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**TYCO / SCOTT AVIATION FACILITY
LANCASTER, NEW YORK**

**PHASE II ENVIRONMENTAL SITE
INVESTIGATION SUMMARY REPORT**

June 2004

Prepared for:

TYCO International (US), Inc.

Prepared by:



A **tyco** INTERNATIONAL LTD. COMPANY.

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PHASE II ENVIRONMENTAL SITE INVESTIGATION SUMMARY REPORT

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June 2004

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1.0 INTRODUCTION AND PURPOSE

This Phase II Environmental Site Investigation Summary Report has been prepared by Earth Tech for Tyco International (US), Inc. (Tyco) pursuant to the *Proposal for Phase II Environmental Site Investigation* submitted to Tyco on March 27, 2004 for the Scott Aviation facility, 225 Erie Street, and 25-27 Walter Winter Drive, Lancaster, New York.

The purpose of the Phase II Environmental Site Investigation was to:

- Investigate areas identified in “Section 6.0 – Findings” of the *Phase I Environmental Site Assessment*, dated May 3, 2004 (Phase I report), prepared by Earth Tech for Tyco International (US), Inc., as identified below:

“Earth Tech chose an appropriate level of effort consistent with the ASTM Standard Practice E1527-00 for evaluating the environmental status of the Property. Based on the information reviewed, interviews, and the Property reconnaissance, historical sources for impacts to soil and/or ground water were identified on and adjacent to the Property. Five RECs associated with the Property were identified:

- Soil and shallow ground water west of Plant 2, both on the Property and extending onto the adjacent parcel, have been impacted by releases of chlorinated organic compounds and petroleum products (apparently used oil) from at least two sources. Extensive monitoring and remedial activities have been underway in that area for several years (under a Consent Order with the State of New York), and additional activities are in progress and scheduled to be completed in 2004.
- Most of the sewer lines beneath, and from, Plants 1 and 2 date from the 1950s and 1960s. The potential exists that one or more of them may have leaked during that period, although no specific indication of any such release was found during this assessment.
- Two former USTs that had contained gasoline starting in the early 1970s were removed from the southeastern portion of the Plant 1 Area in November of 1987. However, no records were found to indicate that any post-excavation sampling was done to demonstrate that soil and ground water in the vicinity had not been impacted.
- A former UST that had contained gasoline from an unknown date until the early 1970s was reportedly cleaned and closed in place at that time by filling it with sand. It is believed to be located beneath the current hazardous materials storage shed. No records were found to indicate exactly where that tank is located, when closure occurred, or that any post-excavation sampling was done to demonstrate that soil and ground water in the vicinity had not been impacted.
- Used sand from a steel-casting foundry operation that was located in the western portion of Plant 1 from the early 1950s to about 1973 was disposed behind (south of) Plant 1, and some was used around the foundation of Plant 2 during its construction in 1965.

No information was found regarding substances other than silica and steel that may have been in the used sand.”

- Provide statistically reasonable investigative coverage of undeveloped areas of the site using non-intrusive sensing techniques (i.e., geophysical survey), and
- Further investigate any anomalous or suspect areas identified during the non-intrusive investigations.

Organization of Report

Section 1 provides a summary of the scope and methodology of the investigation. Section 2 provides a summary of the investigation methodologies. Section 3 presents a summary of the areas of investigation and activities performed. Section 4 provides a summary of the data acquired during this investigation. Section 5 provides the references used in preparation of this report.

2.0 SCOPE AND METHODOLOGY OF INVESTIGATION

2.1 *Scope*

The overall property is comprised of several adjoining parcels as presented in Figure 1. Although the property is comprised of multiple adjoining parcels, for convenience of discussion in this summary report, the property has been broken into three general areas: northern property (area north of plant 3, essentially undeveloped); Plant No. 2/Plant No. 3 area (developed parcels north of Erie Avenue, west of Walter Winter Drive, south of northern property); and Plant No. 1 area (developed area south of Erie Avenue). The approximate area of the overall plant property is 25-acres (the plant), about one-third of which is improved as buildings or parking areas. (Additional detail regarding parcel identification can be found in the Phase I Environmental Site Assessment Report (Earth Tech, April 12, 2004.))

Earth Tech conducted the following activities as part of the Phase II investigation:

- A non-intrusive geophysical survey was performed over all accessible areas of the property using a geophysical survey method (i.e., EM31, an electromagnetic induction tool) on a 12.5-foot line spacing. Inaccessible areas of the property were investigated using visual survey and test pit methods. Appendix I presents the geophysical survey summary report.
- Locations of recognized environmental conditions identified in the Phase I report were investigated, including:
 - Underground storage tanks (USTs) including two removed USTs and one closed-in-place UST;
 - Plant No. 2 June 23, 1999 “oil spill” soil remediation at northeast corner of Plant No. 2 (see Appendix H, Phase I report);
 - Plating operation in Plant No. 1;
 - February 2004 “oil spill” west-northwest of Plant No. 2; and,
 - Plant No. 1 foundry area.
- Shallow test pits were conducted over the wooded portion of the Northern Area (i.e., area that was inaccessible to geophysical survey). Prior to the excavation of test pits, a visual survey of the area for suspect fill or stressed vegetation was performed to assist in the determination of where the test pits should be placed. For areas where no suspect fill or stressed vegetation were identified, test pits were spaced to achieve an even, representative coverage of the area. Test pits were excavated to a minimum depth of four feet below grade to confirm the soil profile.
- Shallow test pits were performed on the west side of Plant No. 1 to visually delineate a suspected buried refuse waste pile and to confirm the soil profile.
- Direct push technology (DPT) soil borings were performed within, or at the perimeter of each suspect location (i.e., abandoned UST locations, Plant No. 1 foundry area, Plant No. 2 June 23, 1999 “oil spill” area, and anomalies identified during the geophysical survey).
- Soils exposed during test pit excavation and borings were scanned with an HNu, visually inspected and logged. Appendices III and IV present soil logs for DPT borings and test pits, respectively.

- Soil samples were collected for various chemical analyses at select DPT and test pit locations. Chemical analysis was based on suspected contaminants, using process knowledge. Soil samples were generally biased to the interval(s) with the highest HNu reading or interval(s) containing visually stained soil or fill. Appendix II presents the laboratory Form I data.
- Groundwater samples were collected from temporary piezometers at UST investigation locations and the Plant No. 2 June 23, 1999 “oil spill” soil remediation area. Chemical analysis was based on suspected contaminants, using process knowledge. Appendix II presents the laboratory Form I data.

2.2 Methodology

Subcontractors used by Earth Tech to complete the work included SJB Services, Hamburg, NY (DPT borings), SLC Environmental Services, Lockport, NY (test pits), Geomatrix Consultants (geophysical survey), and Severn Trent Laboratories, Amherst, NY (analytical laboratory; NYSDOH ELAP Certified).

DPT boring subsurface soil sampling was conducted in accordance with ASTM D6282-98 (Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations). DPT borings were advanced into the overburden soil and samples were collected using a truck-mounted DPT unit equipped with a two-inch OD by four-foot long sampler. The DPT unit includes a hydraulic push/percussion hammer that is used to advance the sampler. The DPT borings were advanced to confirm native soils or to below the water table depending on the investigation area (i.e., borings to investigate foundry sand were advanced to native soil whereas borings to investigate abandoned USTs were advanced to below the water table).

The general investigation methodology for the DPT borings was to advance the borings and inspect the soil and fill materials for evidence of contamination. Where no staining, odors, elevated HNu readings, or sheen were noted, no analytical samples were collected. Where there was potential evidence for contamination, a soil sample was collected for analytical laboratory testing. The selected analytical parameters were dependent upon the location of the sample (i.e., based on background data research or generator knowledge). Soil samples collected for analytical laboratory testing were handled in accordance with the *Comprehensive Site Investigation Work Plan*, Appendix IV, Quality Assurance Project Plan, prepared for Tyco by Earth Tech, dated December 31, 2002.

Analytical methods used for this investigation included volatile organic compounds (VOCs) (EPA Method 8260), semi-volatile organic compounds (SVOCs) (EPA Method 8270), total petroleum hydrocarbons (TPH) (NYSDOH Method 310.13), target analyte list (TAL) metals (EPA Method 8010 and 7471 [mercury only]), diesel range organics (DRO) (EPA Method 8015B), and phenolics (EPA Method 9066).

Field “rinsate” blanks were collected over the soil sampling equipment and the groundwater sampling equipment on March 26, 2004 to monitor the effectiveness of the field decontamination effort. The samples were analyzed for VOCs, SVOCs, TPH, TAL metals, DRO and phenolics. All

analytes were non detect for each set of rinsate blanks. Appendix II presents the laboratory Form I data for these samples.

Soil samples from test pits were collected from the sidewall of the test pit or, for deeper interval samples, from the center of the excavator bucket and handled in accordance to the above referenced document.

The macro-core sampler used for DPT borings was field decontaminated between uses using a potable water and phosphate-free detergent wash, followed by a potable water rinse. Spoons and spatulas used to transfer soil to analytical laboratory containers were field decontaminated between uses.

Soil samples were visually examined and described by a qualified Earth Tech geologist in accordance with ASTM D2487 *Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)*. A log of each boring and test pit was prepared noting significant geologic features, sample identification, sample depth interval, recovery, and date.

Groundwater samples were collected from select DPT borings. The sampling methodology included placement of a clean, new temporary 1-inch diameter PVC screen and riser from grade to the bottom of the boring, without placement of any additional well materials (e.g., sand pack, bentonite seal, etc.). The purpose of the temporary piezometer was simply to maintain access to the bottom of the boring in case upper portions of the boring caved in. Groundwater samples were collected using dedicated polyethylene tubing attached to a peristaltic pump. Groundwater was pumped directly from the PVC casing to the sample containers. Metals samples were not field or laboratory filtered. After collection, the groundwater samples were handled in accordance with *Site Investigation Work Plan*, Appendix IV, Quality Assurance Project Plan, prepared for Tyco by Earth Tech, dated December 31, 2002.

3.0 PHASE II ACTIVITIES

A summary of the activities performed and findings at each of the investigated areas outlined above are discussed in the following sections.

The reader should note in the interest of presenting concise data tables, analytical summary tables referenced in the following subsections present only reported detections for the respective analyses. A complete set of laboratory Form I reports is presented in Appendix II; the Form I lists all the compounds that were included in each analysis.

3.1 *Geophysical Survey*

Prior to the subsurface investigation program, a geophysical investigation survey was performed over all accessible areas of the Plant property using EM31. Geomatrix conducted the geophysical survey during the week of March 22, 2004. A report summarizing the geophysical survey was prepared by Geomatrix, and is presented in Appendix I.

Interpretation of the raw geophysical data resulted in the identification of seven anomalies, labeled A through G (refer to Appendix I for additional detail). All anomalies were determined to be attributable to non-hazardous sources, as follows:

- Anomaly A - Construction and demolition debris present in a berm (e.g., concrete with reinforcing bar, etc.). Test pits were conducted to confirm absence of non-C&D material.
- Anomaly B – Presence of electric dog fence confirmed with adjacent property owner.
- Anomaly C and E– Earth Tech conducted additional investigations to address anomalies C and E on March 29, 2004 using DPT borings. Table 1 presents a summary of these borings, including boring identification numbers, depths and field observations. Figures 2 through 4 depict the DPT boring locations. Based on boring observations, Earth Tech determined that anomalies C and E were attributable to the presence of blast furnace slag (expanded variety; porous, low bulk density) used as subbase material for the Plant No. 1 and No. 2 asphalt parking lots. (For additional information regarding blast furnace slag, see <http://www.tfhr.gov/hnr20/recycle/waste/bfs1.htm>.) Because the blast furnace slag material is essentially inert, and because the material is covered by asphalt pavement that provides a barrier to personal contact and from surface water contact, no blast furnace slag samples were collected for laboratory analysis.
- Anomaly D – Presence of surface metal debris, including steel cable, concrete with reinforcing bar, miscellaneous steel fragments (structural?) confirmed by visual inspection.
- Anomaly F – Presence of a single, steel drum lid observed on surface. No other indications of buried metal observed.
- Anomaly G – Presence of steel guy wire adjacent to a utility pole observed.

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3.2 Northern Area

Approximately one-half of the Northern Area is heavily vegetated (scrub brush, trees). Due to the heavy vegetation, Geomatrix was not able to conduct the geophysical survey in this area. To explore this area, 20 shallow test pits (approximately two per acre) were excavated on March 23, 2004. The test pits were excavated to approximately four feet below grade, to confirm the presence of a native soil profile, and the absence of buried waste material. Figure 2 depicts the test pit locations. Table 1 presents a summary of test pit identification numbers, depths and field observations. Grab samples were collected from surface and subsurface soil for laboratory testing for VOCs, SVOCs, and metals. A total of four samples were collected from two test pits (TP- 11 and TP-15). Table 2 presents a list of detected compounds.

3.3 Plant No. 2 June 23, 1999 "Oil Spill"

On March 26, 2004, three DPT borings (DPT -9, -10, -11) were advanced adjacent to the location of the Plant No. 2 June 23, 1999 "oil spill." Figures 2 and 3 depict the DPT boring locations. Table 1 presents a summary of boring identification numbers, depths and field observations. The soil cores were visually inspected and scanned with an HNu. No indication of contamination was observed or detected with the HNu from the three borings. No soil samples were collected for analytical testing.

An aqueous grab sample of groundwater was collected from DPT-11 (east of the former spill area). The sample was analyzed for total petroleum hydrocarbons, VOCs, SVOCs, and metals. A list of detected compounds is presented in Table 3. It is important to note that the turbidity level of the grab sample was quite high (visual estimation greater than 200 NTU; impact discussed in more detail in Section 4.0). The sample was collected by installing a clean 1-inch diameter PVC screen to the bottom of the DPT boring, followed by collection of an aqueous sample using dedicated tubing and a peristaltic pump. The sample should be considered a "grab" sample, as the method of collection did not include installation of a monitoring well, or pre-purging a volume of water before groundwater sample collection.

3.4 Abandoned USTs

The *Phase I Environmental Site Assessment* identified a total of three abandoned USTs located south (1) and southeast (2) of Plant No. 1. During additional records search in preparation for the Phase II site investigation, Earth Tech acquired the following additional information:

- Two USTs, registered by Scott Aviation as 2,000-gallon gasoline storage tanks, were located approximately 100 feet southeast of Plant No. 1. These two USTs were emptied of their contents and removed by a contractor for Scott Aviation on November 12, 1987.
- A single UST, registered as a diesel storage tank, was abandoned-in-place (date not confirmed). This UST is located on the south side of Plant No. 1 adjacent to the chemistry laboratory and plating shop.

On March 25 and 26, 2004, a total of six DPT borings were advanced adjacent to the locations of the abandoned USTs areas to an approximate depth of 16 feet below ground surface. Figures 2 and 4 present the DPT boring locations at each area. Table 1 presents a summary of boring identification numbers, depths and field observations.

Borings DPT-3 through DPT-6 (four borings) were advanced around the footprint of the two removed USTs southeast of Plant No. 1. The soil cores were visually inspected and scanned with an HNu. No indication of contamination was visually observed or detected with the HNu. A subsurface soil sample, and a grab sample for groundwater (collected in the same manner as at DPT-11) were collected from DPT-4 for VOCs, diesel range organics, lead, and cyanide (soil only). Tables 4 and 5 present a list of detected compounds for aqueous and soil parameters, respectively.

Borings DPT-7 and DPT-8 were advanced adjacent to the abandoned-in-place UST located immediately south of Plant No. 1 (adjacent to the chemistry laboratory and plating shop). At DPT-8, visual inspection of the soil core revealed black staining in the bottom 1.2 feet of the 0 to 2-foot interval. A visible sheen was noted on the soil sample at eight feet below grade; however, due to heavy rain, apparent storm water was infiltrating the uncased borehole from the surface, as the soil sample was described as “dry,” but water was collecting in the boring (water was observed to drain from the annulus of the core liner and the core barrel upon retrieval). Foundry sand was also noted at DPT-8 between 0.8 and 1.0 foot below grade. A grab sample of the shallow foundry sand, and of groundwater (collected in the same manner as at DPT-11) was collected from the DPT-8 boring location for VOCs, diesel range organics, lead, and cyanide (soil only). Tables 4 and 5 present a list of detected compounds for aqueous and soil parameters, respectively.

3.5 Metal Plating Shop

Earth Tech personnel visually inspected the floor and floor drainage collection area of the metal plating shop in Plant No. 1. Both the floor and floor drainage collection area (i.e., pH neutralization basin) appeared to be in satisfactory condition with no visible cracks. According to Mr. Robert Clark, Manufacturing Manager of Scott Aviation, the floor, walls, and ceiling are inspected annually and repainted by maintenance personnel as needed.

3.6 Plant No. 1 Foundry Area

Ten DPT borings (DPT-1 and DPT-2, and DPT-12 through DPT-19) and two hand auger borings were advanced along the Plant No. 1 southern perimeter fence to investigate the possible presence of sand generated from the former foundry operations. The borings were advanced on March 25, 26, and 29, 2004. Figures 2 and 4 depict the DPT and hand auger boring locations. Table 1 presents a summary of boring identification numbers, depths and field observations.

Grab samples of foundry sand were collected from borings DPT-8 and DPT-13. Grab samples of shallow subsurface soil were collected from borings DPT-2, DPT-12, and DPT-17. Each grab

samples was submitted for laboratory analysis for VOCs, phenols, metals, and cyanide. A list of detected compounds is presented in Table 6.

Distinct, apparent foundry sand was identified at DPT-13 located south of the former foundry area (southwest corner of Plant No.1). Foundry sand was also identified and sampled for the parameters noted above from boring DPT-8 (UST investigation boring, discussed above), and from TP-22 ("West Side of Plant No. 1" investigation area, discussed below). Refer to Table 6 for a summary of detected compounds.

3.7 West Side of Plant No. 1

A detailed study of historical aerial photographs from Appendix E of the Phase I report indicated possible reworked soil on the west side of Plant No. 1, south of the existing Visitor Parking Lot and just outside the western perimeter fence gate. During a visual inspection of the area, Earth Tech personnel noted miscellaneous debris (empty steel personal compressed gas cylinder, fire brick, etc.) scattered across the ground surface and partially buried. On March 29, 2004, seven test pits were excavated on the west side of the Plant No. 1 perimeter fence to investigate the extent of the miscellaneous debris. Figures 2 and 4 depict the test pit locations. Table 1 presents a summary of test pit identification numbers, depths and field observations.

Apparent waste material was observed in two test pits (TP-24A and TP-24C). The waste material was found to occur approximately 18 to 24 inches below ground surface, was less than one foot thick (typically six inches), and encompasses approximately 150 square feet in area (determined from a visual inspection of the test pits). A groundwater seep was observed below the waste material in TP- 24A. In TP-25, the seep had a visible chemical sheen. As noted above, foundry sand was observed in TP-22, and a lesser amount of foundry sand was observed at TP-21 (no analytical sample collected at TP-21).

Grab samples of the soil directly below the observed waste was sampled and submitted for laboratory analysis, including VOCs, SVOCs, and metals plus cyanide. Table 7 presents a summary of detected compounds.

4.0 SUMMARY OF FINDINGS

In accordance with the ASTM E1527-00 Standard Practice, a “Recognized Environmental Condition” is defined as:

“The presence or likely presence of any hazardous substances or petroleum products on a Property under the conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the Property or into the ground, ground water, or surface water of the Property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include the de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.”

4.1 *Recognized Environmental Conditions*

Earth Tech chose an appropriate level of effort consistent with *ASTM Standard Practice E1903-97, Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process* for evaluating the environmental status of the property. Based on the information acquired during this investigation, and review of materials presented in the Phase I Environmental Site Assessment (draft internal, prepared by Earth Tech for Tyco, draft March 8, 2004), Earth Tech notes the following “Recognized Environmental Conditions,” in accordance with the definition presented in ASTM E1527-00.

4.1.1 *Plant No. 2 June 23, 1999 “Oil Spill”*

The aqueous grab sample collected as part of the investigation associated with the June 23, 1999 “oil spill” (located on the northeast side of Plant No. 2) contained low levels of VOC contamination (see Table 3). The VOCs detected in the aqueous grab sample that exceeded New York State Groundwater Standards (6 NYCRR Part 703) included chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, vinyl chloride, and acetone; 2-butanone was also detected but did not exceed the NYS groundwater standard.

The VOC contamination detected at this location is not consistent with solely a petroleum source, but may also be the result of the oil spill source area having been cross-contamination by chlorinated solvent. Based on conversations with Scott Aviation personnel, the concrete pad at the northeast corner of Plant No. 2 contained a scrap metal “hopper” (i.e., small container, 1 to 2 cubic yards capacity) in addition to drum storage. It is likely that the hopper contained scrap metal that also contained some quantity of cutting oil, which may have been cross-contaminated by chlorinated solvent use (residue from cleaning operations, etc). Over the period of use, leakage from the hopper and/or sloppy handling practices may have contributed small amounts of chlorinated solvent to the waste oil spill area. The spill response that was conducted in 1999 did

not include chlorinated VOCs in the confirmatory sampling, and it appears this type of contamination was inadvertently overlooked. The low-level of contamination present in the DPT-11 aqueous grab sample may be the result of residual contamination migrating from the former source area (removed 1999).

As discussed in Section 3.3, the grab sample of groundwater was relatively turbid. As a result, the contaminant levels detected in the aqueous sample may not be indicative of only aqueous phase contamination, but may also include some level of interference from contamination associated with the suspended sediment.

Although this environmental condition appears to present a low level of risk, Earth Tech cannot predict whether or not the regulatory agencies might consider this condition “de minimis,” and not require enforcement action. As a result, this environmental condition has been included as a Recognized Environmental Condition, until such time as additional investigations are conducted to clarify the condition, or until the agencies are contacted to determine whether the condition can be considered “de minimis.”

4.1.2 Abandoned USTs

Diesel Storage Tank (1), South of Plant No. 1 (LUST issues)

According to Scott Aviation maintenance personnel, the 2,000-gallon diesel underground storage tank, was emptied and abandoned-in-place, although no official records were provided. Access to the tank has been prevented by the construction of a wood-frame building over the location of the tank.

None of the detected VOCs in soil exceed the NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives (RSCOs) (see Table 5). Diesel range organics were detected at a concentration of 140 milligrams per kilogram in the subsurface soil sample collected from 9 to 10 feet below grade.

A review of the DPT-8 boring log and analytical data indicates the presence of low-levels of VOC and diesel range organic contamination at this location. Detected VOCs in groundwater that exceed New York State groundwater standards (6NYCRR Part 703) include acetone, trichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, and vinyl chloride (see Table 4). No standard is available for diesel range organics in groundwater, although a value of 20 milligrams per liter was reported.

As was the case for DPT-11 (northeast of Plant No. 2, Oil Spill area), the grab sample of groundwater collected at DPT-8 was relatively turbid. As a result, the contaminant levels detected in the aqueous sample may not be indicative of only aqueous phase contamination, but may also include some level of interference from contamination associated with the suspended sediment.

Although this environmental condition appears to present a low level of risk, Earth Tech cannot predict whether or not the regulatory agencies might consider this condition “de minimis,” and not require enforcement action. As a result, this environmental condition has been included as a Recognized Environmental Condition, until such time as additional investigations are conducted to

clarify the condition, or until the agencies are contacted to determine whether the condition can be considered “de minimis.”

4.1.3 Plant No. 1 Foundry Area

Foundry sand was not observed at the following DPT borings conducted south of Plant No. 1: DPT-1 through DPT-7, DPT-9 through DPT-12, and DPT-14 through DPT-17. Foundry sand was identified in shallow subsurface zones at borings DPT-8 and DPT-13 (south-central area of Plant No. 1), and in test pit TP-22 (west of western perimeter fence). In each case, the zone of foundry sand was noted to occur approximately 0.5 feet to less than 2 feet below grade, in a relatively thin layer. Based on the borings and test pits conducted, the occurrence of the foundry sand appeared to be limited to sporadic areas in the south-central to southwest area of the rear of Plant No. 1.

Grab samples of shallow subsurface soil and/or foundry sand (where present) were collected from DPT-2, DPT-8, DPT-12, DPT-13, DPT-17, and TP-22. Analytical data for these samples were compared against analytical data for the test pit soil samples collected from the Northern Area to determine site background concentrations.

With the exception of acetone at DPT-8, there were no VOC detections reported that exceed TAGM 4046 RSCOs. As noted in Section 3.5, the soil sample for DPT-8 was collected from below an asphalt driveway. As such, contact with this soil is limited. No action is recommended considering the isolated occurrence of the acetone detection, and the location of the affected soil.

There were several metals analytes that exceeded the TAGM 4046 RSCOs at DPT-8, DPT-13 and TP-22 where grab samples of the foundry sand were collected. Where metals analyses were performed on soil samples at DPT-2, DPT-12, and DPT-17 (i.e., foundry sand not present), there were no exceedences of the TAGM 4046 RSCOs. (Note: Although antimony was detected, analytical QC qualifiers indicated presence in the blank and poor spike recovery; and, lead was detected at about 1.6 times the average background level, and was considered reasonable given the location of the sample [0 to 1 foot, immediately adjacent to southern fence, which is immediately adjacent to an railroad line].) Refer to Table 6 for a summary of the analyte list (exceedences are shaded).

4.1.4 West Side of Plant No. 1

Apparent waste material of an unknown origin was found just west and south of the vehicle gate located in the western perimeter fence, immediately north of the water tower. Elevated levels of VOCs and SVOCs present in the soil immediately below the waste indicate that some leaching of the waste has occurred. Detected VOCs that exceeded the TAGM 4046 RSCOs included 1,1-dichloroethane, 1,1,1-trichloroethane, toluene, ethylbenzene and (total) xylenes. Detected SVOCs that exceeded the TAGM 4046 RSCOs included phenol, 2-methylphenol, and 4-methylphenol. Refer to Table 7 for a summary of detected compounds.

4.2 Areas for No Further Concern

Based on a review of available information, as well as data generated during this Phase II site investigation, the following areas do not present further environmental concern.

4.2.1 Geophysical Survey

Each of the anomalies identified in the geophysical survey have been adequately explained and do not indicate any areas of concern. No further action is recommended at areas investigated via the geophysical survey.

4.2.2 Northern Area

The test pit activity performed in the Northern Area, which supplemented the geophysical survey, did not identify any items of concern. No further action is recommended over the Northern Area.

4.2.3 Metal Plating Shop

The metal plating shop was inspected for obvious breaches in containment (e.g., floor joints, open drains), and was determined to be in satisfactory condition. No further action is recommended for this area.

4.2.4 Abandoned USTs

Gasoline Storage Tanks (2), Southeast of Plant No. 1

Scott Aviation has record of the two gasoline storage tanks being removed in 1987. Visual analysis of the four DPT boring samples, and chemical analyses of soil and groundwater samples collected at DPT-4, indicate only acetone present above groundwater guidance values in this area (grab sample concentration 120 µg/l; guidance value for Class GA groundwater 50 µg/l). The presence of acetone in this area is not supported by past disposal practices according to Scott Aviation personnel. Visual sheen or elevated PID reading were not noted at any of the DPT boring locations in this area. As a result, the acetone detection is considered a suspected laboratory artifact. Earth Tech recommends Tyco propose no further action for this area.

5.0 REFERENCES

ASTM E1527-00 *Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM International, Philadelphia, Pennsylvania.

ASTM 1903-97 *Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, ASTM International, Philadelphia, Pennsylvania

Earth Tech, March 8, 2004. *Phase I Environmental Site Assessment* (draft internal).

Earth Tech, December 31, 2002. "Comprehensive Site Investigation Work Plan, Scott Aviation Site, Lancaster, NY."

Fetter, C.W., 1988. *Applied Hydrogeology, Second Edition*. Table 4-5, Page 80. Merrill Publishing Company, Columbus, Ohio.

Interstate Technology and Regulatory Cooperation Work Group (ITRC), May 1999. "Natural Attenuation of Chlorinated Solvents in Groundwater: Principles and Practices."

NYS Department of Health, Public Water Systems Part 5, Subpart 5-1, Table 1, revised January 13, 2004.

NYS Department of Environmental Conservation, Division of Environmental Remediation, Technical and Administrative Guidance Memorandum #4046 Determination of Soil Cleanup Objectives and Cleanup Levels - Recommended soil cleanup objectives, January 24, 1994.

NYS Department of Environmental Conservation, Division of Environmental Remediation, Spill Technology and Remediation Series (STARS) Memo #1 Petroleum-Contaminated Soil Guidance Policy, revised August 1992.

TABLES

Table 1

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

Geophysical Anomaly Investigation

Boring ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
DPT-18	3/29/2004	Plant #1 Parking Lot	Geophysical Anomaly E	8 feet	ND	0.5' slag and 2' saturated very fine sand
DPT-19	3/29/2004	Plant #1 Parking Lot	Adjacent to Anomaly E	4 feet	ND	No slag or saturated very fine sand
DPT-20	3/29/2004	Plant #2 Parking Lot	Geophysical Anomaly C	8 feet	ND	0.5' slag
DPT-21	3/29/2004	Plant #2 Parking Lot	Adjacent to Anomaly C	4 feet	ND	No slag
DPT-22	3/29/2004	Plant #2 Parking Lot	Geophysical Anomaly C	4 feet	ND	0.5' slag

Northern Area Investigation

Test Pit ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
TP-1	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-2	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-3	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	6 feet	ND	Native
TP-4	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-5	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	7 feet	ND	Native
TP-6	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-7	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-8	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-9	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-10	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-11	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	10 feet	ND	Native; sample collected
TP-12	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	7 feet	ND	Native
TP-13	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	5 feet	ND	Native
TP-14	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	6 feet	ND	Native
TP-15	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	6 feet	ND	Native; sample collected
TP-16	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-17	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Native
TP-18	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	12 feet	ND	Reworked native fill to 6'
TP-19	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Top soil
TP-20	3/23/2004	North of Plant #3	Areas inaccessible to geophysical survey	8 feet	ND	Tree logs

Plant No. 2 June 23, 1999 "Oil Spill" Area

Boring ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
DPT-9	3/26/2004	Adjacent to south side of Plant #2	Adjacent to Plant #2 oil spill location	16 feet	ND	
DPT-10	3/26/2004	Adjacent to south side of Plant #3	Adjacent to Plant #2 oil spill location	16 feet	ND	
DPT-11	3/26/2004	Adjacent to south side of Plant #4	Adjacent to Plant #2 oil spill location	16 feet	ND	Aqueous samples collected

Abandoned USTs

Boring ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
DPT-3	3/25/2004	Removed UST	Adjacent to UST location	11 feet	ND	
DPT-4	3/25/2004	Removed UST	Adjacent to UST location	16 feet	ND	Soil and aqueous samples collected
DPT-5	3/25/2004	Removed UST	Adjacent to UST location	17 feet	ND	
DPT-6	3/25/2004	Removed UST	Adjacent to UST location	18 feet	ND	
DPT-7	3/25/2004	Abandoned UST	Adjacent to UST location	19 feet	2ppm	
DPT-8	3/26/2004	Abandoned UST	Adjacent to UST location	20 feet	3ppm	Staining, odor, sheen observed; soil and aqueous samples collected ⁽¹⁾

Foundry Sand Investigation

Boring ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
DPT-1	3/25/2004	South of Plant #1 Parking Lot	Foundry sand	7 feet	ND	No foundry sand observed
DPT-2	3/25/2004	South of Plant #1 Parking Lot	Foundry sand	4 feet	ND	No foundry sand observed; sample collected
DPT-8	3/26/2004	South of Plant #1	Abandoned UST	16 feet	3	Foundry sand observed; sample collected
DPT-12	3/26/2004	South of Plant #1	Foundry sand	4 feet	ND	No foundry sand, staining observed; sample collected
DPT-13	3/26/2004	South of Plant #1	Foundry sand	8 feet	ND	Foundry sand observed; sample collected
DPT-14	3/26/2004	West of Plant #1	Foundry sand	0 feet	NA	No recovery
DPT-15	3/26/2004	West of Plant #2	Foundry sand	4 feet	ND	No foundry sand observed
DPT-16	3/26/2004	South of Plant #1	Foundry sand	4 feet	ND	No foundry sand observed
DPT-17	3/26/2004	South of Plant #1	Foundry sand	4 feet	ND	No foundry sand observed
HA-1	3/29/2004	South of Plant #1	Foundry sand	2 feet	ND	No foundry sand observed
HA-2	3/29/2004	South of Plant #1	Foundry sand	2 feet	ND	No foundry sand observed
TP-22	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	ND	Foundry sand observed; sample collected

West Side Plant No. 1 Investigation

Test Pit ID	Date	Location	Target	Depth	Hnu (ppm)	Comments
TP-21	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	ND	Trace foundry sand observed
TP-22	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	ND	Foundry sand observed; samples collected ⁽¹⁾
TP-23	3/29/2004	West side Plant #1	Suspected buried waste	2 feet	ND	Rust colored soil staining observed
TP-24A	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	50	Waste material observed to 2 feet; samples collected
TP-24B	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	ND	No waste visible
TP-24C	3/29/2004	West side Plant #1	Suspected buried waste	3 feet	50	Waste material observed on north sidewall of test pit
TP-25	3/29/2004	West side Plant #1	Suspected buried waste	3.5 feet	ND	No waste visible, sheen on seep

⁽¹⁾ Foundry sand observed and sampled; refer to Foundry Sand table and text for additional information.

Table 2

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

Northern Area Analytical Results - Soil (VOCs, SVOCs, Metals, and pH)

Location		TP-11	TP-11	TP-15	TP-15
Sample Identification		TP-11-0-1	TP-11-1-4	TP-15-0-1	TP-15-1-4
Interval		0-1'	1-4'	0-1'	1-4'
Date		3/23/2004	3/23/2004	3/23/2004	3/23/2004
Matrix		Soil	Soil	Soil	Soil
Constituent	TAGM #4046 Recommended Soil Clean-Up Objectives				
VOCs - Analytical Method 8260 plus STARS (µg/Kg)					
Methylene Chloride	100 ⁽¹⁾	ND	5 J	6 J	5 J
SVOCs - Analytical Method 8270 (µg/Kg)					
Phenanthrene	50,000 ⁽¹⁾	ND (410)	ND (410)	ND (440)	13J
Di-n-butyl phthalate	8,100	43 MJ	14 MJ	21 MJ	20 MJ
Flouranthene	50,000 ⁽²⁾	69 J	ND (410)	ND (440)	18 J
Pyrene	50,000 ⁽²⁾	53 J	ND (410)	ND (440)	16 J
Benzo(a)anthracene	224 or MDL	25 J	ND (410)	ND (440)	ND (420)
Chrysene	400	32J	ND (410)	ND (440)	ND (420)
Bis(2-ethylhexyl) phthalate	50,000 ⁽²⁾	51 MJ	50 MJ	48 MJ	60 MJ
Benzo(a)fluoranthene	1,100	32 J	ND (410)	ND (440)	ND (420)
Benzo(k)fluoranthene	1,100	23 J	ND (410)	ND (440)	ND (420)
Benzo(a)pyrene	61 or MDL	28 J	ND (410)	ND (440)	ND (420)
Indeno(1,2,3-cd)pyrene	3,200	19 J	ND (410)	ND (440)	ND (420)
Benzo(g,h,i)perylene	50,000 ⁽²⁾	22 J	ND (410)	ND (440)	ND (420)
Metals - Analytical Methods 6010 and 7471 (Mercury) (mg/Kg)					
	Eastern USA Background ⁽³⁾	Cleanup Objective ⁽⁴⁾			
Aluminum	33,000	SB	11,400 E	13,900 E	16,700 E
Arsenic	3-12**	7.5 or SB	5.4	8.1	9.3
Barium	15 - 600	300 or SB	33.1 E	80.9 E	85.7 E
Beryllium	0 - 1.75	0.16 or SB	0.40 B	0.66	0.74
Cadmium	0.1 - 1	1 or SB	0.31 B	0.35 B	0.30B
Calcium	130 - 35,000 ***	SB	1,040 E	56,500 E	1,670 E
Chromium	1.5 - 40 ***	10 or SB	11.3 E	17.5 E	19.4 E
Cobalt	2.5 - 60 **	30 or SB	5.5 BE	11.7 E	13.4 E
Copper	1 - 50	25 or SB	11.3 E	27.2 E	11.1 E
Iron	2,000 to 550,000	2,000 or SB	16,800 E	25,200 E	32,600 E
Lead	****	SB****	17.5 E*	12.5 E*	22.3 E*
Magnesium	100 - 5,000	SB	1,960E	18,200 E	4,090 E
Manganese	50 - 5,000	SB	127 NE*	540 NE*	557 NE*
Mercury	0.001 - 0.2	0 - 1	0.062	0.026	0.053
Nickel	0.5 - 25	13 or SB	13.5 *	28.1 E	20.3 E
Potassium	8,500 - 43, 000 **	SB	792 E	2,370 E	1,640 E
Selenium	0.1 - 3.9	2 or SB	0.99 B	ND (0.38)	1.1 B
Silver	N/A	SB	ND (0.05)	ND (0.06)	0.07 B
Sodium	6,000 - 8,000	SB	27.6	114 B	55.1 B
Vanadium	1 - 300	150 or SB	22.5 E	25 E	32.9 E
Zinc	9 - 50	20 or SB	56.2 E	60.3 E	76.4 E
Leachable pH - Analytical Method 9045					
Leachable pH	None available	None available	5.02	7.91	5.72
					6.37

Notes

- (1) TAGM #4046 - Recommended soil cleanup objectives (ug/kg or ppb)
 (2) As per TAGM # 4046, total VOCs < 10,000 ppb, total semi-VOCs <500,000 ppb and individual semi-VOCs <50,000 ppm
 (3) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Eastern USA Background
 (4) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Recommended Soil Cleanup Objective (average background concentrations as reported in a 1984 survey of reference material by E. Carol McCovern, NYSDEC)
- TAGM Technical and Administrative Guidance Memorandum
 TP Test Pit
 SB Site Background (analytical results presented in this table are considered representative of site background)
 NA Not Applicable
 ND (0.06) Not detected above the associated reporting limit (presented in parentheses)
 VOCs Volatile Organic Compounds
 SVOCs Semi-Volatile Organic Compounds
 M Analyte found in associated blank, as well as in the sample
 B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit
 J Indicates an estimated value
 E Indicates a value estimated or not reported due to the presence of interferences
 * Indicates analysis is not within the quality control limits
 N Indicates spike sample recovery is not within the quality control limits
 ** New York State background
 *** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable.
 **** Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective
 Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average background levels in metropolitan or suburban areas near highways are much higher and typically range from 200 - 500 ppm.
- µg/Kg micrograms per kilogram (ppb - parts per billion)
 mg/Kg milligrams per kilogram (ppm - parts per million)

Table 3

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

Plant No. 2 June 23, 1999 "Oil Spill" Area Analytical Results- Aqueous (TPH, VOC plus MTBE, SVOCs, and Metals)

Location		DPT-11
Sample ID		DPT-11
Interval		NA
Date		3/26/2004
Matrix		Aqueous
Constituent	6NYCRR Part 703 Class GA Groundwater Standard	
TPH (Petroleum Products) - Analytical Method 310.13 (µg/L)		
Fuel Oil #2	None available	ND (960)
Fuel Oil #4	None available	ND (960)
Fuel Oil #6	None available	ND (960)
Gasoline	None available	ND (960)
Kerosene	None available	ND (960)
Motor Oil	None available	ND (960)
Other-1	None available	ND (960)
VOCs - Analytical Method 8260 plus STARS (µg/L)		
Vinyl chloride	2	32
Chloroethane	50	70
Acetone	50	120
1,1-Dichloroethene	5	120
1,1-Dichloroethane	5	9 J
2-Butanone	50	13
trans-1,2-Dichloroethene	5	94
cis-1,2-Dichloroethene	5	9 J
Methyl tert butyl ether (MTBE)	10 ⁽¹⁾	ND (10)
SVOCs - Analytical Method 8270 (µg/L)		
No SVOCs were detected.		Not Applicable
		ND
Metals - Analytical Methods 6010 and 7471 (Mercury) (mg/L)		
Aluminum	2,000	11,200
Arsenic	50	49
Barium	2,000	677
Beryllium	None available	4.7 B
Cadmium	10	6.3
Calcium	None available	177,000
Chromium	None available	148
Cobalt	None available	67.5
Copper	1,000	184
Iron	600	144,000
Lead	50	167
Magnesium	None available	75,500
Manganese	600	2,860
Nickel	200	154
Potassium	None available	18,000
Selenium	20	10.5 B
Sodium	None available	12,000
Vanadium	None available	186
Zinc	5,000	604

Notes

- (1) NYSDOH Public Water Systems Part 5, Subpart 5-1, revised January 13, 2004
Table 1. Inorganic Chemicals and Physical Characteristics.
- | | |
|----------|--|
| 167 | Constituent detected above 6NYCRR Part 703 Class GA Groundwater Standard |
| ND (960) | Not detected above the associated reporting limit (presented in parentheses) |
| ND | Not Detected |
| TPH | Total Petroleum Hydrocarbons |
| VOCs | Volatile Organic Compounds |
| SVOCs | Semi-Volatile Organic Compounds |
| B | Indicates a value greater than or equal to the instrument detection limit but less than the quantitation limit |
| J | Indicates an estimated value |
| NA | Not Applicable |
| µg/L | micrograms per liter (ppb - parts per billion) |
| mg/L | milligrams per liter (ppm - parts per million) |

Table 4

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

USTs Analytical Results - Aqueous (VOCs plus MTBE, DRO, Lead and Cyanide)

Location		DPT-4	DPT-8
Sample Identification		DPT-4	DPT-8
Interval		NA	NA
Date		3/25/2002	3/26/2004
Matrix		Aqueous	Aqueous
6NYCRR Part 703 Class GA Groundwater Standard			
Constituent			
VOCs - Analytical Method 8260 plus STARS (µg/L)			
Vinyl chloride	2	ND (10)	4 J
Chloroethane	50	ND (10)	14
Acetone	50	120 D	71
1,1-Dichloroethane	5	ND (10)	31
1,2-Dichloroethane	5	ND (10)	22
Trichloroethene	5	ND (10)	8 J
cis-1,2-Dichloroethene	5	ND (10)	5 J
Methyl tert butyl ether (MTBE)	10 ⁽¹⁾	ND (10)	ND (10)
DRO - Analytical Method 8015B (mg/L)			
DRO	None available	ND (0.48)	20
Lead - Analytical Method 6010 (mg/L)			
Lead	None available	335 E	1,610 E
Cyanide - Total - Analytical Method 9012 (µg/L)			
Cyanide	None available	NA	NA

Notes

- (1) NYSDOH Public Water Systems Part 5, Subpart 5-1, revised January 13, 2004, Table 1.
Inorganic Chemicals and Physical Characteristics.

167	Constituent detected above 6NYCRR Part 703 Class GA Groundwater Standard
NA	Not Analyzed
DPT	Direct Push Technology
DRO	Diesel Range Organics
ND (10)	Not detected above the associated reporting limit (presented in parentheses)
VOCs	Volatile Organic Compounds
J	Indicates an estimated value
D	Identifies compounds identified in secondary dilution
E	Indicates a value estimated or not reported due to the presence of interferences
µg/L	micrograms per liter (parts per billion)
mg/L	milligram per liter (parts per million)

Table 5

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

USTs Analytical Results - Soil (VOCs plus MTBE, DRO, Lead and Cyanide)

Location		DPT-4	DPT-8	
Sample Identification		DPT-4-6-8	DPT-8-9-10	
Interval		6-8'	9-10'	
Date		3/25/2004	3/26/2004	
Matrix		Soil	Soil	
Constituent	TAGM #4046 Recommended Soil Clean- Up Objectives ⁽¹⁾			
VOCs - Analytical Method 8260 plus STARS (µg/Kg)				
Methylene Chloride	100	5 J	5 J	
1,1-Dichloroethane	200	ND (12)	14	
1,2-Dichloroethane	100	ND (12)	2 J	
Trichloroethene	700	ND (12)	98	
cis-1,2-Dichloroethene	None available	ND (12)	13	
Methyl tert butyl ether (MTBE)	1,000 ⁽⁴⁾	ND (12)	ND (12)	
DRO - Analytical Method 8015B (mg/Kg)				
DRO		None available	8.8 J	140
		Eastern USA Background ⁽²⁾	Recommended Soil Cleanup Objective ⁽³⁾	
Lead - Analytical Method 6010 (mg/Kg)				
Lead	****	SB****	13.0	30.9
Cyanide - Total - Analytical Method 9012 (µg/Kg)				
Cyanide	None available	***	NA	ND (4,425)

Notes

- (1) TAGM #4046 - Recommended soil cleanup objectives (ug/kg or ppb)
 (2) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Eastern USA Background
 (3) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Recommended Soil Cleanup Objective (average background concentrations as reported in a 1984 survey of reference material by E. Carol McCovern, NYSDEC)
 (4) STARS - TCLP alternative guidance value for gasoline contaminated soil (ug/kg or ppb)
 NA Not Analyzed
 DPT Direct Push Technology
 DRO Diesel Range Organics
 ND (10) Not detected above the associated reporting limit (presented in parentheses)
 VOCs Volatile Organic Compounds
 J Indicates an estimated value
 *** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable. Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective
 **** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average background levels in metropolitan or suburban areas near highways are much higher and typically range from 200 - 500 ppm.
 SB Site Background (analytical results presented in Table 9 (Northern Area) are considered representative of site background)
 µg/kg micrograms per kilogram (ppb - parts per billion)
 mg/kg milligram per kilogram (ppm - parts per million)

Table 6

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

Foundry Sand Analytical Results - Soil (VOCs, Metals, Cyanide, and Phenols)

Location	DPT-2	DPT-8	DPT-12	DPT-13	DPT-17	TP-22		
Sample Identification	DPT-2-2-4	DPT-8-0-1	DPT-12-0-1	DPT-13-1-2	DPT-17-1-2	TP-22-0-1		
Interval	2-4'	0-1'	0-1'	1-2'	1-2'	0-1'		
Date	3/25/2004	3/26/2004	3/26/2004	3/26/2004	3/26/2004	3/29/2004		
Matrix	Soil	Soil	Soil	Soil	Soil	Soil		
Foundry Sand Observed	no	yes	no	yes	no	yes		
Constituent	TAGM #4046 Recommended Soil Clean-Up Objectives ⁽¹⁾							
VOCs - Analytical Method 8260 plus STARS (µg/Kg)								
Vinyl Chloride	200	ND (12)	3 J	ND (13)	ND (15)	ND (12)		
Chloroethane	1,900	ND (12)	230	ND (13)	3 J	ND (12)		
Methylene Chloride	100	ND (12)	ND (12)	ND (13)	7 J	ND (12)		
Acetone	200	ND (26)	400 E	ND (13)	120	ND (28)		
Carbon Disulfide	2,700	ND (12)	4 J	ND (13)	ND (15)	ND (12)		
1,1-Dichloroethane	200	ND (12)	39	ND (13)	5 J	ND (12)		
1,2-Dichloroethane	100	ND (12)	32	ND (13)	ND (15)	ND (12)		
1,1,1-Trichloroethane	800	ND (12)	ND (12)	ND (13)	ND (15)	ND (12)		
2-Butanone	300	ND (12)	72	ND (13)	26	ND (12)		
Trichloroethene	700	ND (12)	3 J	ND (13)	ND (15)	ND (12)		
cis-1,2-Dichloroethene	None available	ND (12)	4 J	ND (13)	5 J	ND (12)		
Methyl tert butyl ether (MTBE)	1,000 ⁽⁴⁾	ND (12)	ND (12)	ND (13)	ND (15)	ND (12)		
Metals - Analytical Methods 6010 and 7471 (Mercury) (mg/Kg)								
	Eastern USA Background ⁽²⁾	Recommended Soil Cleanup Objective ⁽³⁾						
Aluminum	33,000	SB	12800 E	75900 E	13200 E	17900 E	17400 E	5540
Antimony	N/A	SB	0.80 BN	4.2 BN	1.0 BN	1.4 BN	0.78 BN	ND (0.37)N
Arsenic	3-12**	7.5 or SB	9	7.8	8.3	6	7.6	2.7*
Barium	15 - 600	300 or SB	76.2 E	224 E	69.2 E	65 E	152 E	36.1
Beryllium	0 - 1.75	0.16 or SB	0.66	0.52 B	0.61 B	0.51 B	0.83	0.25 B
Cadmium	0.1 - 1	1 or SB	0.53 B	166	0.65 B	2.1	0.69	2.6*
Calcium	130 - 35,000 ***	SB	34700 E*	13000 E*	3480 E*	23700 E*	3190 E*	49800
Chromium	1.5 - 40 ***	10 or SB	17.1 E	440 E	14.8 E	98.4 E	21.2 E	84.8 N*
Cobalt	2.5 - 60 **	30 or SB	12.1 E	16 E	5.6 BE	6.5 BE	10.8 E	2.7 B
Copper	1 - 50	25 or SB	26.6	33100	16.2	96.6	18.9	65.2 N*
Iron	2,000 to 550,000	2,000 or SB	26000 E	46400 E	20900 E	21200 E	26700 E	11100
Lead	****	SB****	14.2	1760	29.7	156	19.2	40.8*
Magnesium	100 - 5,000	SB	14400	2750	2270	11600	4860	4960
Manganese	50 - 5,000	SB	521 E	731 E	195 E	232 E	502 E	301
Mercury	0.001 - 0.2	0 - 1	0.020 B	0.53	0.097	0.099	0.025	0.199
Nickel	0.5 - 25	13 or SB	29.2 E	66.5 E	13.3 E	28 E	29.3 E	14.4
Potassium	8,500 - 43,000 **	SB	2070 E	459 BE	1120 E	1080 E	1700 E	557 B
Selenium	0.1 - 3.9	2 or SB	1.1 B	7.8	1.7 B	1.2 B	0.48 B	0.51 B
Silver	N/A	SB	0.20 B	4.1	0.26 B	0.67 B	0.16 B	0.47 B
Sodium	6,000 - 8,000	SB	165	1590	112 B	171 B	103 B	71.7 B
Thallium	N/A	SB	ND (0.43)	ND (0.45)	0.62 B	ND (0.55)	ND (0.46)	ND (0.42)
Vanadium	1 - 300	150 or SB	23.9 E	21.9 E	28.6 E	26.9 E	30.5 E	7.2
Zinc	9 - 50	20 or SB	63.3 E	17100 E	75.8 E	561 E	71 E	206 N
Cyanide - Total - Analytical Method 5012 (µg/Kg)								
Cyanide - Total -	N/A	***	NA	ND (5012)	NA	NA	NA	NA
Total Recoverable Phenolics - Analytical Method 9066 (µg/g)								
Total Recoverable Phenolics	Not applicable	Not applicable	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

Notes

- (1) TAGM #4046 - Recommended soil cleanup objectives (ug/kg or ppb)
 - (2) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Eastern USA Background
 - (3) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Rec. Soil Cleanup Objective
 - (4) STARS - TCLP alternative guidance value for gasoline contaminated soil (ug/kg or ppb)
- DPT Direct Push Technology
- 167 Constituent detected above Recommended Soil Clean-up Objective
- ND (0.45) Not detected above the associated reporting limit (presented in parentheses)
- VOCs Volatile Organic Compounds
- B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit
- J Indicates an estimated value
- * Indicates analysis is not within the quality control limits
- N Indicates spike sample recovery is not within the quality control limits
- E Concentration exceeded the calibration range of the instrument
- NA Not Analyzed
- SB Site Background (analytical results presented in Table 9 (Northern Area) are considered representative of site background)
- ** New York State background
- *** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable. Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective.
- **** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average background levels in metropolitan or suburban areas near highways are much higher and typically range from 200 - 500 ppm.
- µg/Kg micrograms per kilogram (ppb - parts per billion)
- mg/Kg milligrams per kilogram (parts per million)
- µg/g micrograms per gram (parts per million)

Table 7

Scott Aviation Facility
Lancaster, New York
Phase II Environmental Site Investigation

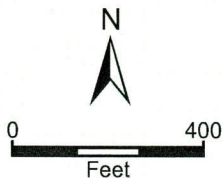
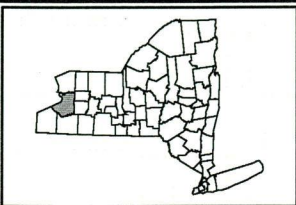
West Side Plant No. 1 Analytical Results - Soil (VOCs, SVOCs, Metals, Cyanide, and pH)

Location		TP-24A
Sample Identification		TP-24-3
Interval		3'
Date		3/29/2004
Matrix		Soil
Constituent	TAGM #4048 Recommended Soil Clean-Up Objectives	
VOCs - Analytical Method 8260 plus STARS (µg/Kg)		
Vinyl Chloride	200 ⁽¹⁾	3 J
Chloroethane	1,900	28
Acetone	200	46
1,1-Dichloroethane	200	3,600 D
1,1,1-Trichloroethane	800	18,000 D
Trichloroethene	700	60
1,1,2-Trichloroethane	None available	39
Benzene	60	7 J
4-Methyl-2-pentanone	1,000	8 J
Tetrachloroethane	1,400	6 J
Toluene	1,500	28,000 D
Ethylbenzene	5,500	8,400 D
Total Xylenes	1,200	140,000 D
1,1,2-Trichloro-1,2,2-trifluor	None available	7,100 D
cis-1,2-Dichloroethene	None available	4,400 D
Cyclohexane	None available	9J
Methylcyclohexane	None available	37
Isopropylbenzene	None available	98
sec-Butylbenzene	None available	2 J
n-Propylbenzene	None available	19
p-Cymene	None available	2 J
1,2,4-Trimethylbenzene	None available	68
1,3,5-Trimethylbenzene	None available	36
SVOCs - Analytical Method 8270 (µg/Kg)		
Phenol	30 or MDL ⁽²⁾	640
2-Methylphenol	100 or MDL	910
Acetophenone	None available	520
4-Methylphenol	100 or MDL	6,600 D
2,4-Dimethylphenol	None available	11,000 D
Naphthalene	13,000	120 J
2-Methylnaphthalene	36,400	59 J
2,4,5-Trichlorophenol	100	39 J
Biphenyl	None available	20 J
Pentachlorophenol	100 or MDL	26 J
Phenanthrene	50,000 ⁽³⁾	64 J
Anthracene	50,000 ⁽³⁾	13 J
Di-n-butyl phthalate	8,100	66 J
Fluoranthene	50,000 ⁽³⁾	85 J
Pyrene	50,000 ⁽³⁾	51 J
Benzo(a)anthracene	224 or MDL	30 J
Chrysene	400	28 J
Bis(2-ethylhexyl)phthalate	50,000 ⁽³⁾	2,000
Metals - Analytical Methods 6010 and 7471 (Mercury) (mg/Kg)		
	Eastern USA Background ⁽⁴⁾	Recommended Soil Cleanup Objective ⁽⁵⁾
Aluminum	33,000	SB
Arsenic	3-12**	7.5 or SB
Barium	15 - 600	300 or SB
Beryllium	0 - 1.75	0.16 or SB
Cadmium	0.1 - 1	1 or SB
Calcium	130 - 35,000 ***	SB
Chromium	1.5 - 40 ***	10 or SB
Cobalt	2.5 - 60 **	30 or SB
Copper	1 - 50	25 or SB
Iron	2,000 to 550,000	2,000 or SB
Lead	***	SB***
Magnesium	100 - 5,000	SB
Manganese	50 - 5,000	SB
Mercury	0.001 - 0.2	0 - 1
Nickel	0.5 - 25	13 or SB
Potassium	8,500 - 43,000 **	SB
Selenium	0.1 - 3.9	2 or SB
Silver	N/A	SB
Sodium	6,000 - 8,000	SB
Vanadium	1 - 300	150 or SB
Zinc	9 - 50	20 or SB
Cyanide - Total - Analytical Method 5012 (µg/Kg)		
Cyanide - Total	N/A	***
Leachable pH - Analytical Method 9045		
Leachable pH	None available	None available

Notes

- (1) TAGM #4046 - Recommended soil cleanup objectives (µg/kg or ppb)
 (2) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Eastern USA Background
 (3) As per TAGM # 4046, total VOCs < 10,000 ppb, total semi-VOCs < 500,000 ppb and individual semi-VOCs < 50,000 ppm
 (4) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Eastern USA Background
 (5) TAGM #4046 - Recommended soil cleanup objectives (mg/kg or ppm) - Recommended Soil Cleanup Objective (average background concentrations as reported in a 1984 survey of reference material by E. Carol McCovern, NYSDDEC).
 TP Test Pit
 167 Constituent detected above Recommended Soil Clean-Up Objective
 ND (4914) Not detected above the associated reporting limit (presented in parentheses)
 VOCs Volatile Organic Compounds
 SVOCs Semi-Volatile Organic Compounds
 J Indicates an estimated value
 D Identifies compounds identified in secondary dilution
 B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit
 E Concentration exceeded the calibration range of the instrument
 NA Not Analyzed
 SB Site Background (analytical results presented in Table 9 (Northern Area) are considered representative of site background)
 ** New York State background
 *** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable.
 **** Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective
 Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4 - 61 ppm. Average background levels in metropolitan or suburban areas near highways are much higher and typically range from 200 - 500 ppm
 µg/kg micrograms per kilogram (ppb - parts per billion)
 mg/Kg milligrams per kilogram (ppm - parts per million)

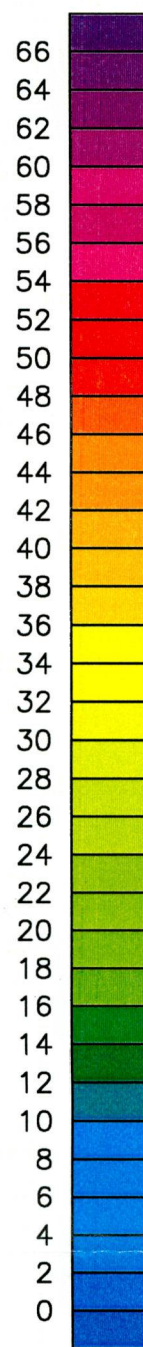
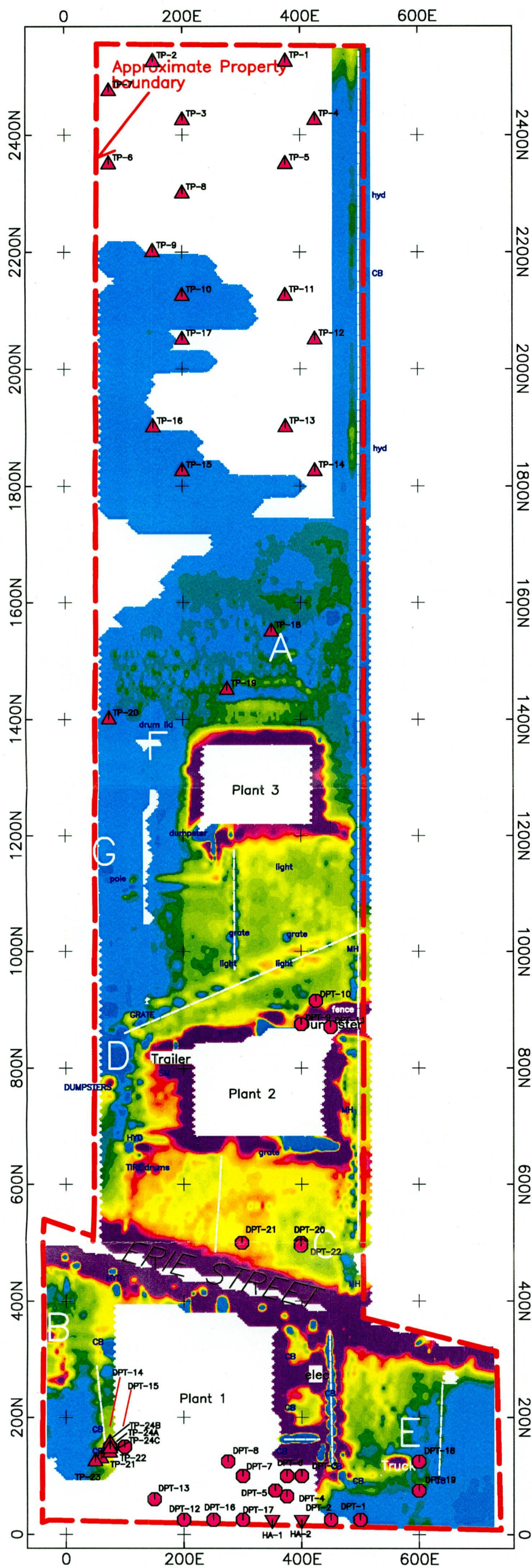
FIGURES



TYCO - SCOTT AVIATION
Lancaster, New York
PHASE II SITE INVESTIGATION
SITE LAYOUT



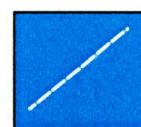
A Tyco Infrastructure Services Company



EM31 Conductivity Data
(mS/m)



Geophysical anomaly
discussed in report



Interpreted linear anomaly



TP-1
Test Pit Location and Designation



DPT-1
DPT Location and Designation



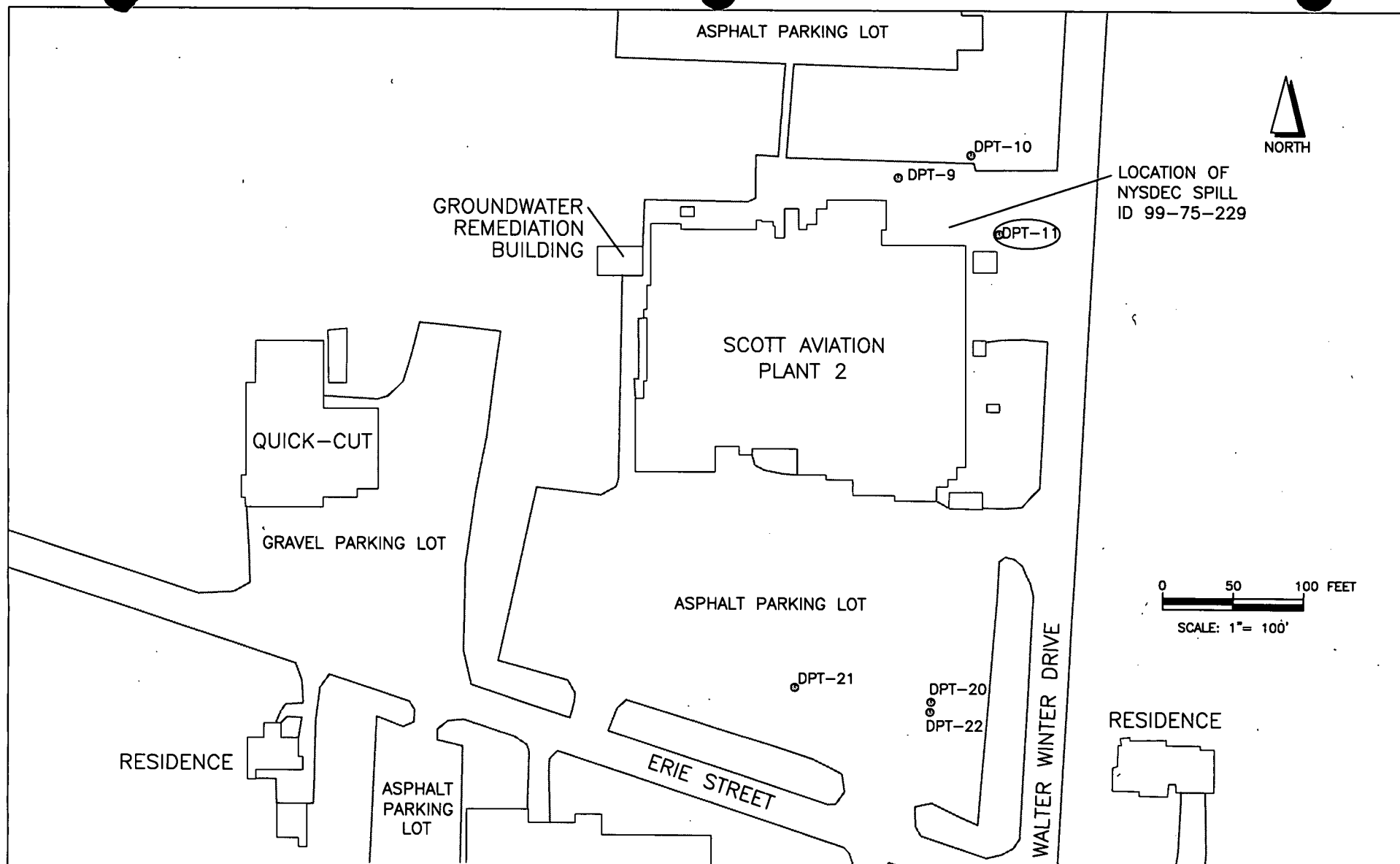
HA-1
Hand Auger Location and Designation

Figure 2

Phase II Investigation Locations

Scott Aviation Property
Erie Ave
Lancaster, NY
Earth Tech

Figure adapted from Geomatrix geophysical report



LEGEND

⊙ DPT-1

DPT LOCATION AND
DESIGNATION

⊙ DPT-1

AQUEOUS SAMPLE OBTAINED AT THIS LOCATION EXCEEDS
6NYCRR PART 703 CLASS GA GROUNDWATER STANDARDS

NOTES: 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE. MAP CREATED BY DIGITIZING AN AERIAL PHOTOGRAPH.
2. SOIL AND/OR GROUNDWATER SAMPLES WERE NOT OBTAINED AT EVERY LOCATION SHOWN.

PHASE II INVESTIGATION PLANT 2 SOIL BORING LOCATIONS

Date 05-04

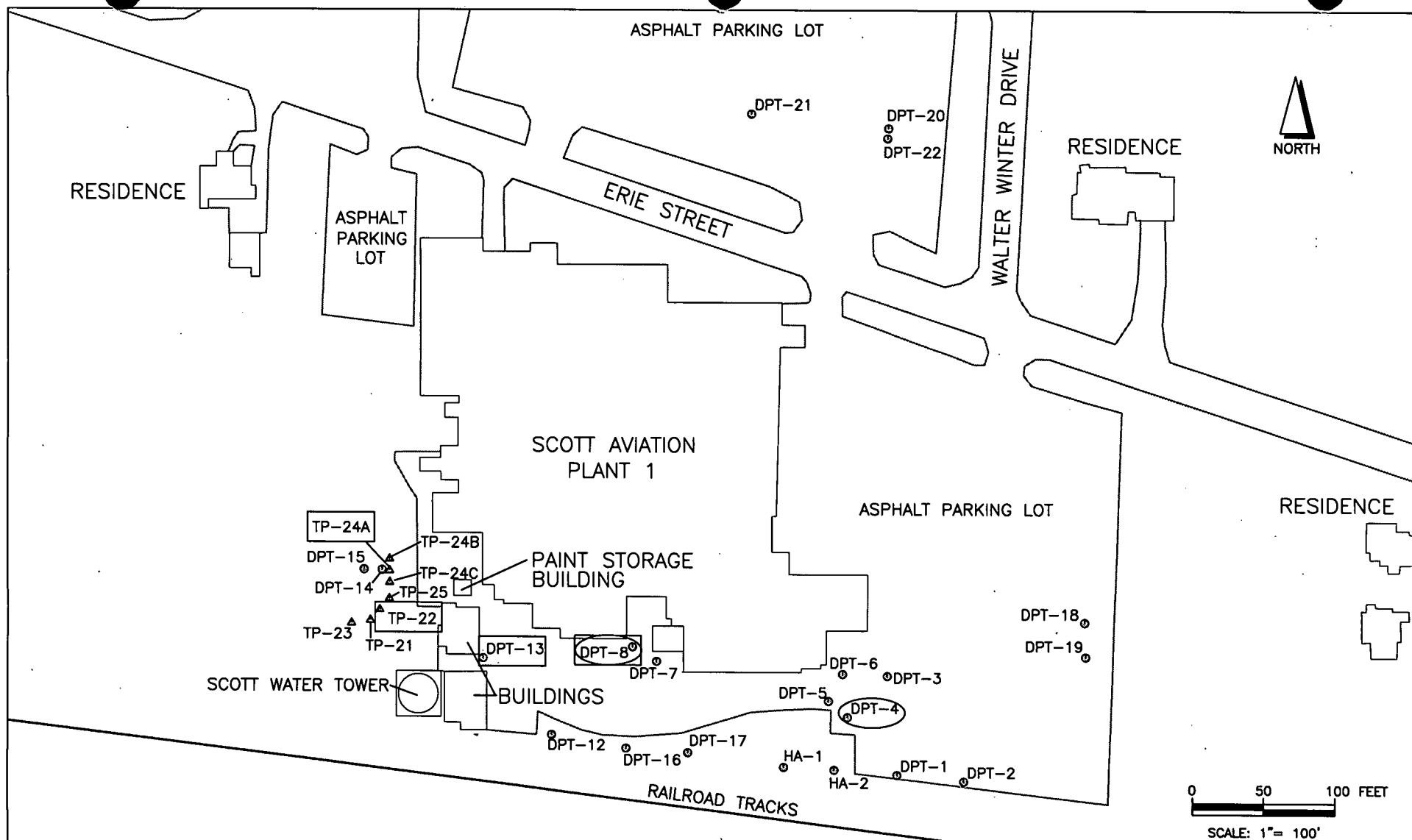
SCOTT AVIATION

Figure

Project No.
76482.01

EARTH  TECH

3



LEGEND

▲ TP-1	TEST PIT LOCATION AND DESIGNATION	○ DPT-1	AQUEOUS SAMPLE OBTAINED AT THIS LOCATION EXCEEDS 6NYCRR PART 703 CLASS GA GROUNDWATER STANDARDS
○ DPT-1	DPT LOCATION AND DESIGNATION	□ DPT-1	SOIL SAMPLE OBTAINED AT THIS LOCATION EXCEEDS TAGM #4046 RECOMMENDED SOIL CLEAN-UP OBJECTIVES

NOTES: 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE. MAP CREATED BY DIGITIZING AN AERIAL PHOTOGRAPH.
 2. SOIL AND/OR GROUNDWATER SAMPLES WERE NOT OBTAINED AT EVERY LOCATION SHOWN.

PHASE II INVESTIGATION PLANT 1 SOIL BORING AND TEST PIT LOCATIONS

Date 05-04	SCOTT AVIATION	Figure
Project No. 76482.01	EARTH  TECH	4

APPENDIX I
GEOPHYSICAL REPORT

90B John Muir Drive
Amherst, New York 14228
(716) 565-0624 • Fax (716) 565-0625



April 6, 2004

Dino Zack
Geologist
Earth Tech, Inc.
University Corporate Centre, Suite 341
100 Corporate Parkway
Amherst, NY 14226

**Subject: Proposed Geophysical Survey,
Scott Aviation Property, Lancaster, NY**

Dear Mr. Zack,

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for Earth Tech, Inc. in support of their investigation of the Scott Aviation Property located in Lancaster, NY (the Site). The site is approximately 26 acres in size. Approximately half of the site is asphalt paved with the remainder sparsely to heavily vegetated.

The objective of the geophysical investigation was to geophysically characterize the site by identifying anomalies with potential environmental significance. A portion of the northern area of the Site is covered with dense vegetation which limited our ability to acquire geophysical data.

A geophysical investigation was performed at the Site utilizing frequency domain electromagnetic techniques. Geomatrix Consultants, Inc. (Geomatrix) performed the data acquisition between March 18 -21, 2004. Preliminary data were supplied to Earth Tech on March 22, 2004.

The geophysical results presented herein are intended to serve as a guide to focus any future intrusive investigations, if warranted. Additional collaborative data are generally necessary to confirm geophysical anomalies.

METHODOLOGY

The following sections present the geophysical methodology utilized for this investigation.

2.1 Reference Grid

A reference grid was installed by Geomatrix personnel to facilitate data acquisition along lines spaced 12.5 feet apart. The grid consisted of alternating orange and yellow pin flags (vegetated areas) and/or spray painted markings (asphalt-paved areas) nominally spaced at 100 ft by 25 ft intervals. Select grid coordinates were labeled to assure that grid coordinates could be reoccupied if necessary. Surface features were annotated on-site to assist with geophysical data interpretation.

2.2 Electromagnetic EM31 Survey Methodology

A Geonics EM31 Terrain Conductivity meter was used to measure and record the quadrature component (ground conductivity) and the inphase component of the EM field along the survey lines. The quadrature component of the EM field is a measurement of the apparent ground conductivity. The inphase component of the EM field is sensitive to metallic objects. Comparison of the quadrature component of the EM field data (expressed in units of milliSiemens per meter (mS/m)) and the inphase component data (expressed in units of parts per



EM31 in use at the site

thousand (ppt)) results in increased anomaly definition. The character of the EM response, low or high, is partially dependent on the orientation of the buried target relative to the orientation of the EM31 device during data acquisition, and the survey direction. A buried metal pipe, for example, will exhibit a high valued response when the trend of the pipe is parallel to the survey direction. Alternatively, when a survey line crosses a buried metal pipe whose trend is perpendicular to the survey direction, it is characterized by a low response. Similarly, other complex buried metal anomalies are indicated by a coupling of a high and low response.

All readings were taken with the instrument oriented parallel to the direction of travel, in the vertical dipole mode and with the instrument at waist height. The depth of penetration with the instrument in this configuration is approximately 12 to 15 feet below ground surface. Data were collected and stored in a solid state memory data logger during the survey. The data logger was interfaced to a portable computer and the data were transferred to a floppy disk for subsequent processing and interpretation. A survey base station was established on-site and was revisited throughout the survey to check for instrument drift and malfunction. No significant drift or malfunction was observed.

The terrain conductivity and inphase data were initially edited and then plotted as profile lines for interpretation. Contour maps of the data were then constructed and utilized for final interpretation. The geophysical data are presented in final form as a series of color contour maps. The color maps allow for an illustration of detected anomalies that are associated with conductive materials such as buried metals, wastes, fill, utilities, and changes in soil texture and/or moisture content.

3.0 RESULTS

The geophysical conductivity and inphase data from the EM31 survey are presented as color contour maps in Figure 1 and 2, respectively. Conductivity values at the site were observed to range from below 0 mS/m to over 70 mS/m. This variation in conductivity may be related to any one or combination of the following conditions:

- A change in soil/fill type. For example, an increase in relative clay content may increase the measured conductivity;
- A change in soil moisture. Moisture content would be expected to increase in areas of low topographic elevation as more saturated sediments lie within the depth of investigation of the EM instrument;
- A change in pore fluid specific conductance. For example, the presence of salt-impacted water within the pore space of the shallow soil will increase the measured conductivity primarily due to the presence of chloride ions; or
- Interference from surface or buried metallic anthropogenic features such as power lines, fences, pipes, and metallic structures.

The EM-31 inphase data are presented in Figure 2. The inphase component of the electromagnetic field, measured by the EM-31, is sensitive to buried metals. The inphase response is proportional to the conductivity response in areas of high conductivity. Where the

conductivity is highly variable over a relatively short lateral distance, data interpretation and anomaly identification are difficult.

The following labeled anomalies are interpreted to be potentially significant:

Anomaly A is an anomalous zone in the eastern portion of a sparsely vegetated field north of Plant 3. Construction and Demolition (C&D) debris were observed coincident with this anomaly. The inphase data is highly variable in this area suggesting the presence of surface or buried metals.

Anomaly B is located in a grassy area west of Plant 1 in close proximity to a neighboring residence. The conductivity data of Figure 1 suggests a linear buried metallic feature. The adjacent property owner indicated that he installed a buried dog fence in this area. If this fence had been energized, it might explain the observed response.

Anomalies C and E are characterized by a moderately high inphase response in the southeast portion of the Plant 2 parking area (C) and the center of the Eastern Plant 1 parking area (E). These anomalous areas appear rectilinear in nature suggesting a man-made source. These anomalies may be due to conductive fill material.

Anomalous Areas D, F, and G are located near the western property boundary in the Plant 2 and Plant 3 areas. These anomalies are characterized by inphase values (and to a lesser extent, conductivity values) fluctuating rapidly over a short distance. These areas likely contain buried metals. A drum lid was observed at surface in the vicinity of Anomaly F. A utility pole is present near Anomaly G and this anomaly may be related to a guy wire or buried lines.

Should an intrusive investigation identify significant environmental concerns associated with any of these anomalies, it would be prudent to review the data and identify other unlabeled anomalies with similar characteristics.

4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, tractor trailers, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

Earth Tech, Inc.
April 6, 2004

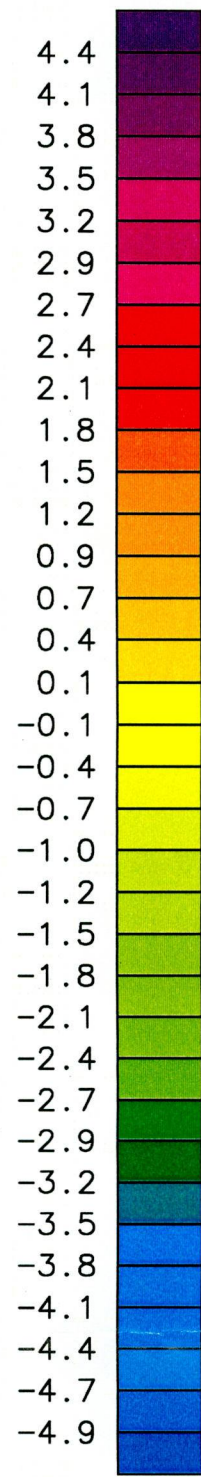
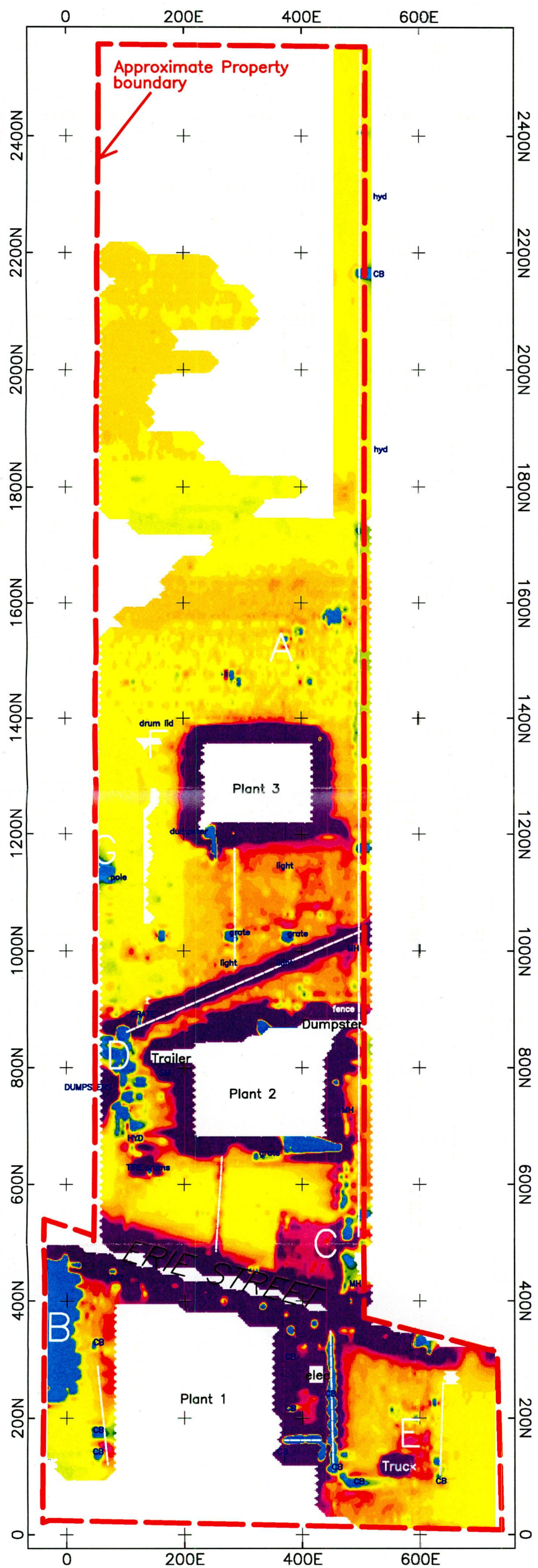


Page 5

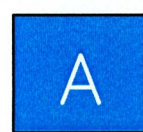
Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

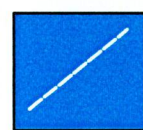
John Luttinger
Senior Geophysicist



Inphase Response
(ppt)



Geophysical anomaly
discussed in report



Interpreted linear anomaly

Figure 2

Geophysical Survey Results
Color Contours of EM31 Data
Inphase Data (ppt)

Scott Aviation Property
Erie Ave
Lancaster, NY
Earth Tech

Geomatrix (716) 565-0624

APPENDIX II
FORM I ANALYTICAL DATA REPORTS

Tyco / Scott Aviation Facility
Canaster, NY
Phase II Environmental Site
Investigation Summary Report

Is it live or is it Memorex?
Memorex



June 2004

Appendix II Analytical Reports

CD-I

RECORD

APPENDIX III
DPT BORING LOGS

BORING LOG

Boring No.: (DPT-1)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.7' ASPHALT with blue-gray slag base. 0.7 - 4' Reddish brown SILTY CLAY, some mottled gray silty clay, trace rootlets, trace gravel, native (dry).		
2				ND			
3				ND			
4				ND			
5			3	ND	Reddish brown SILTY CLAY, some mottled gray silty clay, trace gravel, stiff, native (dry).		
6				ND			
7				ND			
8							
9					Borehole depth - 8'. Abandon boring with spoils and top with asphalt.		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-2)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	1' ASPHALT with blue-gray slag base.		
2				ND	1 - 4' Reddish brown SILTY CLAY, trace mottled gray and olive silty clay, trace gravel, stiff, native (dry).		
3				ND			
4				ND	Sample: DPT-2-2-4 (0945hrs) VOC, Phenols, Metals		
5					Borehole depth - 4'.		
6					Abandon boring with spoils and top with asphalt.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-3)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			3	ND	0.5' ASPHALT 0.5 - 3' Reddish brown SILTY CLAY, trace mottled gray and olive silty clay, trace gravel, possibly native (dry).		
2				ND			
3				ND			
4							
5			4	ND	Reddish brown SILTY CLAY, some mottled tan to gray silty clay, trace gravel, native, stiff (dry).		
6				ND			
7				ND			
8				ND			
9			0.3		Refusal at 11'. Liner stuck in core barrel. Reddish brown SILTY CLAY, stif (dry) in core barrel tip.		
10							
11				ND			
12							
13					Borehole depth - 12'. Abandon boring with spoils and top with asphalt.		
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-4)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0.5' TOPSOIL		
2				ND	0.5 - 4' Reddish brown SILTY CLAY, trace mottled gray and olive silty clay, trace gravel, native, stiff (dry).		
3				ND			
4				ND			
5			4	ND	Reddish brown SILTY CLAY, trace mottled tan to gray silty clay, trace gravel, native, stiff (dry).		
6				ND			
7				ND	Sample: DPT-4-6-8 (1145hrs) VOC, DRO, Pb		
8				ND			
9			4	ND	8 - 8.5' Reddish brown SILTY CLAY, trace gravel (dry-moist).		
10				ND	8.5 - 8.75' Reddish brown to brown SILTY CLAY, little f-c sand, trace gravel (wet).		
11				ND	8.75 - 12' Reddish brown SILTY CLAY, little gray vf sand layers (dry-moist).		
12				ND			
13			4	ND	12 - 12.25' Reddish brown SILTY CLAY, stiff (dry-moist).		
14				ND	12.25 - 13' Reddish brown SILTY CLAY and F SAND, lose (wet).		
15				ND	13 - 16' Reddish brown SILTY CLAY and gray VF SAND layers, trace gravel, soft (moist).		
16				ND			
17					Borehole depth - 16'.		
18					Set temporary 5' screen for water sample collection.		
19							
20							

BORING LOG

Boring No.: (DPT-5)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			0.5	ND	GRAVEL FILL.		
2							
3							
4							
5			4	ND	Reddish brown SILTY CLAY, trace gravel, native (dry).		
6				ND			
7				ND			
8				ND			
9			4	ND	8 - 9.5' Reddish brown SILTY CLAY, little tan to olive vf sand layers, stiff, native (dry). 9.5 - 12' Reddish brown SILTY CLAY, little mottled tan to olive and gray silty clay and vf sand, stiff, native (dry).		
10				ND			
11				ND			
12				ND			
13			4	ND	12 - 13' Reddish brown SILTY CLAY, trace mottled tan to olive and gray silty clay and vf sand, loose (wet). 13 - 15.5' Reddish brown SILTY CLAY, trace gravel, soft (moist).		
14				ND			
15				ND			
16				ND	15.5 - 16' Gray F-C SAND, some gravel, trace silty clay, soft (moist).		
17					Borehole depth - 16'. Abandon boring with spoils.		
18							
19							
20							

BORING LOG

Boring No.: (DPT-6)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1				
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004				
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack				
WATER LEVELS				DRILLING AND SAMPLING						
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE			
--	--	--		TYPE	--	DPT	--			
--	--	--		I.D.	--	2 inch	--			
--	--	--		WT./Fall	--	--	--			
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES					
1			4	ND	1' ASPHALT with blue-gray slag base (dry).					
2				ND	1 - 4' Reddish brown SILTY CLAY, some mottled gray and tan silty clay, trace gravel, stiff (dry).					
3				ND						
4				ND						
5			4	ND				Reddish brown SILTY CLAY, trace mottled olive to tan and gray silty clay (dry).		
6				ND	8 - 11' Reddish brown SILTY CLAY, little mottled tan to olive silty clay and vf sand (dry).					
7				ND						
8			4	ND				8 - 11' Reddish brown SILTY CLAY, little mottled tan to olive silty clay and vf sand (dry).		
9				ND						
10				ND	11 - 12' Reddish gray SILTY CLAY, trace gravel (dry-moist).					
11				ND						
12			4	ND				12 - 14' Reddish brown to gray SILTY CLAY, trace gravel (dry).		
13				ND				14 - 16' Gray F SAND, some gravel, some silt (moist).		
14				ND						
15				ND						
16					Borehole depth - 16'. Abandon boring with spoils and top with asphalt.					
17										
18										
19										
20										

BORING LOG

Boring No.: (DPT-7)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 25, 2004	
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE *	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	1' ASPHALT with gravel base.		
2				1	1 - 2' Olive SILT and VF SAND, little gravel, fill (dry).		
3				2	2 - 4' Reddish brown SILTY CLAY, little mottled olive and gray silty clay, reworked native (dry).		
4				1			
5			4	ND	Reddish brown SILTY CLAY, little mottled olive and gray silty clay (dry). Water between liner and core barrel - no sheen.		
6				ND			
7				ND			
8				ND			
9			4	ND	8 - 9' GRAVEL slough (caving into borehole from under asphalt).		
10				ND	9 - 10' Reddish brown SILTY CLAY, trace gravel (dry).		
11				ND	Water between liner and core barrel - no sheen.		
12				ND			
13			4	ND	12 - 14' GRAVEL slough (caving into borehole from under asphalt).		
14				ND			
15				ND	14 - 16' Reddish brown SILTY CLAY, some gray vf sand layers, trace gravel (moist).		
16				ND	Water between liner and core barrel - no sheen.		
17					Borehole depth - 16'.		
18					Abandon boring with spoils and top with asphalt.		
19							
20							

BORING LOG

Boring No.: (DPT-8)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: UST		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	4	1' ASPHALT with gravel base and 0.2' foundry sand stained black with chemical odor (dry-moist).		
2				2	Sample: DPT-8-0-1 (0840hrs) VOC, Metals, Phenols, CN		
3				1	1 - 2' Olive gray SILT, little clay, trace vf sand, trace gravel, some black staining, fill (moist).		
4				ND	2 - 4' Reddish brown SILTY CLAY and mottled gray to olive gray SILTY CLAY, fill (dry-moist).		
5			4	ND	4 - 7' Reddish brown SILTY CLAY, some mottled olive and gray silty clay, stiff, reworked native (dry-moist).		
6				ND			
7				ND	7 - 8' Reddish brown SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
8			4	5	8 - 9' GRAVEL slough (caving into borehole from under asphalt) slight sheen (wet).		
9				3	9 - 12' Reddish brown SILTY CLAY, trace gravel (dry-moist).		
10				1	Sample: DPT-8-9-10 (0945hrs) VOC, Pb, DRO, CN		
11				1			
12			4	ND	12 - 12.5' GRAVEL slough (caving into borehole from under asphalt) slight sheen.		
13				ND	12.5 - 16' Reddish brown SILTY CLAY, trace gravel (moist).		
14				ND			
15				ND			
16					Borehole depth - 16'.		
17					Set temporary 5' screen for water sample collection.		
18							
19							
20							

BORING LOG

Boring No.: (DPT-9)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Plant #2 oil spill		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			3	ND	0 - 2' GRAVEL fill.		
2				ND			
3				ND	Olive brown SILT and VF SAND, trace gravel, trace organics, fill (dry-moist).		
4			4	ND	4 - 5' GRAVEL slough		
5				ND	5 - 8' Brown SILTY CLAY and TOPSOIL, trace gravel, trace organics, fill (moist).		
6				ND			
7				ND			
8			4	ND	8 - 9' GRAVEL slough		
9				ND	9 - 12' Reddish brown SILTY CLAY, little mottled gray and olive silty clay, native (moist-dry).		
10				ND			
11				ND			
12			3	ND	12 - 13' GRAVEL slough		
13				ND	13 - 15' Reddish brown SILTY CLAY, trace gravel (moist-dry).		
14				ND	Refusal at 15'.		
15							
16					Borehole depth - 15'.		
17					Abandon boring with spoils.		
18							
19							
20							

BORING LOG

Boring No.: (DPT-10)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Plant #2 oil spill		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			3	ND	0 - 1' GRAVEL fill.		
2				ND	Olive brown SILT CLAY, little gravel, fill (dry-moist).		
3				ND			
4							
5			4	ND	4 - 4.5' GRAVEL slough		
6				ND	4.5 - 8' Olive brown SILTY CLAY, trace gravel, trace organics fill (moist).		
7				ND			
8							
9			4	ND	Reddish brown SILTY CLAY, trace gravel, stiff, native (dry-moist).		
10				ND			
11				ND			
12							
13			1	ND	Reddish brown SILTY CLAY, trace gravel, stiff, native (dry-moist).		
14							
15							
16					Borehole depth - 16'.		
17					Abandon boring with spoils.		
18							
19							
20							

BORING LOG

Boring No.: (DPT-11)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Plant #2 oil spill		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.5' ASPHALT and GRAVEL. 0.5 - 4' Dark gray SILT, trace reddish brown silty clay, trace f sand, trace organics, trace gravel, fill (moist).		
2				ND			
3				ND			
4				ND			
5			4	ND	Dark gry SILT, trace reddish brown silty clay, trace f sand, trace organics, trace gravel, fill (moist).		
6				ND			
7				ND			
8				ND			
9			1	ND	Slough, pushed rock.		
10							
11							
12							
13			1	ND	Slough, pushed rock.		
14							
15							
16							
17					Borehole depth - 16'. Set temporary 5' screen for water sample collection.		
18							
19							
20							

BORING LOG

Boring No.: (DPT-12)

PROJECT: Scott Aviation (Phase II)			CONTRACTOR: SJB (Randy Steiner)			PAGE 1 OF 1	
PROJECT No.: 71149			SITE LOCATION: Lancaster, New York			DATE: March 26, 2004	
SURFACE ELEVATION: NA			BORING TARGET: Foundry sand			ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.25' TOPSOIL.		
2				ND	0.25 - 1' Brown SILT, little f sand, trace gravel, trace organics, trace black staining (moist).		
3				ND	1 - 2' Tan to olive SILY CLAY, little f sand, trace gravel, trace organics (moist).		
4				ND	2 - 4' Reddish brown SILTY CLAY, trace mottled tan to olive silty clay, trace organics, trace gravel, trace rootlets (dry-moist). Sample: DPT-12-0-1 (1430hrs) VOC, Phenols, Metals		
5					Borehole depth - 4'.		
6					Abandon boring with spoils.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-13)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.25' GRAVEL, little topsoil, trace organics, fill (moist). 0.25 - 1' Brown F SAND and SILT, trace gravel (moist). 1 - 1.5' Black FOUNDRY SAND (mist-dry). 1.5 - 3 Black F SAND and SILT (moist-dry). 3 - 4' Olive to reddish brown SILTY CLAY, little mottled gray silty clay, trace gravel (dry-moist). Sample: DPT-13-1-2 (1440hrs) VOC, Phenols, Metals		
2				ND			
3				ND			
4				ND			
5				ND	Reddish brown SILTY CLAY, trace mottled gray and olive silty clay (dry).		
6				ND			
7				ND			
8				ND			
9					Borehole depth - 8'. Abandon boring with spoils.		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-14)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			0		WOOD in core barrel tip.		
2							
3							
4					Borehole depth - 4'.		
5					Abandon boring with spoils.		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-15)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 1' Gray to tan SILTY CLAY, little organics.		
2				ND	1 - 2' Gray to tan SILT and ORGANICS (moist).		
3				ND	2 - 4' Reddish brown SILTY CLAY, some mottled gray and tan silty clay, trace gravel (moist).		
4				ND			
5					Borehole depth - 4'.		
6					Abandon boring with spoils.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-16)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
			4	ND	0 - 1' TOPSOIL.		
1				ND	1 - 2' Tan to reddish brown SILTY CLAY, trace rootlets, trace mottled gray silty clay, trace gravel, native (moist).		
2				ND	2 - 4' Reddish brown SILTY CLAY, little mottled gray and olive silty clay, native (dry).		
3				ND			
4					Borehole depth - 4'.		
5					Abandon boring with spoils.		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-17)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 26, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Foundry sand		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 1' TOPSOIL.		
2				ND	1 - 2' Tan to olive SILTY CLAY, little f sand, little organics (moist).		
3				ND	Sample: DPT-17-1-2 (1540hrs) VOC, Phenols, Metals		
4				ND	2 - 4' Reddish brown SILTY CLAY, trace mottled gray and tan silty clay, trace gravel, native (dry).		
5					Borehole depth - 4'.		
6					Abandon boring with spoils.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-18)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Anomaly - Plant #1 parking lot		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.5' ASPHALT		
2				ND	0.5 - 1' Blue-gray SLAG		
3				ND	1 - 1.5' Gray VF SAND (moist-wet).		
4				ND	1.5 - 3' Tand VF SAND (moist-wet).		
5				ND	3 - 4' Reddish brown SILTY CLAY (dry-moist).		
6				ND	Reddish brown SILTY CLAY, little mottled gray and olive silty clay, trace gravel (dry-moist).		
7				ND			
8					Borehole depth - 8'.		
9					Abandon boring with spoils and top with asphalt.		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-19)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Adjacent to anomaly - Plant #1 lot		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.5' ASPHALT and GRAVEL base (no slag). 0.5 - 4' Reddish brown SILTY CLAY, little mottled gray and olive silty clay, trace gravel (dry-moist).		
2				ND			
3				ND			
4				ND			
5					Borehole depth - 4'. Abandon boring with spoils and top with asphalt.		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-20)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Anomaly - Plant #2 parking lot		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.75' ASPHALT and blue-gray SLAG base. 0.75 - 4' Reddish brown SILTY CLAY, some mottled gray silty clay, reworked native (dry-moist).		
2				ND			
3				ND			
4				ND			
5					4 - 7.75' Reddish brown SILTY CLAY, little mottled gray silty clay, trace gravel, native (dry-moist).		
6							
7					7.75 - 8' Tan VF SAND layer (dry-moist)		
8							
9					Borehole depth - 8'. Abandon boring with spoils and top with asphalt.		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-21)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Adjacent to anomaly - Plant #2 lot		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	DPT	--	--
--	--	--		I.D.	2 inch	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 0.5' ASPHALT and GRAVEL base (no slag). 0.5 - 2' Olive SILT, some topsoil, trace gravel, trace clay (moist-dry). 2 - 4' Reddish brown SILTY CLAY, some mottled gray silty clay, stiff, native (dry).		
2				ND			
3				ND			
4				ND			
5					Borehole depth - 4'. Abandon boring with spoils and top with asphalt.		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

BORING LOG

Boring No.: (DPT-22)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SJB (Randy Steiner)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29, 2004	
SURFACE ELEVATION: NA				BORING TARGET: Anomaly - Plant #2 lot		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	DPT	--
--	--	--		I.D.	--	2 inch	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1			4	ND	0 - 1' ASPHALT and blueish gray SLAG.		
2				ND	1 - 2' Olive to reddish brown SILT, little gravel, little silty clay (dry).		
3				ND	2 - 4' Reddish brown SILTY CLAY, some mottled gray silty clay, stiff, native (dry).		
4				ND			
5					Borehole depth - 4'.		
6					Abandon boring with spoils and top with asphalt.		
7							
8							
9							
10							
11							
12							
13							
14							
15							
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APPENDIX IV
TEST PIT LOGS

TEST PIT LOG

Test Pit No.: (TP-1)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-2)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, little gravel, trace mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-3)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fail	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 6' Reddish brown SILTY CLAY, little gravel, trace mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7					Total depth ~6 feet.		
8					Test pit backfilled with excavated soil.		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-4)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, little gravel, trace mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-5)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 7' Tan to olive SILTY CLAY, little gravel, little mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8					Total depth ~7 feet.		
9					Test pit backfilled with excavated soil.		
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-6)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, little gravel, trace mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-7)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, little gravel, trace mottled gray silty clay, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-8)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown to reddish tan SILTY CLAY, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-9)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, little mottled gray silty clay, little gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-10)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.25' TOPSOIL		
2				ND	0.25 - 8' Reddish brown to reddish tan SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-11)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown to reddish tan SILTY CLAY, little mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected sample TP-11-0-1 (VOC, SVOC, metals)		
4					Collected sample TP-11-1-4 (VOC, SVOC, metals)		
5					Collected photograph of test pit.		
6							
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-12)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 1' TOPSOIL		
2				ND	1 - 10' Reddish brown SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7							
8							
9							
10							
11					Total depth ~10 feet.		
12					Test pit backfilled with excavated soil.		
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-13)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 5' Reddish brown SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6					Total depth ~5 feet.		
7					Test pit backfilled with excavated soil.		
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-14)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 5' Reddish tan SILTY CLAY, trace mottled reddish brown and gray silty clay, trace gravel, native (dry-moist).		
3							
4							
5				ND	5 - 6' Reddish brown SILTY CLAY, native (dry-moist).		
6					Collected photograph of test pit.		
7					Total depth ~6 feet.		
8					Test pit backfilled with excavated soil.		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-15)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 6' Reddish brown to tan SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected sample TP-15-0-1 (VOC, SVOC, metals)		
4					Collected sample TP-15-1-4 (VOC, SVOC, metals)		
5					Collected photograph of test pit		
6							
7					Total depth ~6 feet.		
8					Test pit backfilled with excavated soil.		
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

TEST PIT LOG

Test Pit No.: (TP-16)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 6' Reddish brown to tan SILTY CLAY, some mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
5							
6							
7					Total depth ~6 feet.		
8					Test pit backfilled with excavated soil.		
9							
10							
11							
12							
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TEST PIT LOG

Test Pit No.: (TP-17)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 0.5' TOPSOIL		
2				ND	0.5 - 8' Reddish brown SILTY CLAY, trace mottled gray silty clay, trace gravel, native (dry-moist).		
3					Collected photograph of test pit.		
4							
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8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-18)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 6' Reddish brown SILTY CLAY, little gravel, fill (dry-moist).		
2				ND	6 - 11' Reddish brown SILTY CLAY, little gravel, native (dry-moist).		
3				ND	11 - 12' Reddish brown SILTY CLAY, little gravel, little mottled gray silty clay, native (dry-moist).		
4					Collected photograph of test pit.		
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12							
13					Total depth ~12 feet.		
14					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-19)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: Northern Area		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 8' TOPSOIL (possibly from Plant #3 construction).		
2					Collected photograph of test pit.		
3							
4							
5							
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7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-20)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 23, 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #3		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
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--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 4' WOOD (logs and branches) and TOPSOIL.		
2							
3							
4				ND	4 - 8' Reddish brown SILTY CLAY, trace gravel (dry-moist).		
5							
6					Collected photograph of test pit.		
7							
8							
9					Total depth ~8 feet.		
10					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-21)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 3' FILL, weathered rock and brick, topsoil, gravel, trace black foundry sand.		
2							
3				ND	3 - 4' reddish brown SILTY CLAY, trace gravel (dry-moist).		
4					Collected photograph of test pit.		
5					Total depth ~4 feet.		
6					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-22)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 3' FILL, topsoil, gravel, some black and rust foundry sand.		
2					Collected sample TP-22-0-1 (VOC, phenols, metals)		
3					Collected photograph of test pit.		
4					Total depth ~3 feet.		
5					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-23)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 1.75' Black SILT and ORGANICS, trace rust staining.		
2				ND	1.75 - 2' Reddish brown SILTY CLAY, trace gravel, trace rootlets.		
3					Collected photograph of test pit.		
4					Total depth ~2 feet.		
5					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-24A)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				50	0 - 2' FILL, yellow and amber to green waste between 1.5 - 2'. Water seep below waste.		
2				ND	2 - 3' Reddish brown SILTY CLAY, native. Collected photograph of test pit. Collected samples of waste and native soil below waste.		
3					TP-24-2 and TP-24-3 (VOC, SVOC, PAH, Metals)		
4					Total depth ~3 feet.		
5					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-24B)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 2' FILL, no waste visible.		
2				ND	2 - 3' Reddish brown SILTY CLAY, native.		
3					Collected photograph of test pit.		
4					Total depth ~3 feet.		
5					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-24C)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 2' FILL, yellow and amber to green waste between 0.75 - 2' on north wall of test pit.		
2				ND	2 - 3' Reddish brown SILTY CLAY, native.		
3					Collected photograph of test pit.		
4					Total depth ~3 feet.		
5					Test pit backfilled with excavated soil.		
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TEST PIT LOG

Test Pit No.: (TP-25)

PROJECT: Scott Aviation (Phase II)				CONTRACTOR: SLC (Jerry Jones)		PAGE 1 OF 1	
PROJECT No.: 71149				SITE LOCATION: Lancaster, New York		DATE: March 29 2004	
SURFACE ELEVATION: NA				TEST PIT LOCATION: West of Plant #1 (west of gate)		ET REP.: Dino Zack	
WATER LEVELS				DRILLING AND SAMPLING			
DATE	TIME	DEPTH		CASING	SAMPLER	CORE	TUBE
--	--	--		TYPE	--	--	--
--	--	--		I.D.	--	--	--
--	--	--		WT./Fall	--	--	--
Depth (ft)	Sample Number & Time	Blows per/6"	Rec. (feet)	HNu Readings (ppm)	SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES		
1				ND	0 - 3' FILL, no waste visible. Water seep from east side of test pit at 3' with sheen.		
2							
3				ND	3 - 3.5' Reddish brown SILTY CLAY, native. Collected photograph of test pit.		
4					Total depth ~3.5 feet. Test pit backfilled with excavated soil.		
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