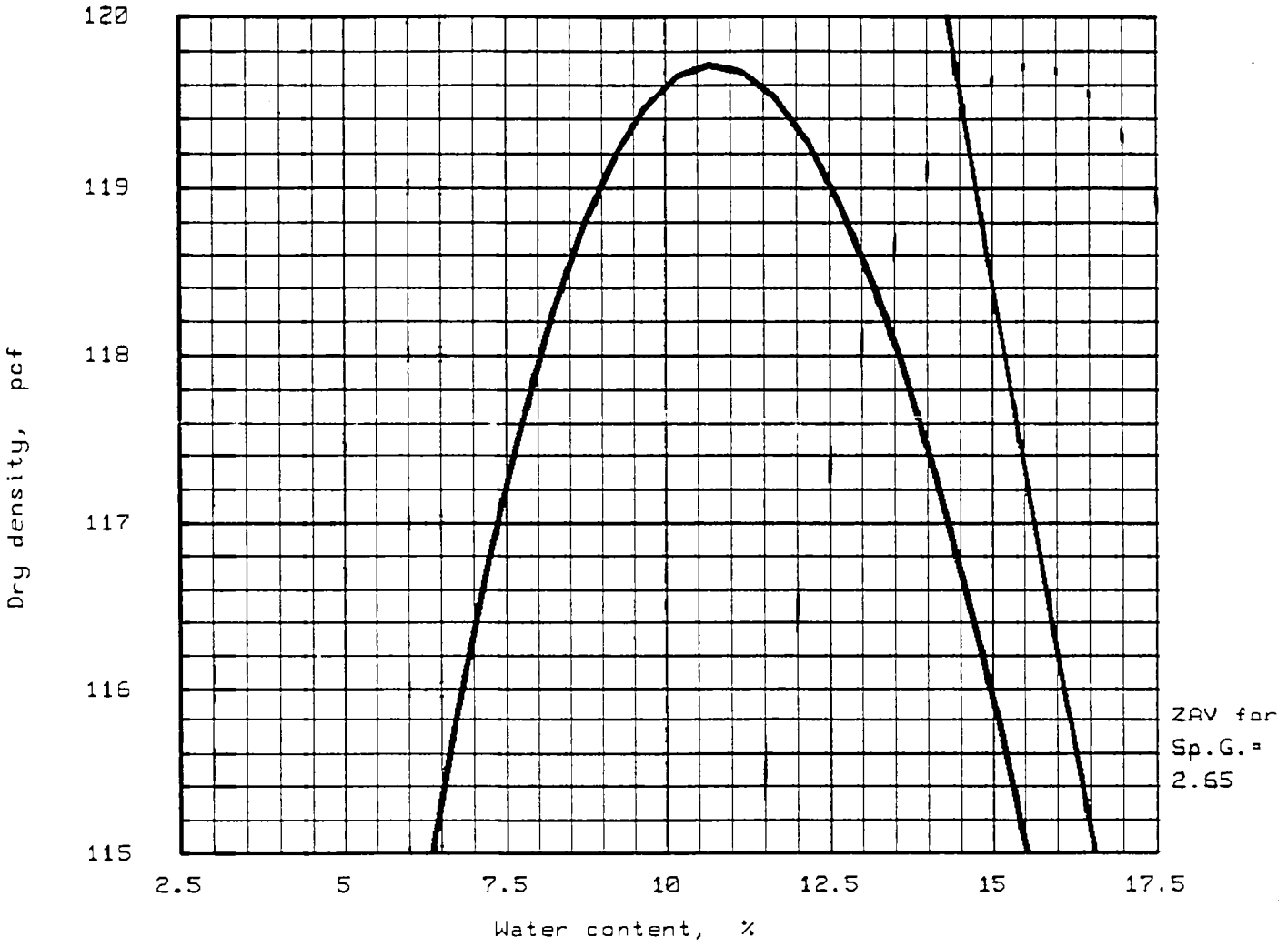
Paul C. Gregorczyk
Laboratory Manager

Ray J. Kron
Testing Services Manager

national ground water association

"QUALITY & SERVICE THE WAY IT USED TO BE"

PROCTOR TEST REPORT

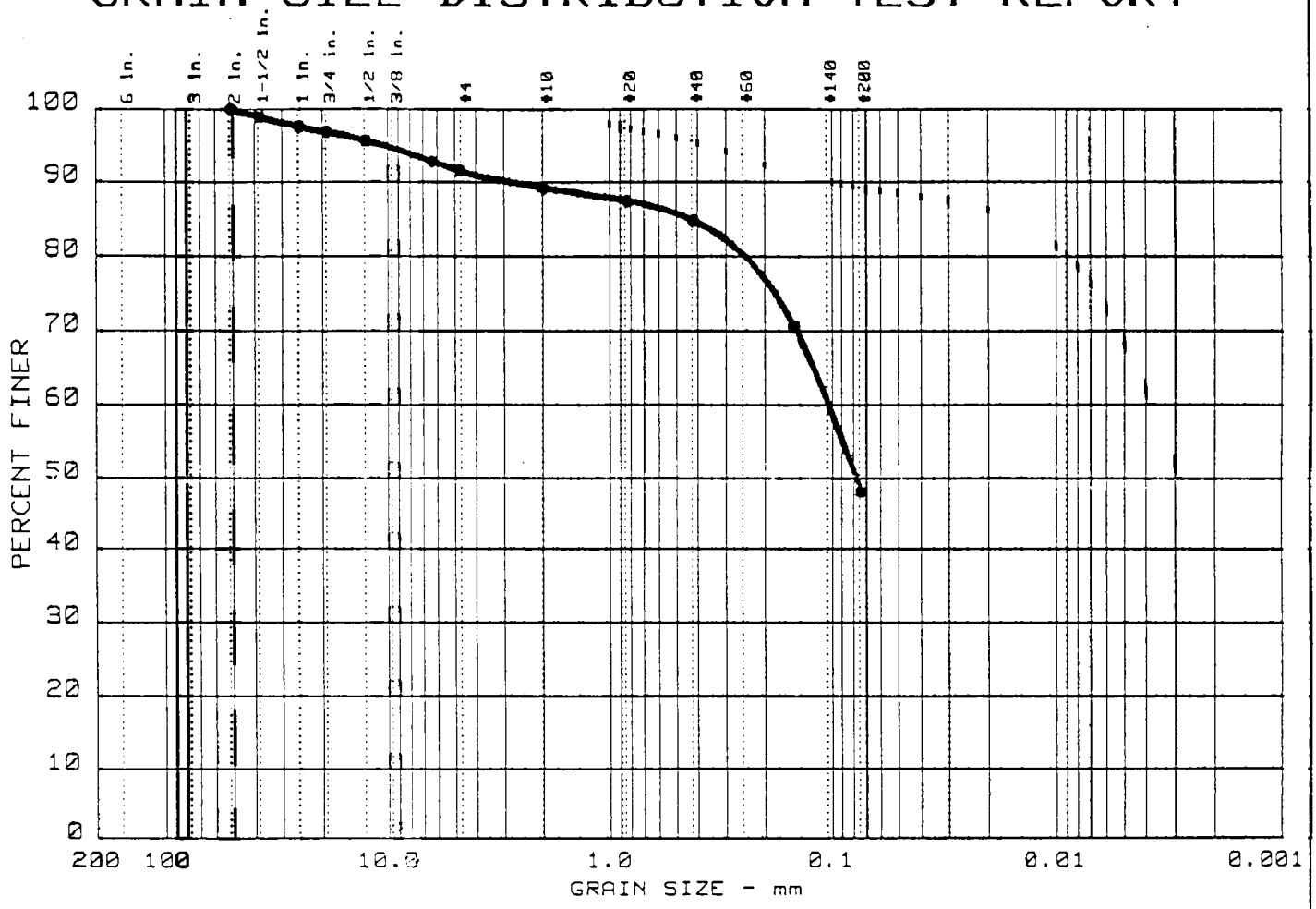


"Standard" Proctor, AASHTO T99, Method B

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No. 200
	USCS	AASHTO						
	SM	A-4(0.0)		2.65			3.1 %	48.1 %

TEST RESULTS	MATERIAL DESCRIPTION
Optimum moisture = 10.7 % Maximum dry density = 119.7 pcf	SAND FROM PINE SAND AND GRAVEL, LANCASTER NY
Project No.: SJB-T272 : LTR-1 Project: STRIPPIT LANDFILL CLOSURE Location: AKRON NY Date: SEPTEMBER 13, 1994	Remarks: PROCTOR RESULTS FOR SAMPLE #94-625 USING AASHTO T-99 METHOD B
PROCTOR TEST REPORT SJB Services, Inc.	Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	4	0.0	8.4	43.5	48.1	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●			0.43	0.10	0.06					

MATERIAL DESCRIPTION	USCS	AASHTO
● SAND MATERIAL	SM	A-4(0.0)

Project No.: SJB-T272 : LTR-1
Project: STRIPPIT LANDFILL CLOSURE - AKRON NY
● Location: PINE HILL SAND & GRAVEL

Date: SEPTEMBER 19, 1994

Remarks:
Collected by SJB from an on-site stockpile on September 9, 1994.
Sample ID# is 94-625

GRAIN SIZE DISTRIBUTION TEST REPORT

SJB Services, Inc.

Figure No. _____

Topsoil

MALCOLM PIRNIE, INC.

Project..... Day Engineering, P.C.
Project Number.. 2573-00-1
Location..... STRIPPIT LANDFILL

Sample Number	pH	Organic Content %
TH-1	4.9	3.9

APPENDIX E

Geomembrane Specifications/Certification and Installation Test Results

National Seal Company
Quality Control Certifications

NSC

National Seal Company

Construction Division

167 Anderson Road
Cranberry Township, PA 16066-2901
412/452-8800
412/452-8880 FAX

August 8, 1994

Mr. Mark Haseley
Stippit Industries
Rt.93 & Clarence Center Rd
Akron, NY 14001

RE: Job # 6782-110

Dear Mr. Haseley:

Enclosed herewith are National Seal Company Quality Control Certifications for the materials delivered to Stippit Industries in Akron, NY.

Sincerely,

Christine Pritts

Christine Pritts

Enclosures

07/26/94

NSC

POLYETHYLENE CERTIFICATE OF ANALYSIS

Customer: Stippit Industries

Resin Type: U.C. 1527

Project Name: Akron, NY

Project Number: 6782-110

We hereby certify that the polyethylene resin for the above identified shipment, meets or exceeds National Seal Company's specifications, below. Testing was performed on each resin blend.

Melt flow index was determined according to ASTM D 1238. Density was determined according to ASTM D 1505. Where appropriate, carbon black content was determined according to ASTM D 1603. The average test results are listed in the table below.

RESIN SPECIFICATIONS

Melt Flow Index	0.5 gram/10 minutes	Maximum
Density (with carbon black)	0.94 grams/cm^3	Minimum
Carbon Black Content	2% to 3%	Range

BLEND NUMBER	MELT FLOW INDEX	DENSITY	CARBON BLACK CONTENT
1545	0.22	0.938	0.00

Jane Allen

Jane Allen
Quality Control Manager

7-26-94

Date:

NSC

GEOMEMBRANE CERTIFICATE OF ANALYSIS

Customer: Stippit Industries

Number of Rolls Shipped: 5

Project Name: Akron, NY

Nominal Thickness: 40 mil

Project Number: 6782-110

We hereby certify that the polyethylene geomembrane for the above identified shipment meets or exceeds National Seal Company's specifications, below. Testing was performed at the frequency indicated.

The raw polymeric material is first quality polyethylene resin containing no more than two percent clean re-worked plastic by weight. Thickness was measured according to ASTM D 5199. Tensile properties were determined in accordance with ASTM D 638, NSF modified, using Type IV dumbell specimens, a strain rate of two inches per per minute, and grip movement for strain determinations. Carbon black dispersion slides were prepared according to ASTM D 3015, NSF modified, and rated according to the ASTM D 2663 dispersion classification chart under 100X magnification. Where appropriate, carbon black content was determined according to ASTM D 1603. Dimensional stability was determined according to ASTM D 1204 at 100°C for one hour.

A database listing of all test values follows.

GEOMEMBRANE SPECIFICATIONS

Thickness	40 mil Minimum	at least every 50,000 ft^2
Stress at Yield	2200 psi Minimum	at least every 50,000 ft^2
Stress at Break	3800 psi Minimum	at least every 50,000 ft^2
Strain at Yield	13% Minimum	at least every 50,000 ft^2
Strain at Break	700% Minimum	at least every 50,000 ft^2
Carbon Black Dispersion	A1 or A2	at least every 50,000 ft^2
Carbon Black Content	2% to 3%	at least every 50,000 ft^2
Dimensional Stability	+/- 2%	at least once per shift

NATIONAL SEAL COMPANY

Jane Allen

Jane Allen
Quality Control Manager

7-26-94

Date

NSC

GEOMEMBRANE STANDARD TESTING

Date: 07/26/94 Page: 1

Bill(s) of Lading: 03493

ROLL NUMBER	THICK (mil)	STRESS AT YIELD (psi) MD	STRESS AT YIELD (psi) TD	STRESS AT BREAK (psi) MD	STRESS AT BREAK (psi) TD	STRAIN AT YIELD (%) MD	STRAIN AT YIELD (%) TD	STRAIN AT BREAK (%) MD	STRAIN AT BREAK (%) TD	CARB DISP	CARB CONT (%)	DIMENSIONAL STABILITY MD	DIMENSIONAL STABILITY TD
C04L1545-4E140002**1**	42.1	2590	2760	5260	5510	15.2	13.9	875	1040	A1	2.27	0.0	0.0
C04L1545-4E140004**1**	42.0	2620	2710	5310	5000	14.9	14.2	885	971	A1	2.32	0.0	0.0
C04L1545-4E140006**1**	42.0	2610	2590	5020	4990	14.9	14.5	865	986	A1	2.29	-0.6	0.4
C04L1545-4E140008**1**	42.0	2740	2810	5180	5500	15.3	14.3	874	1040	A1	2.29	0.0	0.0
C04L1545-4E140010**1**	41.8	2620	2480	5230	5050	14.4	15.3	1020	863	A1	2.28	0.0	0.0
C04L1545-4E140012**1**	41.7	2490	2630	5470	5220	14.9	14.3	912	984	A1	2.28	-0.6	0.4
C04L1545-4E150001**1**	41.7	2630	2790	5360	5250	14.8	14.5	892	996	A1	2.30	0.0	0.0
C04L1545-4E150003**1**	41.7	2680	2710	5380	5260	14.9	14.2	887	998	A1	2.24	0.0	0.0
C04L1545-4E150005**1**	42.0	2720	2760	5210	4700	14.6	14.2	868	894	A1	2.26	-0.6	0.4
C04L1545-4E150008**1**	41.6	2650	2830	5290	4990	17.6	15.2	860	918	A1	2.28	-0.6	0.2
C04L1545-4E150011**1**	41.6	2740	2800	4860	5440	17.1	15.7	826	1010	A1	2.24	0.0	0.0
C04L1545-4E160004**1**	41.6	2550	2820	5280	4860	17.3	15.8	886	904	A1	2.24	-0.6	0.4
C04L1545-4E160011**1**	41.4	2700	2820	5430	5320	17.5	15.8	892	988	A1	2.28	-0.8	0.4

Jane Allen

Jane Allen
Quality Control Manager

7-26-94
Date

TRAILER NO. 3381

STRAIGHT BILL OF LADING
ORIGINAL—NOT NEGOTIABLE

03493

EAL NO. PK NO. ORDER NO.

6782-110

AME OF CARRIER Mercer 10002860 DATE 07/26/94

TO CONSIGNEE	STIPPIT INDUSTRIES	FROM SHIPPER	NATIONAL SEAL COMPANY
STREET	RT 93 & CLARENCE CENTER ROAD	STREET	1255 MONMOUTH BLVD.
ESTINATION	AKRON,NY	ORIGIN	GALESBURG, ILLINOIS 61402-1448

OUTE MARK HASELEY 716-297-1550

24-HOUR NOTICE REQUIRED PRIOR TO DELIVERY FOR ASSISTANCE IN UNLOADING

NO. SHIPPING UNITS	HM	KIND OF PACKAGING, DESCRIPTION OF ARTICLES SPECIAL MARKS AND EXCEPTIONS	WEIGHT (SUBJECT TO CORRECTION)	SQ. FEET
5		40 MIL 1527	26,000	25,250

	LENGTH	WIDTH	SF	ID NO.		LENGTH	WIDTH	SF	ID NO.
1	1670	15.00	25050	C04L1545-4E1500061 ✓	2	1670	15.00	25050	C04L1545-4E140005 ✓
3	1670	15.00	25050	C04L1545-4E1500031 ✓	4	1670	15.00	25050	C04L1545-4E1600041 ✓
5	1670	15.00	25050	C04L1545-4E1400041 ✓					

HOLE IN OUTER LAYER

ROLL C04L1545-4E15000

EMIT C.O.D. TO: DDRESS

COD

C.O.D. FEE:
PREPAID ☐ $
COLLECT ☐
TOTAL CHARGES: $

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.
$______ per ______

This is to certify that the above named articles are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
______ Signature

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
______ (Signature of Consignor)

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked
Check box if charges are to be collected ☐

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER NATIONAL SEAL COMPANY	CARRIER
PER Michael Shilena	PER [signature]
	DATE

CARRIER

HDPE GEOMEMBRANE
PHYSICAL PROPERTIES

40 mil

The properties on this page are not part of NSC's Manufacturing Quality Control program and are not included on the material certifications. Seam testing is the responsibility of the installer and/or CQA personnel.

PROPERTIES	METHOD	UNITS	MINIMUM[1]	TYPICAL
Multi-Axial Tensile Elongation	GRI, GM-4	percent	20.0	26.0
Critical Cone Height	GRI, GM-3, NSC mod.	cm	1.0	1.5
Wide Width Tensile	ASTM D 4885			
Stress at Yield		psi	2000	2110
Strain at Yield		%	15.0	20.0
Brittleness Temp. by Impact[2]	ASTM D 746	°C	-75	<-90
Coef. of Linear Thermal Exp.[2]	ASTM D 696	$°C^{-1}$	1.5×10^{-4}	1.2×10^{-4}
ESCR, Bent Strip	ASTM D 1693	hours	1500	>10,000
Hydrostatic Resistance	ASTM D 751	psi	300	360
Modulus of Elasticity	ASTM D 638	psi	80,000	131,000
Ozone Resistance	ASTM D 1149, 168 hrs	P/F	P	P
Permeability[2]	ASTM E 96	cm/sec · Pa	3.5×10^{-14}	1.4×10^{-14}
Puncture Resistance	FTMS 101, method 2065	ppi	1300	1900
		lbs	52	79
Soil Burial Resistance[2]	ASTM D 3083, NSF mod.	% change	10	0
Tensile Impact	ASTM D 1822	ft lbs/in²	250	390
Volatile Loss[2]	ASTM D 1203, A	percent	0.10	0.08
Water Absorption[2]	ASTM D 570, 23°C	percent	0.10	0.04
Water Vapor Transmission[2]	ASTM E 96	g/day · m²	0.036	0.014

SEAM PROPERTIES	METHOD	UNITS	MINIMUM[1]	TYPICAL
Shear Strength	ASTM D 4437, NSF mod.	psi	2000	2630
		ppi	80	109
Peel Strength	ASTM D 4437, NSF mod.	psi	1500	1880
(hot wedge fusion)		ppi	60	78
Peel Strength	ASTM D 4437, NSF mod.	psi	1300	1590
(fillet extrusion)		ppi	52	66

STANDARD ROLL DIMENSIONS

Length	1670 feet	Area	25,050 ft²
Width	15 feet	Weight	5,000 lbs

The information contained herein has been compiled by National Seal Company and is, to the best of our knowledge, true and accurate. All suggestions and recommendations are offered without guarantee. Final determination of suitability for use based on any information provided, is the sole responsibility of the user. There is no implied or expressed warranty of merchantability of fitness of the product for the contemplated use.

NSC reserves the right to update the information contained herein in accordance with technological advances in the material properties.

4H-0893

NSC
NATIONAL SEAL COMPANY
1245 Corporate Blvd. • Suite 300
Aurora, IL 60504
(708) 898-1161 • (800) 323-3820
Fax: (708) 898-3461

HDPE GEOMEMBRANE
QUALITY CONTROL SPECIFICATIONS

40 mil

National Seal Company's High Density Polyethylene (HDPE) Geomembranes are produced from virgin, first quality, high molecular weight resins and are manufactured specifically for containment in hydraulic structures. NSC HDPE geomembranes have been formulated to be chemically resistant, free of leachable additives and resistant to ultraviolet degradation.

The following properties are tested as a part of NSC's quality control program. Certified test results for properties on this page are available upon request. Refer to NSC's Quality Control Manual for exact test methods and frequencies.

All properties meet or exceed NSF Standard Number 54.

RESIN PROPERTIES	METHOD	UNITS	MINIMUM[1]	TYPICAL
Melt Flow Index[2]	ASTM D 1238	g/10 min	0.50	0.25
Oxidative Induction Time	ASTM D 3895, Al pan, 200°C, 1 atm O_2	minutes	100	120

SHEET PROPERTIES	METHOD	UNITS	MINIMUM[1]	TYPICAL
Thickness	ASTM D 751, NSF mod.			
Average		mils	40.0	41.5
Individual		mils	38.0	40.3
Density	ASTM D 1505	g/cm³	0.940	0.948
Carbon Black Content	ASTM D 1603	percent	2.0-3.0	2.35
Carbon Black Dispersion	ASTM D 3015, NSF mod.	rating	A1, A2, B1	A1
Tensile Properties	ASTM D 638			
Stress at Yield		psi	2200	2460
		ppi	88	102
Stress at Break		psi	3800	4920
		ppi	152	204
Strain at Yield	1.3" gage length (NSF)	percent	13.0	16.6
Strain at Break	2.0" gage or extensometer	percent	700	880
	2.5" gage length (NSF)	percent	560	700
Dimensional Stability[2]	ASTM D 1204, NSF mod.	percent	2.0	0.8
Tear Resistance	ASTM D 1004	ppi	750	870
		lbs	30	36
Puncture Resistance	ASTM D 4833	ppi	1800	2386
		lbs	72	99
Constant Load ESCR, Single Point	GRI, GM-5a	hours	200	>400

[1] This value represents the minimum acceptable test value for a roll as tested according to NSC's Manufacturing Quality Control Manual. Individual test specimen values are not addressed in this specification except thickness.

[2] Indicates Maximum Value

NSC
NATIONAL SEAL COMPANY
1245 Corporate Blvd. • Suite 300
Aurora, IL 60504
(708) 898-1161 • (800) 323-3820
Fax (708) 898-3481

Malcom Pirnie, Inc.
Test Results

Peal Test, Seam Integrity ASTM D413
Shear Test, Seam Integrity ASTM D3083

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE	SPECIMEN	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
NUMBER	NUMBER	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2
S-1	1	1.007	1.007	89	64	88.4	63.6	FTB	FTB	P	P
	2	1.008	1.008	88	67	87.3	66.5	FTB	FTB	P	P
	3	1.007	1.007	86	62	85.4	61.6	FTB	FTB	P	P
	4	1.007	1.007	85	63	84.4	62.6	FTB	FTB	P	P
	5	1.008	1.008	88	63	87.3	62.5	FTB	FTB	P	P
	AVG	1.007	1.007	87	64	86.6	63.3				
	STD DEV.	0.000	0.000	1.470	1.720	1.441	1.690				
DS-2	1	1.007	1.007	94	66	93.3	65.5	FTB	FTB	P	P
	2	1.010	1.010	89	62	88.1	61.4	FTB	FTB	P	P
	3	1.010	1.010	89	63	88.1	62.4	FTB	FTB	P	P
	4	1.007	1.007	86	71	85.4	70.5	FTB	FTB	P	P
	5	1.007	1.007	86	79	85.4	78.5	FTB	FTB	P	P
	AVG	1.008	1.008	89	68	88.1	67.7				
	STD DEV.	0.001	0.001	2.926	6.242	2.901	6.266				
DS-3	1	1.009	1.009	92	66	91.2	65.4	FTB	FTB	P	P
	2	1.009	1.009	91	70	90.2	69.4	FTB	FTB	P	P
	3	1.008	1.008	92	72	91.3	71.4	FTB	FTB	P	P
	4	1.008	1.008	93	68	92.3	67.5	FTB	FTB	P	P
	5	1.011	1.011	95	71	94.0	70.2	FTB	FTB	P	P
	AVG	1.009	1.009	93	108	91.8	68.8				
	STD DEV.	0.001	0.001	1.356	2.154	1.278	2.124				
DS-4	1	1.009	1.009	86	66	85.2	65.4	FTB	FTB	P	P
	2	1.011	1.011	88	61	87.0	60.3	FTB	FTB	P	P
	3	1.008	1.008	89	63	88.3	62.5	FTB	FTB	P	P
	4	1.008	1.008	90	62	89.3	61.5	FTB	FTB	P	P
	5	1.004	1.004	92	63	91.6	62.7	FTB	FTB	P	P
	AVG	1.008	1.008	89	63	88.3	62.5				
	STD DEV.	0.002	0.002	2.000	1.673	2.148	1.685				
DS-5	1	1.009	1.009	92	73	91.2	72.3	FTB	FTB	P	P
	2	1.013	1.013	92	76	90.8	75.0	FTB	FTB	P	P
	3	1.006	1.006	83	69	82.5	68.6	FTB	FTB	P	P
	4	1.015	1.015	89	64	87.7	63.1	FTB	FTB	P	P
	5	1.009	1.009	89	66	88.2	65.4	FTB	FTB	P	P
	AVG	1.010	1.010	89	70	88.1	68.9				
	STD DEV.	0.000	0.003	3.286	4.409	3.110	4.378				

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE	SPECIMEN	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
NUMBER	NUMBER	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2
6	1	1.006	1.006	84	68	83.5	67.6	FTB	FTB	P	P
	2	1.006	1.006	84	68	83.5	67.6	FTB	FTB	P	P
	3	1.005	1.005	86	70	85.6	69.7	FTB	FTB	P	P
	4	1.004	1.004	87	70	86.7	69.7	FTB	FTB	P	P
	5	1.007	1.007	86	69	85.4	68.5	FTB	FTB	P	P
	AVG	1.006	1.006	85	69	84.9	68.6				
	STD DEV.	0.001	0.001	1.200	0.894	1.241	0.937				
D-7	1	1.006	1.006	77	83	76.5	82.5	FTB	FTB	P	P
	2	1.011	1.011	91	80	90.0	79.1	FTB	FTB	P	P
	3	1.006	1.006	83	81	82.5	80.5	FTB	FTB	P	P
	4	1.005	1.005	94	77	93.5	76.6	FTB	FTB	P	P
	5	1.009	1.009	86	75	85.2	74.3	FTB	FTB	P	P
	AVG	1.007	1.007	86	79	85.6	78.6				
	STD DEV.	0.002	0.002	5.980	2.857	5.902	2.876				
8	1	1.004	1.004	88	61	87.6	60.8	FTB	FTB	P	P
	2	1.005	1.005	88	70	87.6	69.7	FTB	FTB	P	P
	3	1.003	1.003	81	63	80.8	62.8	FTB	FTB	P	P
	4	1.005	1.005	86	87	85.6	86.6	FTB	FTB	P	P
	5	1.003	1.003	84	62	83.7	61.8	FTB	FTB	P	P
	AVG	1.004	1.004	85	108	85.1	68.3				
	STD DEV.	0.001	0.001	2.653	9.728	2.587	9.639				
9	1	1.005	1.005	94	70	93.5	69.7	FTB	FTB	P	P
	2	1.001	1.001	89	66	88.9	65.9	FTB	FTB	P	P
	3	1.006	1.006	95	67	94.4	66.6	FTB	FTB	P	P
	4	1.006	1.006	88	83	87.5	82.5	FTB	FTB	P	P
	5	1.006	1.006	94	87	93.4	86.5	FTB	FTB	P	P
	AVG	1.005	1.005	92	75	91.6	74.2				
	STD DEV.	0.002	0.002	2.898	8.686	2.806	8.562				
D-10	1	1.005	1.005	86	71	85.6	70.6	FTB	FTB	P	P
	2	1.005	1.005	87	68	86.6	67.7	FTB	FTB	P	P
	3	1.004	1.004	91	66	90.6	65.7	FTB	FTB	P	P
	4	1.004	1.004	89	72	88.6	71.7	FTB	FTB	P	P
	5	0.999	0.999	90	74	90.1	74.1	FTB	FTB	P	P
	AVG	1.003	1.003	89	70	88.3	70.0				
	STD DEV.	0.000	0.002	1.855	2.857	1.961	2.952				

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE	SPECIMEN	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
NUMBER	NUMBER	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2
-11	1	1.004	1.004	79	80	78.7	79.7	FTB	FTB	P	P
	2	1.005	1.005	86	83	85.6	82.6	FTB	FTB	P	P
	3	1.004	1.004	82	75	81.7	74.7	FTB	FTB	P	P
	4	1.003	1.003	81	77	80.8	76.8	FTB	FTB	P	P
	5	1.006	1.006	84	68	83.5	67.6	FTB	FTB	P	P
	AVG	1.004	1.004	82	77	82.0	76.3				
	STD DEV.	0.001	0.001	2.417	5.083	2.351	5.090				
D-12	1	1.005	1.005	93	71	92.5	70.6	FTB	FTB	P	P
	2	1.006	1.006	91	75	90.5	74.6	FTB	FTB	P	P
	3	1.004	1.004	98	74	97.6	73.7	FTB	FTB	P	P
	4	1.006	1.006	96	73	95.4	72.6	FTB	FTB	P	P
	5	1.004	1.004	93	72	92.6	71.7	FTB	FTB	P	P
	AVG	1.005	1.005	94	73	93.7	72.6				
	STD DEV.	0.001	0.001	2.482	1.414	2.501	1.388				
D-13	1	1.004	1.004	91	73	90.6	72.7	FTB	FTB	P	P
	2	1.030	1.030	91	73	88.3	70.9	FTB	FTB	P	P
	3	1.031	1.031	95	74	92.1	71.8	FTB	FTB	P	P
	4	1.005	1.005	93	82	92.5	81.6	FTB	FTB	P	P
	5	1.006	1.006	90	82	89.5	81.5	FTB	FTB	P	P
	AVG	1.015	1.015	92	108	90.6	75.7				
	STD DEV.	0.013	0.013	1.789	4.261	1.581	4.819				
-14	1	1.004	1.004	88	71	87.6	70.7	FTB	FTB	P	P
	2	0.996	0.996	85	74	85.3	74.3	FTB	FTB	P	P
	3	1.008	1.008	90	72	89.3	71.4	FTB	FTB	P	P
	4	1.005	1.005	88	69	87.6	68.7	FTB	FTB	P	P
	5	1.007	1.007	91	70	90.4	69.5	FTB	FTB	P	P
	AVG	1.004	1.004	88	71	88.0	70.9				
	STD DEV.	0.004	0.004	2.059	1.720	1.711	1.939				

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%
FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
DS-1	1	1.007	116	115.2	100	FTB	P
	2	1.011	115	113.7	100	FTB	P
	3	1.012	115	113.6	100	FTB	P
	4	1.013	116	114.5	100	FTB	P
	5	1.019	116	113.8	100	FTB	P
	AVG	1.012	116	114.2	100		
	STD DEV.	0.004	0.490	0.589	0.000		
DS-2	1	1.012	114	112.6	100	FTB	P
	2	1.011	113	111.8	100	FTB	P
	3	1.011	115	113.7	100	FTB	P
	4	1.007	114	113.2	100	FTB	P
	5	1.011	115	113.7	100	FTB	P
	AVG	1.010	114	113.0	100		
	STD DEV.	0.000	0.748	0.748	0.000		
DS-3	1	1.009	117	116.0	91	FTB	P
	2	1.008	115	114.1	73	FTB	P
	3	1.007	116	115.2	79	FTB	P
	4	1.012	115	113.6	79	FTB	P
	5	1.007	115	114.2	77	FTB	P
	AVG	1.009	116	114.6	80		
	STD DEV.	0.002	0.800	0.842	5.987		
DS-4	1	1.026	117	114.0	100	FTB	P
	2	1.009	117	116.0	100	FTB	P
	3	1.019	113	110.9	100	FTB	P
	4	1.007	115	114.2	100	FTB	P
	5	1.008	113	112.1	100	FTB	P
	AVG	1.014	115	113.4	100		
	STD DEV.	0.007	1.789	1.763	0.000		
DS-5	1	1.009	117	116.0	100	FTB	P
	2	1.010	115	113.9	100	FTB	P
	3	1.014	115	113.4	100	FTB	P
	4	1.011	116	114.7	100	FTB	P
	5	1.010	115	113.9	100	FTB	P
	AVG	1.011	116	114.4	100		
	STD DEV.	0.002	0.800	0.904	0.000		

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT:DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%

FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
-6	1	1.004	112	111.6	100	FTB	P
	2	1.008	112	111.1	100	FTB	P
	3	1.008	114	113.1	100	FTB	P
	4	1.006	114	113.3	100	FTB	P
	5	1.006	114	113.3	100	FTB	P
	AVG	1.006	113	112.5	100		
	STD DEV.	0.001	0.980	0.951	0.000		
D-7	1	1.007	109	108.2	100	FTB	P
	2	1.008	111	110.1	100	FTB	P
	3	1.008	112	111.1	100	FTB	P
	4	1.007	113	112.2	100	FTB	P
	5	1.008	111	110.1	100	FTB	P
	AVG	1.008	111	110.4	100		
	STD DEV.	0.000	1.327	1.312	0.000		
-8	1	1.008	114	113.1	100	FTB	P
	2	1.007	115	114.2	100	FTB	P
	3	1.007	114	113.2	100	FTB	P
	4	1.007	108	107.2	33	FTB	P
	5	1.012	114	112.6	100	FTB	P
	AVG	1.008	113	112.1	87		
	STD DEV.	0.002	2.530	2.468	26.680		
-9	1	1.008	115	114.1	100	FTB	P
	2	1.013	111	109.6	100	FTB	P
	3	1.007	110	109.2	100	FTB	P
	4	1.008	110	109.1	100	FTB	P
	5	1.008	113	112.1	100	FTB	P
	AVG	1.009	112	110.8	100		
	STD DEV.	0.002	1.939	1.962	0.000		
D-10	1	1.008	106	105.2	100	FTB	P
	2	1.008	109	108.1	100	FTB	P
	3	1.006	110	109.3	100	FTB	P
	4	1.007	113	112.2	100	FTB	P
	5	1.007	114	113.2	100	FTB	P
	AVG	1.007	110	109.6	100		
	STD DEV.	0.001	2.871	2.891	0.000		

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT:DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%
FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
D-11	1	1.009	109	108.0	37	FTB	P
	2	1.005	68	67.7	98	FTB	F
	3	1.007	111	110.2	100	FTB	P
	4	1.007	110	109.2	100	FTB	P
	5	1.007	128	127.1	100	FTB	P
	AVG	1.007	105	104.5	87		
	STD DEV.	0.001	19.874	19.677	25.239		
D-12	1	1.005	74	73.6	100	FTB	F
	2	1.004	112	111.6	100	FTB	P
	3	1.006	114	113.3	100	FTB	P
	4	1.006	114	113.3	100	FTB	P
	5	1.005	115	114.4	100	FTB	P
	AVG	1.005	106	105.3	100		
	STD DEV.	0.000	15.930	15.836	0.000		
D-13	1	1.006	108	107.4	100	FTB	P
	2	1.011	111	109.8	100	FTB	P
	3	1.010	111	109.9	100	FTB	P
	4	1.009	111	110.0	100	FTB	P
	5	1.007	112	111.2	100	FTB	P
	AVG	1.009	111	109.7	100		
	STD DEV.	0.002	1.356	1.261	0.000		
D-14	1	1.009	113	112.0	100	FTB	P
	2	1.007	113	112.2	100	FTB	P
	3	1.010	132	130.7	100	FTB	P
	4	1.009	113	112.0	100	FTB	P
	5	1.008	114	113.1	100	FTB	P
	AVG	1.009	117	116.0	100		
	STD DEV.	0.001	7.510	7.359	0.000		

ENVIRONMENTAL SECURITY SERVICES, INC.

GEOMEMBRANE INSTALLATION
SUMMARY REPORT

E.S.S.I. ENVIRONMENTAL SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Strippet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/26/7:45	1		465	14.6	Starting panel on top of south slope panel runs east to west
8/26/8:06	2		463	14.6	Panel runs east to west - top of cap
8/26/8:23	3		466	14.6	Panel runs east to west - top of cap
8/26/8:39	4		26	14.6	Starting panel east end of south slope - panel runs north to south
8/26/8:43	5		26	14.6	Panel runs north to south - south slope
8/26/8:48	6		26	14.6	Panel runs north to south - south slope
8/26/8:54	7		28	14.6	Panel runs north to south - south slope
8/26/9:00	8		28	14.6	Panel runs north to south - south slope
8/26/9:07	9		28	14.6	Panel runs north to south - south slope
8/26/9:14	10		29	14.6	Panel runs north to south - south slope
8/26/9:21	11		29	14.6	Panel runs north to south - south slope
8/26/9:28	12		31	14.6	Panel runs north to south - south slope
8/26/9:37	13		34	14.6	Panel runs north to south - south slope
8/26/9:45	14		34	14.6	Panel runs north to south - south slope
8/26/9:54	15		38	14.6	Panel runs north to south - south slope

E.S.S.I. ENVIRONMENTAL SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Stryppit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/26 10:02	16		40	14.6	Panel runs north to south - south slope
8/26 10:11	17		40	14.6	Panel runs north to south - south slope
8/26 10:20	18		42	14.6	Panel runs north to south - south slope
8/26 10:29	19		44	14.6	Panel runs north to south - south slope
8/26 10:38	20		44	14.6	Panel runs north to south - south slope
8/26 10:48	21		45	14.6	Panel runs north to south - south slope
8/26 10:58	22		45	14.6	Panel runs north to south - south slope
8/26 11:08	23		45	14.6	Panel runs north to south - south slope
8/26 11:18	24		46	14.6	Panel runs north to south - south slope
8/26 11:28	25		46	14.6	Panel runs north to south - south slope
8/26 11:38	26		47	14.6	Panel runs north to south - south slope
8/26 1:10	27		465	14.6	Panel runs east to west - top of cap
8/26 1:30	28		460	14.6	Panel runs east to west - top of cap
8/26 1:48	29		48	14.6	Panel runs north to south - south slope
8/26 11:58	30		48	14.6	Panel runs north to south - south slope

E.S.S.I. ENVIRONMENTAL SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Stryppet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/26 1:50	31		50	14.6	Panel runs north to south - south slope
8/26 1:55	32		50	14.6	Panel runs north to south - south slope
8/26 2:06	33		57	14.6	Panel runs east to west - top of cap
8/26 2:12	34		55	14.6	Panel runs, east to west - top of cap
8/26 2:17	35		53	14.6	Panel runs east to west - top of cap
8/26 2:22	36		52	14.6	Panel runs east to west - top of cap
8/26 2:27	37		52	14.6	Panel runs north to south - south slope
8/26 2:32	38		52	14.6	Panel runs north to south - south slope
8/27 7:30	39		396	14.6	Panel runs east to west - top of cap
8/27 7:45	40		366	14.6	Panel runs east to west - top of cap
8/27 8:00	41		351	14.6	Panel runs east to west - top of cap
8/27 8:15	42		321	14.6	Panel runs east to west - top of cap
8/27 8:30	43		78	14.6	Panel runs south to north - north slope
8/27 8:44	44		78	14.6	Panel runs south to north - north slope
8/27 8:58	45		81	14.6	Panel runs south to north - north slope

E.S.S.I. ENVIRONMENTAL, SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Strippit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/27 9:05	46		27	14.6	Panel runs southwest to northeast - northeast slope
8/27 9:15	47		37	14.6	Panel runs southwest to northeast - northeast slope
8/27 9:25	48		47	14.6	Panel runs southwest to northeast - northeast slope
8/27 9:35	49		57	14.6	Panel runs southwest to northeast - northeast slope
8/27 9:45	50		66	14.6	Panel runs southwest to northeast - northeast slope
8/27 9:57	51		75	14.6	Panel runs southwest to northeast - northeast slope
8/27 10:10	52		75	14.6	Panel runs southwest to northeast - northeast slope
8/27 10:20	53		65	14.6	Panel runs southwest to northeast - northeast slope
8/27 10:30	54		45	14.6	Panel runs southwest to northeast - northeast slope
8/27 10:38	55		22	14.6	Panel runs southwest to northeast - northeast slope
8/27 10:45	56		94	14.6	Panel runs south to north - north slope
8/27 10:55	57		76	14.6	Panel runs south to north - north slope
8/27 11:05	58		76	14.6	Panel runs south to north - north slope
8/27 11:15	59		77	14.6	Panel runs south to north - north slope
8/27 11:25	60		77	14.6	Panel runs south to north - north slope

E.S.S.I. ENVIRONMENTAL SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Strippet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/27 11:35	61		78	14.6	Panel runs south to north = north slope
8/27 11:45	62		78	14.6	Panel runs south to north - north slope
8/27 11:56	63		82	14.6	Panel runs south to north - north slope
8/27 12:06	64		85	14.6	Panel runs south to north - north slope
8/27 1:00	65		90	14.6	Panel runs south to north = north slope
8/27 1:12	66		90	14.6	Panel runs south to north - north slope
8/27 1:23	67		141	14.6	Panel runs east to west = top of cap
8/27 1:37	68		77	14.6	Panel runs south to north - north slope
8/27 1:45	69		88	14.6	Panel runs south to north - north slope
8/27 1:55	70		97	14.6	Panel runs south to north - north slope
8/27 2:07	71		108	14.6	Panel runs south to north - north slope
8/27 2:17	72		110	14.6	Panel runs south to north - north slope
8/27 2:34	73		68	14.6	Panel runs south to north - north slope
8/27 2:40	74		63	14.6	Panel runs south to north - north slope
8/27 2:47	75		58	14.6	Panel runs south to north - north slope

E.S.S.I. ENVIRONMENTAL, SECURITY SERVICES INC

PANEL PLACEMENT FORM

PROJECT NAME: Strippet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
8/29/ 11:35	76		22	14.6	Panel runs southeast to northwest - northwest slope
8/29/ 11:45	77		42	14.6	Panel runs southeast to northwest - northwest slope
8/29/ 11:55	78		52	14.6	Panel runs southeast to northwest - northwest slope
8/29/ 12:10	79		49	14.6	Panel runs southwest to northwest - northwest slope
8/29/ 12:20	80		20	14.6	Panel runs southwest to northwest - northwest slope

E.S.S.I.

ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Stuppet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/26 9:45	1	1+2	465	NM.	1509	750°/16'	Sunny	mild	70-75	DS1 P	
8/26 10:25	2	2+3	463	NM	1509	750°/16'	Sunny	mild	70-75	DS2 P	
8/26 10:40	3	4+5	26	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 10:48	4	5+6	26	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 10:56	5	6+7	26	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:05	6	7+8	28	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:12	7	8+9	28	NM	1509	750°/16'	Sunny	mild	70-75	DS5-P	
8/26 11:21	8	9+10	28	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:28	9	10+11	29	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:37	10	11+12	29	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:45	11	12+13	31	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 11:55	12	13+14	34	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 12:06	13	14+15	34	NM	1509	750°/16'	Sunny	mild	70-75		
8/26 12:14	14	15+16	38	NM	1509	750°/16'	Sunny	mild	70-75		

E.S.S.I.

ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Stroppit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 mil HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/26 12:23	15	16+17	40	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 12:36	16	17+18	40	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 12:39	17	18+19	42	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 12:50	18	19+20	44	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 1:01	19	20+21	44	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 1:14	20	21+22	45	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 1:27	21	22+23	45	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 1:40	22	23+24	45	NM	1509	750°/16'	Sunny	Mild	70-75	DS6-P	
8/26 1:52	23	24+25	46	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 2:10	24	25+26	46	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 2:25	25	3 26+27	46.5	NM	1509	750°/16'	Sunny	Mild	70-75	DS3-P	
8/26 2:43	26	27+28	46.5	NM	1509	750°/16'	Sunny	Mild	70-75	DS4-P	
8/26 3:18	27	26+29	47	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 3:59	28	29+30	48	NM	1509	750°/16'	Sunny	Mild	70-75		
8/26 4:16	29	30+31	48	NM	1509	750°/16'	Sunny	Mild	70-75		

E.S.S.I. | ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Skippack PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 Mil HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/26 4:30	30	31+32	50	HM	1509	750°/16'	Sunny	Mild	70-75		
8/26 4:47	31	32+37	50	HM	1509	750°/16'	Sunny	Mild	70-75		
8/26 5:05	32	37+38	52	HM	1509	750°/16'	Sunny	Mild	70-75	DS7-P	
8/26 5:21	33	33+34	55	HM	1509	750°/16'	Sunny	Mild	70-75		
8/26 5:45	34	34+35	53	HM	1509	750°/16'	Sunny	Mild	70-75		
8/26 5:59	35	35+36	52	HM	1509	750°/16'	Sunny	Mild	70-75		
8/26 6:15			52	HM	1509	750°/16'	Sunny	Mild	70-75		Butt seam southwest corner
8/26 6:32			465	HM	1509	750°/16'	Sunny	Mild	70-75		Butt seam top of cap to south slope
8/27 9:50	36	28+39	460	HM	1509	750°/16'	Sunny	Mild	70-85	DS8-P	
8/27 10:16	37	39+40	396	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 10:44	38	40+41	366	HM	1509	750°/16'	Sunny	Mild	70-85	DS11-P	
8/27 11:10	39	41+42	351	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 11:21	40	43+44	78	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 11:29	41	44+45	78	HM	1509	750°/16'	Sunny	Mild	70-85	DS9-P	

E.S.S.I.

ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Strippet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 mil HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/27 11:36	42	46+47	32	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 11:44	43	47+48	42	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 11:52	44	48+49	47	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 12:02	45	49+50	57	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 12:32	46		81	HM	1509	750°/16'	Sunny	Mild	70-85		tie in seam for inside corner northeast slope
8/27 12:42	47	50+51	70	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 12:54	48	51+52	75	HM	1509	750°/16'	Sunny	Mild	70-85	DS10-P	
8/27 1:05	49	52+53	70	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 1:13	50	53+54	50	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 1:19	51	54+55	30	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 1:38	52		76	HM	1509	750°/16'	Sunny	Mild	70-85		tie in seam for inside (corner) northeast slope)
8/27 1:48	53	56+57	76	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 1:58	54	57+58	76	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 2:10	55	58+59	76	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 2:21	56	59+60	77	HM	1509	750°/16'	Sunny	Mild	70-85	DS12-P	

E.S.S.I. | ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Stryppit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 mil HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/27 3:30	57	60+61	76	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 3:41	58	61+62	78	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 3:51	59	62+63	78	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 4:03	60	63+64	82	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 4:16	61	64+65	85	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 4:29	62	65+66	90	HM	1509	750°/16'	Sunny	Mild	70-85		
8/27 3 thru				HM	1509	750°/16'	Sunny	Mild	70-85		Butt seam for tie in of north slope and top of cap
8/29 11:15	63	42+67	141	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 11:25	64	66+68	77	HM	1509	750°/16'	Sunny	windy	68-74	DS13-P	
8/29 11:35	65	68+69	77	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 11:48	66	69+70	88	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:02	67	70+71	97	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:15	68	71+72	108	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:25	69	73+74	68	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:34	70	74+75	63	HM	1509	750°/16'	Sunny	windy	68-74		

E.S.S.I.

ENVIRONMENTAL, SECURITY SERVICES INC

PANEL SEAMING FORM

PROJECT NAME: Streppet PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 MIL HDPE

DATE/ TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	WINDS	AMBIENT TEMP	DES TEST P/F	COMMENTS
8/29 12:40	71	76+77	30	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:46	72	77+78	48	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:52	73	78+79	50	HM	1509	750°/16'	Sunny	windy	68-74		
8/29 12:58	74	79+80	34	HM	1509	750°/16'	Sunny	Windy	68-74		
8/29 1:20	75			HM	1509	750°/16'	Sunny	Windy	68-74		tie in northwest corner to north slope
8/29 1:50	76			HM	1509	750°/16'	Sunny	Windy	68-74		tie in northwest corner to north slope
8/29 2:20	77			HM	1509	750°/16'	Sunny	Windy	68-74	DS14-P	Butt seam top of cap to northwest slope

E.S.S.I. ENVIRONMENTAL SECURITY SERVICES INC

DESTRUCTIVE TEST LOG

PROJECT NAME: Strippit PROJECT NUMBER: _____

DATE	SAMPLE I.D.	SEAM NO.	MACH NO.	OPER INITIALS	PEEL VALUES LBS. / INCH						PASS / FAIL	DATE TO LAB PKG. SLIP NO.	LAB PASS / FAIL	LOCATION / COMMENTS
8/27	1	1	1509	HM	156	139	131	142	129	130	P	8/28/94	P	150 / 175
8/27	2	2	1509	HM	123	127	113	138	109	106	P	8/28/94	P	142 / 160
8/27	3	3	1509	HM	137	130	113	121	125	132	P	8/28/94	P	206 / 181
8/27	4	26	1509	HM	133	120	131	135	131	116	P	8/28/94	P	221 / 195
8/27	5	8	1509	HM	134	112	130	113	112	122	P	8/28/94	P	177 / 176
8/27	6	23	1509	HM	121	120	135	116	140	115	P	8/28/94	P	215 / 185
8/27	7	38	1509	HM	100	127	130	133	130	127	P	8/28/94	P	190 / 198
8/30	8	38	1509	HM	131	118	148	129	113	135	P	8/30/94	P	201 / 175
8/30	9	43	1509	HM	129	133	118	126	135	111	P	8/30/94	P	171 / 169
8/30	10	50	1509	HM	122	121	119	127	130	121	P	8/30/94	P	179 / 191
8/30	11	34	1509	HM	141	136	134	140	129	138	P	8/30/94	P	192 / 202
8/30	12	56	1509	HM	137	129	120	115	131	128	P	8/30/94	P	189 / 211
8/30	13	63	1509	HM	112	122	119	117	124	129	P	8/30/94	P	167 / 139
8/30	14	68	1509	HM	130	125	129	119	133	127	P	8/30/94	P	199 / 180

E.S.S.I. ENVIRONMENTAL, SECURITY SERVICES INC

TRIAL WELD INFORMATION

PROJECT NAME: Strippit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40mil HDPE

DATE/ TIME	AMBIENT TEMP	O.C. INITIALS	MACHINE NUMBER	SCANNER INITIALS	EXTRUSION WELDS				FUSION WELDS				PEEL VALUES LBS / INCH			PASS/ FAIL	COMMENTS
					BARREL TEMP		PREHEAT TEMP		WEDGE TEMP		MEASURED SPEED FT / MIN	SPEED SETTING					
					SET	PYRO	SET	PYRO	SET	PYRO							Sheak
8:30 8/26	70	HM	1509	HM					750		16		88	84	102		
													77	95	90	P	130/129
12:45 8/26	75	HM	1509	HM					750		16		90	101	80		
													76	95	92	P	102/111
9:20 8/27	65	HM	1509	HM					750		16		95	110	103		
													100	84	89	P	125/100
3:05 8/27	82	HM	1509	HM					750		16		91	86	79		
													100	84	88	P	97/100
10:55 8/29	68	HM	1509	HM					750		16		90	80	88		
													86	85	87	P	111/109

Environmental Security Services, Inc.

REPAIR REPORT

PROJECT NAME: Stripit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 mil HDPE

FIELD SEAM #	PANEL NO.	REPAIR DATE	REPAIR CREW	MACHINE NUMBER	TEST DATE	TEST CREW	TEST P/F	LOCATION / COMMENTS
1	1+2	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #1 Repair
2	2+3	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #2 Repair
3	8+9	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #5 Repair
9	11+10	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	Air Test Repair
11	13+13	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	Air Test Repair
22	23+24	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #6 Repair Boot and Repair around Gas well
24	25+26	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	Air Test Repair
25	3+27	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #3 Repair
26	27+28	8/27/94	B.T	001	8/29/94	J.S.+B.S.	P	DS #4 Repair
29	30+31	8/27/94	B.T	001	8/29/94	J.S.+B.S.	P	Air test Repair Boot and Repair around Gas well
33	35+36	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	Air Test Repair and Extrusion whole seam
34	28+39	8/27/94	B.T	001	8/29/94	J.S.+B.S.	P	DS #8 Repair and Air test and Boot Repair around Gas well
36	40+41	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #11 Repair
~~36~~								
39	44+45	8/27/94	B.T.	001	8/29/94	J.S.+B.S.	P	DS #9 Repair

Environmental Security Services, Inc.

REPAIR REPORT

PROJECT NAME: Strippit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: 40 mil HDPE

FIELD SEAM #	PANEL NO.	REPAIR DATE	REPAIR CREW	MACHINE NUMBER	TEST DATE	TEST CREW	TEST P/F	LOCATION / COMMENTS
—	46	8/29/94	B.T.	001	8/29/94	J.S. + B.S.	P	EXTRUSION WELD CORNER PIECE ON PANEL 46
40	46 + 47	8/29/94	B.T.	001	8/29/94	J.S. + B.S.	P	AIR TEST REPAIR
41	47 + 48	8/29/94	B.T	001	8/29/94	J.S. + B.S.	P	AIR TEST REPAIR
42	48 + 49	8/29/94	B.T.	001	8/29/94	J.S. + B.S.	P	AIR TEST REPAIR
44	49 + 50	8/29/94	B.T.	001	8/29/94	J.S. + B.S.	P	AIR TEST REPAIR
45	50 + 51	8/29/94	B.T.	001	8/29/94	J.S. + B.S.	P	AIR TEST REPAIR
46	51 + 52	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	AIR TEST REPAIR AND DS #10 REPAIR
47	52 + 53	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	AIR TEST REPAIR
48	53 + 54	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	AIR TEST REPAIR
49	54 + 55	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	AIR TEST REPAIR
—	55	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	AIR TEST REPAIR EXTRUSION WELD CORNER PIECE ON PANEL 55
55	59 + 60	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	DS #12 REPAIR
61	66 + 68	8/29/94	B.T.	001	8/30/94	J.S. + B.S.	P	DS #13 REPAIR
62	42 + 67	8/31/94	B.M.	001	8/31/94	H.M ~~J.S. + B.S.~~	P	AIR TEST REPAIR EXTRUSION 68' OF SEAM
67	67 + 73	8/31/94	B.M.	001	8/31/94	H.M	P	AIR TEST REPAIR AND DS #14 REPAIR

Environmental Sect[illegible]ty Services, Inc.

REPAIR REPORT

PROJECT NAME: Skippit PROJECT NUMBER: _____ MATERIAL DESCRIPTION: _____

FIELD SEAM #	PANEL NO.	REPAIR DATE	REPAIR CREW	MACHINE NUMBER	TEST DATE	TEST CREW	TEST P/F	LOCATION / COMMENTS
70	76+77	8/31/94	HM	001	8/31/94	HM	P	AIR TEST REPAIR
71	77+78	8/31/94	HM	001	8/31/94	HM	P	AIR TEST REPAIR
72	78+79	8/31/94	HM	001	8/31/94	HM	P	AIR TEST REPAIR
73	79+80	8/31/94	HM	001	8/31/94	HM	P	AIR TEST REPAIR
~~74~~	80	8/31/94	HM	001	8/31/94	HM	P	EXTRUSION WELD CORNER TO PANEL 80

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
		WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2
DS-1	1	1.007	1.007	89	64	88.4	63.6	FTB	FTB	P	P
	2	1.008	1.008	88	67	87.3	66.5	FTB	FTB	P	P
	3	1.007	1.007	86	62	85.4	61.6	FTB	FTB	P	P
	4	1.007	1.007	85	63	84.4	62.6	FTB	FTB	P	P
	5	1.008	1.008	88	63	87.3	62.5	FTB	FTB	P	P
	AVG	1.007	1.007	87	64	86.6	63.3				
	STD DEV.	0.000	0.000	1.470	1.720	1.441	1.690				
DS-2	1	1.007	1.007	94	66	93.3	65.5	FTB	FTB	P	P
	2	1.010	1.010	89	62	88.1	61.4	FTB	FTB	P	P
	3	1.010	1.010	89	63	88.1	62.4	FTB	FTB	P	P
	4	1.007	1.007	86	71	85.4	70.5	FTB	FTB	P	P
	5	1.007	1.007	86	79	85.4	78.5	FTB	FTB	P	P
	AVG	1.008	1.008	89	68	88.1	67.7				
	STD DEV.	0.001	0.001	2.926	6.242	2.901	6.266				
DS-3	1	1.009	1.009	92	66	91.2	65.4	FTB	FTB	P	P
	2	1.009	1.009	91	70	90.2	69.4	FTB	FTB	P	P
	3	1.008	1.008	92	72	91.3	71.4	FTB	FTB	P	P
	4	1.008	1.008	93	68	92.3	67.5	FTB	FTB	P	P
	5	1.011	1.011	95	71	94.0	70.2	FTB	FTB	P	P
	AVG	1.009	1.009	93	108	91.8	68.8				
	STD DEV.	0.001	0.001	1.356	2.154	1.278	2.124				
DS-4	1	1.009	1.009	86	66	85.2	65.4	FTB	FTB	P	P
	2	1.011	1.011	88	61	87.0	60.3	FTB	FTB	P	P
	3	1.008	1.008	89	63	88.3	62.5	FTB	FTB	P	P
	4	1.008	1.008	90	62	89.3	61.5	FTB	FTB	P	P
	5	1.004	1.004	92	63	91.6	62.7	FTB	FTB	P	P
	AVG	1.008	1.008	89	63	88.3	62.5				
	STD DEV.	0.002	0.002	2.000	1.675	2.148	1.685				
DS-5	1	1.009	1.009	92	73	91.2	72.3	FTB	FTB	P	P
	2	1.013	1.013	92	76	90.8	75.0	FTB	FTB	P	P
	3	1.006	1.006	83	69	82.5	68.6	FTB	FTB	P	P
	4	1.015	1.015	89	64	87.7	63.1	FTB	FTB	P	P
	5	1.009	1.009	89	66	88.2	65.4	FTB	FTB	P	P
	AVG	1.010	1.010	89	70	88.1	68.9				
	STD DEV.	0.000	0.003	3.286	4.409	3.110	4.378				

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%
FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
DS-1	1	1.007	116	115.2	100	FTB	P
	2	1.011	115	113.7	100	FTB	P
	3	1.012	115	113.6	100	FTB	P
	4	1.013	116	114.5	100	FTB	P
	5	1.019	116	113.8	100	FTB	P
	AVG	1.012	116	114.2	100		
	STD DEV.	0.004	0.490	0.589	0.000		
DS-2	1	1.012	114	112.6	100	FTB	P
	2	1.011	113	111.8	100	FTB	P
	3	1.011	115	113.7	100	FTB	P
	4	1.007	114	113.2	100	FTB	P
	5	1.011	115	113.7	100	FTB	P
	AVG	1.010	114	113.0	100		
	STD DEV.	0.000	0.748	0.748	0.000		
DS-3	1	1.009	117	116.0	91	FTB	P
	2	1.008	115	114.1	73	FTB	P
	3	1.007	116	115.2	79	FTB	P
	4	1.012	115	113.6	79	FTB	P
	5	1.007	115	114.2	77	FTB	P
	AVG	1.009	116	114.6	80		
	STD DEV.	0.002	0.800	0.842	5.987		
DS-4	1	1.026	117	114.0	100	FTB	P
	2	1.009	117	116.0	100	FTB	P
	3	1.019	113	110.9	100	FTB	P
	4	1.007	115	114.2	100	FTB	P
	5	1.008	113	112.1	100	FTB	P
	AVG	1.014	115	113.4	100		
	STD DEV.	0.007	1.789	1.763	0.000		
DS-5	1	1.009	117	116.0	100	FTB	P
	2	1.010	115	113.9	100	FTB	P
	3	1.014	113	113.4	100	FTB	P
	4	1.011	116	114.7	100	FTB	P
	5	1.010	115	113.9	100	FTB	P
	AVG	1.011	116	114.4	100		
	STD DEV.	0.002	0.800	0.904	0.000		

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
		WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD
D-6	1	1.006	1.006	54	68	83.5	67.6	FTB	FTB	P	P
	2	1.006	1.006	54	68	83.5	67.6	FTB	FTB	P	P
	3	1.005	1.005	56	70	85.6	69.7	FTB	FTB	P	P
	4	1.004	1.004	87	70	86.7	69.7	FTB	FTB	P	P
	5	1.007	1.007	86	69	85.4	68.5	FTB	FTB	P	P
	AVG	1.006	1.006	85	69	84.9	68.6				
	STD DEV.	0.001	0.001	1.200	0.894	1.241	0.937				
D-7	1	1.006	1.006	77	83	76.5	82.5	FTB	FTB	P	P
	2	1.011	1.011	91	80	90.0	79.1	FTB	FTB	P	P
	3	1.006	1.006	83	81	82.5	80.5	FTB	FTB	P	P
	4	1.005	1.005	94	77	93.5	76.6	FTB	FTB	P	P
	5	1.009	1.009	86	75	85.2	74.3	FTB	FTB	P	P
	AVG	1.007	1.007	86	79	85.6	78.6				
	STD DEV.	0.002	0.002	5.980	2.857	5.902	2.876				
D-8	1	1.004	1.004	88	61	87.6	60.8	FTB	FTB	P	
	2	1.005	1.005	88	70	87.6	69.7	FTB	FTB	P	
	3	1.003	1.003	81	63	80.8	62.8	FTB	FTB	P	
	4	1.005	1.005	86	87	85.6	86.6	FTB	FTB	P	
	5	1.003	1.003	84	62	83.7	61.8	FTB	FTB	P	
	AVG	1.004	1.004	85	108	85.1	68.3				
	STD DEV.	0.001	0.001	2.653	9.728	2.587	9.659				
D-9	1	1.005	1.005	94	70	93.5	69.7	FTB	FTB	P	
	2	1.001	1.001	89	66	88.9	65.9	FTB	FTB	P	
	3	1.006	1.006	95	67	94.4	66.6	FTB	FTB	P	
	4	1.006	1.006	88	83	87.5	82.5	FTB	FTB	P	
	5	1.006	1.006	94	87	93.4	86.5	FTB	FTB	P	
	AVG	1.005	1.005	92	75	91.6	74.2				
	STD DEV.	0.002	0.002	2.898	8.696	2.806	8.562				
D-10	1	1.005	1.005	86	71	85.6	70.6	FTB	FTB	P	
	2	1.005	1.005	87	68	86.6	67.7	FTB	FTB	P	
	3	1.004	1.004	91	66	90.6	65.7	FTB	FTB	P	
	4	1.004	1.004	89	72	88.6	71.7	FTB	FTB	P	
	5	0.999	0.999	90	74	90.1	74.1	FTB	FTB	P	
	AVG	1.003	1.003	89	70	88.3	70.0				
	STD DEV.	0.000	0.002	1.855	2.857	1.961	2.952				

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT:DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%
FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
D-6	1	1.004	112	111.6	100	FTB	P
	2	1.008	112	111.1	100	FTB	P
	3	1.008	114	113.1	100	FTB	P
	4	1.006	114	113.3	100	FTB	P
	5	1.006	114	113.3	100	FTB	P
	AVG	1.006	113	112.5	100		
	STD DEV.	0.001	0.980	0.951	0.000		
D-7	1	1.007	109	108.2	100	FTB	P
	2	1.008	111	110.1	100	FTB	P
	3	1.008	112	111.1	100	FTB	P
	4	1.007	113	112.2	100	FTB	P
	5	1.008	111	110.1	100	FTB	P
	AVG	1.008	111	110.6	100		
	STD DEV.	0.000	1.387	1.312	0.000		
D-8	1	1.008	114	113.1	100	FTB	P
	2	1.007	115	114.2	100	FTB	P
	3	1.017	114	113.2	100	FTB	P
	4	1.007	108	107.2	35	FTB	P
	5	1.012	114	112.6	100	FTB	P
	AVG	1.008	113	112.1	87		
	STD DEV.	0.002	2.530	2.468	26.680		
D-9	1	1.008	115	114.1	100	FTB	P
	2	1.013	111	109.6	100	FTB	P
	3	1.007	110	109.2	100	FTB	P
	4	1.008	110	109.1	100	FTB	P
	5	1.008	113	112.1	100	FTB	P
	AVG	1.009	112	110.8	100		
	STD DEV.	0.002	1.939	1.962	0.000		
D-10	1	1.008	106	105.2	100	FTB	P
	2	1.008	109	108.1	100	FTB	P
	3	1.006	110	109.3	100	FTB	P
	4	1.007	113	112.2	100	FTB	P
	5	1.007	114	113.2	100	FTB	P
	AVG	1.007	110	109.6	100		
	STD DEV.	0.001	2.871	2.891	0.000		

ASTM D4437
PEEL TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT: DAY ENGINEERING
DATE TESTED: 8-26-94 THROUGH 8-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: Double Fusion
TEMPERATURE AT TESTING TIME: 69 DEGREES F
RELATIVE HUMIDITY AT TESTING TIME: 45%
FTB=Film Tear Bond
NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH OF SPECIMEN, IN		LOAD, LBS		ADHESION VALUE, PPI		TYPE OF BREAK		PASS/FAIL	
		WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2	WELD 1	WELD 2
D-11	1	1.004	1.004	79	80	78.7	79.7	FTB	FTB	P	P
	2	1.005	1.005	86	83	85.6	82.6	FTB	FTB	P	P
	3	1.004	1.004	82	75	81.7	74.7	FTB	FTB	P	P
	4	1.003	1.003	81	77	80.8	76.8	FTB	FTB	P	P
	5	1.006	1.006	84	68	83.5	67.6	FTB	FTB	P	P
	AVG	1.004	1.004	82	77	82.0	76.3				
	STD DEV.	0.001	0.001	2.417	5.083	2.351	5.090				
D-12	1	1.005	1.005	93	71	92.5	70.6	FTB	FTB	P	P
	2	1.006	1.006	91	75	90.5	74.6	FTB	FTB	P	P
	3	1.004	1.004	98	74	97.6	73.7	FTB	FTB	P	P
	4	1.006	1.006	96	73	95.4	72.6	FTB	FTB	P	P
	5	1.004	1.004	93	72	92.6	71.7	FTB	FTB	P	P
	AVG	1.005	1.005	94	73	93.7	72.6				
	STD DEV.	0.001	0.001	2.482	1.414	2.501	1.388				
D-13	1	1.004	1.004	91	73	90.6	72.7	FTB	FTB	P	P
	2	1.030	1.030	91	73	88.3	70.9	FTB	FTB	P	P
	3	1.031	1.031	95	74	92.1	71.8	FTB	FTB	P	P
	4	1.005	1.005	93	82	92.5	81.6	FTB	FTB	P	P
	5	1.006	1.006	90	82	89.5	81.5	FTB	FTB	P	P
	AVG	1.015	1.015	92	108	90.6	75.7				
	STD DEV.	0.013	0.013	1.789	4.261	1.581	4.819				
D-14	1	1.004	1.004	88	71	87.6	70.7	FTB	FTB	P	P
	2	0.996	0.996	85	74	85.3	74.3	FTB	FTB	P	P
	3	1.008	1.008	90	72	89.3	71.4	FTB	FTB	P	P
	4	1.005	1.005	88	69	87.6	68.7	FTB	FTB	P	P
	5	1.007	1.007	91	70	90.4	69.5	FTB	FTB	P	P
	AVG	1.004	1.004	88	71	88.0	70.9				
	STD DEV.	0.004	0.004	2.059	1.720	1.711	1.939				

ASTM D4437
SHEAR TEST RESULTS

MALCOLM PIRNIE, INC.

PROJECT: STRIPPIT LANDFILL
CLIENT:DAY ENGINEERING
DATE TESTED: 08-26-94
THROUGH 08-30-94

TYPE OF LINER: HDPE
TYPE OF SEAM: DOUBLE FUSION
TEMPERATURE AT TESTING TIME: 72 degrees F
RELATIVE HUMIDITY AT TESTING TIME: 48%
FTB=Film Tear Bond NFTB=Non Film Tear Bond

SAMPLE NUMBER	SPECIMEN NUMBER	WIDTH IN.	MAXIMUM LOAD LBS	BREAKING FACTOR MAX LOAD/ORIG WIDTH PPI	ELONGATION AT BREAK %	TYPE OF BREAK	PASS/FAIL
D-11	1	1.009	109	108.0	37	FTB	P
	2	1.005	68	67.7	98	FTB	P
	3	1.007	111	110.2	100	FTB	P
	4	1.007	110	109.2	100	FTB	P
	5	1.007	128	127.1	100	FTB	P
	AVG	1.007	105	104.5	87		
	STD DEV.	0.001	19.874	19.677	25.239		
D-12	1	1.005	74	73.6	100	FTB	P
	2	1.004	112	111.6	100	FTB	P
	3	1.006	114	113.3	100	FTB	P
	4	1.006	114	113.3	100	FTB	P
	5	1.005	115	114.4	100	FTB	P
	AVG	1.005	106	105.3	100		
	STD DEV.	0.000	15.930	15.836	0.000		
D-13	1	1.006	108	107.4	100	FTB	P
	2	1.011	111	109.8	100	FTB	P
	3	1.010	111	109.9	100	FTB	P
	4	1.009	111	110.0	100	FTB	P
	5	1.007	112	111.2	100	FTB	P
	AVG	1.009	111	109.7	100		
	STD DEV.	0.002	1.956	1.261	0.000		
D-14	1	1.009	113	112.0	100	FTB	P
	2	1.007	113	112.2	100	FTB	P
	3	1.010	132	130.7	100	FTB	P
	4	1.009	113	112.0	100	FTB	P
	5	1.008	114	113.1	100	FTB	P
	AVG	1.009	117	116.0	100		
	STD DEV.	0.001	7.510	7.359	0.000		

APPENDIX F

Petroleum-Contaminated Soil

Evaluation and Analytical Rest Results

PETROLEUM-CONTAMINATED SOIL EVALUATION AND REMOVAL

August 29, 1994

During excavation of the geomembrane anchor trench on the west side of the site (see Figure 4), petroleum-contaminated soil was encountered at a depth of about 2.5 feet below the ground surface. This soil appeared to extend to a depth of about 5 feet, but it's lateral extent (i.e., along the trench and to the west) was not determined at this time. Since no air monitoring equipment was on site, it was decided to stop work in the area until such equipment could be provided.

August 30, 1994

Initially, a HNU Model HW-101 photoionization detector (PID) with a 10.2 eV bulb and a Century OVA Model 128GC falme ionization detector (FID) were calibrated in preparation for the evaluation of the petroleum-contaminated soils. During excavation, a sample of petroleum-contaminated soil from the anchor trench was collected and placed in a clean glass sample container. Following equilibrization a headspace sample was collected from the jar and tested. The resulting readings were:

PID = 38 ppm
FID = 126 ppm

The petroleum-contaminated soil was then removed from the anchor trench and placed in a stockpile area to the west. [Note: Plastic sheeting and/or excess 40 mil HPDE geomembrane from the IRM construction was placed on the ground surface and a surrounding soil berm was constructed to contain the stockpile.]

Following excavation of obvious petroleum-contaminated soil from the anchor trench a confirmatory sample was collected from the invert of the trench. This sample, collected at a depth of 5.3 feet below the ground surface, was tested in the field using the potable equipment. The results of the headspace screening of the confirmatory soil sample are summarized below:

PID = no detection
FID = 1.3 ppm

Subsequently, a composite sample of the petroleum-contaminated soil and a confirmatory sample of "clean" soil from the invert of the anchor trench were delivered to ACTS Testing Laboratory, Inc. on August 31, 1994. These samples were tested to evaluate the nature of the material and requirements for its disposal (see analytical data in this appendix).

Based upon the screening results and visual observation, it was decided by Day and NYSDEC that sufficient soil had been removed to allow anchor trench construction. Therefore, the contractor was instructed to add additional geomembrane (i.e., to account for the additional soil removed) so that it would extend throughout the anchor trench. Following placement of the geomembrane, the anchor trench was backfilled with the glacial till used as barrier protection material. The anchor trench was backfilled in 8-inch thick loose lifts and compacted using hand-held compaction equipment.

September 16, 1994

Petroleum-contaminated soil located west of the anchor trench (i.e., within the limits of a haul road used to deliver soil fill for the cap system) was excavated and placed on the stockpile. A PID and FID were used to screen soils to evaluate the extent of removal required. Based on this evaluation, approximately 75 cubic yards of material were removed from depths of about 2 to 5 feet below the ground surface. During this removal, apparent contamination was detected in an approximate ten foot wide, or less, section along the western property line. The distance that this material extends off-site was not evaluated of this time.

September 21, 1994

An approximate 4 to 8 feet wide (ranging from about 1.5 to 3.5 feet below the ground surface), section of petroleum-contaminated soil was excavated beginning at the western property line. Based on field observations and screening results, this material extended a distance of about 12 feet west of the property line. Following removal of about 10 cubic yards of contaminated soil, the area was backfilled with barrier protection soil and compacted.

October 19, 1994

Strippit, Inc. retained Waste Technology Services (WTS) to coordinate the removal and disposal of the petroleum-contaminated soil. WTS, in turn, retained Modern Landfill, Inc., Lewiston, New York to dispose of the material at their facility. An executed copy of the NYSDEC's "Application for Treatment for Disposal of an Industrial Waste Stream" is included in this appendix. Following acceptance of the waste, the petroleum-contaminated soil was transported to Modern Landfill, Inc., Lewiston, New York and disposed on this date. As indicated by the copies of weight tickets provided (included in this appendix), a total of 143.65 tons of petroleum-contaminated soil was disposed of at Modern Landfill, Inc.

ACTS TESTING LABS, INC.
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Technical Report 4B-4129ER
File # Stripp-94-2430R
REVISED REPORT

September 16, 1994

Mr. Ray Kampff
DAY ENGINEERING, P.C.

SUBJECT:

Analysis of one (1) soil sample for various parameters. The sample was received on August 31, 1994.

RESULTS

On Pages Two through Five.

EXPERIMENTAL:

Polychlorinated Biphenyls (PCBs) in soil was determined according to United States Environmental Protection Agency Method 3540: Soxhlet Extraction and Method 8080: Organochlorine Pesticides and PCBs.

Semi-volatile Organics in soil was determined according to Snited States Environmental Protection Agency Method 8270: Semi-volatile Organics.

Volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8260: Volatile Organics.

The Toxicity Characteristic Leaching Procedure for Metals was determined as defined in Title 40, Code of Federal Regulations, Part 268, Appendix 1. The Toxicity Characteristic Leaching Procedure was conducted according to "Test Methods for the Examination of Solid Waste Physical/Chemical Methods", EPA SW-846.

The remaining analysis was determined according to United States Environmental Protection Agency "Methods for Chemical Analysis of Water and Wastes", March 1983.

Petroleum Products in soil was determined according to New York State Department of Health modified procedure 310-13: Petroleum Products in Water.

ACTS TESTING LABS, INC.
Charles E. Hartke
Charles E. Hartke
Manager, Chemistry Laboratory

ACTS TESTING LABS, INC.
Lisa M. Clerici
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Wet Chemistry Laboratory

ACTS TESTING LABS, INC.
Elizabeth R. Hausler
Elizabeth R. Hausler, Supervisor
Gas Chromatography Laboratory

cme

RESULTS:	ACTS #4B-4129E 2430-08314-AT1	TCLP Blank	TCLP Limit
TCLP Metals			
Arsenic	LT 0.05	LT 0.05	5.0
Barium	6.22	LT 0.005	100.0
Cadmium	0.010	LT 0.005	1.0
Chromium	0.01	LT 0.01	5.0
Lead	LT 0.03	LT 0.03	5.0
Mercury	LT 0.0002	LT 0.0002	0.2
Selenium	LT 0.12	LT 0.12	1.0
Silver	0.021	LT 0.005	5.0

LT = Less Than
The results are reported as milligrams per liter (mg/L)

Petroleum Hydrocarbons (418.1) 0.085

Result is reported as % by weight.

Petroleum Hydrocarbons (310-13): Gasoline - None detected
Lubricating Oils - None detected
Kerosene 1.39
Fuel Oil LT 0.01

LT=Less Than
Results are repored as microliters per gram (uL/g) or parts per thousand.

EPA 8270	
N-Nitroso-dimethylamine	LT 76.0 (LT 76.0)*
Bis (2-chloroethyl) ether	LT 38.0 (LT 38.0)*
1,3-Dichlorobenzene	LT 38.0 (LT 38.0)*
1,4-Dichlorobenzene	LT 38.0 (LT 38.0)*
1,2-Dichlorobenzene	LT 38.0 (LT 38.0)*
Bis (2-chloroisopropyl) ether	LT 38.0 (LT 38.0)*
N-Nitroso-di-n-propylamine	LT 38.0 (LT 38.0)*
Hexachloroethane	LT 38.0 (LT 38.0)*
Nitrobenzene	LT 38.0 (LT 38.0)*
Isophorone	LT 38.0 (LT 38.0)*
Bis (2-chloroethoxy) methane	LT 38.0 (LT 38.0)*
1,2,4-Trichlorobenzene	LT 38.0 (LT 38.0)*
Napthalene	210.0 (180.0)*
4-Chloroaniline	LT 38.0 (LT 38.0)*
Hexachlorobutadiene	LT 76.0 (LT 76.0)*
2-Methylnaphthalene	1000.0 (910.0)*

EPA 8270 (con't):

	ACTS #4B-4129E 2430-08314-AT1
Hexachlorocyclopentadiene	LT 380.0 (LT 380.0)*
2-Chloronaphthalene	LT 38.0 (LT 38.0)*
2-Nitroaniline	LT 38.0 (LT 38.0)*
Dimethylphthalate	LT 38.0 (LT 38.0)*
Acenphthylene	LT 38.0 (LT 38.0)*
2,6-Dinitrotoluene	LT 38.0 (LT 38.0)*
Acenaphthene	LT 38.0 (LT 38.0)*
3-Nitroaniline	LT 76.0 (LT 76.0)*
Dibenzofuran	LT 38.0 (LT 38.0)*
2,4-Dinitrotoluene	LT 38.0 (LT 38.0)*
Diethylphthalate	160.0 (180.0)*
Fluorene	LT 38.0 (LT 38.0)*
4-Nitroaniline	LT 76.0 (LT 76.0)*
4-Chlorophenyl phenyl ether	LT 76.0 (LT 76.0)*
N-Nitrosodiphenylamine	LT 38.0 (LT 38.0)*
4-Bromophenyl phenyl ether	LT 38.0 (LT 38.0)*
Hexachlorobenzene	LT 38.0 (LT 38.0)*
Phenanthrene	LT 38.0 (LT 38.0)*
Anthracene	LT 38.0 (LT 38.0)*
Carbazole	LT 38.0 (LT 38.0)*
Di-n-butyl phthlate	LT 38.0 (LT 38.0)*
Fluoranthene	LT 38.0 (LT 38.0)*
Pyrene	LT 38.0 (LT 38.0)*
Butyl benzyl phthalate	99.0 (LT 38.0)*
Benzo(a)anthracene	LT 38.0 (LT 38.0)*
3-3'-Dichlorobenzidine	LT 76.0 (LT 76.0)*
Chrysene	LT 38.0 (LT 38.0)*
Bis (2-ethylhexyl) phthlate	120.0 (70.0)*
Di-n-octyl phthlate	LT 38.0 (LT 38.0)*
Benzo(b)fluoranthene	LT 38.0 (LT 38.0)*
Benzo(k)fluoranthene	LT 38.0 (LT 38.0)*
Benzo(a)pyrene	LT 38.0 (LT 38.0)*
Indo(1,2,3-cd) pyrene	LT 38.0 (LT 38.0)*
Dibenz(a,h)anthracene	LT 38.0 (LT 38.0)*
Benzo(g,h,i)perylene	LT 38.0 (LT 38.0)*

LT = Less Than
* = Duplicate results
Results are reported as micrograms per kilogram (ug/Kg).

EPA 8260

Dichlorodifluoromethane	LT 0.6 (LT 0.6)*
Chloromethane	LT 0.6 (LT 0.6)*
Choroethane	LT 0.6 (LT 0.6)*
Bromomethane	LT 0.6 (LT 0.6)*
Vinyl chloride	LT 0.6 (LT 0.6)*
Trichlorofluoromethane	LT 0.6 (LT 0.6)*
1,1-Dichloroethene	LT 0.6 (LT 0.6)*
Methylene Chloride	16.0B (19.0B)*

B = Found in Method Blank at 19.0 ug/Kg.

EPA 8260 (con't):	ACTS #4B-4129E 2430-08314-AT1
Trans 1,2-Dichloroethene	LT 0.6 (LT 0.6)*
1,1-Dichloroethane	LT 0.6 (LT 0.6)*
Cis 1,2-Dichloroethene	LT 0.6 (LT 0.6)*
2,2'-Dichloropropane	LT 0.6 (LT 0.6)*
Bromochloromethane	LT 0.6 (LT 0.6)*
Chloroform	6.7 (9.9)*
1,1,1-Trichloroethane	LT 0.6 (LT 0.6)*
1,1-Dichloropropene	LT 0.6 (LT 0.6)*
Carbon Tetrachloride	LT 0.6 (LT 0.6)*
1,2-Dichloroethane	LT 0.6 (LT 0.6)*
Benzene	LT 0.6 (LT 0.6)*
Trichloroethene	LT 0.6 (LT 0.6)*
1,2-Dichloropropane	LT 0.6 (LT 0.6)*
Dibromomethane	LT 0.6 (LT 0.6)*
Bromodichloromethane	LT 0.6 (LT 0.6)*
Toluene	8.8 (17.0)*
cis-1,3-Dichloropropene	LT 0.6 (LT 0.6)*
1,1,2-Trichloroethane	LT 0.6 (1.4)*
1,3-Dichloropropane	LT 0.6 (LT 0.6)*
Tetrachloroethene	8.7 (9.2)*
Dibromochloromethane	LT 0.6 (LT 0.6)*
1,2-Dibromomethane	LT 0.6 (LT 0.6)*
Chlorobenzene	LT 0.6 (0.5)*
1,1,1,2-Tetrachloroethane	LT 0.6 (3.2)*
Ethylbenzene	1.0 (12.0)*
M,P-Xylenes	13.0 (15.0)*
O-Xylene	10.0 (13.0)*
Styrene	LT 0.6 (LT 0.6)*
Bromoform	LT 0.6 (LT 0.6)*
Isopropylbenzene	2.4 (2.5)*
1,1,2,2-Tetrachloroethane	LT 0.6 (LT 0.6)*
1,2,3-Trichloropropane	LT 0.6 (LT 0.6)*
Bromobenzene	LT 0.6 (LT 0.6)*
n-Propylbenzene	6.5 (6.8)*
2-Chlorotoluene	LT 0.6 (LT 0.6)*
1,3,5-Trimethylbenzene	50.0 (61.0)*
4-Chlorotoluene	LT 0.6 (LT 0.6)*
tert-Butylbenzene	LT 0.6 (LT 0.6)*
1,2,4-Trimethylbenzene	160.0 (200.0)*
sec-Butylbenzene	14.0 (16.0)*
p-Isopropyltoluene	21.0 (23.0)*
1,3-Dichlorobenzene	LT 0.6 (LT 0.6)*
1,4-Dichlorobenzene	LT 0.6 (1.0)*
n-Butylbenzene	21.0 (24.0)*
1,2-Dichlorobenzene	LT 0.6 (LT 0.6)*
1,2-Dibromo-3-chloropropane	3.3 (3.8)*
1,2,4-Trichlorobenzene	LT 0.6 (LT 0.6)*
Hexachlorobutadiene	LT 0.6 (LT 0.6)*
Naphthalene	70.0 (87.0)*
1,2,3-Trichlorobenzene	LT 0.6 (LT 0.6)*

LT = Less Than
* = Duplicate results
Results are reported as micrograms per kilogram (ug/Kg).

EPA 8080 (PCBs only)

Polychlorinated Biphenyls as:

Arochlor-1016	LT 0.094
Arochlor-1221	LT 0.094
Arochlor-1232	LT 0.094
Arochlor-1242	LT 0.094
Arochlor-1248	LT 0.094
Arochlor-1254	0.91
Arochlor-1260	LT 0.094

LT = Less Than
Results are reported as micrograms per gram (ug/g).

CHAIN-OF-CUSTODY RECORD

Station Number	Time (24 hr.)	Container ID	Sampler ID	Location Description	Sample Type	ANALYSES REQUIRED: 8260	8270 B/N	TCLP-metals	PCBs	TPH	IN SITU-MEASUREMENTS	Total # of Cont.	Note #
48-4128E	5 DAY TURN-AROUND →			2430-08314-AT1	Soil	X	X	X	X	X	PID=38ppm FID=[illegible]	6	1
48-4130E	10 DAY TURN-AROUND →			2430-08314-AT2	Soil	X	X	X			PID=ND FID=1.3	4	

TOTAL NUMBER OF CONTAINERS

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
[signature]	8/31/94	Cindy Edwards
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

NOTES:
① Composite samples from containers provided to make one test sample

TPH via 310-13

ANALYTICAL LABORATORY: ACTS Testing Labs
LABORATORY CONTACT: W. Grabowski

CONTACT: R. Kompff
631-5961

DAY ENVIRONMENTAL, INC.
AN AFFILIATE OF DAY ENGINEERING, P.C.

SUITE 210
338 HARRIS HILL ROAD
WILLIAMSVILLE, NEW YORK 14221

FILE NO. Stapp-94-2430R P.O. NO.
PROJECT
LOCATION
COLLECTOR R. Kompff / T. Dorety
DATE OF COLLECTION 8/31/94 SHEET 1 OF 1

ACTS TESTING LABS, INC.
25 Anderson Road
Buffalo, NY 14225-4928
Tel (716) 897-3300
Fax (716) 897-0876

Technical Report 4B-4130E
File # Stripp-94-2430R

September 16, 1994

Mr. Ray Kampff
DAY ENVIRONMENTAL, INC.

SUBJECT:

Analysis of one (1) soil sample for various parameters. The sample was received on August 31, 1994.

RESULTS:

On Pages Two through Four.

EXPERIMENTAL:

Semi-volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8270: Semi-volatile Organics.

Volatile Organics in soil was determined according to United States Environmental Protection Agency Method 8260: Volatile Organics.

The Toxicity Characteristic Leaching Procedure for Metals was determined as defined in Title 40, Code of Federal Regulations, Part 268, Appendix 1. The Toxicity Characteristic Leaching Procedure was conducted according to "Test Methods for the Examination of Solid Waste Physical/Chemical Methods", EPA SW-846.

ACTS TESTING LABS, INC.
Charles E. Hartke
Charles E. Hartke
Manager, Chemistry Laboratory

ACTS TESTING LABS, INC.
Lisa M. Clerici
Lisa M. Clerici, Supervisor
Wet Chemistry Laboratory

ACTS TESTING LABS, INC.
Elizabeth R. Hausler
Elizabeth R. Hausler, Supervisor
Gas Chromatography Laboratory

cme

RESULTS:	ACTS #4B-4130E 2430-08314-AT2	TCLP Blank	TCLP Limit
TCLP Metals			
Arsenic	LT 0.05	LT 0.05	5.0
Barium	1.35	LT 0.005	100.0
Cadmium	0.009	LT 0.005	1.0
Chromium	LT 0.01	LT 0.01	5.0
Lead	LT 0.03	LT 0.03	5.0
Mercury	LT 0.0002	LT 0.0002	0.2
Selenium	LT 0.12	LT 0.12	1.0
Silver	0.032	LT 0.005	5.0

LT = Less Than
The results are reported as milligrams per liter (mg/L)

EPA 8270	
N-Nitroso-dimethylamine	LT 73.0
Bis (2-chloroethyl) ether	LT 36.0
1,3-Dichlorobenzene	LT 36.0
1,4-Dichlorobenzene	LT 36.0
1,2-Dichlorobenzene	LT 36.0
Bis (2-chloroisopropyl) ether	LT 36.0
N-Nitroso-di-n-propylamine	LT 36.0
Hexachloroethane	LT 36.0
Nitrobenzene	LT 36.0
Isophorone	LT 36.0
Bis (2-chloroethoxy) methane	LT 36.0
1,2,4-Trichlorobenzene	LT 36.0
Napthalene	LT 36.0
4-Chloroaniline	LT 36.0
Hexachlorobutadiene	LT 73.0
2-Methylnaphthalene	LT 360.0
Hexachlorocyclopentadiene	LT 360.0
2-Chloronaphthalene	LT 36.0
2-Nitroaniline	LT 36.0
Dimethylphthalate	LT 36.0
Acenphthylene	LT 36.0
2,6-Dinitrotoluene	LT 36.0
Acenaphthene	LT 36.0
3-Nitroaniline	LT 73.0
Dibenzofuran	LT 36.0
2,4-Dinitrotoluene	LT 36.0
Diethylphthalate	150.0
Fluorene	LT 36.0
4-Nitroaniline	LT 73.0
4-Chlorophenyl phenyl ether	LT 73.0
N-Nitrosodiphenylamine	LT 36.0
4-Bromophenyl phenyl ether	LT 36.0

EPA 8270 (con't):	ACTS #4B-4130E 2430-08314-AT2
Hexachlorobenzene	LT 36.0
Phenanthrene	LT 36.0
Anthracene	LT 36.0
Carbazole	LT 36.0
Di-n-butyl phthlate	LT 36.0
Fluoranthene	LT 36.0
Pyrene	LT 36.0
Butyl benzyl phthalate	LT 36.0
Benzo(a)anthracene	LT 36.0
3-3'-Dichlorobenzidine	LT 73.0
Chrysene	LT 36.0
Bis (2-ethylhexyl) phthlate	LT 36.0
Di-n-octyl phthlate	LT 36.0
Benzo(b)fluoranthene	LT 36.0
Benzo(k)fluoranthene	LT 36.0
Benzo(a)pyrene	LT 36.0
Indo(1,2,3-cd) pyrene	LT 36.0
Dibenz(a,h)anthracene	LT 36.0
Benzo(g,h,i)perylene	LT 36.0

LT=Less Than
Results are reported as micrograms per kilogram (ug/Kg).

EPA 8260	
Dichlorodifluoromethane	LT 0.5
Chloromethane	LT 0.5
Choroethane	LT 0.5
Bromomethane	0.7
Vinyl chloride	LT 0.5
Trichlorofluoromethane	LT 0.5
1,1-Dichloroethene	LT 0.5
Methylene Chloride	18.0B
Trans 1,2-Dichloroethene	LT 0.5
1,1-Dichloroethane	LT 0.5
Cis 1,2-Dichloroethene	LT 0.5
2,2'-Dichloropropane	LT 0.5
Bromochloromethane	LT 0.5
Chloroform	8.5
1,1,1-Trichloroethane	LT 0.5
1,1-Dichloropropene	LT 0.5
Carbon Tetrachloride	LT 0.5
1,2-Dichloroethane	LT 0.5
Benzene	LT 0.5
Trichloroethene	LT 0.5
1,2-Dichloropropane	LT 0.5
Dibromomethane	LT 0.5
Bromodichloromethane	LT 0.5
Toluene	LT 0.5

B=Found in Method Blank at 19.0 ug/Kg.

EPA 8260 (con't):	ACTS #4B-4130E 2430-08314-AT2
cis-1,3-Dichloropropene	LT 0.5
1,1,2-Trichloroethane	LT 0.5
1,3-Dichloropropane	LT 0.5
Tetrachloroethene	LT 0.5
Dibromochloromethane	LT 0.5
1,2-Dibromomethane	LT 0.5
Chlorobenzene	LT 0.5
1,1,1,2-Tetrachloroethane	LT 0.5
Ethylbenzene	1.3
M,P-Xylenes	LT 1.0
O-Xylene	LT 0.5
Styrene	LT 0.5
Bromoform	LT 0.5
Isopropylbenzene	LT 0.5
1,1,2,2-Tetrachloroethane	LT 0.5
1,2,3-Trichloropropane	LT 0.5
Bromobenzene	LT 0.5
n-Propylbenzene	LT 0.5
2-Chlorotoluene	LT 0.5
1,3,5-Trimethylbenzene	LT 0.5
4-Chlorotoluene	LT 0.5
tert-Butylbenzene	LT 0.5
1,2,4-Trimethylbenzene	LT 0.5
sec-Butylbenzene	LT 0.5
p-Isopropyltoluene	LT 0.5
1,3-Dichlorobenzene	LT 0.5
1,4-Dichlorobenzene	LT 0.5
n-Butylbenzene	LT 0.5
1,2-Dichlorobenzene	LT 0.5
1,2-Dibromo-3-chloropropane	LT 0.5
1,2,4-Trichlorobenzene	LT 0.5
Hexachlorobutadiene	LT 0.5
Naphthalene	1.5
1,2,3-Trichlorobenzene	LT 0.5

LT = Less Than
Results are reported as micrograms per kilogram (ug/Kg).

CHAIN-OF-CUSTODY RECORD

Station Number	Time (24 hr.)	Container ID	Sampler ID	Location Description	Sample Type	ANALYSES REQUIRED: 8260	8270 B/N	TCLP-metals	PCBs	TPH	INSITU-MEASUREMENTS	Total # of Cont.	Note #
48-41JAE	5 DAY TURN-AROUND →			2430-08314-AT1	soil	X	X	X	X	X	PID=38ppm FID=126ppm	6	1
48-41JBE	10 DAY TURN-AROUND →			2430-08314-AT2	soil		X	X	X		PID=N.D FID=1.3	4	

TOTAL NUMBER OF CONTAINERS

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Raymond L. Kampff	8/31/94	Cindy Edwards
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

NOTES:

① Composite samples from containers provided to make one test sample

TPH via 310-13

ANALYTICAL LABORATORY: ACTS Testing Labs

LABORATORY CONTACT: W. Grabowski

CONTACT: R. Kampff 631-5961

DAY ENVIRONMENTAL, INC.
AN AFFILIATE OF DAY ENGINEERING, P.C.

SUITE 210
338 HARRIS HILL ROAD
WILLIAMSVILLE, NEW YORK 14221

FILE NO. Stupp-94-2430R P.O. NO.

PROJECT

LOCATION

COLLECTOR R. Kampff / J. Dorety

DATE OF COLLECTION 8/31/94 SHEET 1 OF 1

Removal and Disposal **Documentation**

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. 932030	APPLICATION NO 9494-0516	DATE RECEIVED 10/12/94
DEPARTMENT ACTION ☒ Approved ☐ Disapproved		DATE 10/12/94

1. NAME OF PROJECT/FACILITY	2. COUNTY	3. SITE NUMBER
MODERN LANDFILL INC	NIAGARA	932030
4. NAME OF OWNER	5. ADDRESS (Street, City, State, Zip Code)	6. TELEPHONE NO
MODERN LANDFILL INC	4466 MODEL CITY RD, MODEL CITY, NY	(716)754-8226
7. NAME OF OPERATOR	8. ADDRESS (Street, City, State, Zip Code)	9. TELEPHONE NO.
RICHARD WASHUTA	FLETCHER & HAROLD RD, MODEL CITY, NY 14107	(716)754-8226

10. METHOD OF TREATMENT OR DISPOSAL

SANITARY LANDFILL - D80

11. COMPANY GENERATING WASTE	12. ADDRESS OF FACILITY GENERATING WASTE (Street, City, State, Zip Code)
Scrippit, Inc.	12975 Clarence Center Rd., Akron, NY 14001
13. REPRESENTATIVE OF WASTE GENERATOR	14. MAILING ADDRESS OF REPRESENTATIVE
R. Johnson	12975 Clarence Center Rd., Akron, NY 14001
15. TELEPHONE NO.	716-542-4511

16. DESCRIPTION OF PROCESS PRODUCING WASTE DEC SITE # 915053

Excavation of soils contaminated with petroleum hydrocarbon/organics

17. EXPECTED ANNUAL WASTE PRODUCTION	18. WASTE HAULED IN
400-600 Tons/Year ____ Cubic Yards/Gallons/Year	☐ Drums ☐ Bulk Tank ☐ Rolloff Container ☒ Other Dump trailer

19. WASTE COMPOSITION	19b. Physical State	19c. pH Range
19a. Average Percent Solids 20%	☐ Liquid ☐ Slurry ☐ Sludge ☒ Solid ☐ Contained Gas	6 to 8

19d	COMPONENTS	CONCENTRATION (Dry Weight) Upper	Lower	Typical	UNIT (Check one) Wt %	PPM
1)	Soil, stone	99	99	99	☒	☐
2)	Trace organics (see attached analysis)	1	1	1	☒	☐
3)					☐	☐
4)					☐	☐

20. IS AN ANALYSIS OF WASTE ATTACHED?	21. WAS AN EP TOXICITY TEST CONDUCTED ON THE WASTE?	22. MATERIAL IS:
☒ Yes ☐ No	☒ Yes ☐ No If "Yes", attach results (TCLP)	☐ Hazardous ☒ Non-Hazardous

23. DETAIL ALL HAZARD AND NUISANCE PROBLEMS ASSOCIATED WITH THE WASTES. List necessary safety, handling, treatment and disposal precautions.

None WIS# 8717

NYSDEC CONTACT: MR. JASPAL WALIA

24. WHERE WAS MATERIAL DISPOSED OF PREVIOUSLY?

First time disposal

25. NAME OF WASTE TRANSPORTER	26. ADDRESS (Street, City, State, Zip Code)	27. NYSDEC PERMIT No.	28. TELEPHONE NO.
Modern Disposal, Inc.	P O Box 209, Model City, NY 14107	94-023	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	DATE
X R. Johnson Manager Landfill Ops	10/5/94
b. SIGNATURE AND TITLE OF REPRESENTATIVE OF TREATMENT OR DISPOSAL FACILITY	DATE
X [illegible] — Waste Disposal Coordinator	10/12/94

MODERN LANDFILL INC.

TICKET : 114707
DATE IN : 10/19/94 09:25:14
DATE OUT: 10/19/94 09:43:37

P.O. BOX 209 MODEL CITY, NEW YORK 14107
LANDFILL SITE - HAROLD E. FLETCHER RD.
LEWISTON, NEW YORK

TRUCK :512
HAULER :MODERN DISPOSAL
GENERATOR: 5116.078
STRIPPITT (WTS)
12975 CLARENCE CENTER ROAD

HAULER TICKET:WTS #BB1669

BILL TO : 6163.000
MODERN DISPOSAL

COMMODITY:0800-0000 SOIL AND OIL CLEANUP
GROSS WEIGHT: 85,960.
TARE WEIGHT: 34,320.
NET WEIGHT: 51,640.
TONS: 25.82

WEIGHMASTER: _____

To the best of my knowledge, the waste stream(s) indicated on this ticket contain(s) no hazardous or unacceptable waste and has been packaged and transported in accordance with all applicable state and federal regulations. Any person accepting this ticket assumes all risk of accident and expressly agrees that Modern Landfill Inc. shall not be liable under any circumstances for any injury to person, loss or damage and also agrees to indemnify and hold harmless Modern Landfill Inc. and its employees.

Additionally, I hereby acknowledge that I have read and understand conditions or statements indicated on reverse.

Signature: _____

MODERN LANDFILL INC.

TICKET : 114709
DATE IN : 10/19/94 09:27:42
DATE OUT: 10/19/94 09:44:33

P.O. BOX 209 MODEL CITY, NEW YORK 14107
LANDFILL SITE - HAROLD E. FLETCHER RD.
LEWISTON, NEW YORK

TRUCK :498
HAULER :MODERN DISPOSAL
GENERATOR: 5116.078
STRIPPITT (WTS)
12975 CLARENCE CENTER ROAD

HAULER TICKET:WTS #BB1669

BILL TO : 6163.000
MODERN DISPOSAL

COMMODITY:0800-0000 SOIL AND OIL CLEANUP
GROSS WEIGHT: 72,800.
TARE WEIGHT: 28,700.
NET WEIGHT: 44,100.
TONS: 22.05

WEIGHMASTER: _____

To the best of my knowledge, the waste stream(s) indicated on this ticket contain(s) no hazardous or unacceptable waste and has been packaged and transported in accordance with all applicable state and federal regulations. Any person accepting this ticket assumes all risk of accident and expressly agrees that Modern Landfill Inc. shall not be liable under any circumstances for any injury to person, loss or damage and also agrees to indemnify and hold harmless Modern Landfill Inc. and its employees.

Additionally, I hereby acknowledge that I have read and understand conditions or statements indicated on reverse.

Signature: _____

MODERN LANDFILL INC.

P.O. BOX 209 MODEL CITY, NEW YORK 14107
LANDFILL SITE - HAROLD @ PLETCHER RD.
LEWISTON, NEW YORK

TICKET : 114722
DATE IN : 10/19/94 09:58:14
DATE OUT: 10/19/94 10:12:37

TRUCK : 497
HAULER : MODERN DISPOSAL
GENERATOR: 5116.078
STRIPPITT (WTS)
12975 CLARENCE CENTER ROAD

HAULER TICKET:WTS #BB1669

BILL TO : 5163.000
MODERN DISPOSAL

COMMODITY:0800-0000 SOIL AND OIL CLEANUP
GROSS WEIGHT: 78,860.
TARE WEIGHT: 27,940.
NET WEIGHT: 50,920.
TONS: 25.46

WEIGHMASTER: _____

To the best of my knowledge, the waste stream(s) indicated on this ticket contain(s) no hazardous or unacceptable waste and has been packaged and transported in accordance with all applicable state and federal regulations. Any person accepting this ticket assumes all risk of accident and expressly agrees that Modern Landfill Inc. shall not be liable under any circumstances for any injury to person, loss or damage and also agrees to indemnify and hold harmless Modern Landfill Inc. and its employees.

Additionally, I hereby acknowledge that I have read and understand conditions or statements indicated on reverse.

Signature: _____

MODERN LANDFILL INC.

P.O. BOX 209 MODEL CITY, NEW YORK 14107
LANDFILL SITE - HAROLD @ PLETCHER RD.
LEWISTON, NEW YORK

TICKET : 114721
DATE IN : 10/19/94 09:56:40
DATE OUT: 10/19/94 10:13:52

TRUCK : 499
HAULER : MODERN DISPOSAL
GENERATOR: 5116.078
STRIPPITT (WTS)
12975 CLARENCE CENTER ROAD

HAULER TICKET:WTS #BB1669

BILL TO : 5163.000
MODERN DISPOSAL

COMMODITY:0800-0000 SOIL AND OIL CLEANUP
GROSS WEIGHT: 75,680.
TARE WEIGHT: 28,380.
NET WEIGHT: 48,300.
TONS: 24.15

WEIGHMASTER: _____

To the best of my knowledge, the waste stream(s) indicated on this ticket contain(s) no hazardous or unacceptable waste and has been packaged and transported in accordance with all applicable state and federal regulations. Any person accepting this ticket assumes all risk of accident and expressly agrees that Modern Landfill Inc. shall not be liable under any circumstances for any injury to person, loss or damage and also agrees to indemnify and hold harmless Modern Landfill Inc. and its employees.

Additionally, I hereby acknowledge that I have read and understand conditions or statements indicated on reverse.

Signature: _____

MODERN LANDFILL INC.

TICKET # 114737
DATE IN : 10/19/94 10:38:06
DATE OUT: 10/19/94 10:58:00

P.O. BOX 209 MODEL CITY, NEW YORK 14107
LANDFILL SITE: HAROLD E. PLETCHER RD.
LEWISTON, NEW YORK

TRUCK : 1PE31
HAULER : MODERN DISPOSAL
GENERATOR: 5116.078
STRIPPITT (WTS)
12975 CLARENCE CENTER ROAD

HAULER TICKET: WTS #981565
BILL TO : 6163.000
MODERN DISPOSAL

COMMODITY: 0800-0000 SOIL AND OIL CLEANUP
GROSS WEIGHT: 128,240.
TARE WEIGHT: 35,860.
NET WEIGHT: 92,380.
TONS: 46.19

WEIGHMASTER: _____

To the best of my knowledge, the waste stream(s) indicated on this ticket contain(s) no hazardous or unacceptable waste and has been packaged and transported in accordance with all applicable state and federal regulations. Any person accepting this ticket assumes all risk of accident and expressly agrees that Modern Landfill Inc. shall not be liable under any circumstances for any injury to person, loss or damage and also agrees to indemnify and hold harmless Modern Landfill Inc. and its employees.

Additionally, I hereby acknowledge that I have read and understand conditions or statements indicated on reverse.

Signature: _____

APPENDIX G

Daily Field Reports

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/14/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Light Rain
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-01

PERSONNEL AND EQUIPMENT ON SITE:

R. Crouch, J. Dorety (Day); No representatives from Haseley on site.

John Deere 490D Trackhoe with Brush Chopper, Ford 775A Backhoe, Cat D5H Dozer, Ford Dump Truck, Office Trailer.

MATERIALS PLACED/WORK COMPLETED:

No work being done while writer was on site.

COMMENTS:

Haseley has begun the cleaning of the drainage swale along the west property line. Excavated sediments from the ditch being placed on top of landfill and will be incorporated as fill.

Walked site with R. Crouch so that he could show me specific areas of concern (gas well, monitoring wells, limits of landfill).

Met with Ken Berkowitz of Strippit. He expressed his concerns about truck traffic on the property. We informed him we would have the contractor confine trucks to west side of the parking lot.

Still waiting on Health and Safety Plan approval from NYSDEC and NYSDOH.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/15/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Breezy
LOCATION: Akron, N.Y.	TEMPERATURE: 80°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-02

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Crouch, R. Kampff (Day): Foreman, equipment operator, laborer (Haseley); Equipment Operator, 2 Laborers (Site Clearing Subcontractor); J. Tuk (NYSDEC)

Ford Dumptruck, Backhoe

MATERIALS PLACED/WORK COMPLETED:

Swale along the west property line has had sediments removed to the CMP coming from storm sewer drop inlets in parking lot to the south side of the building. Swale now being extended towards north toe of slope of landfill.

Clearing and grubbing work being completed within the former disposal area.

COMMENTS:

Decision made today to not allow wood chips and/or branches to be placed with soils underlying the geomembrane. Branches, larger logs and stumps will be disposed of off-site. Wood chips will be mixed with topsoil as mulch.

NYSDEC using videotape to supplement written field documentation.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/19/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-03

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Crouch (Day); Foreman, equipment operator, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

Ford Dumptruck, backhoe, work trailer.

MATERIALS PLACED/WORK COMPLETED:

Drainage ditch along the north slope completed to gravel access road. Partial removal of fence and concrete posts along north end of landfill.

Surveyor begins property boundary survey.

COMMENTS:

Met with contractor and surveyor to go over survey requirements for construction. Surveyor tied into property corner at northwest.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/20/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: ~75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-04

PERSONNEL AND EQUIPMENT ON SITE:
J. Dorety (Day); Foreman, equipment operator, laborer (Haseley); Surveyor and assistant.

MATERIALS PLACED/WORK COMPLETED:
Continued removal of fence around landfill.

West property line staked and landfill cap control grid beginning point established.

COMMENTS:
Meeting with Haseley representatives regarding health and safety requirements during subgrade preparation.

TECHNICIAN (print): J. Joseph Dorety
(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/21/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: ~75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-05

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, equipment operator, laborer (Haseley)

Ford dumptruck, backhoe

MATERIALS PLACED/WORK COMPLETED:

Contractor continued removal of fence around landfill.

COMMENTS:

Still no approval of the Health and Safety plan that Haseley has submitted.

Explained to contractor foreman that he should remove the larger pieces of steel located on top of the landfill.

Smell of natural gas noticeable around the gas well. Informed R. Crouch of this matter. He will contact Field Services, Inc.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/22/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 80°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-06

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, equipment operator, laborer (Haseley)

Dumptruck, backhoe

MATERIALS PLACED/WORK COMPLETED:

Fencing around gas well removed along with some larger pieces of steel from the top of the landfill.

COMMENTS:

Gas odors still present around gas well. Rick has contacted Field Services and they will be out as soon as schedule allows.

Health and Safety plan approved at end of day.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/25/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 80°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-07

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff, R. Crouch (Day); Foreman, 2 equipment operators, laborer (Haseley); J. Tuk (NYSDEC)

Cat D5H dozer, backhoe, water truck

PPM, Inc. Model 1005 Handheld Aerosol Monitor; HNU Model HW-101 with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Began leveling the berms at the south side of the landfill.

Temporary drainage diversion berm placed along west side of landfill.

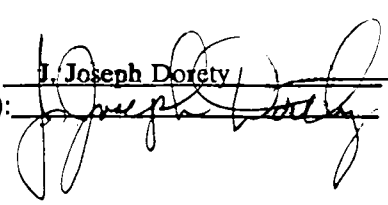
Decontamination pad constructed at top of center access road.

COMMENTS:

Encountered drum of green granular material under a stump at southwest corner of landfill. Immediately stopped earthwork and discussed issue with R. Kampff (Day) and J. Tuk (NYSDEC). Area around drum was delineated with survey ribbon and contractor continued earthwork away from the area.

Community air monitoring began today and included the monitoring of particulate dust and organic vapors. One exceedence of particulate dust levels (instantaneous measurement) was noted and work was stopped until site was watered down with water truck and levels were within acceptable limits. Work then resumed for remainder of the day without further exceedences.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/26/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast, Rain(a.m.)/Clear (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 60 - 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-08

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, R. Crouch (Day): Foreman, 2 equipment operators, laborer (Haseley); Surveyor and 2 assistants; J. Walia, J. Tuk (NYSDEC); D. Wierzba (Field Serv.)

Bulldozer, backhoe, water truck, smooth drum roller

PPM, Inc. Handheld Aerosol Monitor, HNU Model HW-101 with 10.2 eV lamp PID

MATERIALS PLACED/WORK COMPLETED:

Began cut of west slope using material to fill area near gas well. Disturbed areas rolled at end of day. Silt fence placed along northeast perimeter.

COMMENTS:

Preliminary meeting on site with NYSDEC.

Leak at gas well due to bad valve at building. Valve repaired and leak stopped.

Material cut from western slope containing occasional fragments of C&D material.

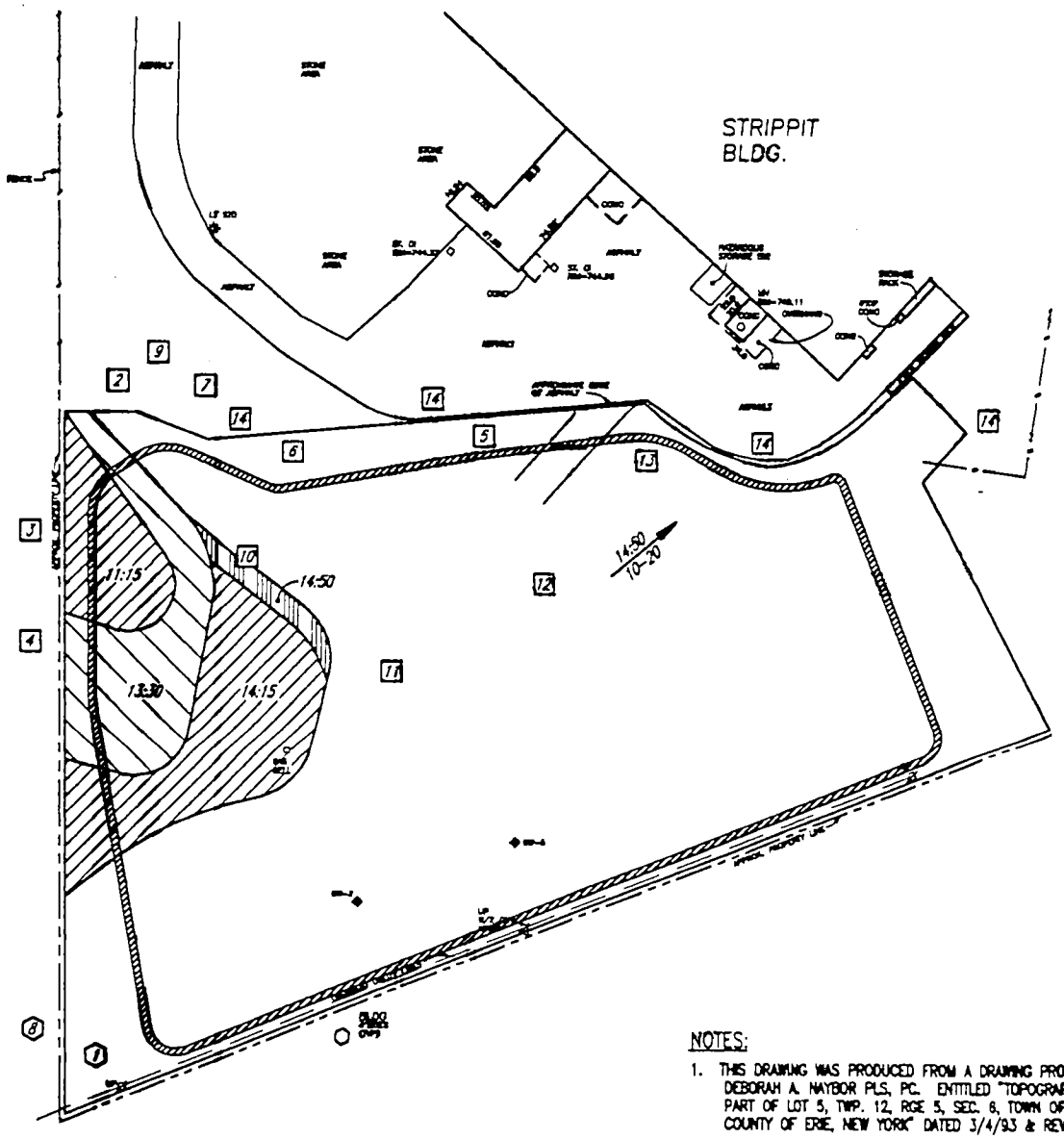
No exceedences today during community air monitoring.

Surveyor began setting grade stakes on the top of landfill.

TECHNICIAN (print): R. Kampff

(signed): Raymond L. Kampff

AIR MONITORING LOG - JULY 26, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. MAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 8, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12-45 / 10-20 WIND DIRECTION WITH TIME AND SPEED (mph)

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 66 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 17 ug/m3

(2) MAXIMUM PID READING: 0.3 ppm
8 HOUR TWA PID READING: 0.17 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 11:20:00 1994
FILE NAME: [illegible]

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/27/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Clear
LOCATION: Akron, N.Y.	TEMPERATURE: 55°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-09

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day); 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

D5H Dozer, backhoe, water truck (not operational)

PPM, Inc. Model 1005 handheld aerosol monitor (HAM), HNU Model HW-101 with 10.2 eV lamp PID

MATERIALS PLACED/WORK COMPLETED:

Western and northern slopes cut with material used as fill on top of disposal area (center areas). Load of #2 crusher run spread in decontamination area.

COMMENTS:

Empty drum, 1/2 full drum of white powder material and steel bin with brick (tan) and ash encountered during cut of west slope. After discussions with the NYSDEC, contractor was allowed to place bricks back in landfill. The white powder was placed in an overpack drum for off-site disposal. HNU readings on materials encountered <4.5 ppm.

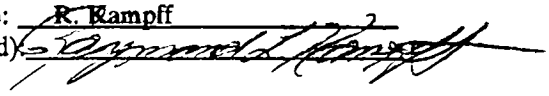
Situation was discussed with Strippit. They believe the white powder is a heat-treating salt, and the green powder is thought to be waste fragments from a grinding wheel ("Green Wheel"). Strippit provided a material safety data sheet (MSDS) for their heat treating salts.

Surveyor and assistant setting grade stakes for sub-base.

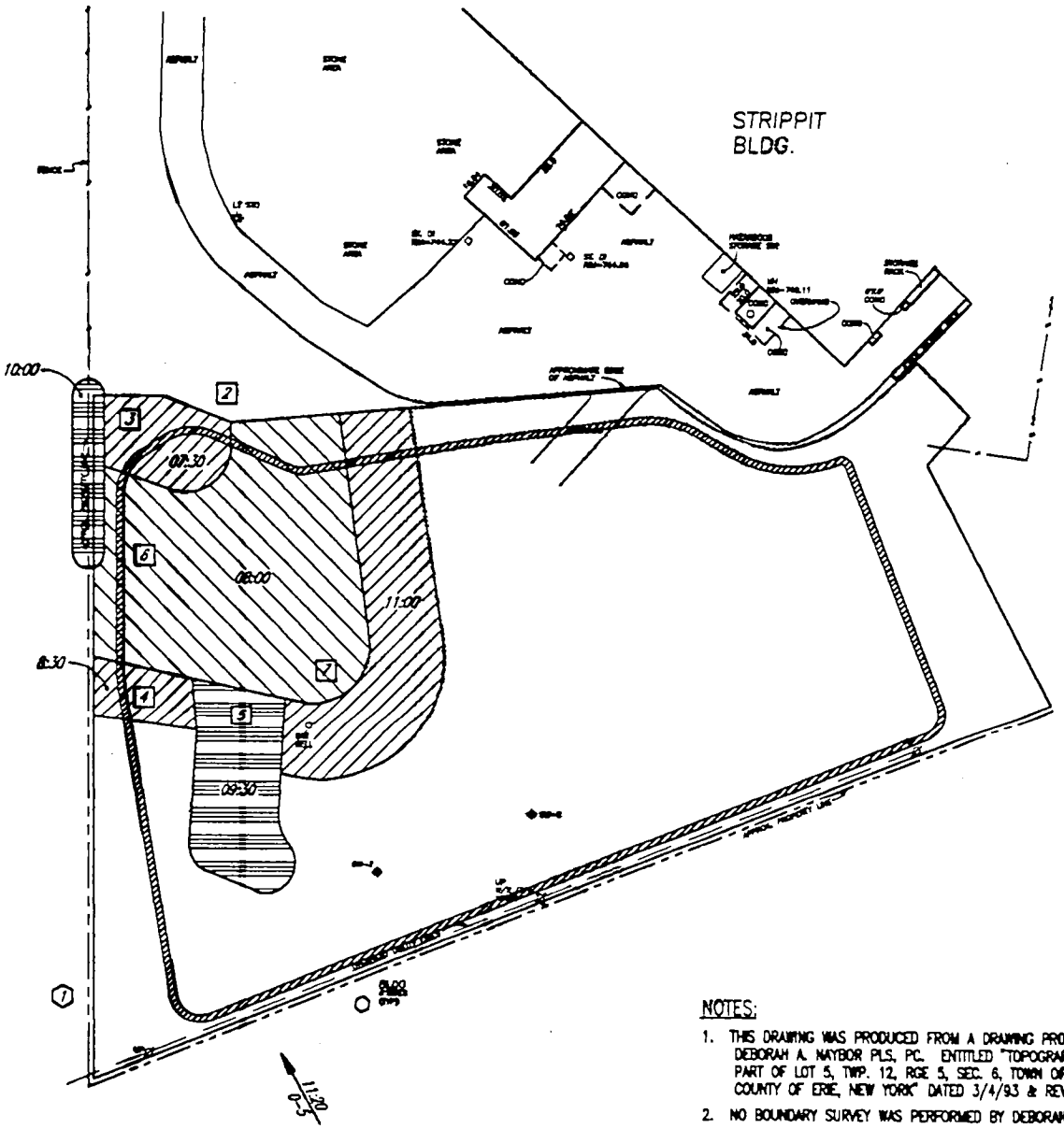
Five (5) rolls of geomembrane delivered to site and placed in northwest corner of the parking lot.

Drums of purge water from monitoring wells emptied on top of landfill by permission of NYSDEC.

TECHNICIAN (print): R. Kampff

(signed) 

AIR MONITORING LOG - JULY 27, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 / 10-20 WIND DIRECTION WITH TIME AND SPEED (mph)

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

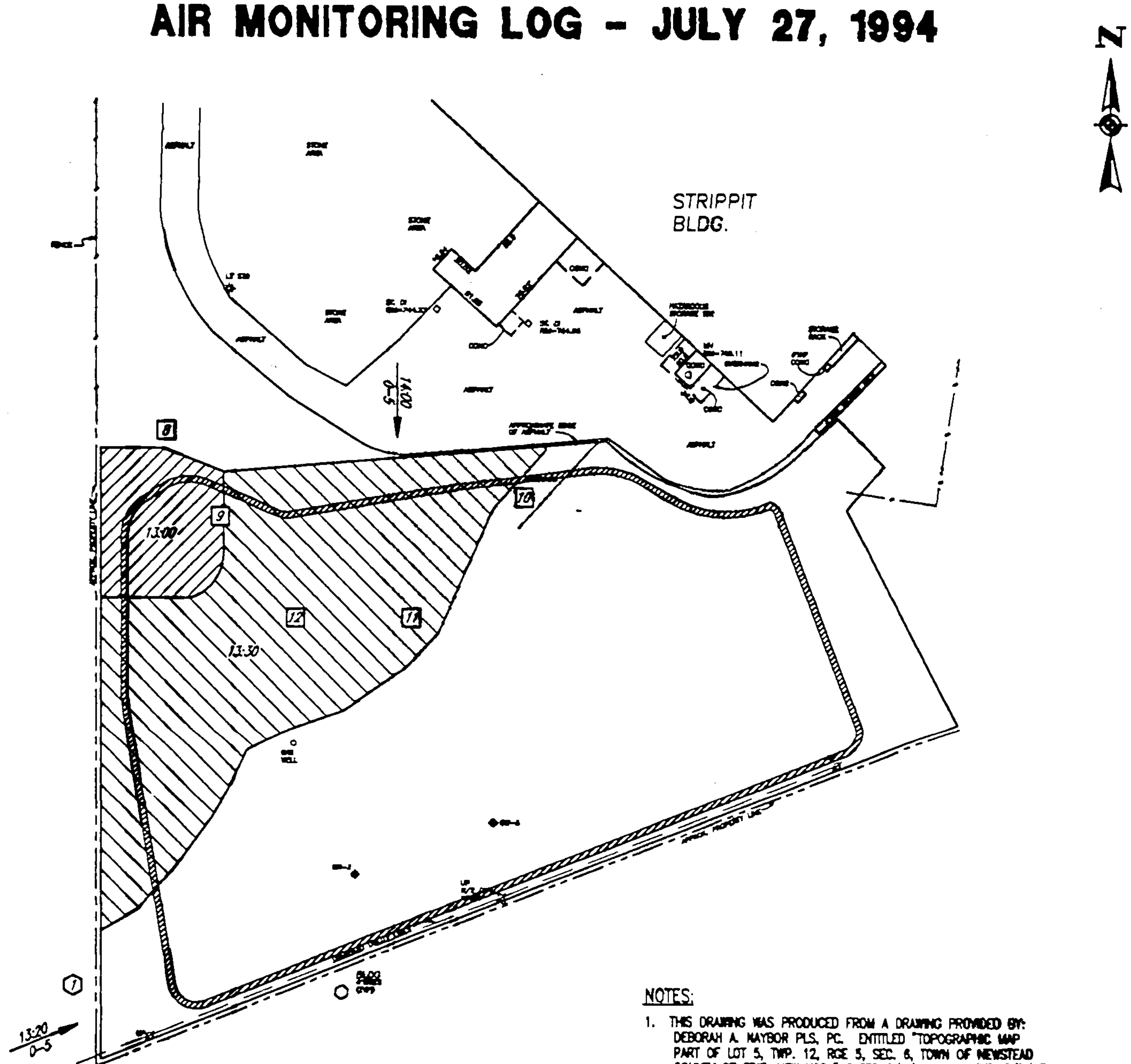
PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1)	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	86 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	45 ug/m3
(2)	MAXIMUM PID READING:	0.5 ppm
	8 HOUR TWA PID READING:	0.3 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP105

AIR MONITORING LOG - JULY 27, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 / 10-20 → WIND DIRECTION WITH TIME AND SPEED (mph)

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1)	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	86 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	45 ug/m3
(2)	MAXIMUM PID READING:	0.5 ppm
	8 HOUR TWA PID READING:	0.3 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/28/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-10

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day); 2 equipment operators, laborer (Haseley)

D5H Dozer, backhoe, roller, water truck

PPM, Inc. Model 1005 HAM, HNU Model HW-101 with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

North slope of landfill cut with material being used as fill on top of landfill. Area of north slope being cut is from northwest corner of landfill to area of decontamination pad.

Contractor attempts to open and fill buried concrete condensate tank for gas well. Don't know if this will work.

COMMENTS:

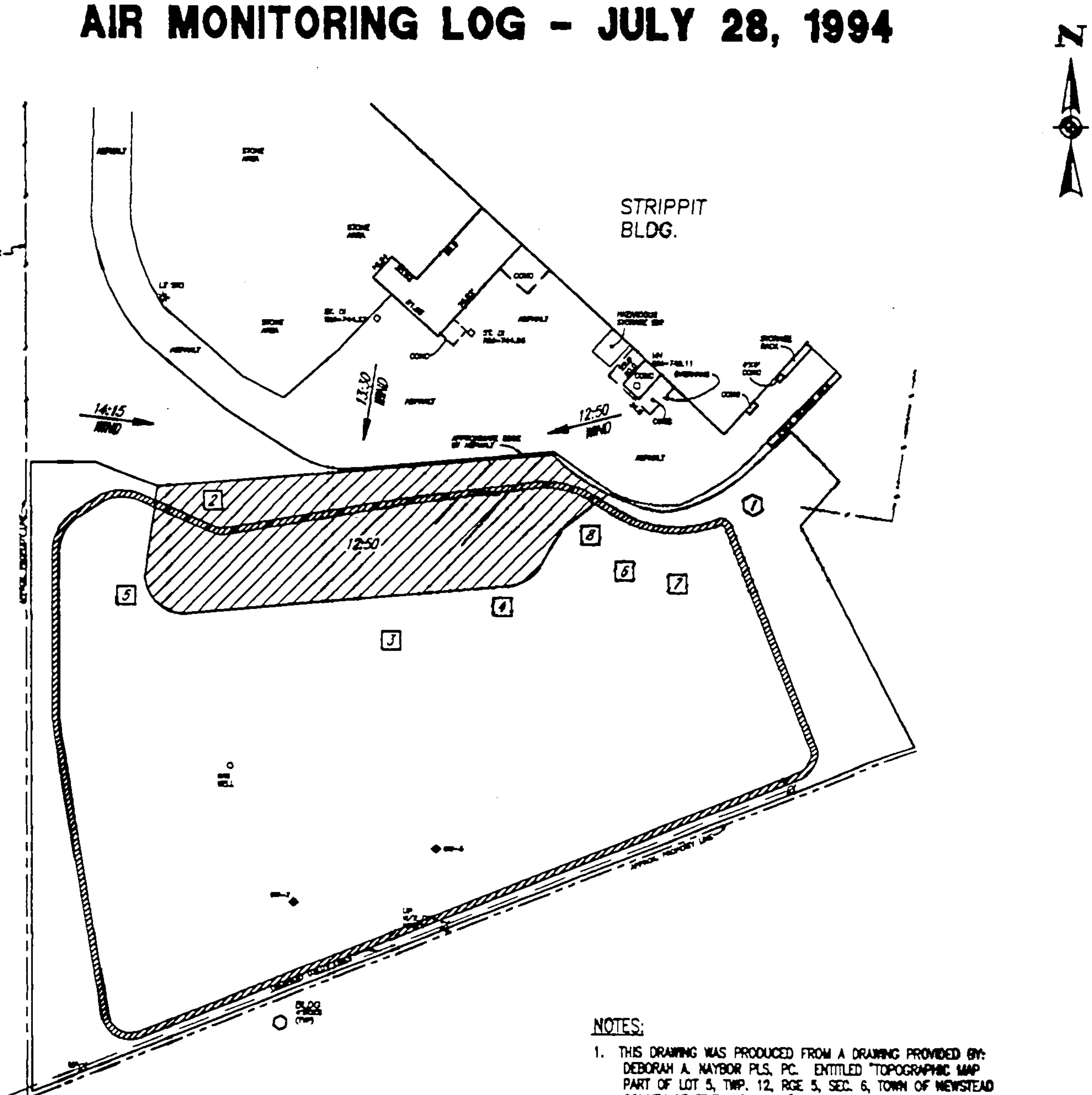
Dozer down until noon today because of oil problems.

Recorded identification information from rolls of geomembrane. One roll was damaged during shipping. Cut is 1" long x 3/4" wide in first layer and is evident in second layer also. Shipper is aware of damage according to contractor.

Informed by R. Kampff and contractor that NYSDEC wants rolls of geomembrane up off asphalt to prevent damage to membrane due to heat build-up. Arrangements made to place material on plywood sheeting.

TECHNICIAN (print): J. Joseph Dorety
(signed): J. Joseph Dorety

AIR MONITORING LOG - JULY 28, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND → WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1)	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	51 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	70 ug/m3
(2)	MAXIMUM PID READING:	0.1 ppm
	8 HOUR TWA PID READING:	0.0 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 7/29/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-11

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day); 2 operators, laborer, substitute foreman (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

D5H Dozer, roller, backhoe, water truck

PPM, Inc. Model 1005 HAM, HNU Model HW-101 with 10.2 eV lamp PID

MATERIALS PLACED/WORK COMPLETED:

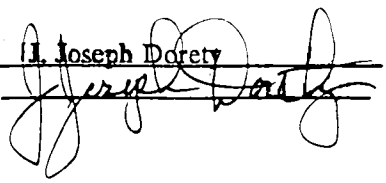
Top of west slope cut with material moved to eastern portion of site for use as fill.

Rolls of geomembrane placed on plywood.
Temporary drum staging/containment area constructed.
Toe stakes set for west slope.

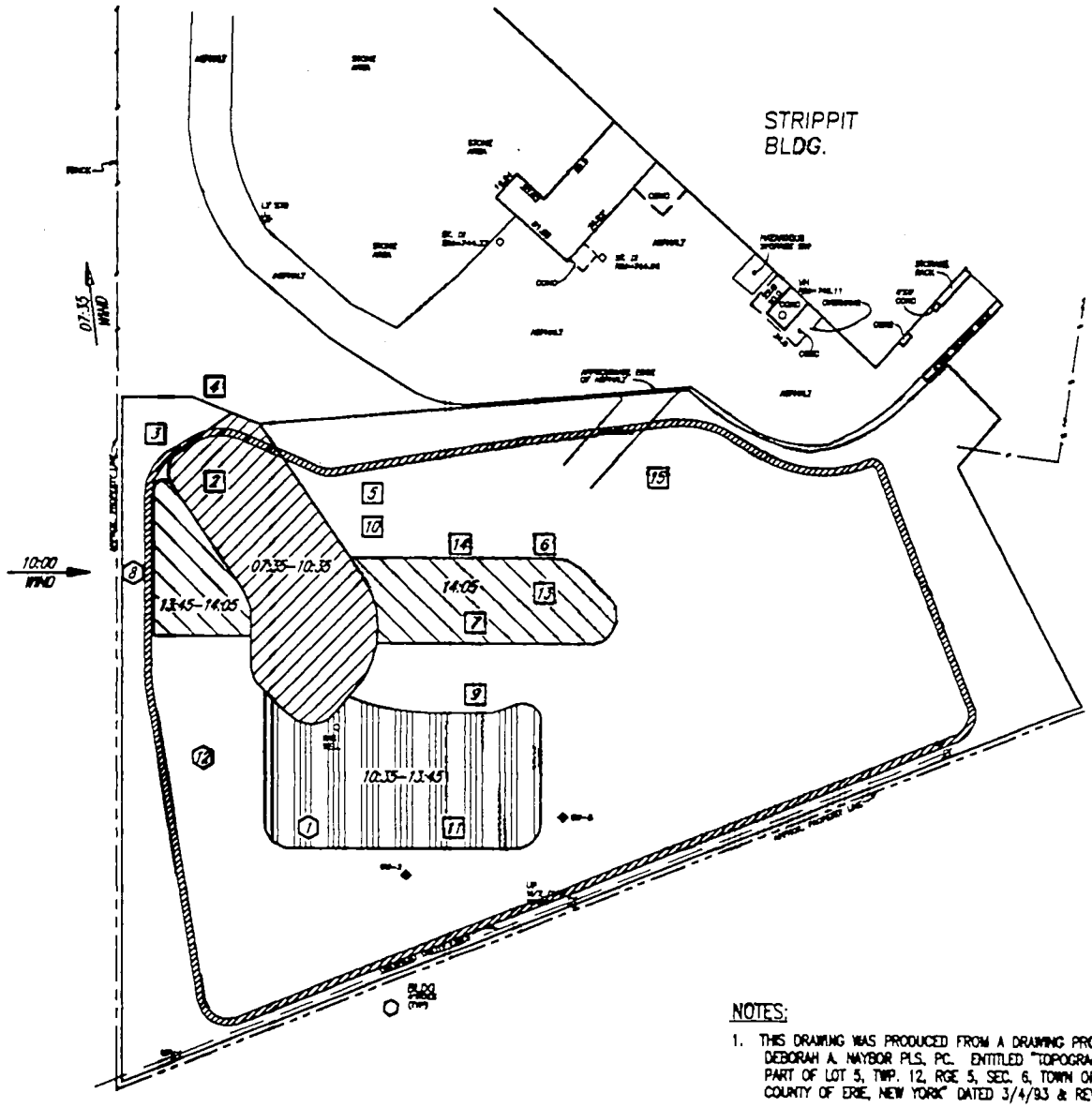
COMMENTS:

Decision was made that stumps and larger logs would be staged at southwest corner of work area for disposal off-site.

Received notification from the Village of Akron that due to a water main break, we will not be able to use Village water for water truck until further notice. They directed us to a hydrant on the town system that contractor can use.

TECHNICIAN (print): J. Joseph Dorety
(signed): 

AIR MONITORING LOG - JULY 29, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 83 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 57 ug/m3

(2) MAXIMUM PID READING: 0.3 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP108

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/1/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny, Hazy, Humid
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F (a.m.)/90°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-12

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day): Foreman, 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Walia, J. Tuk (NYSDEC)

D5H Dozer, roller, backhoe, water truck, Mitzubishi track hoe (pm)

PPM, Inc. Model 1005 HAM, HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Re-graded north and northwest slopes. Drum of green granular material and impacted underlying soils drummed in 55-gallon NYSDOT approved drums. Drums were placed in temporary staging area.

Toe and top stakes set where needed. North slope toe stakes re-set.

COMMENTS:

Dozer out of service for ~ 1.5 hours due to loss of hydraulic oil plug.

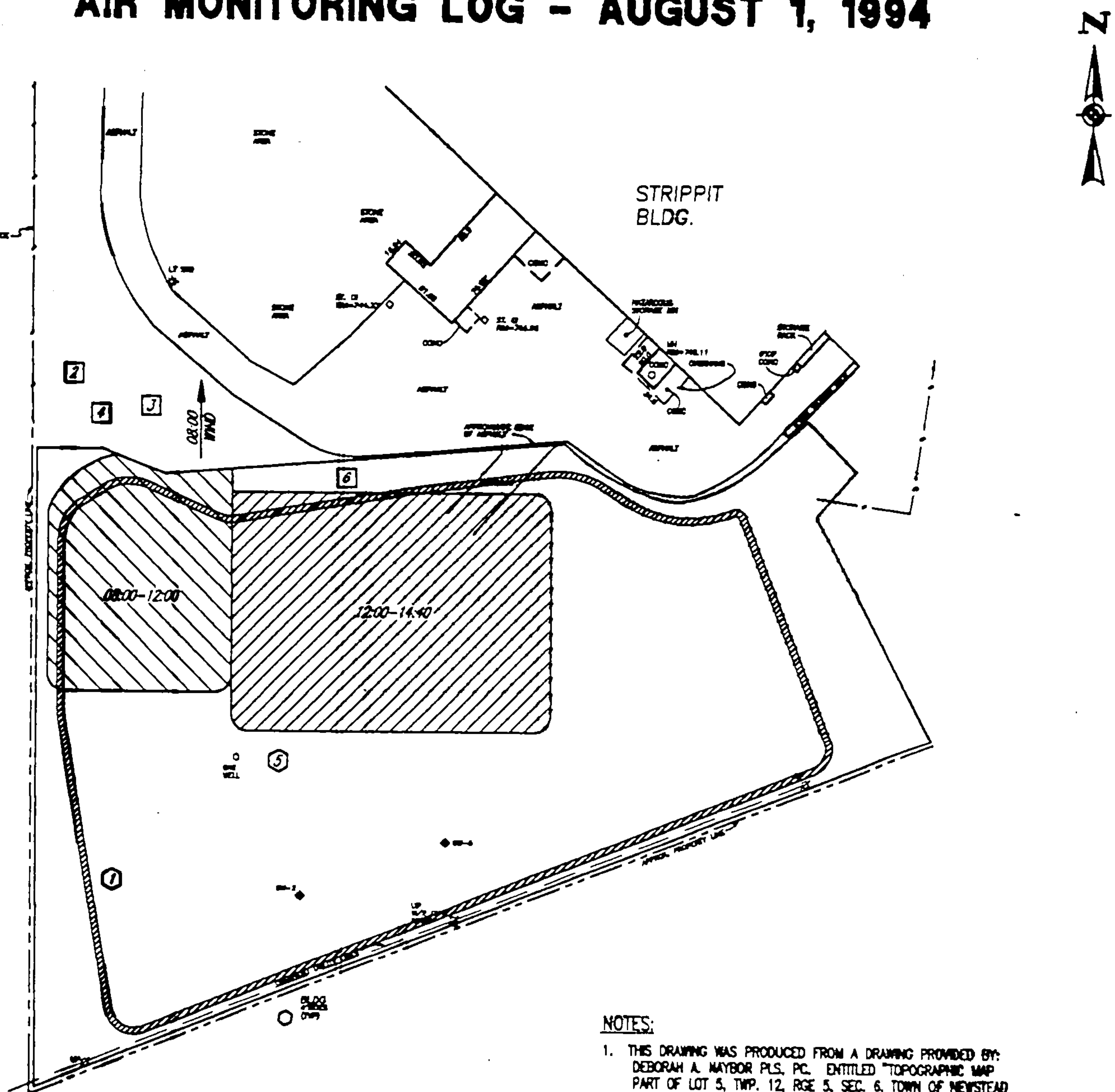
North toe of slope stakes moved in approximately 30 feet from original placement location. This forces areas of north slopes, which were previously graded, to be re-graded in accordance with new stake locations.

On-site progress meeting with NYSDEC today. Contractor is approximately 1 to 1.5 weeks behind his original schedule.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

AIR MONITORING LOG - AUGUST 1, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1)	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	81 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	43.5 ug/m3
(2)	MAXIMUM PID READING:	0.2 ppm
	8 HOUR TWA PID READING:	0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/2/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 72°F (a.m.)/85°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-13

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, laborer (Haseley); Surveyor and helper; J. Tuk (NYSDEC)

D5H Dozer, track hoe, backhoe, roller, water truck, Terex dumptruck (p.m.)

PPM, Inc. Model 1005 HAM, HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Approximately 650 yd^3 of material cut from west slope and placed on top as fill.

A second drum of green granular material encountered.

Larger pieces of steel and tree stumps moved to staging area southwest of disposal area.

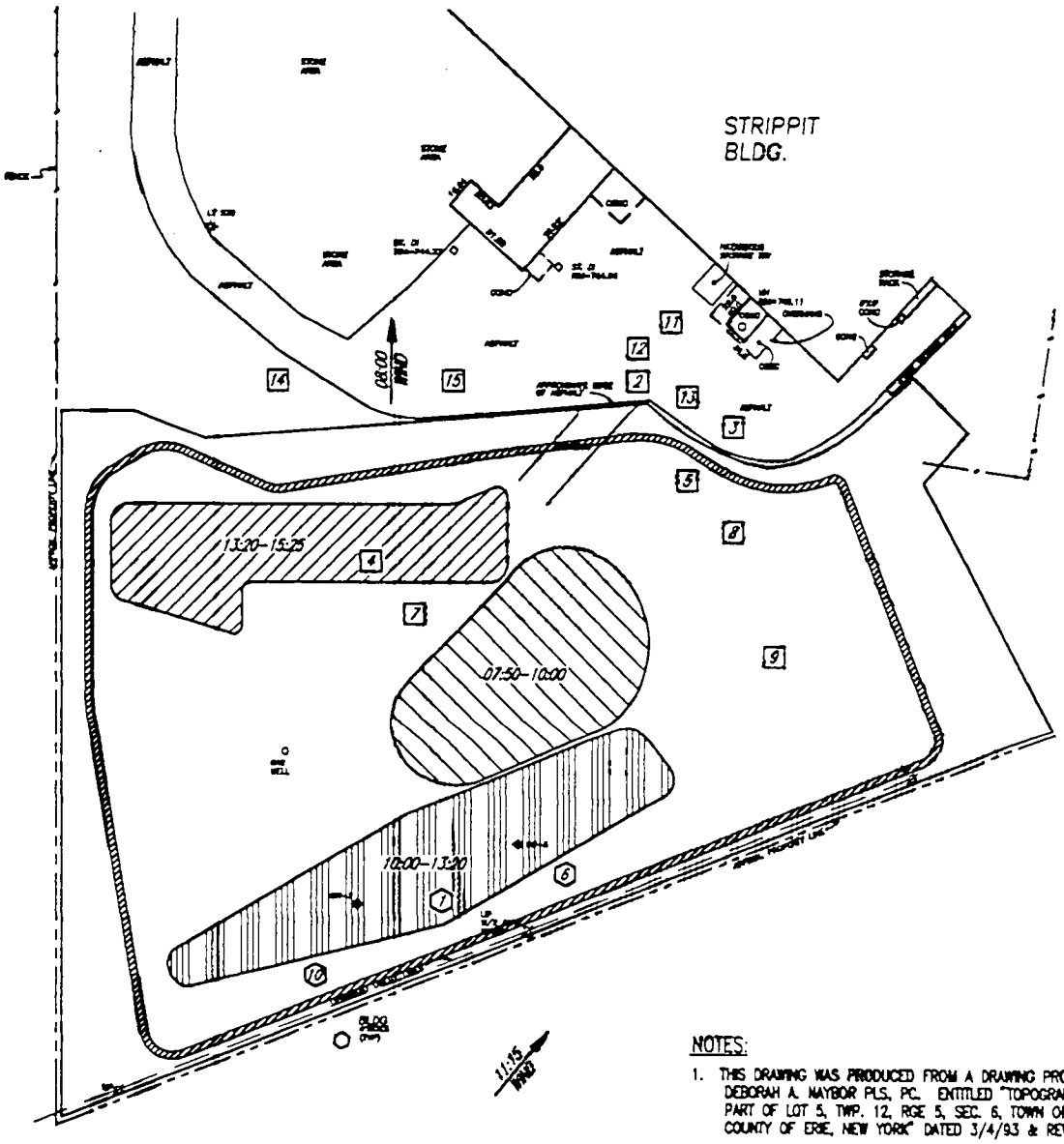
COMMENTS:

Over pack of heat treating salts completed.

TECHNICIAN (print): J. Joseph Dorety

(signed): Joseph Dorety

AIR MONITORING LOG - AUGUST 2, 1994



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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 91 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 66 ug/m3

(2) MAXIMUM PID READING: 0.3 ppm
8 HOUR TWA PID READING: 0.2 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 4, 11:25:00 1994

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/3/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.) /85°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-14

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 3 equipment operators, laborer (Haseley); J. Tuk (NYSDEC)

D5H Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Approximately 650 yd^3 of material cut from west slope and placed on top as fill.

Drum carcasses and soils impacted with petroleum-like odor placed in overpack drum (OP-#5) and staged in containment area. Excavated areas rolled at end of day.

COMMENTS:

Drum carcasses that were more than fragments (> 1/2 drum) were removed and staged with overpack drums in containment area. Small fragments were crushed with dozer and placed under the deeper fill.

The drums with petroleum-like odors had PID readings ranging from 5.3 ppm to 38 ppm.

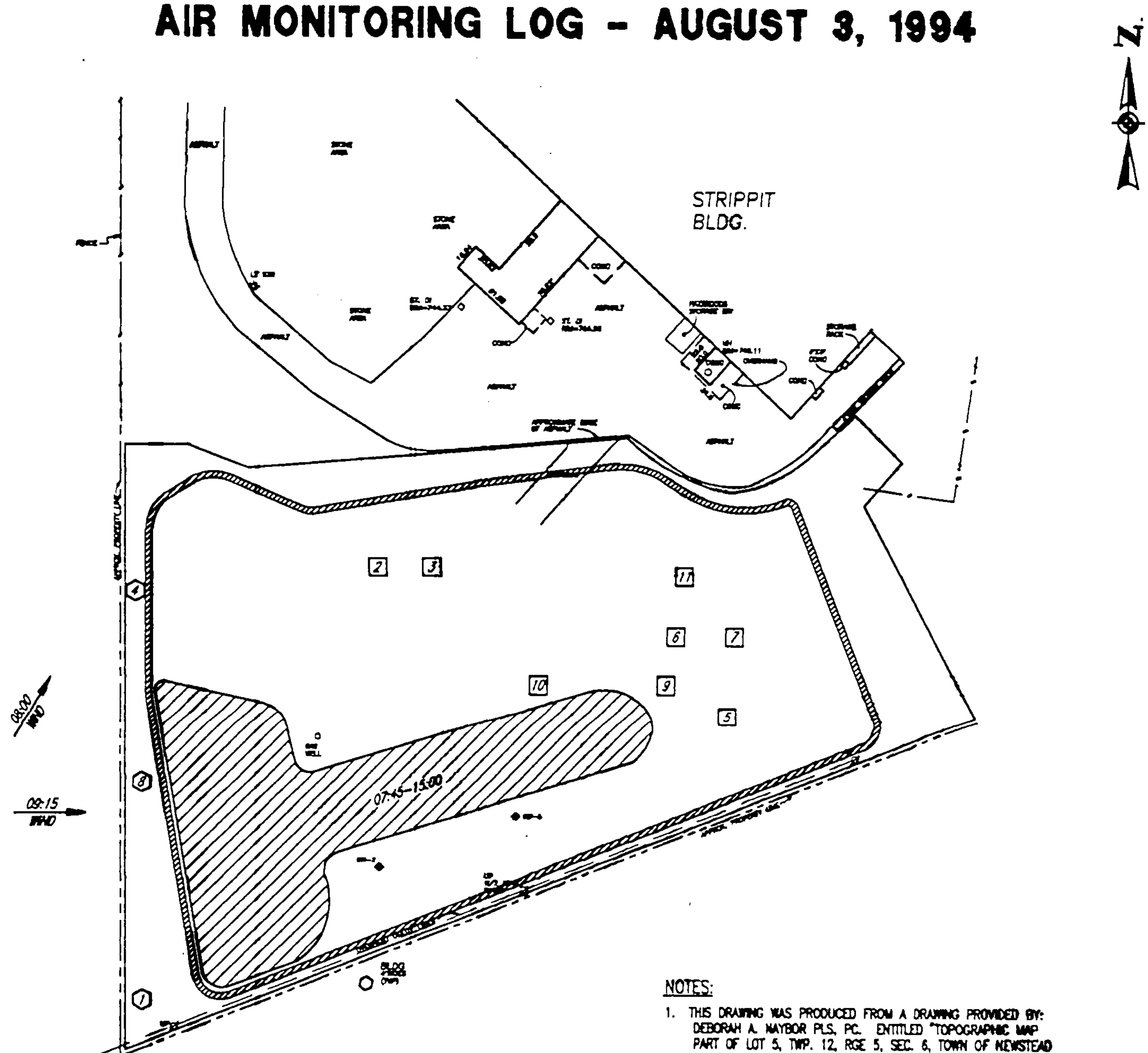
Discussed materials found today with J. Tuk (NYSDEC). He told me "if it was on site before, it can stay on site".

Dust levels in afternoon were higher than usual, though there were no exceedences. Water truck used most of the afternoon to control dusts.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

AIR MONITORING LOG - AUGUST 3, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND → WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 141 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 96 ug/m3

(2) MAXIMUM PID READING: 0.1 ppm
8 HOUR TWA PID READING: 0.4 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 11:30:00 1994

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/4/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy, Hazy
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F (a.m.)/85°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-15

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 3 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

D5H Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Stone placed for new decontamination area, decon equipment relocated. Rough grade of west slope completed, smoothed with dozer, and rolled. Crew continues grading work on north slope from former decon area towards the northeast corner of the landfill.

Surveyor staked centerline of swale along the south slope.

COMMENTS:

Crew making better progress now but contractor still feels they are 7 to 10 days behind schedule.

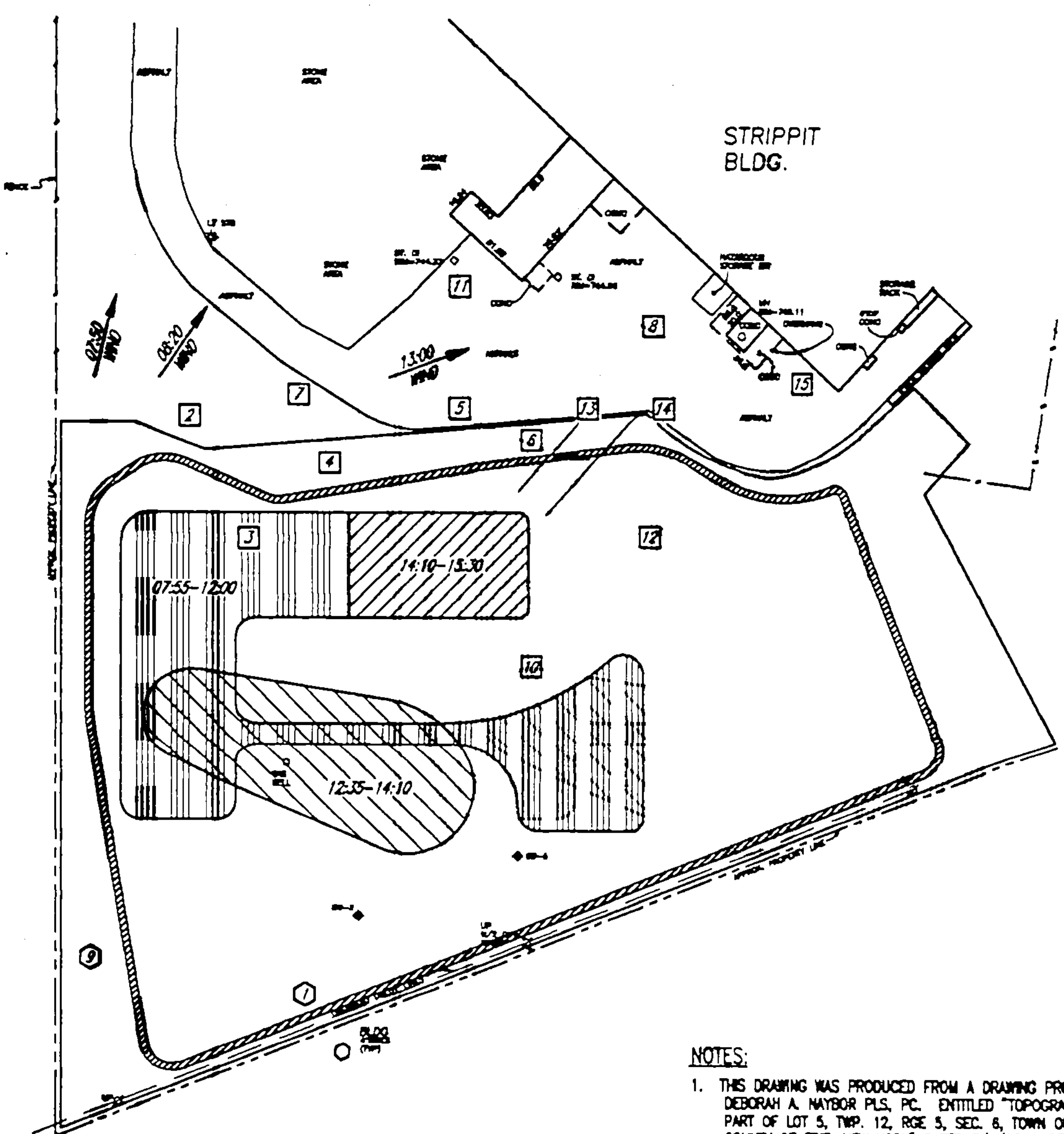
Winds today quite gusty and making dust suppression continuous work in the afternoon. Needed to have dozer stop work along north slope.

Rain began falling as roller started going over disturbed areas to compact for the night.

MECHNICIAN (print): J. Joseph Dorety

(signed): Joseph Dorety

AIR MONITORING LOG - AUGUST 4, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- ⑦ UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND → WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

① MAXIMUM AIRBOURNE PARTICULATE LEVEL: 138 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 71 ug/m3

② MAXIMUM PID READING: 0.3 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 11:30:00 1994

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/5/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 60°-65°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-16

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R Kampff (Day); Foreman, 3 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Approximately 100 linear feet of north slope cut to rough grade, with excavated material placed on top of landfill as fill material. Surveyor verified subbase grade of west slope and the western portion of north slope.

Silt fence placed along west side of west property line drainage diversion berm.

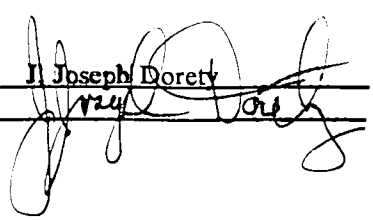
COMMENTS:

Informed by Jaspal Walia (NYSDEC) that neighbor to west complained of mud in their pond and wanted to know if it was possible the mud came from run-off from our site. J. Tuk (NYSDEC) on site and investigated the problem. He spoke with the owner and it was determined that silt came from his own property.

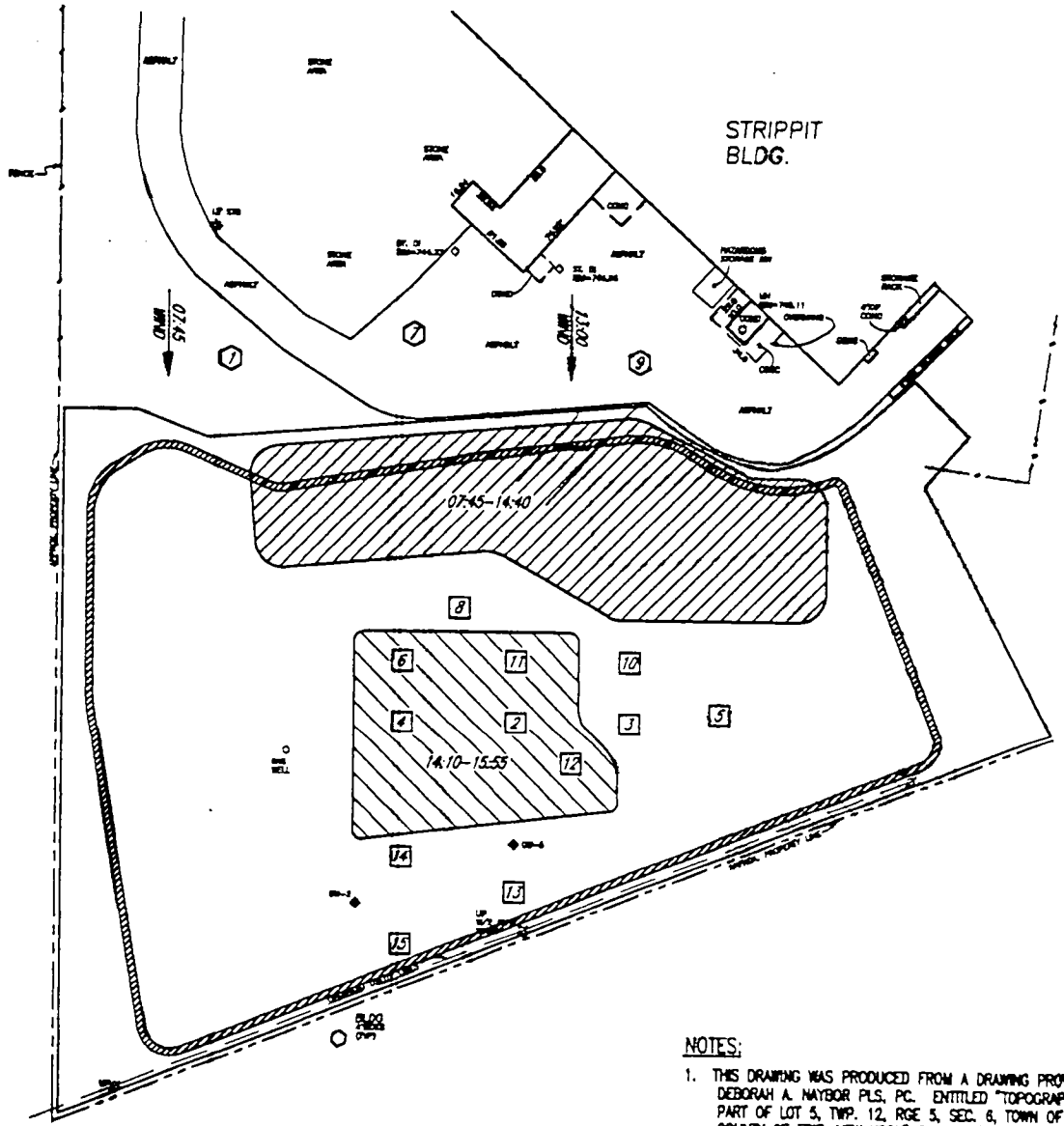
Received manufacturing specifications of raw materials for geomembrane from Haseley today.

Areas of site which were disturbed rolled at end of day.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

AIR MONITORING LOG - AUGUST 5, 1994



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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 32 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 17 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.0 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP113

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/8/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-17

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R Kampff (Day); Foreman, 3 equipment operators, laborer (Haseley); J. Walia, J. Tuk (NYSDEC)

Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc, Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Approximately 90 linear feet of north slope cut to rough grade. Western portion of north slope brought to finish grade for subbase.

Cut material from north slope used as fill on top.

Entire area of disturbed soils rolled at the end of the day.

COMMENTS:

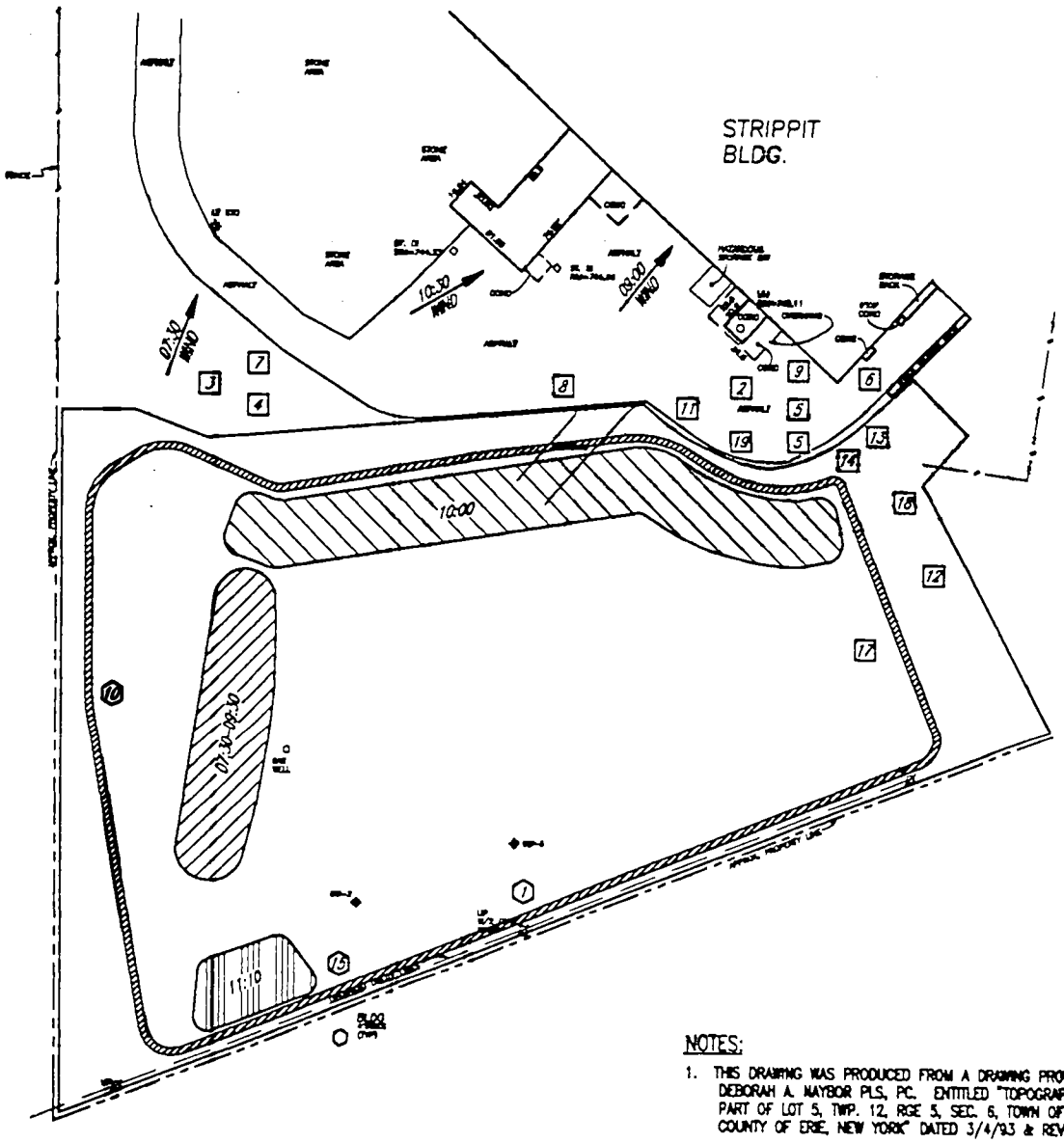
Had on-site meeting with NYSDEC today. Verbally received schedule from Haseley today for placement of select fill subbase, geomembrane installation, and 6" select fill liner protection.

Explained to contractor that barrier protection material should have a higher fines content than material that is proposed.

North slope cut nearly completed.

TECHNICIAN (print): J. Joseph Dorety
(signed):

AIR MONITORING LOG - AUGUST 8, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 91 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 26 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP114

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/9/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Occasional Light Rain
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-18

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 3 equipment operators, laborer (Haseley); Surveyor and 2 assistants; J. Tuk (NYSDEC)

Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

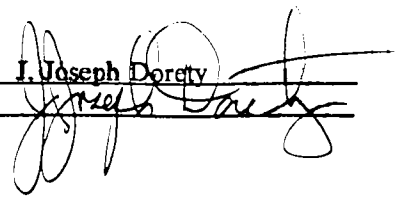
Cut adjustment made to eastern portion of north slope. Crew begins cut and fill of south slope.

Surveyor begins checking subbase grades where work is completed. Took shots to tops of monitoring wells to be extended to determine materials needed.

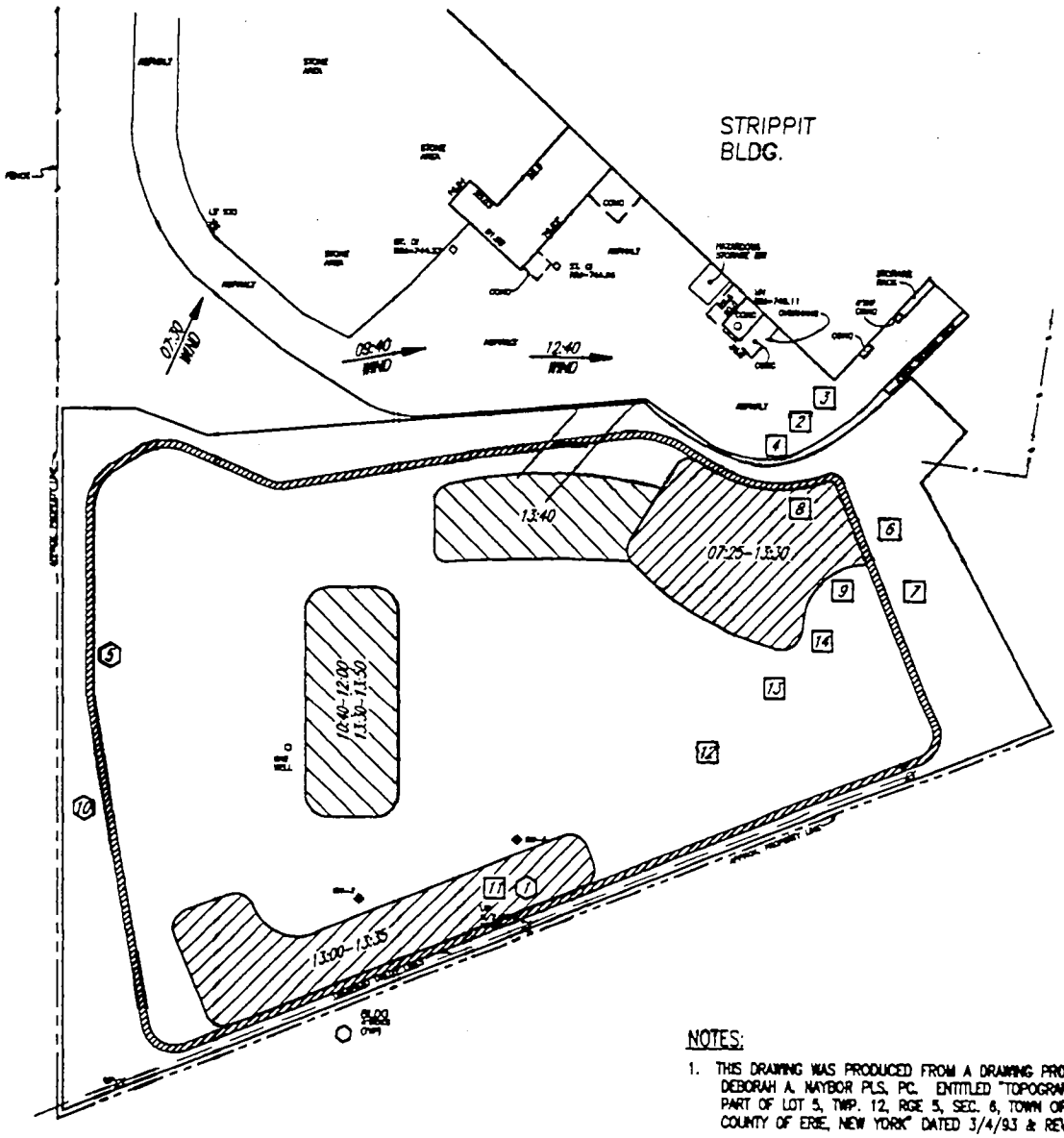
COMMENTS:

North slope finished for rough grade at end of day. Elevations at eastern end of top of landfill don't appear to be correct. With the amount of material remaining to be cut, it does not appear that it will fill the top of proposed grade. Contractor going to wait and see what happens, but thinks he will have to cut the top at the western end to bring eastern top section up to grade.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

AIR MONITORING LOG - AUGUST 9, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 121 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 56 ug/m3

(2) MAXIMUM PID READING: 0.3 ppm
8 HOUR TWA PID READING: 0.2 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 12:30:00 1994
FILE NAME: \STRIPPIT\STRIPPIT.DWG

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/10/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-19

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 3 equipment operators, laborer (Haseley); 2 laborers from Buffalo Drilling; J. Walia, J. Tuk, K. Glaser (NYSDEC)

Dozer, trackhoe, dumptruck, backhoe, water truck, roller

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Buffalo Drilling extended monitoring wells GW-2 and GW-5 to accommodate new finished grade per plan.

Contractor began south slope/swale cut.

Stump and logs stockpiled in southwest corner were taken off site for disposal (2 loads)

6" cut of west top of landfill started and material moved to east top of landfill.

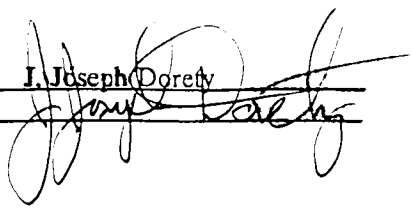
COMMENTS:

Decision made today by contractor to lower grade at top of landfill by 6" from proposed/staked grade. Crew began in northwest corner with the cut.

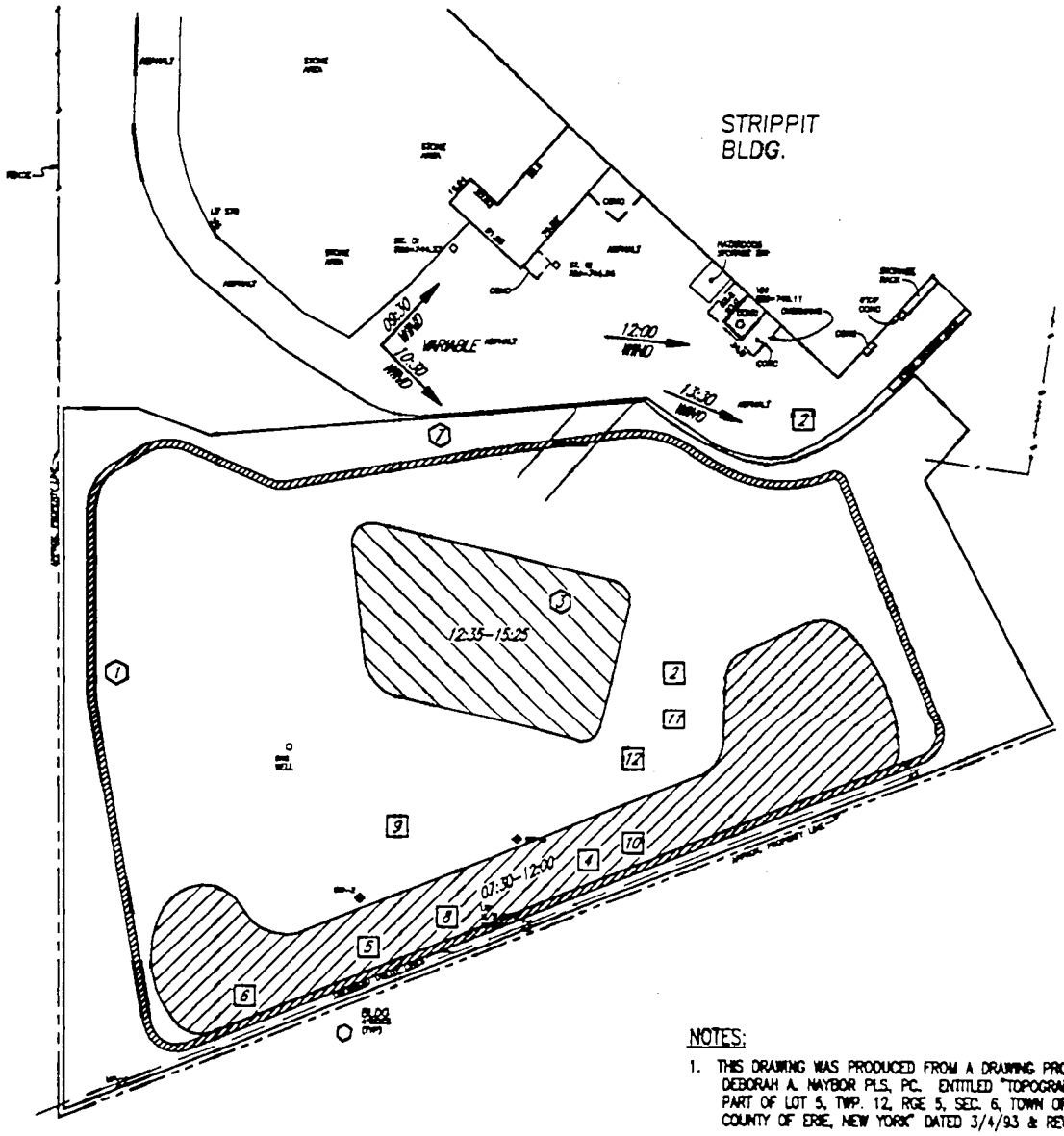
Contractor laborer going over graded/rolled areas and marking protrusions to be removed.

Informed by NYSDEC today that they want to know amount of "clean" fill cover over waste, needs to be a minimum of 12". If sufficient "clean" fill is present, NYSDEC also want subbase compacted to 95% and tested. If we can accomplish this, we do not have to meet compaction requirements on lifts of material added above subbase.

Ray wants auger probes of fill done to evaluate thickness of "clean" fill. Told Ray I would start this tomorrow.

TECHNICIAN (print): J. Joseph Dorety
(signed): 

AIR MONITORING LOG - AUGUST 10, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 101 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 68 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.2 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 12:30:00 1994

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/11/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Light Rain
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/68°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-20

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 2 operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

Dozer, trackhoe, backhoe, roller, dumptruck, water truck

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Approximately 75 lineal feet of southern/western swale cut beginning just east of southwest corner. Excavated material placed on top as fill.

Thickness of "clean" fill over waste checked with hand auger. Thicknesses range from 18"+ to less than 3".

Concrete forms placed around wells for liner attachment/boot construction.

COMMENTS:

Augering of fill determined that "clean" fill is of insufficient thickness according to NYSDEC requirements (12" minimum). We will have to rely on compaction to subsequent lifts above liner protection material.

Dumptruck cleaned/decontaminated for mobilization off-site.

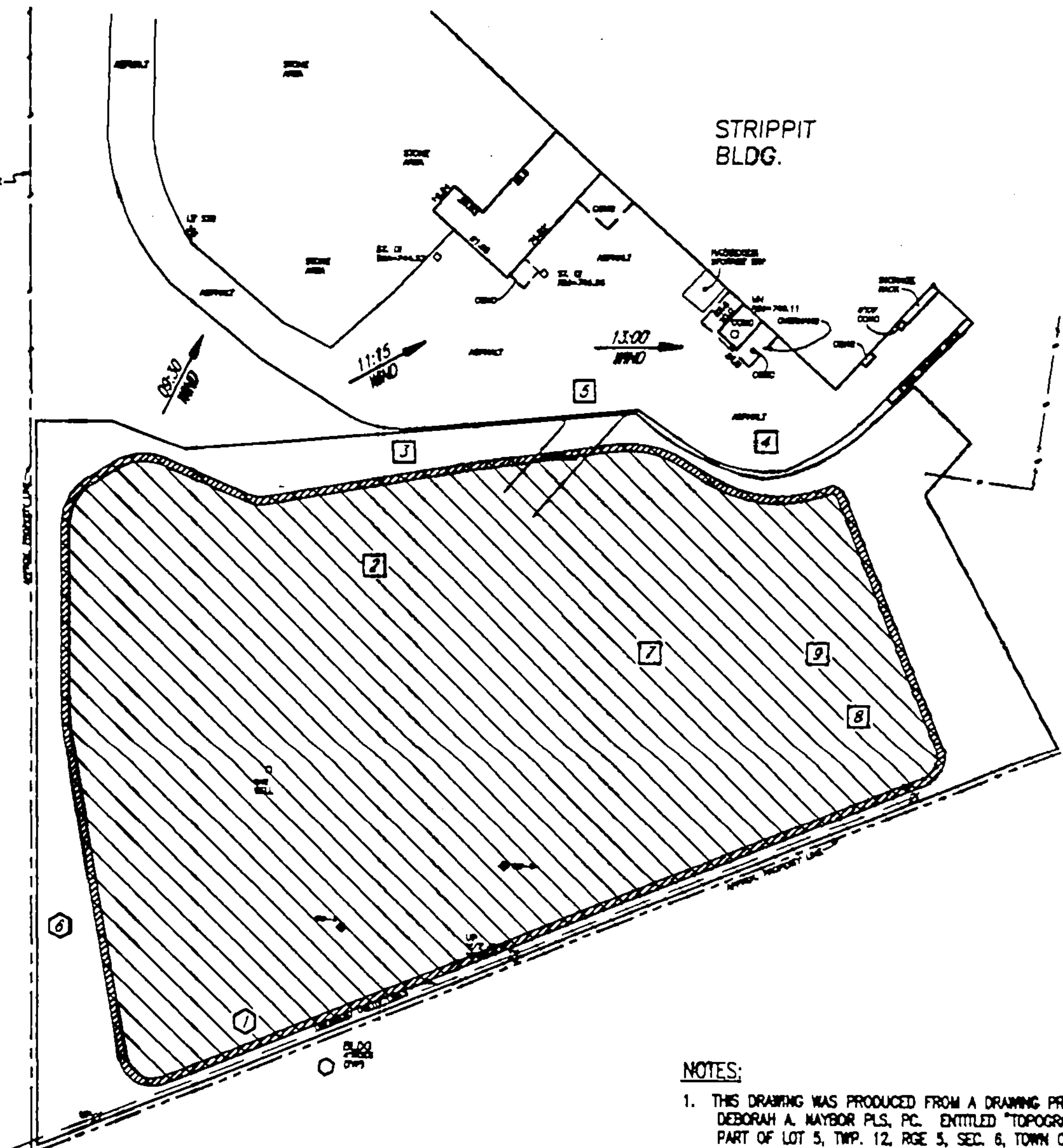
Subbase grading nearing completion, approximately 75% of subbase grades verified by surveyor.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

AIR MONITORING LOG - AUGUST 11, 1994

N



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- 1 UPWIND AIR MONITORING LOCATION
- 2 DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

①	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	38 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	22 ug/m3
②	MAXIMUM PID READING:	0.3 ppm
	8 HOUR TWA PID READING:	0.2 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/12/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy (a.m.)/Sunny (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/70°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-21

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

D5H and D3C dozers, backhoe, roller, water truck

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Grade stakes reset over entire site for subbase elevation verification.

D3C dozer being used for final (polished) finish grade of subbase.

Entire site rolled for the end of the day as the beginning of proof roll of subbase.

COMMENTS:

Subbase grades in areas checked within 1/2" (0.04') of proposed

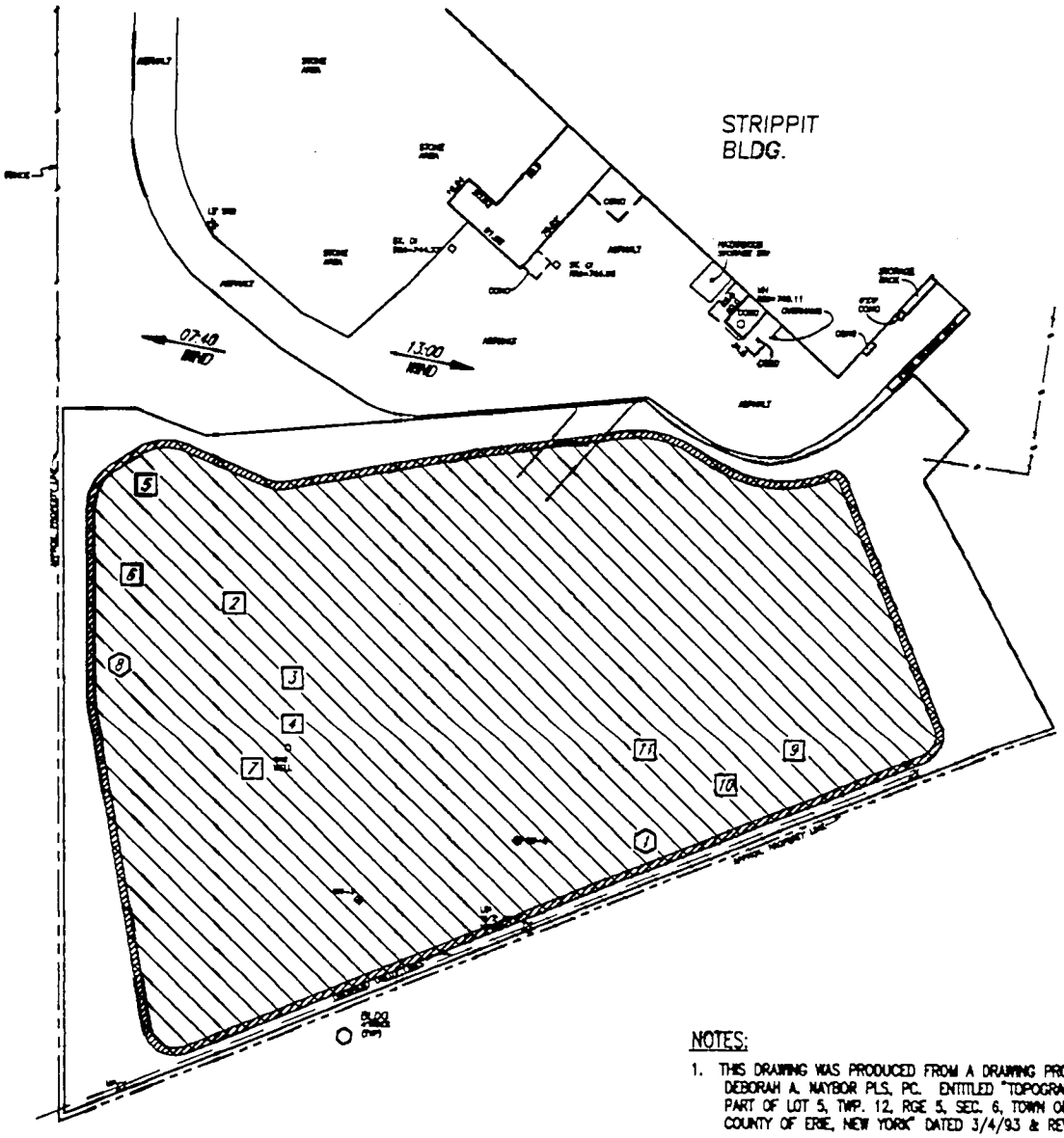
Soils being watered after finish grade by D3C dozer and then compacted with vibratory roller.

Crew will begin having select fill delivered to site on Monday (8/15).

Terex dump truck taken off-site when Cat D3C was delivered.

TECHNICIAN (print): J. Joseph Dorety
(signed): Joseph Dorety

AIR MONITORING LOG - AUGUST 12, 1994



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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 73 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 26 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/15/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-22

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk, J. Walia, K. Glaser (NYSDEC)

2 dozers, trackhoe, backhoe, roller, water truck

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

650 yd^3 of select fill delivered and placed in such a way as to create a haul road onto the top of the landfill from the northwest corner to the southwest corner of the landfill. This will significantly decrease the pushing distance.

Southeast subbase nearly complete.

Select fill placed today completely rolled at end of day.

COMMENTS:

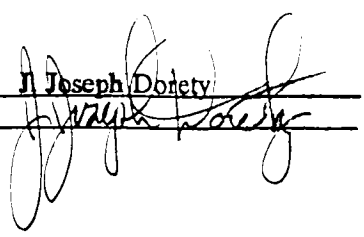
Kevin Glaser on site today for regular progress meeting. He will be filling in for J. Tuk while on vacation.

During meeting, discussed the need for formal schedule update and gradation/proctor of barrier protection material.

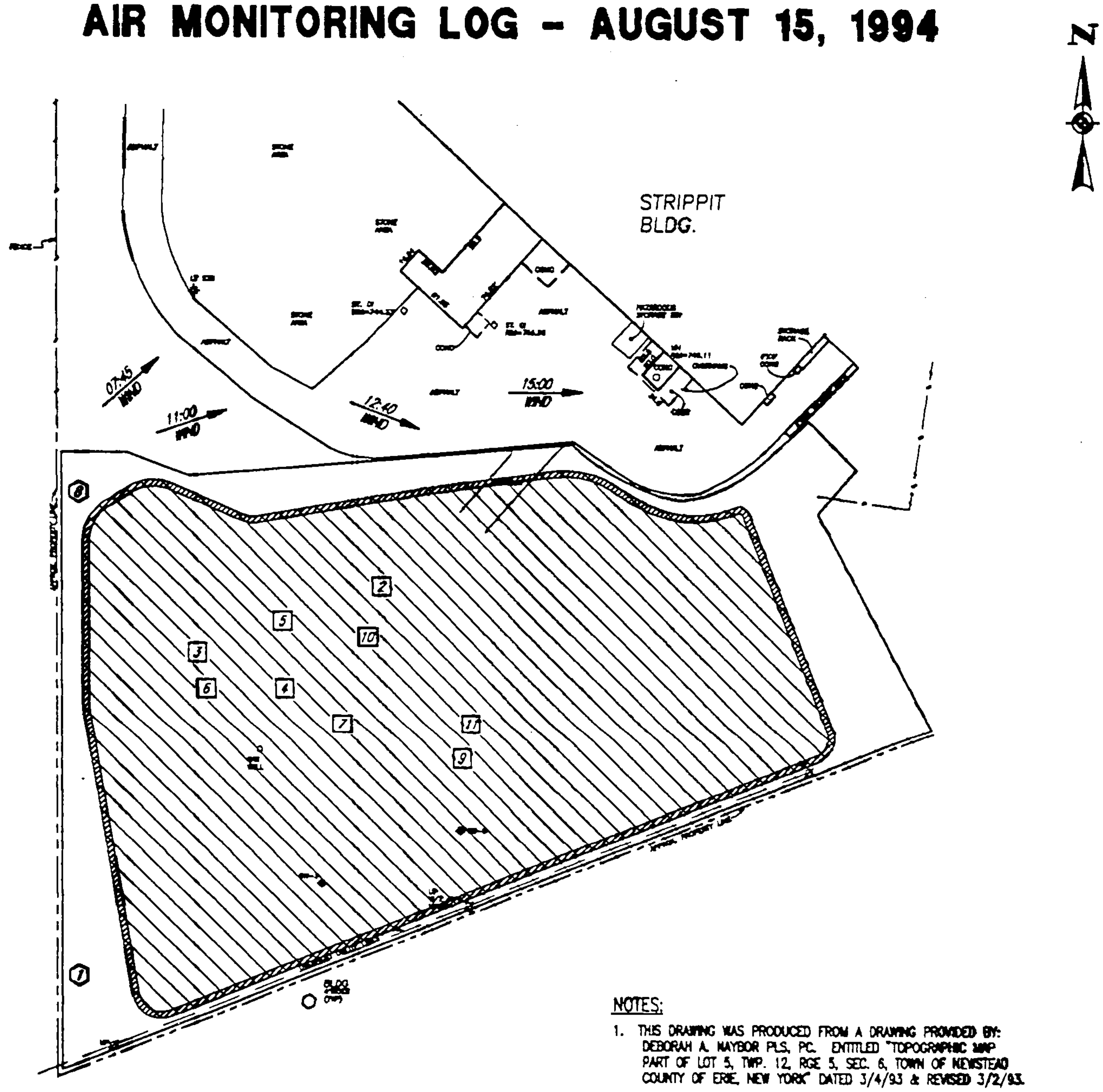
Loads of select arriving later in afternoon have more/larger stones. Informed contractor who then contacted the supplier of the material to resolve the issue. Loads generally consistent in gradation, moisture content and plasticity.

Proof rolling of subbase continues ahead of select fill placement. Approximate 30 ft. x 35 ft. area of soft/west sub-base encountered near top of slope in northwest section of site. Area cut open and allowed to dry, select fill added and recompacted. This was the only area noted.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

AIR MONITORING LOG - AUGUST 15, 1994



NOTES:

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2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

——•——	EXISTING FENCE LOCATION
ZZZZZZZZ	PROPOSED GEOMEMBRANE LIMITS
(1)	UPWIND AIR MONITORING LOCATION
[2]	DOWNWIND AIR MONITORING LOCATION
12:45 WIND →	WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

① MAXIMUM AIRBOURNE PARTICULATE LEVEL: 19 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 11 ug/m3

② MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.2 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 12:35:00 1994

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/16/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-23

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

2 dozers, trackhoe, backhoe, roller, water truck

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

624 yd^3 of select fill placed in 6" lift and compacted using vibratory roller.

Finish grade of subbase high point adjusted per surveyor's elevations.

Subbase near completion.

COMMENTS:

Used select fill as base for trucks delivering to site. Crew working to cover northern section of top of landfill along with north and west slopes.

Slopes being loaded from the top and material being pushed down slope.

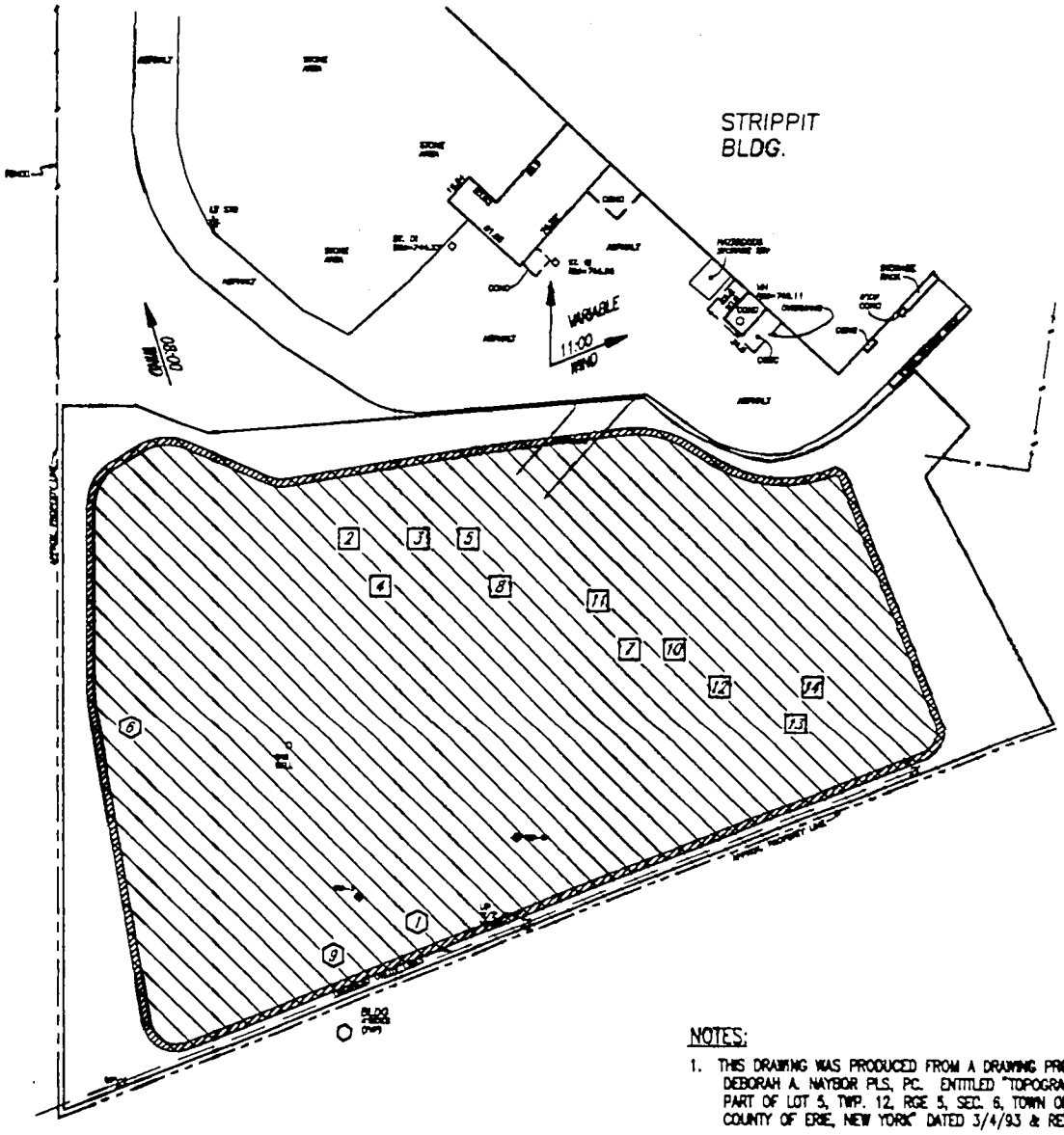
Subbase should be completed tomorrow (8/17/).

Contacted Dan Huff (Village of Akron) regarding cleaning of CMP under Clarence Center Road.

TECHNICIAN (print): J. Joseph Dorety

(signed): [signature]

AIR MONITORING LOG - AUGUST 16, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 24 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 16 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

TIME PLOTTED: THUR NOV 3, 12:35:00 1994 FILE \...\AND\...

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/17/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 62°F (a.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-24

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, laborer (Haseley); Surveyor and assistant; J. Tuk (NYSDEC)

2 dozers, trackhoe, backhoe, roller, water truck

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Subbase grading completed today to surveyor's grades. Approximately 725 yd^3 of select fill delivered placed in a 6" lift on top of landfill and on northwest slope. Remaining 29 yd^3 stockpiled at the top of the north slope.

All materials placed were compacted with vibratory roller at the end of the day.

COMMENTS:

Crew still using placed select fill as base for truck traffic/access. Loads of select are dumped at the leading edge of graded select fill and spread to uncovered areas.

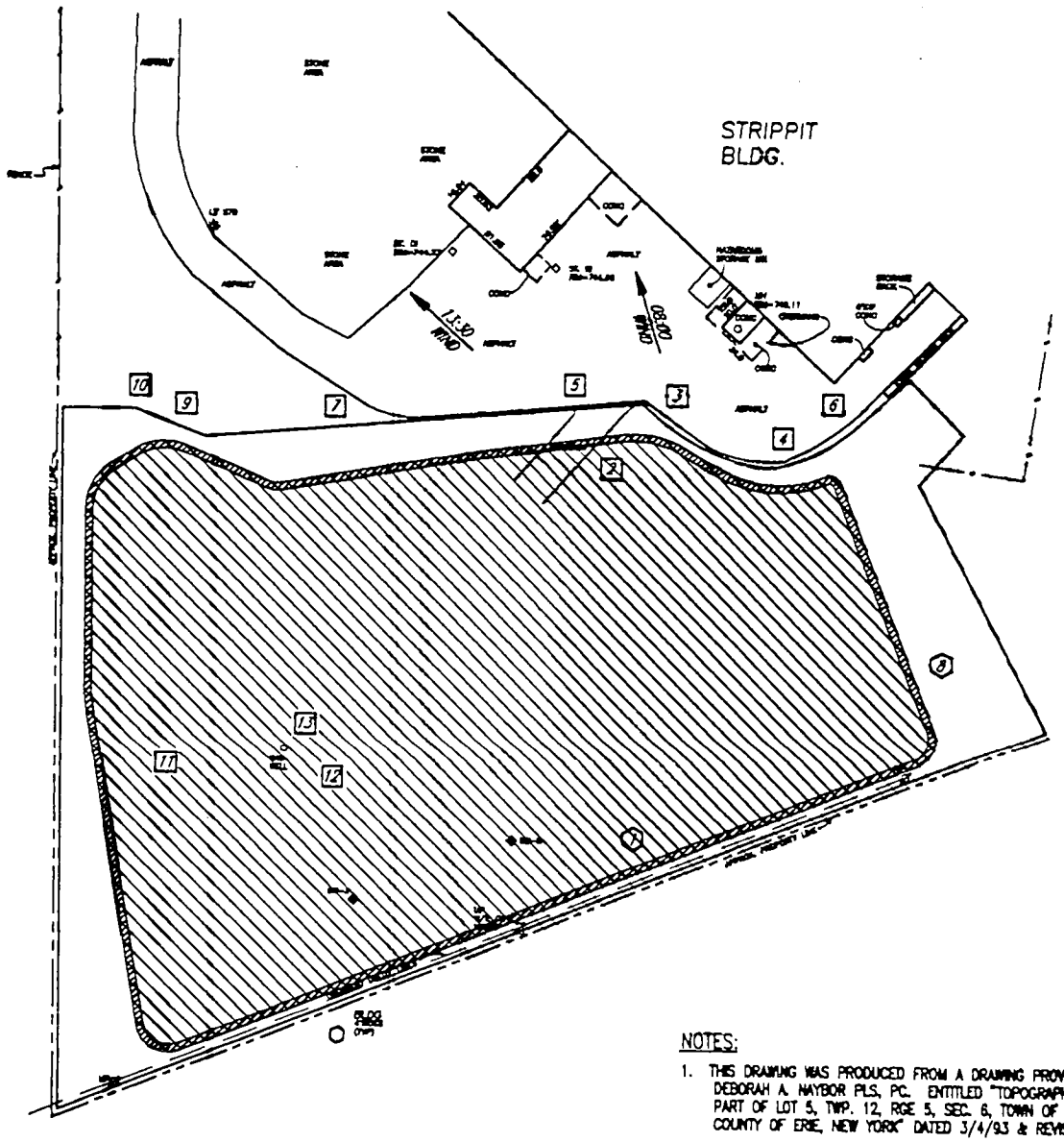
Select fill loads appear to be consistent in gradation, moisture content, and plasticity.

Areas of prepared sub-base, along eastern side of norther slope, proof rolled; no problems notes. Haseley informed writter that geomembrane installer wouldn't be on site until 8/24/94 (delayed at a job in Ohio).

TECHNICIAN (print): J. Joseph Dorety

(signed):

AIR MONITORING LOG - AUGUST 17, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. NAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. NAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1)	MAXIMUM AIRBOURNE PARTICULATE LEVEL:	23 ug/m3
	8 HOUR TWA AIRBOURNE PARTICULATE LEVEL:	12 ug/m3
(2)	MAXIMUM PID READING:	0.2 ppm
	8 HOUR TWA PID READING:	0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP121

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/18/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Fog (a.m.)/Clear (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 64°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-25

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, 2 equipment operators, laborer (Haseley); J. Walia (NYSDEC): Surveyor and assistant

2 Dozers, trackhoe, roller, water truck, backhoe

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Continued placement of 6" lift of select fill over subbase. Approximately 250 yd^3 of the 268 yd^3 delivered today has been placed to the proposed thickness and subsequently compacted with a vibratory roller. The balance of the material was stockpiled for placement tomorrow.

COMMENTS:

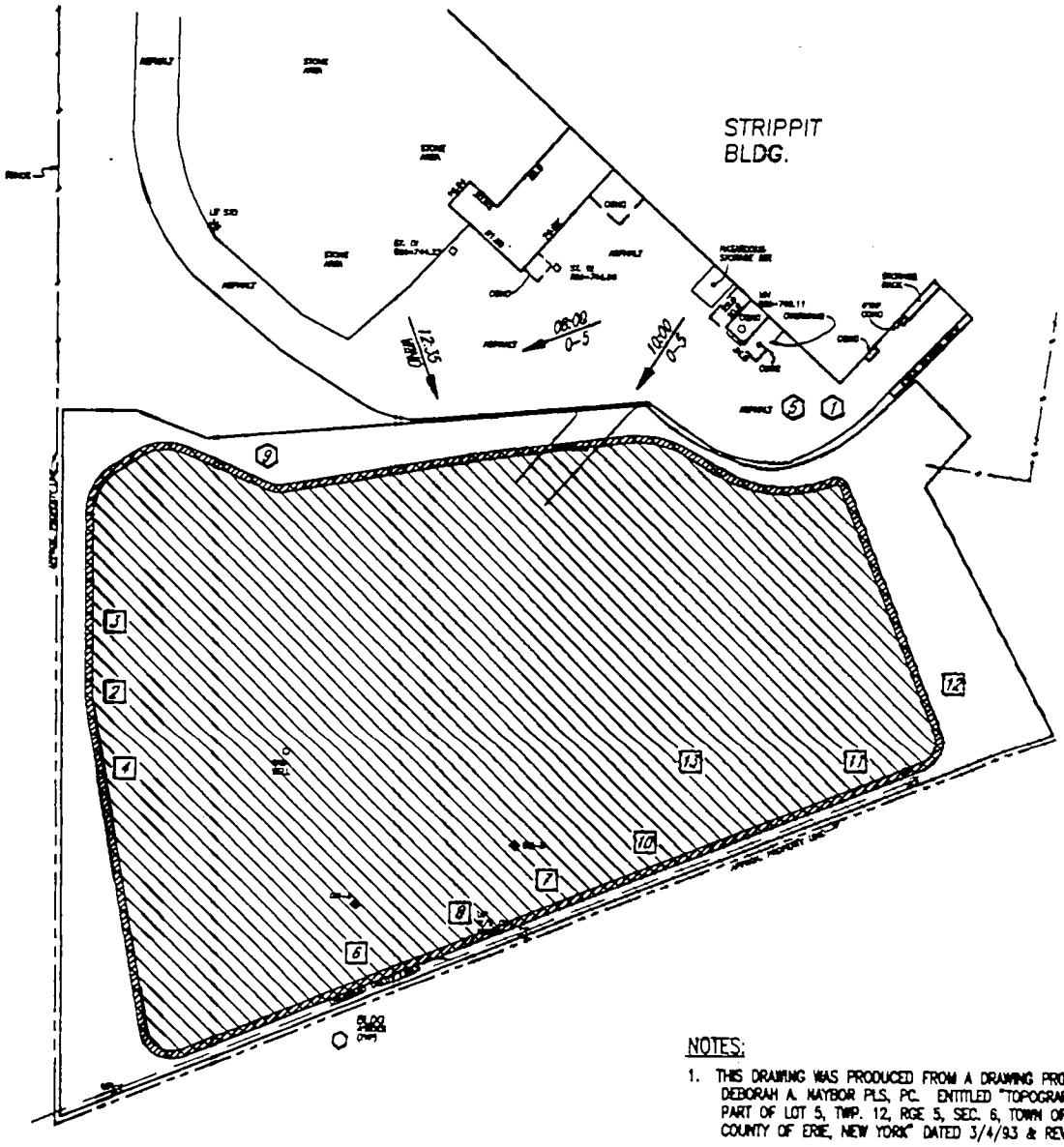
Had rain overnight which did no damage to the newly placed select fill. However, some minor erosion to the subbase did occur on a portion of the northeast slope. Erosion was contained by synthetic silt fence at the toe of the slope.

Informed today that the arrival of the geomembrane installation crew will be delayed. Projected time of the beginning of geomembrane installation is now 8/24 or 8/25.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

AIR MONITORING LOG - AUGUST 18, 1994



NOTES:

1. THIS DRAWING WAS PRODUCED FROM A DRAWING PROVIDED BY: DEBORAH A. MAYBOR PLS, PC. ENTITLED "TOPOGRAPHIC MAP PART OF LOT 5, TWP. 12, RGE 5, SEC. 6, TOWN OF NEWSTEAD COUNTY OF ERIE, NEW YORK" DATED 3/4/93 & REVISED 3/2/93.
2. NO BOUNDARY SURVEY WAS PERFORMED BY DEBORAH A. MAYBOR PLS, PC.

LEGEND

- EXISTING FENCE LOCATION
- PROPOSED GEOMEMBRANE LIMITS
- (1) UPWIND AIR MONITORING LOCATION
- [2] DOWNWIND AIR MONITORING LOCATION
- 12:45 WIND — WIND DIRECTION WITH TIME

AIR MONITORING EQUIPMENT

HAM: PPM, INC., MODEL 1005 HANDHELD AEROSOL MONITOR

PID: HNU MODEL HW-101 PHOTOIONIZATION DETECTOR EQUIPPED WITH A 10.2 eV LAMP

(1) MAXIMUM AIRBOURNE PARTICULATE LEVEL: 83 ug/m3
8 HOUR TWA AIRBOURNE PARTICULATE LEVEL: 38 ug/m3

(2) MAXIMUM PID READING: 0.2 ppm
8 HOUR TWA PID READING: 0.1 ppm

DAY ENGINEERING, P.C.
ROCHESTER, N.Y.

FILE NAME: \STRIP\LAND\STRIP122

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/19/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny, Hot, Humid
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F (a.m.)/85°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-26

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day): Foreman, 1 equipment operator, laborer (Haseley); J. Tuk (NYSDEC): Surveyor and assistant

2 Dozers, trackhoe, roller, water truck, backhoe

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Continued placement of select fill today at the eastern portion of the top of the landfill and on the north slope. Total of 156 yd^3 of select fill placed today.

Concrete blocks around gas well and monitoring wells GW-2 and GW-5 poured today. These blocks will be used to anchor geomembrane at wells for boot construction.

COMMENTS:

During the location of the anchor trench along the south slope by the surveyor it became evident that there was going to be a conflict between anchor trench/swale configuration and the proximity of the overhead utility wires. Current configuration/plans will force work under the lines resulting in an increased elevation of grade. In an agreement with Niagara Mohawk, it was understood that the wires were currently at minimum height above grade and this clearance could not be decreased.

Three alternative configurations were discussed with the contractor which will be presented to the NYSDEC at our weekly on-site meeting on Monday (8/22) for their input.

Received the hydrometer results today for the material chosen as the barrier protection material. Analysis shows approximately 12.1% clay.

TECHNICIAN (print): J. Joseph Dorety

(signed): Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/22/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy, Windy
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/75° (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-27

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 1 equipment operator, laborer (Haseley); J. Walia, K. Glaser (NYSDEC)

2 Dozers, trackhoe, roller, water truck, backhoe

PPM, Inc. Model 1005 HAM; HNU Model HW-101 PID with 10.2 eV lamp

MATERIALS PLACED/WORK COMPLETED:

Completed placement of select fill over subbase by finishing the area on the northeast slope.

With the completion of the select fill, site became considered "clean" by NYSDEC at 14:20 today.

COMMENTS:

Air monitoring ended today with the completion of the 6" lift of select fill over existing subbase material. The completion of select fill also eliminated the need for modified personal protection (Tyveks, boots, gloves, etc.) under OSHA Section 1910.120 Hazardous Waste and Emergency Response Regulations.

In on-site meeting with NYSDEC, we explained the configuration problems which have developed along the south end of the landfill. Walked the site with NYSDEC and showed them this area while they looked at a sketch of the configuration modifications we presented. J. Walia said we would have a decision tomorrow (8/23).

Informed by contractor that geomembrane crew should be on-site on Wednesday, 8/24.

Proof-rolling of entire layer of select fill completed. No problem was noted.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/23/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: 70°F
LOCATION: Akron, N.Y.	TEMPERATURE: Clear
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-28

PERSONNEL AND EQUIPMENT ON SITE:
R. Kampff (Day): Foreman, equipment operator, laborer (Haseley)

MATERIALS PLACED/WORK COMPLETED:
No materials placed today. Contractor preparing site for geomembrane installation.

COMMENTS:
Minor grading along drainage trench south of site.

TECHNICIAN (print): R. Kampff
(signed): Raymond L. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/24/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-29

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day); Foreman, equipment operator, laborer (Haseley); J. Walia (NYSDEC)

MATERIALS PLACED/WORK COMPLETED:

Preparation of haul road for geomembrane placement.

COMMENTS:

Walked site with J. Walia to discuss geomembrane configuration along railroad right-of-way (i.e., option #2 presented to NYSDEC).

TECHNICIAN (print): R. Kampff

(signed): Raymond T. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/25/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Rain (a.m.)/Sun, Clouds (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-30

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, 1 equipment operator, laborer (Haseley); M. Doster, J. Walia, W. Roblee (NYSDEC); geomembrane installer (3 Environmental Security Systems)

D3 Dozer, trackhoe, roller, water truck, backhoe, front end loader

MATERIALS PLACED/WORK COMPLETED:

Haseley removed high/low spots from southwest area on top of landfill. Additional proof-roll of select fill completed - no visible problems.

First roll of HDPE moved to top of landfill with front end loader.

Sandbags placed in rows on top of landfill.

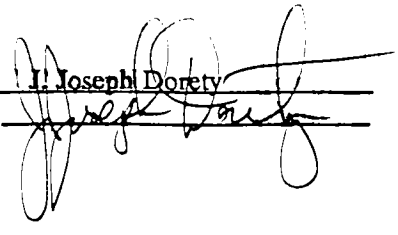
COMMENTS:

Approximately 150 sandbags filled and placed on top of landfill as temporary anchors for HDPE panels.

Part of liner crew on-site, remainder of crew to be on-site tomorrow. Problems with generator - shaft is locked up.

While preparing to set first liner panels, winds began to increase and clouds became very threatening. With winds gusting to 40 mph, decision was made to delay placement of liner until tomorrow morning.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/26/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy, Fog (a.m.)/Sunny (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 62°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-31

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 1 equipment operator, laborer (Haseley); Foreman, 4 laborers (ESS); J. Walia, W. Roblee (NYSDEC)

D3 Dozer, trackhoe, roller, water truck, backhoe, front end loader, liner seaming equipment, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

5 full length panels (east/west) 34 short panels (southwest slopes), all seams of panels placed have been fusion welded.

Seam between panel #1 and panel #2 air tested with passing results.

Approximately 70% of seam between panel #2 and panel #3 air tested with assuring results.

Samples for destructive testing of seams removed (D-1, D-2, D-3, D-4, D-5)

COMMENTS:

Approximately 50,000 ft^2 of geomembrane was installed today.

Seaming machine operating at 750°F and traveling at a rate of 16 feet/minute.

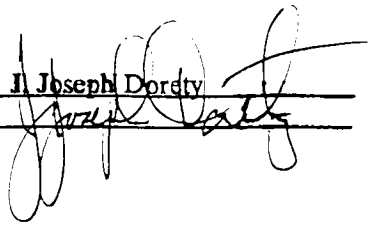
QA/QC samples run on test seams at beginning of day and at mid-day.

Areas where samples for destructive seam tests were removed were patched.

Received approval from NYSDEC today to use barrier protection material an anchor trench backfill.

Load of select fill material (liner protection) delivered to site.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/27/94 Saturday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy (a.m.)/Sunny (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.)/80°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-32

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, 1 equipment operator, laborer (Haseley): Foreman, 4 laborers (ESS); W. Roblee (NYSDEC)

D3 Dozer, roller, water truck, front end loader, liner seaming equipment, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

5 remaining east/west panels and 25 slope panels on eastern and center portions of the north slope. All seams of panels installed today have been welded.

Seams of south slope panels, southwest panels and pull panels (east/west) to gas well have all been air tested (41 air tests) with one failure (south seam of panel #36). This seam will be extrusion welded. [Note: Extrusion weld completed on 8/29/94; seam passed.]

COMMENTS:

Approximately 70,000 ft^2 of geomembrane installed today.

QA/QC performed on seaming equipment at beginning of day and at mid-day. All test seams tested for seal and shear strength pass criteria established by National Seal Company.

No samples taken today for destructive sampling of seams. They will be taken on Monday (8/29).

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/29/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny (a.m.)/Sun, Clouds (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 55°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-33

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 2 equipment operators, laborer (Haseley); Foreman, 4 laborers (ESS); J. Walia, W. Roblee, K. Glaser (NYSDEC); R. Crouch (Buffalo Drilling)

D3 Dozer, roller, water truck, backhoe, front end loader, liner seaming equipment, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

Panel placement completed today by finishing northwest and northeast slopes. All seams welded and beginning detail work of extrusion welding patches and seam ends. Samples for destructive tests D-6 to D-14 taken continued air testing of seams - 48 done today (all tests passed).

Began anchor trench and geomembrane placement into anchor trench. Began select fill placement on panels #1 and #2.

COMMENTS:

While excavating anchor trench along west side of landfill, soils with a petroleum-like odor were encountered. Showed this area to J. Walia and K. Glaser of NYSDEC after our weekly on-site meeting.

DEC wants to know areal extents of the problem. Vertical extent was determined to be 5.0' below grade with the use of a backhoe. We will attempt to determine the extent of westward migration toward the property line tomorrow. At that time, the HNU and OVA will be available for the screening of soils. Contamination appears to extended approximately 25'in the north/south direction along the anchor trench excavation.

R. Crouch pointed out locations of active and abandoned gas wells.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/30/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Clear, Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 55°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-34

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, 2 equipment operators, 2 laborers (Haseley): Foreman, 4 laborers (ESS): M. Doster, J. Walia, K. Glaser (NYSDEC)

D3 Dozer, roller, water truck, backhoe, front end loader, liner seaming equipment, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

Completed air testing of seams of panels placed and seamed yesterday on the northwest slope. Edges of T-seams and patches being ground for extrusion welding. Seams and patches previously having been extrusion welded being tested with vacuum box system. All tested areas passed.

Select fill (liner protection material) being spotted at west toe of slope and being pushed up to top of landfill, leveled to grade and rolled.

COMMENTS:

Contractor cleared an area along west side of landfill and prepared a staging/containment area for petroleum-contaminated soils.

Petroleum-contaminated soils in the area of the west anchor trench were screened during removal with an HNU Model HW-101 PID with 10.2 eV lamp and a Century OVA Model 128GC FID. At a depth of 6.0' - PID reading of 0.0 ppm and FID reading of 1.3 ppm, indicating "clean" soil. Collected confirmatory sample SS-2 from bottom of anchor trench. Excavated approximately 6.0' west, still encountering soils with petroleum-like odors.

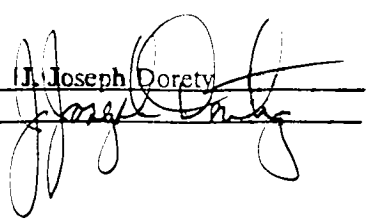
Had additional length of liner extrusion welded to end of panel which passes through overexcavated section of anchor trench.

Positioned liner in anchor trench and backfilled with barrier protection material compacted with gas-powered tamper.

Contractor again using select fill to form an access road to the top of landfill for dumptrucks and grading material from these.

Dumpster delivered today for site clean-up.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 8/31/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Cloudy, Occasional Light Rain
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/70°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-35

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day): Foreman, 2 equipment operators, 2 laborers (Haseley); H. Musall (ESS); K. Glaser (NYSDEC)

D3 Dozer, roller, backhoe, front end loader, liner seaming equipment, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

Extrusion welding of seams and patches continues. Boots for monitoring wells and gas well constructed. Additional material added to ends of 6 panels along the north slope for anchoring purposes.

East side anchor trench excavated liner placed and trench backfilled in 6"-8" lifts and compacted. Approximately 70% of north anchor trench excavated. Select fill placement continues across top of landfill.

COMMENTS:

Samples of petroleum-contaminated soil and "clean" confirmatory sample delivered to ACTS Testing Laboratories, inc. for analysis.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/1/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Mostly Cloudy, Some Sun
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/75° (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-36

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, 2 laborers (Haseley); H. Musall (ESS); J. Walia, K. Glaser (NYSDEC); surveyor and assistant

D3 Dozer, backhoe, front end loader, roller, field testing equipment

MATERIALS PLACED/WORK COMPLETED:

Testing completed indicates geomembrane was installed in accordance to required tolerances. Final vacuum box testing completed, ESS measuring for record plans. Haseley continues to place select fill and on the anchor trench along the north slope. Surveyor verifying elevations of select fill which has been placed and compacted.

COMMENTS:

Haseley placing select fill on top and also along west/northwest slope.

Began placing barrier protection material over select fill near south end of west slope in an attempt to have access for trucks.

Initial survey measurement indicate that elevations of select fill coming in on proposed grade.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/2/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-37

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety, R. Kampff (Day); Foreman, 2 equipment operators, 2 laborers (Haseley); K. Glaser (NYSDEC)

D3 Dozer, backhoe, front end loader, roller

MATERIALS PLACED/WORK COMPLETED:

Select fill placement continues. Placement of select on south slope completed.

Anchor trench along north slope completed.

Loads of select being stockpiled on top and spread to grade.

COMMENTS:

Contractor encountered a concrete slab in the north anchor trench in the vicinity of the former access road to the top of the landfill. Due to size of concrete section, it was left in place and the liner placed and backfilled.

This slab may have to be removed at the time of the drainage ditch excavation.

Ray had contractor re-install silt fences and clean out erosion control measures due to long weekend (Labor Day).

TECHNICIAN (print): J. Joseph Dorety/R. Kampff

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/6/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny (a.m.)/Clouds, Light Rain (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 50°F (a.m.)/70°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-38

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day); Foreman, 2 equipment operators, 2 laborers (Haseley); J. Walia, J. Tuk, K. Glaser (NYSDEC)

D3 Dozer, roller, backhoe, front end loader, water truck

MATERIALS PLACED/WORK COMPLETED:

Select fill placement on top of landfill completed. Contractor finishing northwest sloe and proceeding around to north slope with select fill. Contractor began excavation of drainage ditch to toe of northeast slope. Select fill which has been placed to grade being compacted with a vibratory roller.

COMMENTS:

On site meeting with NYSDEC today. No concerns expressed by NYSDEC regarding progress to this point.

Inspected sample of topsoil today that contractor has collected. Material appears to be within spec. parameters. Contractor going to drop off sample at Malcolm Pirnie a tend of day for pH analysis and organic content determination.

Haseley intends to add additional bulldozer on 9/7/94 to increase progress.

TECHNICIAN (print): J. Joseph Dorety

(signed):

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/7/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Clouds (a.m.)/Sun (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F (a.m.)/70° (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-39

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 3 equipment operators, 2 laborers (Haseley); K. Glaser (NYSDEC); Surveyor and assistant, L. Wolf (Wolf Nursery)

D5 and D3 dozers, roller, front end loader, water truck, backhoe

MATERIALS PLACED/WORK COMPLETED:

Select fill still being placed. Select fill on to of landfill has been proof-rolled and no problem areas were noted.

Barrier protection material being placed on southwest area of top of landfill after select fill elevations were verified.

COMMENTS:

Backhoe off-site in early morning when D5 dozer delivered.

First loads of barrier protection material which were delivered today were refused. Material contains cobbles up to ~10" in size. I informed the contractor that I had refused the barrier protection material and that he needed to remedy the situation. Contractor later told me that material was being taken out of wrong area of pit. Material which was delivered later in the day is the correct gradation.

Landscaper subcontracted by Haseley on site to discuss seeding mixture. Modification to specification is basically the same mix used at the BFI landfills. He will submit proposed seed/fertilizer mixture for approval.

Contacted Dick Owen (Erie County Highway) regarding cleaning of CMP under Clarence Center Road. Tentatively scheduled work for 9/21/94.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/8/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 55°F (a.m.)/70°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-40

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day); Foreman, 3 equipment operators, 2 laborers (Haseley); K. Glaser (NYSDEC)

2 Dozers, roller, front end loader, water truck

MATERIALS PLACED/WORK COMPLETED:

Select fill placed on northeast slope to within ~50 ft^2 of completion. Barrier protection material being placed on top of landfill and on south slope (i.e., areas that were previously proof-rolled and "approved").

COMMENTS:

Air bubble developed at toe of slope in northeast corner due to heating of liner. Will let cool overnight and attempt to cover in morning.

Water added to barrier protection material to improve compaction.

Contacted SJB Services to schedule in-place density testing for first lift of barrier protection material. They can have someone on site tomorrow afternoon (9/9) to begin testing.

TECHNICIAN (print): J. Joseph Dorety

(signed): [signature]

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/9/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 64°F (a.m.)/75°F (a.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-41

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day); Foreman, 3 equipment operators, 2 laborers (Haseley); J. Walia, K. Glaser (NYSDEC); R. Kron (SJB Services)

2 Dozers, roller, front end loader, water truck

MATERIALS PLACED/WORK COMPLETED:

Select fill placement complete and proof-rolled (no problem areas noted). Continuing placement of barrier protection material. First lift placement complete by mid afternoon.

In-place density testing conducted on first lift of barrier protection material covering southern half of landfill. Remainder of first lift being compacted with vibratory roller.

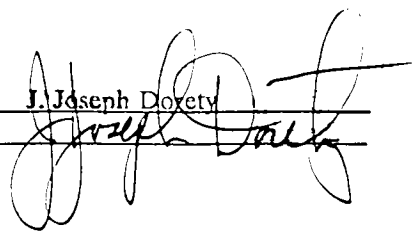
COMMENTS:

Using the proctor value determined by Malcolm Pirnie in-place density testing reveals compaction less than 90%. Called Malcolm Pirnie to verify proctor results. They later called back and asked us to describe the gradation of the material we were testing. Based on this discussion, it appears an error had been made during initial testing, therefore, a sample was collected by SJB Services, Inc. for testing.

Air pocket in liner observed on 9/8/94 has disipated. Area covered with select fill.

[Note: Haseley worked on 9/10/94 placing second lift of barrier protection material above material that had been tested on 9/9/94.]

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/12/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Clear, Fog (a.m.)/Sunny (p.m.)
LOCATION: Akron, N.Y.	TEMPERATURE: 58°F (a.m.)/70°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-42

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff, J. Dorety (Day): Foreman, 2 equipment operators, 2 laborers (Haseley); J. Walia, K. Glaser (NYSDEC); K. Donner (SJB Services); D. Wierzba (Field Services, Inc.)

2 Dozers, roller, front end loader, water truck
Troxler Model 3430 Moisture - Density Gauge

MATERIALS PLACED/WORK COMPLETED:

Second lift of barrier protection material being completed on southern half of landfill. Northern half of landfill compacted and tested for in-place density by SJB Services. Testing completed indicates sufficient compaction.

Collected samples from staged drums for disposal analysis.

COMMENTS:

Second lift of barrier protection material should be completed by tomorrow afternoon.

Crew is compacting immediately after material is to grade in an attempt to seal in moisture.

On-site meeting with NYSDEC. No major concerns expressed.

Field Services, Inc. on-site to determine how gas well piping will be routed. Wants to begin tomorrow.

TECHNICIAN (print): J. Joseph Dorety
(signed): [signature]

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/13/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-43

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, 2 laborers (Haseley); K. Glaser (NYSDEC); Surveyor and 2 assistants, D. Wierzba (Field Services, Inc.)

2 Dozers, roller, water truck, front and loader

MATERIALS PLACED/WORK COMPLETED:

Elevation grid re-staked and elevations checked against proposed. Grades are ~1" to 2" higher than proposed second lift elevation.

Second lift of barrier protection placed and being compacted. Third gas well piping placed with tracer wire.

COMMENTS:

Proctor results received from SJB Services: 119.7 pcf dry density and 10.7% optimum moisture, these results confirm that all field density tests pass.

Surveyor marked elevation for third lift of barrier protection and final grade. Overall grade looks good with no apparent depressions and/or high areas.

Explained to NYSDEC that we will use test pits for determination of westward extent of petroleum-contaminated soil. They informed me that they would like to be present for work.

TECHNICIAN (print): J. Joseph Dorety

(signed): Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/14/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-44

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day); 2 equipment operators, 2 laborers, foreman (Haseley); J. Walia, sampling technician (NYSDEC); D. Wierzba (Field Services, Inc.)

MATERIALS PLACED/WORK COMPLETED:

None

COMMENTS:

Heavy rains over night caused erosion of uncompacted barrier protection material; particularly along gas line placed down north slope. Since sediment fencing had been removed to allow work in area, some soil washed out onto Strippit parking lot. Haseley spent much of the day cleaning parking lot and re-installing sediment fencing.

NYSDEC on-site to collect three (3) sediment samples from a drainage trench west of the Strippit, Inc. parking lot and north of Clarence Center Road, samples to be tested for metals by NYSDEC lab.

TECHNICIAN (print): R. Kampff

(signed): Raymond L. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/15/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 65°F (a.m.)/75°F (p.m.)
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-45

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, 1 equipment operator, 2 laborers (Haseley); K. Glaser (NYSDEC);

2 Dozers, backhoe, roller, front and loader

HNU Model HW-101 PID with 10.2 eV lamp; Century OVA Model 128GC FID

MATERIALS PLACED/WORK COMPLETED:

Following drying the second lift of barrier protection material was regraded and compacted. The entire lift was then proof-rolled indicating adequate compaction. Contractor began working on final grade of third lift of barrier protection material and compacting.

Excavated three test pits at western property line, approximately 20' apart in area where contaminated soils were encountered in anchor trench.

COMMENTS:

No evidence of petroleum contamination found in any of the three test pits. Will excavate materials tomorrow.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/16/94 Friday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy, Humid
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-46

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day); Foreman, 2 equipment operators, 2 laborers (Haseley); J. Walia (NYSDEC);

2 Dozers, backhoe, roller, front and loader

HNU Model HW-101 PID with 10.2 eV lamp; Century OVA Model 128GC FID

MATERIALS PLACED/WORK COMPLETED:

Excavated petroleum-contaminated soils in area of anchor trench at west side of landfill. Found a small section of soils trending toward property line. Excavated to property line and stopped. Soils staged and covered.

Third lift of barrier protection material placed and compacted.

Contractor is working on grading topsoil above proof-rolled areas of barrier protection material.

COMMENTS:

Topsoil has some roots and branches in it that are being picked out by laborer. Compaction of topsoil is being done by tracking with D3 dozer.

Petroleum-Contaminated soil continued in a small area beyond the west property line. Stopped at property line until Strippit could be notified of situation.

Approximately 100 yd^3 of contaminated soils removed and stockpiled.

Excavation made to remove petroleum-contaminated soil was backfilled with barrier protection material and compacted.

TECHNICIAN (print): J. Joseph Dorety

(signed): J. Joseph Dorety

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/19/94 Monday
PROJECT: Interim Remedial Measure Construction	WEATHER: Partly Cloudy
LOCATION: Akron, N.Y.	TEMPERATURE: 75°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-47

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day); Foreman, 2 equipment operators, laborer (Haseley); J. Walia, J. Tuk, K. Glaser (NYSDEC)

2 dozers, backhoe, roller

MATERIALS PLACED/WORK COMPLETED:

Monitored proof-rolling of final lift of barrier protection material; no problem areas noted.

Following proof rolling topsoil placement continued throughout the landfill.

COMMENTS:

Final weekly construction meeting held with Haseley and NYSDEC.

TECHNICIAN (print): R. Kampff

(signed): Raymond R. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/20/94 Tuesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-48

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day): Foreman, equipment operator, 2 laborers (Haseley); J. Walia (NYSDEC)

1 dozer, backhoe

MATERIALS PLACED/WORK COMPLETED:

Contractor continuing with the placement of topsoil throughout site.

Excavation of drainage trench along north side of site.

COMMENTS:

Contractor picking out larger pieces of roots from topsoil by hand.

Larry Wolf made several tests of the topsoil's pH using a test kit. Testing indicated topsoil was within acceptable range and additives were not required.

TECHNICIAN (print): R. Kampff

(signed): Raymond L. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/21/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-49

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day): Foreman, equipment operator, 2 laborers (Haseley); surveyor and assistant

Dozer, backhoe

HNU PI-101

MATERIALS PLACED/WORK COMPLETED:

Completed placement of topsoil throughout site. Larger roots picked out by hand.

Surveyor checked grade and determined it was within several inches of design elevation.

Completed evaluation and removal of petroleum-contaminated soil along western property line. Excavation material placed in stockpile.

Drainage trench along western side of side completed. Contractor also graded and placed topsoil on west side of site (i.e., the area off-site of south of stockpiled petroleum soil).

COMMENTS:

TECHNICIAN (print): R. Kampff
(signed): Raymond L. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 9/22/94
PROJECT: Interim Remedial Measure Construction	WEATHER: Sunny
LOCATION: Akron, N.Y.	TEMPERATURE: 70°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-50

PERSONNEL AND EQUIPMENT ON SITE:

J. Dorety (Day): Foreman, equipment operator, 2 laborers (Wolf Nursery)

backhoe, roller,

Finn Hydroseeder

MATERIALS PLACED/WORK COMPLETED:

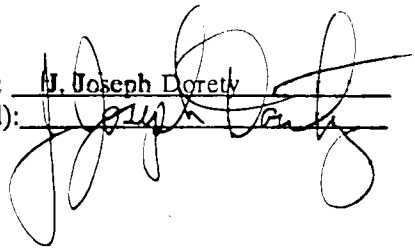
Landfill hydroseeded with mixture of red fescue, annual and perrehial ryegrass, white clover and crown vetch at a rate of 100 pounds of total seed per acre.

Work trailers being prepared for demobilization.

COMMENTS:

Good coverage during hydroseeding. The only area that was not seeded was the area of the haul road south of staged soils to the gravel parking lot at the north. This area will not be seeded until petroleum-contaminated soils are removed.

TECHNICIAN (print): J. Joseph Dorety

(signed): 

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 10/19/94 Wednesday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast/rain
LOCATION: Akron, N.Y.	TEMPERATURE: 55°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-51

PERSONNEL AND EQUIPMENT ON SITE:

R. Kampff (Day); Operator, five (5) drivers (Modern Landfill, Inc.)

Front end loader, 2 trailer and 3 tandem dump trucks

MATERIALS PLACED/WORK COMPLETED:

Petroleum-contaminated soil stockpile loaded and removed from the site for disposal at Modern Landfill, Inc; Lewiston, New York.

COMMENTS:

Grass was observed to be approximately 1/4 to 1/2 inch high throughout site. Growth appears thicker on side slopes and thinner on top of former disposal area.

Same erosion areas noted along northern slope and within southern drainage trench.

TECHNICIAN (print): R. Kampff

(signed): Raymond L. Kampff

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 10/20/94 Thursday
PROJECT: Interim Remedial Measure Construction	WEATHER: Overcast
LOCATION: Akron, N.Y.	TEMPERATURE: 60°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-52

PERSONNEL AND EQUIPMENT ON SITE:
R. Kampff, J. Dorety (Day); driver (Buffalo Fuel)

MATERIALS PLACED/WORK COMPLETED:
Reconnaissance of IRM construction area made to identify punch list items for Haseley to close out site.

Overpack drums picked up for off-site disposal.

COMMENTS:
Several areas requiring additional work (e.g., former petroleum-contaminated soil stockpile, erosion areas, etc.) defined. Haseley subsequently contacted to schedule final site clean-up/closeout.

TECHNICIAN (print): J. Joseph Dorety
(signed):

DAY ENGINEERING, P.C.
INSPECTOR'S DAILY REPORT

CLIENT: Strippit, Inc.	DATE: 11/8/94 Tuesday
PROJECT: Interim Remedial Measure	WEATHER: Partly Cloudy, Breezy
LOCATION: Akron, N.Y.	TEMPERATURE: ~55°F
CONTRACTOR: Haseley Trucking Company	REPORT NO.: 2430-53

PERSONNEL AND EQUIPMENT ON SITE:

Joe Dorety (Day); 2 equipment operators/laborers, truck driver (Wolf Nurseries)

Ford 555B backhoe, John Deere 550G bulldozer, dumptruck

MATERIALS PLACED/WORK COMPLETED:

Punchlist items: Removed hay bales, sediment accumulation and flow impeding vegetation from drainage ditch along west property line; removed accumulated sediments from sedimentation basin and placed along western side of landfill for grading; created 2.5' high berm along northeast and south sides of sedimentation basin; cleaned drum carcasses and placed in scrap steel roll-off container; re-graded bermed soils along western side of landfill to approximate original grade; replaced eroded soils in areas of southern and western drainage swale and on north slope of landfill; filled in horse hoof prints in various areas of landfill; placed hay bales in invert of southern and western drainage swale to reduce flow velocity and reduce possibility of further erosion; changed point of confluence of the western drainage swale and northern drainage swale to preclude erosion problems; added additional silt fence at north end of re-graded area; removed majority of larger roots from topsoil in previously seeded areas; dismantled drum staging area; filled area which had settled in stone area north of landfill.

COMMENTS:

Areas of re-graded or replaced soils still require seeding. This will be done when Wolf returns to demobilize their equipment.

Drum of discarded PPE needs to be disposed of by Haseley.

Field Services, Inc. needs to repair northeast slope of landfill which has settled after installation of natural gas line.

TECHNICIAN (print): J. Joseph Dorety
(signed):

strippit.log

APPENDIX H

Field Density Test Results

SJB SERVICES, INC.
Contract Drilling and Testing

BOX 5793-1
1951 Hamburg Turnpike
Buffalo, NY 14218

Phone: (716) 821-5911
Fax: (716) 821-0163

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: STRIPPIT LANDFILL LOCATION: AKRON N.Y.

CLIENT: DAY ENGINEERING REPORT NO: FDR-1

CONTRACTOR: HOSELEY TRUCKING CO. INC. PROJECT NO: T-272

WEATHER/: TEMPERATURE SUNNY 68°F DATE: 9-9-94

Test No.	Date of Test	Depth or Elevation	In-place Density (pcf)	In-place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	9-9	1ST LIFT	118.8	11.3	99.2	1	TEST # A-1
2			116.9	8.9	97.7		TEST # B-2
3			116.8	10.7	97.6		TEST # C-2
4			119.0	10.9	99.4		TEST # B-1
5			117.5	12.6	98.4		TEST # C-1
6			118.9	11.9	99.3		TEST # D-1
7			117.6	11.0	98.2		TEST # E-1
8			116.9	12.1	97.7		TEST # E-1
9			118.3	12.2	98.8		TEST # G-1
10			117.2	10.5	97.9		TEST # H-1
11			117.3	8.8	98.0		TEST # H-2
12			118.8	9.5	99.2		TEST # G-2
13			119.4	8.2	99.7		TEST # F-2

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	119.7	10.7	SAND + GRAVEL MATERIAL: PINE HILL SAND AND GRAVEL

Comments: 95% COMPACTION REQUIRED / GAUGE # 23724

Technician: Ray Kwa

Time On Site: 12:30 TO 2:30

Respectfully Submitted,
SJB SERVICES, INC.

Ray J Kwa

SJB SERVICES, INC.
Contract Drilling and Testing

BOX 5793-1
1951 Hamburg Turnpike
Buffalo, NY 14218

Phone: (716) 821-5911
Fax: (716) 821-0163

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: STRIPPIT LANDFILL LOCATION: AKRON N.Y.

CLIENT: DAY ENGINEERING REPORT NO: FDR-1 pg. 2

CONTRACTOR: HASSEY TRUCKING Co. INC. PROJECT NO: T-272

WEATHER/ TEMPERATURE: SUNNY 68°F DATE: 9-9-94

Test No.	Date of Test	Depth or Elevation	In-place Density (pcf)	In-place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
14	9-9	1st LIFT	116.2	8.3	97.1	1	TEST E-2
15			116.4	9.5	97.2		TEST D-2
16			122.4	10.3	100+		TEST E-3
17			116.6	8.9	97.4		TEST D-3
19			120.1	9.9	100+		TEST C-3

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	119.7	10.7	SAND AND GRAVEL MATERIAL: PINE HILL SAND + GRAVEL

Comments: 95% COMPACTION REQUIRED / GAGE # 23724

Technician: Ray Kern

Time On Site: 12:30 TO 2:30

Respectfully Submitted,
SJB SERVICES, INC.
Ray J. Kern

SJB SERVICES, INC.
Contract Drilling and Testing

BOX 5793-1
1951 Hamburg Turnpike
Buffalo, NY 14218

Phone: (716) 821-5911
Fax: (716) 821-0163

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: STRIPPIT LANDFILL LOCATION: AKRON, N.Y.

CLIENT: DAY ENGINEERING REPORT NO: FDR-2

CONTRACTOR: HASELEY TRUCKING CO., INC. PROJECT NO: T-272

WEATHER/: SUNNY 51° DATE: 9-12-94
TEMPERATURE

Test No.	Date of Test	Depth or Elevation	In-place Density (pcf)	In-place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	9-12	1ST LIFT	119.2	7.7	99.6	1	A-2
2		1ST LIFT	115.3	8.5	96.3	"	A-3
3		1ST LIFT	120.2	8.9	100+	"	B-3
4		1ST LIFT	120.3	8.8	100+	"	F-3
5		1ST LIFT	123.1	10.3	100+	"	G-3
6		1ST LIFT	115.0	8.1	96.1	"	H-3
7		1ST LIFT	117.5	7.1	98.2	"	G-4
8		1ST LIFT	111.8	7.0	93.4	"	F-4
9		1ST LIFT	116.3	7.2	97.2	"	E-4
10		1ST LIFT	119.1	8.6	99.5	"	D-4
11		1ST LIFT	117.2	11.3	97.9	"	C-4
12		1ST LIFT	115.8	8.4	96.7	"	B-4
13		1ST LIFT	119.9	8.7		"	C-5

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	119.7	10.7	SAND + GRAVEL MATERIAL: PINE HILL SAND AND GRAVEL

Comments: GAUGE 23724 - 95% REQUIRED

Technician: Kevin J. Downes

Time On Site: 8:00 - 11:30

Respectfully Submitted,
SJB SERVICES, INC.

Guy J. Kuo

SJB SERVICES, INC.
Contract Drilling and Testing

BOX 5793-1
1951 Hamburg Turnpike
Buffalo, NY 14218

Phone: (716) 821-5911
Fax: (716) 821-0163

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: STRIPPIT LANDFILL
LOCATION: AKRON, N.Y.
CLIENT: DAY ENGINEERING
REPORT NO: FDR-2 pg.2
CONTRACTOR: HASELEY TRUCKING CO., INC.
PROJECT NO: T-272
WEATHER/: SUNNY 51°
TEMPERATURE
DATE: 9-12-94

Test No.	Date of Test	Depth or Elevation	In-place Density (pcf)	In-place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
14	9-12	1ST LIFT	115.2	7.7	96.2	1	D-5
15		1ST LIFT	115.2	9.0	96.2	"	RETEST # 2, AFTER FURTHER COMPACTION
16		1ST LIFT	118.6	8.4	99.1	"	RETEST # 12, " " "
17		1ST LIFT	119.1	9.0	99.5	"	RETEST # 2 & 15, " " "
18		1ST LIFT	112.9	7.1	94.3	"	RETEST # 14, " " "
19		1ST LIFT	113.2	7.3	94.6	"	RESTEST # 14 & 18, " " "
20		1ST LIFT	118.5	7.0	99.0	"	RESTEST # 8, " " "
21		1ST LIFT	115.2	6.7	96.2	"	RETEST # 6, " " "
22		1ST LIFT	116.4	7.6	97.2	"	RETEST # 14, 18, 19, " " "
23		1ST LIFT	115.4	6.5	96.4	"	RETEST # 6 & 21, " " "
24		1ST LIFT	118.8	6.5	99.2	"	RETEST # 6, 21, 23, " " "

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	119.7	10.7	SAND AND GRAVEL MATERIAL : PINE HILL SAND & GRAVEL

Comments: GAUGE 23724 - 95% REQUIRED

Technician: Kevin J. Donner

Time On Site: 8:00-11:30

Respectfully Submitted,
SJB SERVICES, INC.

Roy J. Kraus

APPENDIX I

Seeding Schedule and Documentation

WOLF'S NURSERY

6083 FISK ROAD
LOCKPORT, NEW YORK 14094
PHONE 716-625-8153 FAX 716-625-7963

SEPTEMBER 8, 1994

HASELEY CONSULTANTS
10315 LOCKPORT ROAD
NIAGARA FALLS, NEW YORK 14304

RE: STRIPPIT - LANDDFILL
12975 CLARENCE CENTER ROAD
AKRON, NEW YORK 14001

SEED SPECS # 50 CROWN VETCH PER ACRE PLUS:

200# PER ACRE OF:

CREEPING RED FESCUE	50%
PERENNIAL RYEGRASS	45%
WHITE CLOVER	5%

PLUS ON THE NORTH SLOPE WE WILL ALSO ADD A TACKING AGENT TO INCREASE SLOPE STABILITY - APPROX 1 ACRE, AT NO ADDITIONAL COST

WOLF'S NURSERY

6083 FISK ROAD
LOCKPORT, NEW YORK 14094
PHONE 716-625-8153 FAX 716-625-7963

OCTOBER 17, 1994

DAY ENGINEERING
2144 BRIGHTON HENRIETTA TOWNLINE ROAD
ROCHESTER, NEW YORK 14623

DEAR JOE,

ENCLOSED IS LETTER OF SEED CERTIFICATION FOR STRIPPIT HYDROSEEDING COMPLETED BY WOLF'S NURSERY.

AT THE TIME OF SEEDING I COMPLETED 6 PH TESTS AND ALL FELL IN THE RANGE OF 6.5 - 7.0 WHICH IS A NEUTRAL TO VERY SLIGHTLY ACID RANGE. I FEEL THIS IS A NORMAL TEST AVERAGE.

SINCERELY,

LARRY J WOLF

LJW/gh

KINDER SEED INC.

P.O. Box 398
485 Ludwig Ave.
Buffalo, NY 14225

September 14, 1994

Wolf Nursery
6083 Fish Rd.
Lockport, NY 14094

To Whom It May Concern:

This is to certify that we at Kinder Seed have supplied 1000# of Strippit Mixture to Wolf Nursery as per specifications given below:

% by weight	Type
50%	Creeping Red Fescue
45%	Perennial Ryegrass
5%	White Clover

The above mixture was mixed and tagged in accordance with all federal and state seed laws.

Sincerely,

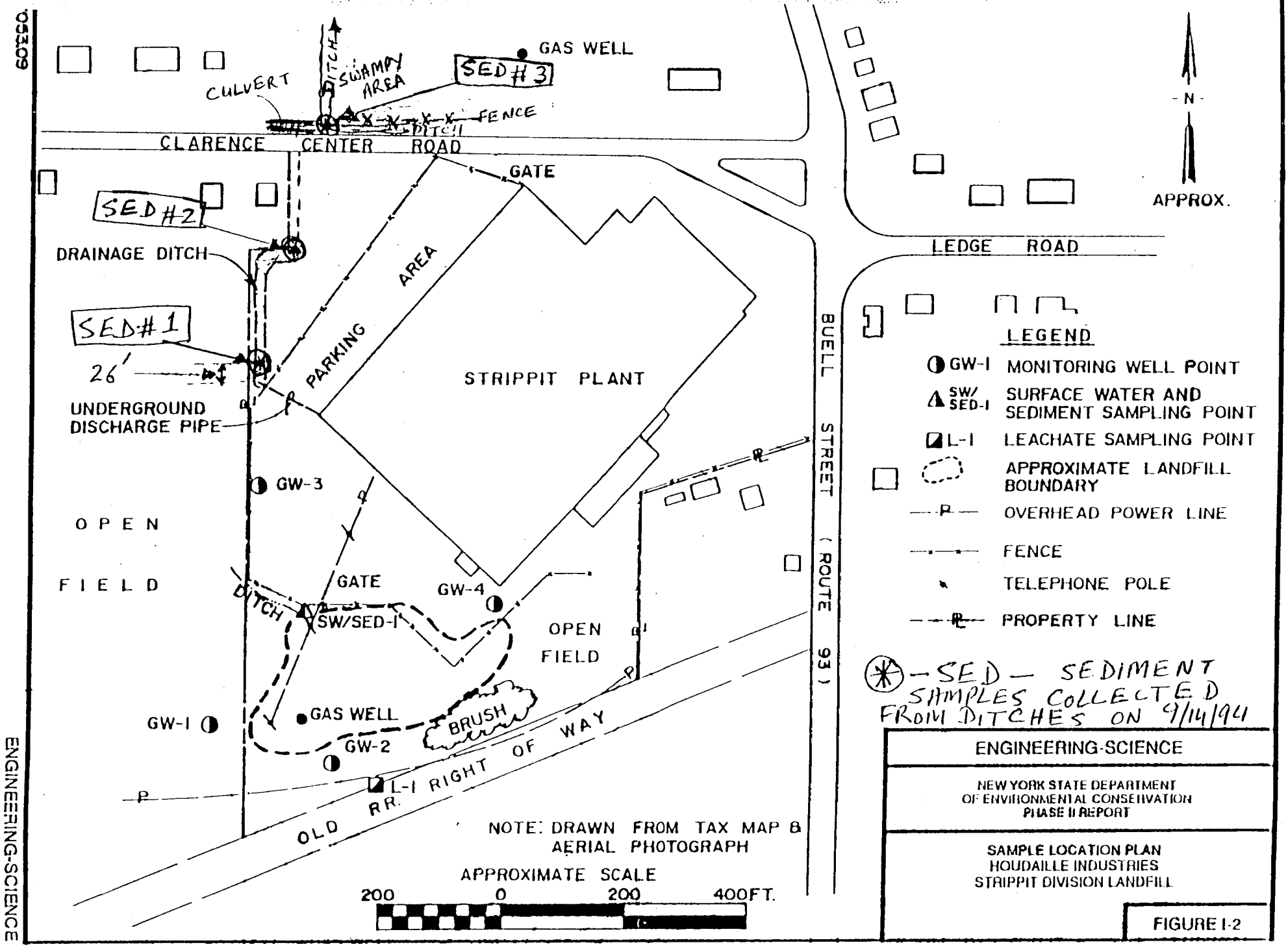
Jack Bryant

Jack Bryant
Kinder Seed, Inc.

JB/jpb

APPENDIX J

September 14, 1994 Sediment Sampling


053109
GAS WELL
SED #3
CULVERT
DITCH
SWAMPY AREA
FENCE
DITCH
CLARENCE CENTER ROAD
GATE
SED #2
DRAINAGE DITCH
AREA
PARKING
STRIPPIT PLANT
SED #1
26'
UNDERGROUND DISCHARGE PIPE
GW-3
OPEN FIELD
GATE
GW-4
DITCH
SW/SED-1
OPEN FIELD
GW-1
GAS WELL
BRUSH
GW-2
L-1
RIGHT OF WAY
OLD RR.
NOTE: DRAWN FROM TAX MAP & AERIAL PHOTOGRAPH
APPROXIMATE SCALE
200 0 200 400FT.
BUELL STREET (ROUTE 93)
LEDGE ROAD
APPROX.
N
LEGEND
GW-1 MONITORING WELL POINT
SW/SED-1 SURFACE WATER AND SEDIMENT SAMPLING POINT
L-1 LEACHATE SAMPLING POINT
APPROXIMATE LANDFILL BOUNDARY
OVERHEAD POWER LINE
FENCE
TELEPHONE POLE
PROPERTY LINE
-SED- SEDIMENT SAMPLES COLLECTED FROM DITCHES ON 9/14/94
ENGINEERING-SCIENCE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PHASE II REPORT
SAMPLE LOCATION PLAN
HOUDAILLE INDUSTRIES
STRIPPIT DIVISION LANDFILL
FIGURE 1-2
ENGINEERING-SCIENCE

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999

Langdon Marsh
Commissioner

MEMORANDUM

TO: Mr. Jaspal Walia
FROM: Dr. Frances Yang F-Y.
SUBJECT: Trace Metals Analysis of Sediment Samples from Strippit Site

DATE: October 3, 1994

On September 14, 1994, three sediment samples were taken from Houdaille-Strippit, and submitted to the DEC laboratory on September 14, 1994, for Barium, Cadmium and Lead Analysis.

USEPA Method 3051 - Microwave Digestionond Method 6010 - Inductively Coupled Plasma Atomic Emission were used for the analysis with method detection limit of 1 PPM.

Results are presented in microgram per gram (PPM) on dry-weight basis:

Sample Designation	Barium	Cadmium	Lead
DEC-64, Sample #1 (SED#1)	316	3	87
DEC-65, Sample #2 (SED#2)	76	<1	69
DEC-66, Sample #3 (SED#3)	725	<1	118

vam
cc: Mr. James Strickland/File

Post-it™ Fax Note 7671	Date 10-4-94	# of pages ▶ 1
To Ray Kempf	From Jaspal Walia	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	