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June 6, 2017

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VIA FEDERAL EXPRESS

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RECEIVED

Juan M. Fajardo, Esq.
Assistant Regional Counsel
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

Re: Diamond Alkali Superfund Site, Lower 8.3 Miles of Lower Passaic River, Essex and Hudson Counties, New Jersey

Dear Mr. Fajardo:

Please allow this firm to respond on behalf of Tiffany and Company (hereinafter "Tiffany") to the letter you forwarded on May 17, 2017 from Eric J. Wilson.

Tiffany previously responded to the letter from the United States Environmental Protection Agency ("EPA") dated March 31, 2016 essentially seeking a de minimis settlement with the EPA under 42 U.S.C.§ 122 (g). See Tiffany Letter of April 21, 2016 (a copy is provided with this letter). In that letter, Tiffany provided evidence that it did not discharge any of the "eight hazardous substances" listed in Mr. Wilson's Letter of May 17, 2017 at all, let alone discharge them into the Passaic River.

Tiffany has reviewed the documents relied on by EPA in offering a settlement to the 20 identified parties. Tiffany does not take any issue with the offers extended, but believes that its exclusion from the group receiving offers is inconsistent with EPA's guidance. First, it bears noting that Tiffany is the only party who complied with New Jersey's Environmental Cleanup Responsibility Act and its progeny (the Industrial Site Remediation Act, N.J.S.A. 13:1K-1 et seq. (hereinafter "ISRA")) and remediated its entire property despite the fact that there was no release or discharge from the site, as explained in greater detail below and in the enclosed April 21 letter. The EPA letter of May 17 also states that the parties eligible for an early settlement are those who "are not associated with the release or disposal of any [of] the COCs" into the Lower Passaic River. This is precisely Tiffany's position. It must be remembered that Tiffany complied with ISRA because it was a manufacturer employing sufficient personal to trigger the Act upon its termination of business at its Newark facility in 1985. There was no release or discharge from the site triggering ISRA. See Tiffany Letter of April 21, 2016 to EPA at Tab 5, Exhibit A, Response 13, pages 3-4. This was not a Spill Act matter. N.J.S.A. 58:10-23.11 et seq.

Tiffany, in its initial ECRA application, certified that there was no known discharge or release of hazardous substances. Tiffany Letter of April 21, 2016 to EPA at Tab 5, Exhibit A, page 3-4.

The evidence for this lies in a hydrogeological investigation Tiffany undertook at the request of the New Jersey Environmental Protection Agency. A copy of the report prepared by Geraghty & Miller is attached hereto as Exhibit 1 to this letter. The conclusion was that the volatile organic compounds (principally trans-1,2-dicholoroethene) found in the monitoring wells were not caused by Tiffany, as the substances found in the groundwater were not found in the upper layer of soil, nor used by Tiffany in its manufacturing process. Id. at pages 10 to 12. See also below. In noting this finding, it is worth highlighting the fact that Tiffany conducted 34 soil samples and in none of them were the VOCs found in the groundwater present in the soil sample. Further, the groundwater was not contaminated with the materials Tiffany did use (as described below), which led Geraghty & Miller to the conclusion that Tiffany was not the source of the VOC contamination, and, further, that such contamination could only come from an up gradient source. Where there were contaminants used by Tiffany found in the soil (as described below), such contaminants were different substances than the VOCs, and, further, there was a clean barrier of soil between the upper layer of soil (where such Tiffany contaminants were found) and the lower soil that surrounded the groundwater. The Geraghty & Miller Report was submitted to NJDEP, which accepted the findings. See Tiffany Letter of April 21, 2016 to EPA at Tab 5, Exhibit D; see also See Tiffany Letter of April 21, 2016 to EPA at Tab 5, Exhibit C (NJDEP letter of June 30, 1989, responding to the Geraghty & Miller Report). Thus, the report findings and underlying evidence make it clear that there were no discharges or releases from the Tiffany facility, off its site, and certainly none to the Passaic River.

Tiffany's Newark facility was a silver manufacturing and engraving facility. The silver manufacturing used cyanide salts, and all process materials were pumped to an onsite 20,000 gallon holding or settling tank. The engraving process used Iron Perchloride, and the excess materials were likewise sent to the settling tank. The tank contents were pumped to the Passaic Valley Sewerage Commission (the "Commission") pursuant to its permitting process. Further, each year the settling tank had its sludge removed and cleaned to recover excess silver. The sludge was trucked off site for proper disposal.

Tiffany was never cited for any violation of any permit with the Commission in its 80 year history at the site. See Tiffany Letter of April 21, 2016 to EPA at Tab 5, Exhibit A, Appendix 2.

Further, no groundwater remediation was ever required of Tiffany by NJDEP.

The soil contamination noted above, which was found in the upper layers of the soil of the facility, never reached the groundwater. Indeed, these soils were separated from the groundwater by several feet of clean undisturbed soil. Moreover, all of the Tiffany contaminants in the soil were removed nearly 30 years ago by Tiffany and disposed of in licensed storage and treatment facilities. Tiffany cleaned up the soils by removing all contaminated soils except for minor residual soil left in place because, in the words of NJDEP, "contamination is not present in the ground water" and "competent bedrock is encountered at two feet". Tiffany Letter of April 21, 2016 to EPA at Exhibit 5, Tab C (NJDEP Letter of June 30, 1989, page 1). In other words, there was no possibility of these materials contaminating the groundwater.

The soils cleanup performed by Tiffany is summarized at Exhibit 6 to the Letter of April 21, 2016. The areas that required remediation were Areas I through V, Area 10 and the interior of the building. Table I (Area I) indicates that the only contaminant of concern in that area of soils was arsenic, which was completely removed by May 1990 (Exhibit 6, pages 3-4); Table II (Area II) indicates that all contaminated soil was removed from that area as of August 29, 1990 (Exhibit 6, pages 4-6); Table III (Area III) shows that all soils were remediated to NJDEP standards as of May 9, 1990 (Exhibit 6, pages 7-8); Table IV (Area IV) was cleaned up by soil removal for all contaminants of concern except for total petroleum hydrocarbons, which was reduced significantly to low levels in 1990 (Exhibit 6, pages 8-9); Table VA (Area VA) indicates that all contaminants of concern in the soil were removed in 1990 (Exhibit 6, pages 10-11); Table VB (Area VB) indicates the soils were cleaned of contaminants except for some minor exceedances by May 10, 1990 (Exhibit 6, pages 11-12); further, the interior of the building was sampled (no PCBs were detected) and cleaned; and the printing area had some chlordane contamination and was remediated by June of 1990. After the soil removal and disposal were complete, a Final Report was submitted by Tiffany to NJDEP, who determined that the cleanup plan and remediation were complete such that Tiffany was in full compliance with ISRA. See Tiffany Letter of April 21, 2016 to EPA at Exhibit 5, Tab D. Thus, not only were there no contaminants caused by Tiffany in the groundwater in the first place, but also, in the second place, even any potential contamination to groundwater from the non-VOC contaminants in the upper level of the soils was eliminated by the soils removal and disposal program nearly 30 years ago.

As noted above, it bears emphasizing that the only pesticide used on Tiffany's site was <u>not</u> dieldrin but chlordane, a significantly different compound that essentially sets up a barrier in the soil that does not break down. Nonetheless, even at that, all chlordane soils were removed through the above-described clean-up process, and all soils were remediated of chlordane to the

satisfaction of NJDEP. Chlordane, moreover, was not present in the groundwater. See Exhibit 1 hereto.

Tiffany, as set forth above and in its prior letters, has not caused any discharge to the Passaic River. As such, it certainly is not, and cannot be, the source of any of the 8 COCs listed in the letter of May 17, 2017. This is not a piece meal application but to clarify its earlier submittal that Tiffany is a party "that could be released from OU2 altogether."

Very truly yours,

John H. Klock
Attorney for Tiffany & Company

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Enclosures

Geraghty & Miller, Inc.

PHASE II HYDROGEOLOGICAL INVESTIGATION
AT THE TIFFANY & CO. FACILITY
NEWARK, NEW JERSEY

DRAFT

September 1988

7 Atlantic Street
Hackensack, New Jersey 07601

T-GIB07027

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2. Water-Level Contour Map, Shallow Monitored Zone, July 20, 1986.
3. Water-Level Contour Map, Deep Monitored Zone, July 20, 1986.

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A. Phase II Workplan and NJDEP Approval Letter.
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PHASE II HYDROGEOLOGIC INVESTIGATION AT THE TIFFANY & CO. FACILITY NEWARK, NEW JERSEY

INTRODUCTION

In May 1987, Geraghty & Miller, Inc. was retained by Crummy, Del Deo, Dolan, Griffinger & Vecchione, attorneys for Tiffany & Co., to carry out the second phase of a hydrogeologic investigation at the Tiffany & Co. facility in Newark, New Jersey. The Phase I investigation, conducted in cooperation with the New Jersey Department of Environmental Protection (NJDEP), was designed to provide a preliminary assessment of ground-water flow and quality conditions. The Phase II investigation was designed to address several aspects of the hydrogeologic system which had not been completely defined in the previous work phase.

Specific tasks undertaken during the Phase II investigation included the following:

- A fracture trace analysis of aerial photographs of the area surrounding the facility.
- The installation and surveying of five additional shallow and five deep monitoring wells.
- The conductance of several synoptic water-level measurement events, in which water levels were measured in all new and previously installed monitoring wells.
- The collection of one round of ground-water samples for chemical analysis from the six previously installed monitoring wells and from the ten new monitoring wells.

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The Phase II investigation was carried out in accordance with a workplan submitted to NJDEP - Bureau of Environmental Evaluation and Cleanup Responsibility Assessment (BEECRA) on June 1, 1987. This plan was reviewed by BEECRA and approved on January 6, 1988; the workplan and approval letter are included in Appendix A.

The Phase II Workplan was designed to address data gaps identified upon completion of the Phase I program. These data gaps included:

- The distribution of volatile organic compound (VOC) concentrations in ground water in the northern Newark area, in particular upgradient of the Tiffany & Co. facility.

- The horizontal boundaries of the area affected by the presence of VOCs detected in the ground water under the Tiffany & Co. facility.

- The direction and magnitude of the vertical component of ground-water flow and the vertical distribution of VOCs in ground water under the facility.

PREVIOUS WORK (PHASE I PROGRAM)

Geraghty & Miller, Inc. carried out a Phase I investigation at the Tiffany & Co. facility from February to May 1987, which included the installation of six shallow monitoring wells, the collection of ground-water samples from these monitoring wells, and a review of prevailing hydrogeologic conditions in the Newark area. The results of this investigation were summarized in a report entitled "Hydrogeologic Investigation at the Tiffany & Co. Facility, Newark, New Jersey", which was submitted to NJDEP in May 1987. The principal findings of the Phase I investigation included the following:

- The Tiffany & Co. facility is underlain by a thin veneer (less than 10 feet thick) of sand, silt, weathered rock, and

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artificial fill, which is in turn underlain by competent bedrock consisting of interbedded shales and sandstones of the Brunswick Formation.

- Ground-water flow in the bedrock under the Tiffany & Co. facility is in an approximately northeast direction, towards Second River.

- Water-level data indicated that MW-1 may not be upgradient of the entire southwest portion of the facility.

- The analysis of the water samples collected from the monitoring wells indicated the presence of VOCs in the shallow ground water under the facility.

PHASE II FIELD PROGRAM

Monitoring Well Installation

Ten monitoring wells were installed at the facility between November 31, 1987 and June 24, 1988. The drilling program was interrupted for several months after the installation of all the new monitoring wells to obtain permission from Consolidated Railroad (Conrail) to install monitoring wells MW-7S and MW-7D on their property. All monitoring wells were installed by a New Jersey-licensed driller in the employ of Samuel Stothoff Company of Flemington, New Jersey; an attending Geraghty & Miller, Inc. hydrogeologist described the geologic materials penetrated and documented the construction of the wells. The locations of the ten new and six existing monitoring wells are shown on Figure 1.

The shallow wells were drilled by the air-rotary method, using a down-the-hole air hammer with a 10- or 8-inch diameter button bit to advance the borehole. After each hole was drilled, a 4-inch diameter PVC well screen and casing assembly was installed in the borehole. No.

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2 Cape May sand was installed in the annular space between the screen and the borehole, from the bottom of the borehole to a level approximately two feet above the top of the screen (an exception is the level of the sand pack in MW-10S, which is approximately seven feet above the top of the screen). The annulus was then sealed with approximately two to three feet of bentonite pellets, followed by cement grout to land surface.

The deep monitoring wells were also drilled by the air-rotary method. Initially, a 10-inch diameter borehole was drilled to a depth approximately 20 feet below the bottom of the adjacent shallow monitoring well. After drilling to this depth, a 6-inch diameter black steel casing was installed in the borehole, followed by the placement of cement grout in the annulus to land surface. The cement grout was allowed to set for 24 hours before continuing to drill inside the steel casing; a 6-inch open rock borehole was then advanced to a depth approximately 20 feet below the bottom of the casing. The shallow monitoring wells were completed with 6-inch diameter protective steel casings and locking caps; the deep wells were fitted with locking caps. Monitoring well construction details are summarized in Table 1, and well construction diagrams are presented in Appendix B.

The new monitoring wells were developed by pumping the wells with a submersible pump until the discharge water was clear and relatively free of silt. The monitoring wells were surveyed on July 7, 1988 by Borric McDonald & Watson, Land Surveyors of Bloomfield, New Jersey. The surveyed elevations of the measuring points marked on the protective steel casings (deep wells) and PVC casings (shallow wells) are included in Table 1. Water levels were measured in all monitoring wells on July 1, July 7, July 14, and July 20, 1988; these data are summarized in Table 2.

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Ground-Water Sampling

The Phase II workplan specified that all existing and new monitoring wells would be sampled for VOCs. Based on verbal communications with NJDEP reprsentatives in September 1987, the sampling program was modified to include the sampling of the on-site production well (which has been out of service for several years), the analysis of all ground-water samples for cadmium in addition to VOCs, and the analysis of the samples collected from monitoring wells MW-4S and MW-4D for total coliform bacteria and nitrogen species (total Kjeldahl nitrogen [TKN], ammonia, nitrate, and nitrite).

From July 13 through July 16, 1988, ground-water samples were collected from all sixteen monitoring wells and the former Tiffany & Co. production well. The protocol used to collect ground-water samples from the monitoring wells is presented in Appendix C. All ground-water samples were analyzed for VOCs plus 15 peaks, utilizing USEPA Method 624. In addition, samples from all monitoring wells and the production well were filtered in the field and analyzed for dissolved cadmium.

As a quality assurance measure, laboratory-blind duplicate samples were collected at monitoring wells MW-2S and MW-2D and labelled MW-12S and MW-12D, respectively. Field blanks were also prepared to verify the quality of field decontamination methods. The field blanks were prepared by pouring distilled water into the sampling bailer, and then into a sample container. These field blanks were also analyzed for VOCs and dissolved cadmium. Trip blanks were also prepared from laboratory supplied water and accompanied the ground-water samples from the site to the laboratory daily; these blanks were also analyzed for VOCs and dissolved cadmium.

In addition to the above sampling and analysis program, monitoring wells MW-4S and MW-4D were sampled and analyzed for total coliform bacteria and the nitrogen species listed earlier. The results of the ground-water sample analysis are summarized in Tables 3 and 4.

HYDROGEOLOGIC FRAMEWORK

Topography and Surface-Water Drainage

The Tiffany & Co. facility is located at the northern edge of Newark, New Jersey, approximately 250 feet south of the Second River. The facility is situated on a relatively flat plateau, at an elevation of approximately 100 feet above mean sea level.

There is a steep cliff between the facility and the Second River; due north of the facility, the elevation of the river bottom is approximately 60 feet above mean sea level. The Second River flows eastward to the Passaic River, located approximately 4500 feet to the east; the Passaic River flows in a southerly direction into Newark Bay.

Surface drainage is generally east-northeast from the site. A Conrail Railroad right-of-way is located adjacent to the southern Tiffany & Co. property boundary; the western boundary of the property is adjacent to a facility currently occupied by Lamandate Plastics, and a residential area extends from the eastern boundary of the facility.

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Geology

The Tiffany & Co. facility is located in the Triassic Lowlands Province of New Jersey. This province, also referred to as the Newark Basin, is underlain by sedimentary rocks, primarily shale, siltstone, sandstone, and conglomerate. Interbedded with these sedimentary rocks are layers of volcanic basalt; all of these sedimentary and volcanic rocks are of Triassic and Jurassic age. The sedimentary and volcanic strata, which were originally horizontal, have been fractured and tilted by tectonic forces, so that at present the strata generally strike northeast-southwest and dip 10° - 20° to the northwest.

The uppermost geologic unit underlying the Tiffany & Co. facility consists of unconsolidated deposits, which include sand, silt, weathered rock, and artificial fill. At all eleven monitoring well or monitoring well cluster locations, competent bedrock was encountered at depths ranging from 2 to 25 feet below ground surface. The bedrock consists of red-brown shale and sandstone of the Passaic Formation (a recently named subdivision of the entire Triassic sequence, which was formerly referred to as the Brunswick Formation). Regionally, the Brunswick Formation contains two major joint sets, one striking northeast-southwest, and the other striking approximately perpendicular to the first set.

A fracture trace analysis of the portion of Newark that includes the Tiffany & Co. facility was completed utilizing aerial photographs. The identification of fracture patterns within bedrock formations may yield information as to zones of highly fractured, more permeable rock or preferred directions of ground-water flow. Due to the high intensity of urbanization within this region, however, small scale surface expressions of fracture patterns were not discernible.

Regional patterns such as those of surface drainage systems were recognizable on the aerial photographs. The directional trend of major stream channels within the area, such as that of the Passaic River, are in a northeast-southwest direction and tributaries such as the Second River join the Passaic at approximately right angles. These trends may reflect regional fracture patterns.

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GROUND-WATER FLOW CONDITIONS

Ground water in the monitoring wells was encountered at depths ranging from approximately 13.5 feet to 52 feet below land surface in July 1988. The water-level data collected on July 20, 1988 were used to construct ground-water contour maps for the shallow and deep

monitored zones, which are shown on Figures 2 and 3. Ground-water contours are drawn so that the contours (or equipotential lines) connect points of equal ground-water elevation; ground-water flow is from equipotential lines of higher elevation toward adjacent ones of lower elevations. The arrows shown on Figures 2 and 3 indicate the direction of the horizontal component of ground-water flow. Examination of Figures 2 and 3 indicate that monitoring well cluster MW-7S/MW-7D is not downgradient of the facility and that this location can be considered an upgradient monitoring station.

As determined during the Phase I investigation, the Tiffany & Co. facility is underlain by bedrock consisting of interbedded shale and sandstone. In contrast to flow within unconsolidated deposits, ground-water flow conditions within bedrock aquifers are governed largely by fracture flow, wherein ground water occurs and moves through a network of interconnected openings formed along joints, fractures, and bedding planes. As such, it is difficult to predict the exact direction of individual ground-water flow paths; in general, however, ground-water flow will be from areas of higher ground-water elevations toward areas of lower ground-water elevations.

Horizontal Component of Ground-water Flow

As can be seen in the ground-water contour maps, shallow ground water flows across the Tiffany & Co. facility in a northeasterly to north-northeasterly direction from the area of higher ground-water elevations southwest of the facility toward the Second River. The wide spacing of the ground-water elevation contours in the southwest portion of the facility indicates a relatively gentle ground-water gradient in this area. A comparison of Figures 2 and 3 indicates that, in general, ground-water flow conditions in the deeper monitored zone resemble those in the shallow monitored zone.

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Vertical Component of Ground-Water Flow

Examination of the water-level data summarized in Table 2 indicates that water-level elevations in the shallow and deep monitored zones were within 1.36 feet of each other in July 1988 at all monitoring well cluster locations, with the exception of monitoring well cluster MW-4S/MW-4D. The water-level elevations measured in monitoring well clusters in the upgradient portion of the facility (MW-7S/MW-7D and MW-2S/MW-2D) indicated a slight upward component to ground-water flow earlier in the month of July 1988, and a slight downward component to flow later in the month. The water-level elevation data for monitoring well clusters MW-10S/MW-10D and MW-11S/MW-11D showed a consistent, slight downward component to ground-water flow in July 1988. Monitoring well cluster MW-4S/ MW-4D showed a stronger downward component to ground-water flow, with the water-level elevation in the shallow well being consistently between 18.5 and 19 feet higher than the water-level elevation in the deeper well. One possible explanation for this condition is that the sewer line that is oriented parallel to the fence line may be leaking. If such a leak existed in the vicinity of monitoring well cluster MW-4S/MW-4D, it would serve to artificially raise water levels in the shallow monitoring well.

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GROUND-WATER QUALITY

The ground-water samples collected between July 13 and July 16, 1988 were sent to Envirotech Research of Edison, New Jersey for chemical analysis. The analytical results are summarized in Tables 3 and 4; the complete laboratory reports are presented in Appendix D.

Volatile Organic Compound Concentrations in Shallow Ground Water

The results of the VOC analysis are summarized in Table 3. The concentrations of individual compounds detected above the detection limit have been added together; this total is shown on the bottom row

of this table. The total VOC concentration detected in monitoring well MW-7S of 470 micrograms per liter (ug/L) can be viewed as indicative of ground-water quality conditions upgradient of the facility. The presence of these VOCs in this monitoring well could reflect past industrial or waste disposal practices in the upgradient area to the southwest of the Tiffany & Co. facility.

Only two onsite monitoring wells showed VOCs in excess of the total VOC concentration detected in the background well; these wells are monitoring wells MW-2S and MW-8S. All other monitoring wells on the facility showed total VOC concentrations less than the concentration of 470 ug/L. The principal VOCs detected in ground water are trichloroethene (TCE) and trans-1,2-dichloroethene. The monitoring wells in the northeastern part of the facility (MW-9S and MW-11S) showed no VOCs above detection limits.

The presence of relatively high total VOC concentrations in monitoring well MW-7S indicates that contamination is flowing under the Tiffany & Co. facility from an upgradient, off-site source or sources. All of the VOC concentrations detected in ground water under the western portion of the facility may originate off-site. The possibility that the VOCs detected in ground water do not have an on-site source is supported by the general absence of VOCs in soil samples analyzed during several phases of the soil sampling and cleanup program.

Soil sampling has been carried out in three phases at the Tiffany and Co. facility. In August 1984, two soil samples were collected by Princeton Aqua Science and analyzed for VOCs; none were detected except for methylene chloride. In March 1986, twelve soil samples were collected by IT Corporation and analyzed for VOCs; no VOCs were detected. Thirty-four soil samples were collected in February and April 1988 by Aguilar Associates and Consultants. Of these thirty-four samples, only one showed significant concentrations of any

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of the principal VOCs detected in ground water. This sample, collected from the upgradient fence boundary, showed 770 parts per billion (ppb) of trans-1,2-dichloroethene. It is highly unlikely that this one detection of a VOC is related to the VOCs detected in ground-water; detection of VOCs in ground-water in the range of several hundred ppb is usually related to soil concentrations several orders of magnitude higher. No TCE was detected in any of the analyzed soil samples.

Volatile Organic Compound Concentrations in Deeper Ground Water

Total VOC concentrations in the deeper monitoring wells ranged from none detected to 29 ug/L; the former production well showed a total VOC concentration of 36 ug/L. As with the shallow ground water, it is likely that these VOCs in deeper ground water are attributable to upgradient sources.

Concentrations of Inorganic Constituents and Coliform Bacteria

The inorganic and bacteriological analytical data are summarized in Table 4. All monitoring wells were sampled for cadmium; no cadmium was detected above the detection limit of 5 ug/L. Monitoring wells MW-4S and MW-4D were sampled for nitrogen species and coliform bacteria. Nitrate was detected at concentrations below the New Jersey Drinking Water Standard of 10 milligrams per liter (mg/L) (expressed as an equivalent concentration of nitrogen). Large numbers of coliform bacteria colonies were observed in both samples; the source of the bacteria in ground water may be reflective of leakage from the nearby sewer line.

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CONCLUSIONS

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The detection of relatively high total VOC concentrations in the upgradient monitoring well MW-7S, and the virtual absence in soils of the VOCs that have been detected in ground water, suggest that the VOCs detected in ground water have an off-site, upgradient source.

As such, no ground-water remediation is warranted at the Tiffany & Co. facility.

Sincerely,

GERAGHTY & MILLER, INC.

Anthony Rana
Scientist

Daniel A. Nachman
Associate

#NJ1192NK2\082588.

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Table 1: Monitoring Well Construction Details

Phase I Monitoring Wells

Well No.	Date Installed	Casing and Screen Diameter (Inches)	Total Depth of Boring (ft bgs)	Screened Interval (ft bgs)	Screen Slot Size (Inches)	Sand Pack (ft bgs)	Bentonite Pellets (ft bgs)	Cement Grout (ft bgs)	Height of Measuring Point (ft ags)	Elevation of Measuring Point (amsl)
MW-1s	02-04-87	4.00	27.10	7.10-27.10	0.020	6.10-27.10	4.10-6.10	0-4.10	1.70	107.00
MW-2s	02-04-87	4.00	26.50	6.50-26.50	0.020	5.70-26.50	4.70-5.70	0-4.70	1.41	105.51
MW-3s	02-04-87	4.00	27.52	7.52-27.52	0.020	5.50-27.52	3.50-5.50	0-3.50	1.62	105.72
MW-4s	02-06-87	4.00	46.00	26.00-46.00	0.020	24.00-46.00	22.00-24.00	0-22.00	1.09	104.29
MW-5s	02-09-87	4.00	24.26	4.26-24.26	0.020	3.56-24.26	1.76-3.26	0-1.76	1.75	105.05
MW-6s	02-09-87	4.00	22.96	2.96-22.96	0.020	1.96-22.96	1.26-1.96	0-1.26	2.05	106.85

Phase II Monitoring Wells

Well No.	Date Installed	Casing & Screen Diameter (inches)	Total Depth of Boring (ft bgs)	Depth of 6 Inch Casing (ft bgs)	Screened Interval (ft bgs)	Open Interval in Rock (ft bgs)	Screen Slot Size (inches)	Sand Pack (ft bgs)	Bentonite Pellets (ft bgs)	Cement Grout (ft bgs)	Height of Measuring Point (ft ags)	Elevation of Measuring Point (amsl)
Shallow:												
MW-7s	06-24-88	4.00	40.00	NA	10.00-30.00	NA	0.020	8.85-30.00	7.51-8.85	0-7.51	-0.05	102.55
MW-8s	06-23-88	4.00	33.00	NA	11.00-31.00	NA	0.020	8.50-33.00	5.00-8.50	0-5.00	1.68	104.28
MW-9s	10-30-87	4.00	60.00	NA	40.00-60.00	NA	0.020	38.00-60.00	36.00-38.00	0-36.00	1.73	104.33
MW-10s	12-04-87	4.00	65.00	NA	45.00-65.00	NA	0.020	43.00-65.00	35.00-43.00	0-35.00	0.90	102.50
MW-11s	06-23-88	4.00	63.85	NA	43.00-63.00	NA	0.020	41.60-63.00	38.60-41.60	0-38.60	1.62	101.52
Deep:												
MW-2d	12-05-87	NA	67.00	47.00	NA	47.00-67.00	NA	NA	NA	0-47.00	1.39	105.99
MW-4d	12-04-87	NA	86.00	66.00	NA	66.00-86.00	NA	NA	NA	0-66.00	0.68	104.36
MW-7d	06-24-88	NA	76.78	55.00	NA	55.00-76.78	NA	NA	NA	0-55.00	-0.33	101.97
MW-10d	12-04-87	NA	105.00	85.00	NA	85.00-105.00	NA	NA	NA	0-85.00	1.67	103.13
MW-11d	06-22-88	NA	97.65	75.27	NA	75.27-97.65	NA	NA	NA	0-75.27	1.29	101.39

ags - above ground surface
bgs - below ground surface
amsl - above mean sea level

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Table 2. Ground - Water Level Elevations

Well Number	Measuring Point Elevation (ft amsl)	July 1, 1988 Depth to Water-Level Water (ft bmp)	July 1, 1988 Depth to Water-Level Elevation (ft amsl)	July 7, 1988 Depth to Water-Level Water (ft bmp)	July 7, 1988 Depth to Water-Level Elevation (ft amsl)	July 14, 1988 Depth to Water-Level Water (ft bmp)	July 14, 1988 Depth to Water-Level Elevation (ft amsl)	July 20, 1988 Depth to Water-Level Water (ft bmp)	July 20, 1988 Depth to Water-Level Elevation (ft amsl)
Shallow Monitoring Wells									
MW-1s	107.00	15.32	91.68	16.16	90.84	17.12	89.88	16.75	90.25
MW-2s	105.51	15.84	89.67	16.47	89.04	16.29	89.22	16.09	89.42
MW-3s	105.72	14.20	91.52	14.86	90.86	16.01	89.71	16.71	89.01
MW-4s	104.29	33.80	70.49	33.90	70.39	33.97	70.32	33.76	70.53
MW-5s	105.05	20.80	84.25	20.36	84.69	20.56	84.49	20.47	84.58
MW-6s	106.85	16.56	90.29	17.39	89.46	18.27	88.58	17.02	89.83
MW-7s	102.55	11.69	90.86	12.63	89.72	13.86	88.69	13.47	89.08
MW-8s	104.28	18.63	85.65	19.15	85.13	21.63	82.65	19.40	84.88
MW-9s	104.33	46.32	58.01	46.52	57.81	46.60	57.73	46.53	57.80
MW-10s	102.50	51.92	50.58	52.06	50.44	52.21	50.29	52.12	50.38
MW-11s	101.52	52.66	48.86	52.82	48.70	52.97	48.55	51.71	49.81
Deep Monitoring Wells									
MW-2d	105.99	15.49	90.50	16.25	89.74	17.43	88.56	17.35	88.64
MW-4d	104.38	52.48	51.90	52.72	51.66	52.91	51.47	52.79	51.59
MW-7d	101.97	10.79	91.18	11.82	90.15	13.22	88.75	13.06	88.91
MW-10d	103.13	53.91	49.22	53.97	49.16	54.13	49.00	53.84	49.29
MW-11d	101.39	53.06	48.33	53.18	48.21	53.29	48.10	53.09	48.30

bmp - below measuring point
amsl - above mean sea level

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Table 3a: Concentrations of Volatile Organic Compounds in Ground - Water

Parameter	Shallow Monitoring Wells												Deep Monitoring Wells						Former Productio
	MW-1s	MW-2s	MW-12s*	MW-3s	MW-4s	MW-5s	MW-6s	MW-7s	MW-8s	MW-9s	MW-10s	MW-11s	MW-2d	MW-12D**	MW-4d	MW-7d	MW-10d	MW-11d	
Benzene	ND	ND	ND	ND	ND	1.1J	ND	ND	ND	1.9J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	1.7J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	19	ND	ND	ND	ND	1.7J	6.0	1.7J	ND	ND	1.5J	1.3J	3.4J	1.9J	1.6J
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	7.1	10	6.9	ND	ND	ND	ND	3.3J	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	116	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.9J	7.2	4.2J	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	136	617	521	3.2J	9.8	196	19	ND	369	ND	56.1	ND	ND	ND	5.8	ND	29	ND	8.9
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl benzene	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3.2JB	2.3JB	2.2JB	2.6JB	1.3J	3.4J	ND	2.8JB	2.5JB	ND	ND	1.4J	2.5JB	ND	1.2J	3.0JB	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.6J	4.6J	3.6J	230	ND	ND	5.5	2.6J	14	ND	4.3J	ND	ND	ND	ND	ND	1.3J	ND	ND
Toluene	ND	ND	ND	ND	2.0J	ND	ND	ND	ND	ND	ND	1.7J	1.2J	ND	ND	ND	ND	1.9J	ND
1,1,1-Trichloroethane	3.2J	1.1J	ND	ND	ND	ND	3.2J	6.3	57.8	1.2J	2.3J	ND	ND	ND	ND	ND	2.0J	ND	1.7J
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	3.3J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Table 2a cont.: Concentrations of Volatile Organic Compounds in Ground - Water

Parameter	Shallow Monitoring Wells												Deep Monitoring Wells						Former Production Well
	MW-1s	MW-2s	MW-12s*	MW-3s	MW-4s	MW-5s	MW-6s	MW-7s	MW-8s	MW-9s	MW-10s	MW-11s	MW-2d	MW-12D**	MW-4d	MW-7d	MW-10d	MW-11d	
Trichloroethene	1.6	70.4	48	6.8	11	2.0J	ND	347	353	1.1J	202	1.1J	ND	ND	19	6.9	ND	1.6J	27
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	6.7J	3.9J	ND	ND	ND	ND	ND	1.8J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1.9J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0J	ND
Total VOCs***	279.1	704.6	575.9	236.8	39.8	196	24.5	459.3	818.8	ND	264.1	ND	ND	ND	24.8	6.9	29	ND	35.9

ND- The compound was not detected at the indicated concentration.

J- Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B- The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

Concentrations in micrograms per liter (ug/l)

* Blind replicate of MW-2s

** Blind replicate of MW-2d

*** Total VOCs does not include concentrations reported with J or B.

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Table 3b: Concentrations of Volatile Organic Compounds in Laboratory Trip Blanks and Field Blanks

Parameter	Field Blank	Trip Blank #1	Trip Blank #2	Trip Blank #3	Trip Blank #4
Benzene	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
Ethyl benzene	ND	ND	ND	ND	ND
Methylene chloride	2.9JB	ND	2.3JB	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND
Xylenes (Total)	ND	ND	ND	ND	ND

ND- The compound was not detected at the indicated concentration.

J- Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B- The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

Concentrations in micrograms per liter (ug/l)

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Table 4: Concentrations of Inorganic Constituents and Coliform Bacteria in Ground-Water

Parameter	Shallow Monitoring Wells												Deep Monitoring Wells						Former Production Well	Field Blank	Trip Blank
	MW-1s	MW-2s	MW-12s	MW-3s	MW-4s	MW-5s	MW-6s	MW-7s	MW-8s	MW-9s	MW-10s	MW-11s	MW-2d	MW-12s	MW-4d	MW-7d	MW-10c	MW-11d			
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN					0.70										0.30						
Ammonia					0.12										0.05						
Nitrate					0.85										6.8						
Nitrite					<0.01										<0.01						
Total Coliform					sss										sss						

Blank Space= Indicates parameter not analysed for.

Nitrogen Species Reported as Equivalent Nitrogen (N), in milligrams per liter (mg/l).

s Blind replicate of MW-2s

ss Blind replicate of MW-2d

sss Too numerous to count.

Cadmium detection limit = 5.0 micrograms per liter (ug/l)

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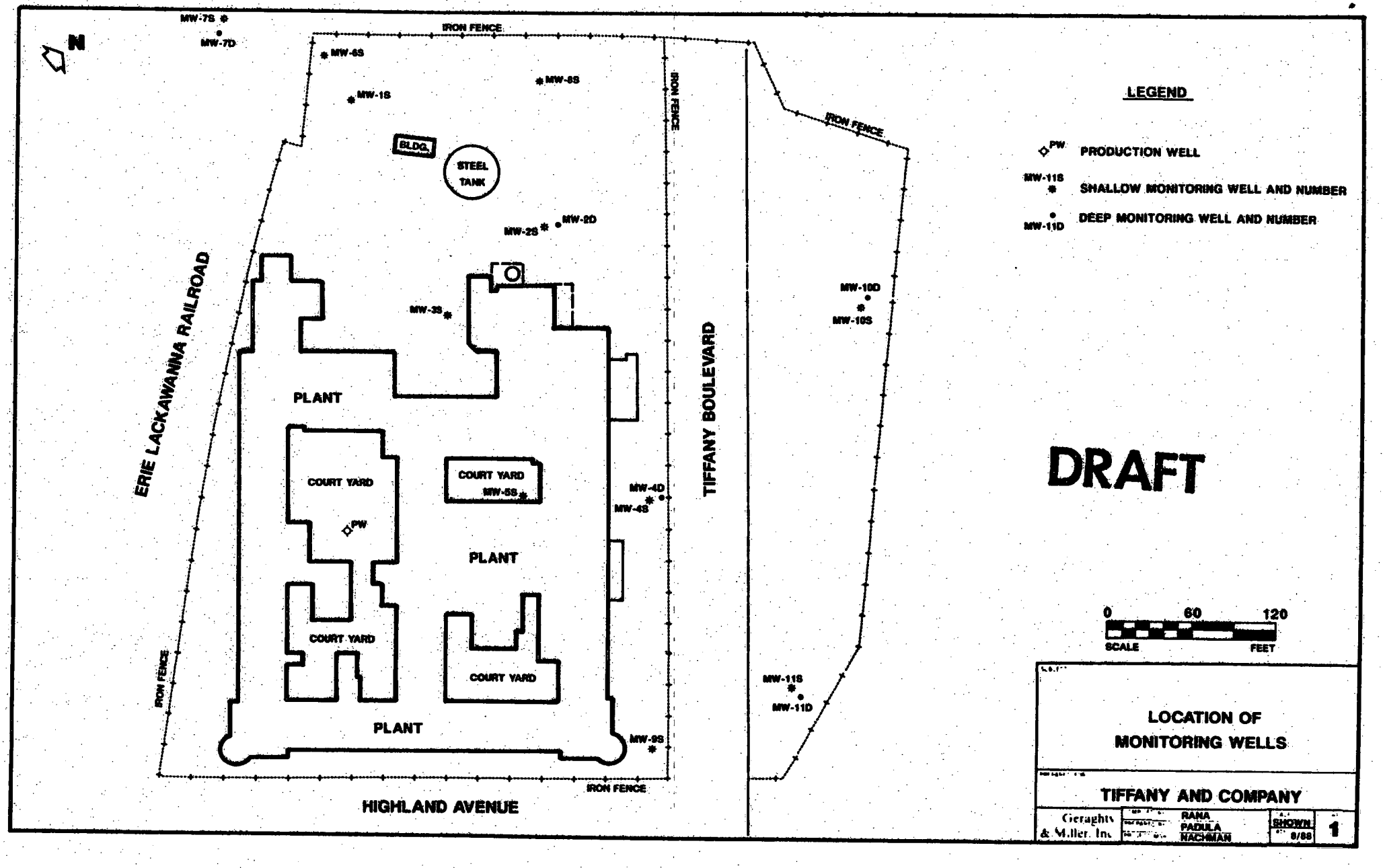
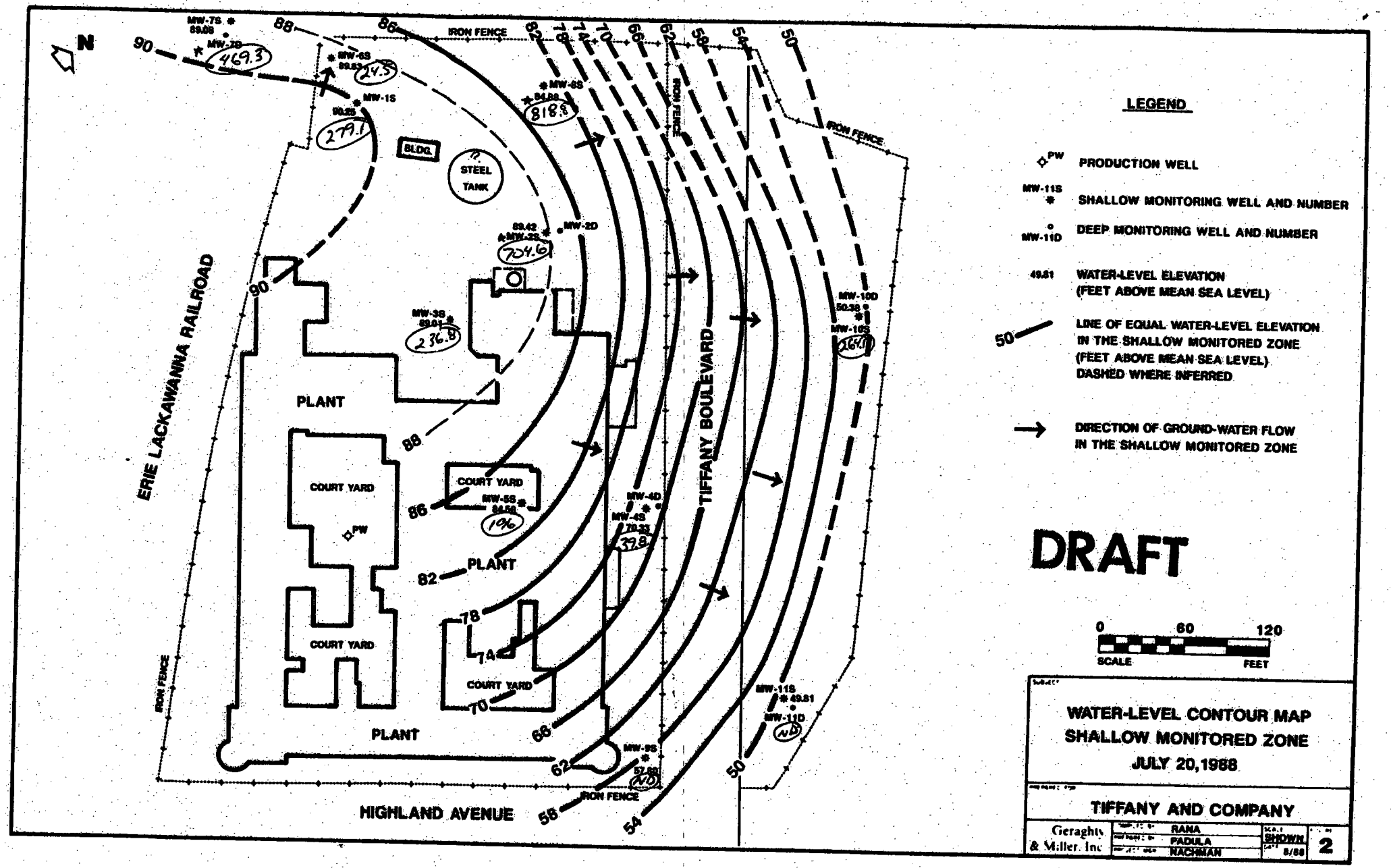


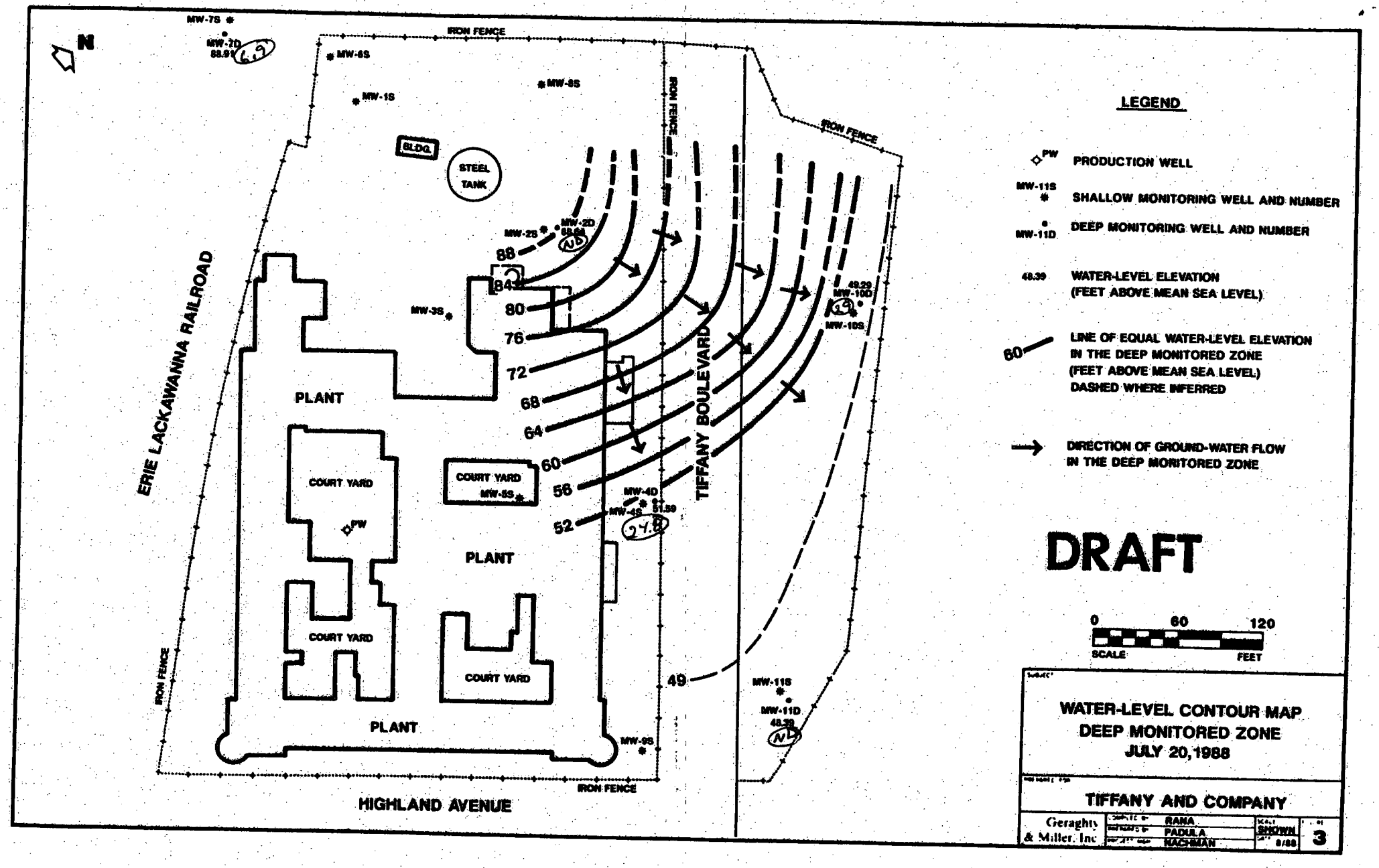
NJ1192ND

T-GIB07048



NJ1192NK2

T-GIB07049


N
MW-7S
MW-7D
IRON FENCE
MW-6S
MW-1S
MW-8S
BLDG.
STEEL TANK
MW-2S
MW-2D
MW-3S
88
84
80
76
72
68
64
60
56
52
49
PLANT
COURT YARD
PW
COURT YARD
MW-5S
PLANT
COURT YARD
COURT YARD
PLANT
MW-4D
MW-4S
MW-9S
MW-10D
MW-10S
MW-11S
MW-11D
ERIE LACKAWANNA RAILROAD
TIFFANY BOULEVARD
HIGHLAND AVENUE
LEGEND
PRODUCTION WELL
SHALLOW MONITORING WELL AND NUMBER
DEEP MONITORING WELL AND NUMBER
WATER-LEVEL ELEVATION (FEET ABOVE MEAN SEA LEVEL)
LINE OF EQUAL WATER-LEVEL ELEVATION IN THE DEEP MONITORED ZONE (FEET ABOVE MEAN SEA LEVEL) DASHED WHERE INFERRED
DIRECTION OF GROUND-WATER FLOW IN THE DEEP MONITORED ZONE
DRAFT
0
60
120
SCALE
FEET
WATER-LEVEL CONTOUR MAP
DEEP MONITORED ZONE
JULY 20,1988
TIFFANY AND COMPANY
Geraghty & Miller, Inc.
RAMA
PADULA
KACHMAN
SHOWN
8/88
3

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APPENDIX A

Phase II Workplan and NJDEP Approval Letter

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WORKPLAN FOR A PHASE II GROUND-WATER INVESTIGATION AT THE TIFFANY & CO. FACILITY NEWARK, NEW JERSEY

INTRODUCTION

In January 1987, an initial (Phase I) ground-water investigation was carried out at the Tiffany & Co. facility in Newark, New Jersey. This study was conducted as part of an on-going ECRA investigation at the site (ECRA Case No. 87-257); the technical elements of the Phase I program were agreed to by the New Jersey Department of Environmental Protection (NJDEP), Bureau of Industrial Site Evaluation (BISE) prior to implementation.

A report was prepared upon completion of the Phase I study entitled "Hydrogeologic Investigation at the Tiffany & Co. Facility, Newark, New Jersey." This report presented information regarding shallow ground-water flow and quality conditions in the uppermost saturated portion of the bedrock formation underlying the site; as a result of these findings, the following data gaps have been identified:

* The status of ambient ground-water quality in the northern Newark area, and in particular upgradient of the Tiffany & Co. facility, is not known. The area immediately upgradient is presently the location of industrial facilities, the histories of which have not been investigated. Two monitoring wells (MW-1 and MW-6) were installed at the southwestern corner of the Tiffany & Co. facility, in an attempt to define ground-water quality conditions upgradient of the principal operating areas. Ground-water elevations measured in these wells indicate that neither well may be upgradient of the operating area of the plant. Ground-water samples from monitoring wells MW-1 and MW-6 showed the presence of volatile organic compounds (VOCs) and base neutral extractable organic compounds (B/N), which may reflect on-site and/or upgradient sources.

* The horizontal boundaries of the area affected by the presence of VOCs in ground water under the Tiffany & Co. facility have not been defined.

* The direction and magnitude of the vertical component of ground-water flow, and the vertical distribution of VOCs in ground water, are not known. Preliminary water-level data from the on-site production well (which is out of service) indicate that there may be a downward component of ground-water flow in the bedrock formation underlying the site.

PHASE II PROGRAM

It is proposed that the Phase II program include the following tasks:

Task 1: Aerial Photograph Analysis
Task 2: Monitoring Well Installation
Task 3: Monitoring Well Sampling
Task 4: Controlled Pumping Test
Task 5: Report Preparation

Task 1: Aerial Photograph Analysis

In areas that are directly underlain by the Brunswick Formation, ground-water flow can be influenced by the intensity and orientation of major fractures in the bedrock. Aerial photographs will be examined for indications of fracture patterns in the bedrock formation and potential preferred directions of ground-water flow.

Task 2: Monitoring Well Installation

Five (5) additional shallow wells will be installed at the facility and surrounding areas, as shown on Figure 1. The shallow monitoring wells will be constructed with 4-inch diameter PVC screen and casing, similiar to the design of the existing six monitoring wells. Monitoring well MW-7S, to be located south of Tiffany & Co.'s property, across the Lakawanna Railroad on Manchester Place, is intended to provide data regarding upgradient ground-water quality.

The location for monitoring well MW-7S was selected under the assumption that it is feasible to obtain permission from the property owner to install wells at that location. It appears that the site is located on public property, in which case permission would be requested from the City of Newark. In the event that permission is not granted, alternate locations for an upgradient well will be considered; at present, one potential alternate location is on the railroad property immediately south of the Tiffany & Co. facility.

Monitoring wells MW-8S and MW-9S are proposed to assess the distribution of VOCs at the western and eastern limits of the facility. Monitoring wells MW-10S and MW-11S are proposed in order to delineate the distribution of VOCs in ground-water downgradient of the facility.

Five (5) deeper bedrock monitoring wells will be installed at the facility, as shown on Figure 1 (MW-2D, MW-3D, MW-4D, MW-7D, and MW-11D). These wells are designed to provide data regarding the vertical component of ground-water flow and the vertical distribution of VOCs.

The deeper monitoring wells are to be installed adjacent to the shallow monitoring wells, and will be constructed by installing

six-inch diameter metal casing, cemented in a 10-inch diameter hole, to a depth at least 20 feet below the bottom of the adjacent shallow monitoring wells. Once the cement has set, a six-inch diameter open hole will be drilled in the bedrock to a depth approximately 20 feet below the bottom of the metal casing. All monitoring wells will be developed in accordance with accepted protocols.

Task 3: Monitoring Well Sampling

Two weeks after the new monitoring wells are developed, ground-water samples will be collected from all new and existing monitoring wells, in accordance with ground-water sampling protocol employed in the initial investigation. Based on the results of the Phase I investigation, VOCs are the principal ground-water quality concern, and as such, it is proposed to sample all new and existing ground-water monitoring wells for VOCs.

Task 4: Controlled Pumping Test

It is proposed that a controlled aquifer pumping test, approximately 24 hours in duration, be conducted at the Tiffany & Co. facility, once the new monitoring wells are installed. The data from this pumping test will be analyzed to assess aquifer hydraulic characterisitcs, and water-level drawdown response to pumping stresses. The data resulting from the pumping test may prove valuable in the design of a potential ground-water recovery system, should such a program be necessary.

Task 5: Report Preparation

The data generated from Tasks 1 through 4 will be analyzed, and a report will be prepared summarizing the data and presenting the major findings. A draft report will be submitted to NJDEP-BISE for review and comment. Following receipt of NJDEP-BISE's comments, the draft will be modified, if necessary, and a final version will be submitted.

#J1192NK1/letter/052187.

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

JAN 06 1988

Bart Bennett
Crummy, Del Deo, Dolan, Griffinger et al.
One Gateway Center
Newark, NJ 07102-5311

Dear Mr. Bennett:

Re: Tiffany and Company
Newark City, Essex County
ECRA Case #84237
Sampling Plan Dated: June 1987 and Amendments thereto

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (NJDEP) by the Environmental Cleanup Responsibility Act (ECRA, N.J.S.A. 13:1K-6 et seq.) and delegated to the Chief of the Bureau of Environmental Evaluation and Cleanup Responsibility Assessment pursuant to N.J.S.A. 13:1B-4, the referenced Sampling Plan is hereby approved as conditioned herein:

1. Tiffany and Company shall accomplish this investigation and any further analytical investigations by the methods outlined in this Sampling Plan. If any change in methods outlined in this sampling plan is necessary or if any delays are encountered, Tiffany and Company shall inform BEECRA in writing prior to implementation.

2. Tiffany and Company shall submit summarized analytical results in tabular form. Tiffany and Company shall also submit with the analytical data all documents associated with the sampling and testing, including but not limited to lab sheets, chain of custody, results of blank analyses, lab chronicles, summary of analytical instrument tuning, and analytical methods used.

3. Tiffany and Company shall submit the results in triplicate within ninety (90) days of receipt of this approval.

4. Tiffany and Company shall notify NJDEP at least five (5) business days prior to implementation of sampling.

5. If contamination is determined to exist above a level found acceptable by NJDEP, Tiffany and Company shall prepare and submit a Cleanup Plan developed pursuant to N.J.A.C. 7:1-3.12 to address said contamination. If the data from implementation of the approved Sampling Plan indicates

the presence of contamination, but is not sufficient to define the full horizontal and vertical extent, then such areal definition shall be proposed as a Sampling Plan Addendum in a form which meets the criteria of N.J.A.C. 7:1-3.7(d)14. The horizontal and vertical extent of contamination shall be determined before an approvable Cleanup Plan can be developed.

This document was prepared by the Case Manager, Ravi Gupta. If you have any questions, please contact the Case Manager at (609) 633-7141.

Very truly yours,

Joseph R. Fallon, Chief
Bureau of Environmental Evaluation
and Cleanup Responsibility Assessment

E16:dg
cc: Brian Sogorka, BEERA
Ted Hayes, NJGS

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APPENDIX B

Monitoring Well Construction Diagram

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APPENDIX C

MONITORING WELL SAMPLING PROTOCOL

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APPENDIX C

MONITORING WELL SAMPLING PROTOCOL

This protocol delineates the proper procedures that were followed in the field to insure that ground-water samples were representative of the discrete interval of the aquifer from which they were collected. The following is the sequence that was followed to insure the quality and integrity of each sample at each location.

1. Water-level measurements.
2. Volume calculation.
3. Evacuation of monitoring wells.
4. Sample collection.
5. Field parameters.
6. Shipping and chain-of-custody.

1. Water-Level Measurements

Before any of the monitoring wells were evacuated for sampling, water levels were measured in all six monitoring wells. The measurements were made to the nearest 100th foot, using the tape and chalk method. The measuring point was recorded, along with the total depth of the well and the height of the measuring point above or below land surface. Also recorded were the time and date of each of the measurements. These data were documented on the Geraghty & Miller, Inc. water sampling logs. A blank sample log is shown on Page B-5.

2. Volume Calculations

At each well, after static water-level measurements were recorded on the sampling log, the volume of water in the well was calculated. A minimum of three well volumes was evacuated, to insure that all stagnant water in the well and gravel pack had been removed, and that the sample collected was derived from the aquifer opposite the screened or open zone. The amount of water that was removed from each well was documented on the sampling log.

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3. Evacuation of Monitoring Wells

A centrifugal pump was used to evacuate the water in monitoring wells MW-1S, MW-2S, MW-3S, MW-5S, MW-6S, MW-7S, and MW-8S. Due to their greater depth, wells MW-4S,, MW-9S, and all deep monitoring wells (MW-2D, MW-4D, MW-7D, MW-10D, and MW-11D) were evacuated with a submersible pump. New 3/8 inch diameter polypropylene tubing was used as a discharge pipe when evacuating with the centrifugal pump and 1/2 inch diameter polypropylene tubing used with the submersible pump. Nylon safety rope was used to lower the submersible pump in the applicable monitoring wells.

4. Sample Collection

After the submersible pump or tubing was removed from the well, a clean teflon bailer was used to collect all water samples. The bailer was cleaned with a laboratory detergent solution, and rinsed repeatedly with distilled water before being placed into the monitoring well. The bailer was rinsed a minimum of three times with the ground water in the well before any samples were collected.

The samples were transferred as quickly as possible from the teflon bailer to new sample containers. Samples collected for VOC analysis were transferred into laboratory supplied vials with teflon seals and filled with no air bubbles or head space. Samples collected for cadmium analysis were first filtered through disposable Nalgene filters are with a .45 um pore size. All other samples were transferred into the appropriate sample containers. All sample containers were labelled with the time, date, and well number and transported to the laboratory daily for chemical analysis.

5. Field Parameters

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The pH, specific conductance, and temperature (^{o}C) of the water from each well were measured in the field. At the beginning of the sampling, the field instruments were calibrated with standard solutions.

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pH Meter: The pH meter was standardized using a two point calibration (pH 4 and pH 7).

Specific Conductance Meter: The specific conductance meters were calibrated using a KCl standard solution of 1,400 umhos/cm.

Temperature (^{o}C): The temperature of the bailed water sample was measured soon after removal from the well.

The physical condition of each sample, including odor, color, and turbidity, was recorded on the water sampling log forms.

6. Chain-of-Custody

In order to document the water samples collected at each well, a standard Geraghty & Miller, Inc. Chain-of-Custody form was completed listing the number and type of sample containers that were filled at each sampling location. Any special notations or remarks that were transmitted between the sampling personnel and the laboratory were noted on the Chain-of-Custody form, along with the handling and delivery of each sample, from collection to delivery to the laboratory. A blank Chain-of-Custody form is shown on Page B-6.

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APPENDIX D

Envirotech Research Laboratory Reports

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GIBBONS

JOHN H. KLOCK
Director

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jklock@gibbonslaw.com

April 21, 2016

Nicoletta DiForte
Deputy Director for Enforcement
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region II
290 Broadway
New York, New York 10007-1866

Re: Diamond Alkali Superfund Site
(Lower 8.3 miles of the Lower Passaic River)

Dear Ms. DiForte:

Tiffany and Company ("Tiffany") appreciates the letter of March 31, 2016 from the United States Environmental Protection Agency ("EPA"), acknowledging that "some of the parties that have been identified as PRPs under CERCLA...may be liable for a cash out settlement" and asking for a prompt response from such parties.

In the 1890s, Louis Tiffany built a facility on the border of Newark and Belleville, New Jersey located next to Branch Brook Park. This was Tiffany's first venture out of New York City, and the facility had ample room not only for silver smithing but also for warehousing materials Tiffany purchased for sale in its New York City store. The facility was accordingly used as a silver plate jewelry factory and warehouse and was located at 820 Highland Avenue in Newark, New Jersey. The building was electrified from the beginning, but its design was in the style of the nineteenth century with large windows to allow daylight in around the facility's quadrangle. The building was part of a campus with a large park that complemented Branch Brook Park. Tiffany called the park "Tiffany Park" and Mr. Tiffany erected one-family homes for his workers around Tiffany Park. The campus was about ¼ mile from the Second River and, from that point, it was another mile and a half to the Passaic River. At the time, the campus was in the country, a long way from downtown Newark. Given its distance from the City's services, Mr. Tiffany was concerned about safety and created a 120,000 gallon cistern under the facility to receive storm water and to be available in case of fire.

According to the records of the Passaic Valley Sewerage Commission ("PVSC"), when the facility began operations in 1898, the facility's waste water was disposed of with the PVSC. See Letter of March 6, 1985 to NJDEP, page 2, Exhibit 1 hereto. The last PVSC permit in Tiffany's records is attached hereto as Exhibit 2. Tiffany never received a permit violation from PVSC in the nearly 90 years of operation. The most recent Monitoring Reports submitted to PVSC are attached hereto as Exhibit 3. Tiffany did not discharge hazardous or toxic materials to PVSC. See Exhibit 4.

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In the late 1970s, Tiffany was acquired by Avon Products Inc. Tiffany employees, however, became interested in buying back their company and they did so through an employee buy-out in 1984. In order to close the buy-out, it was necessary to review the applicability of the newly enacted Environmental Cleanup Responsibility Act, NJSA 13:1K-1 et seq. ("ECRA") now known as the Industrial Site Remediation Act ("ISRA"). Tiffany determined that ECRA would be triggered by the buy-out and initiated the filing of the required General Information Statement. At the same time, Tiffany arranged with a consultant to draft a cleanup plan, as required by ECRA, identifying areas of potential concern for further investigation, and a plan to deal with the sampling and study attendant to those areas. In order to allow the buy-out to go forward, both documents had to be prepared and reviewed by the New Jersey Department of Environmental Protection ("NJDEP"). NJDEP accepted and approved the cleanup plan, which was signed by NJDEP and Tiffany in 1984 ("the 1984 Cleanup Plan"). See Certification of Patrick Dorsey attached hereto as Exhibit 5, Exhibit B thereof (hereinafter referred to as "Dorsey Certification" by paragraph numbers or by its lettered exhibits thereto). This agreement allowed the buy-out to proceed. Essentially, the signed Cleanup Plan meant that Tiffany would, if necessary, attend to any contamination found in the investigated areas. To enable it to complete the General Information Statement, Tiffany sought to gather information including employee interviews to confirm there were no hazardous discharges during the facility's operations. At the time there were several employees who had 30 years of service at the facility. There was no known past spill or discharge nor any known soil contamination in 1984, when the General Information Statement was completed. There also was no evidence of any discharge by Tiffany to the groundwater. See Dorsey Certification, paragraphs 3 and 4 & Exhibit B thereto. However, as noted above, in order to proceed with the scheduled buy-out closing, Tiffany was nonetheless required, under ECRA, to submit a cleanup plan outlining areas for testing of soil and groundwater and the 1984 Cleanup Plan was executed by NJDEP and Tiffany so that the closing scheduled for October 15, 1984 could occur.

As noted above, in 1898, however, the site was in the country; by the early 1980s the city had moved to Tiffany, and the facility was old and outdated. Thus, after the Tiffany employee buy-out, the new owners decided to shut the facility down in 1985 and began looking for a new site. The facility was formally closed in 1986. Tiffany sold the facility to certain real estate developers, and as Tiffany was still in the ECRA process, the sale was folded into the on-going ECRA process.

In 1986, the initial testing under the 1984 Cleanup Plan showed some soil and groundwater contamination. At NJDEP's request, Tiffany agreed to hire a consultant to conduct a groundwater study. Accordingly, Tiffany hired Geraghty & Miller as its groundwater consultant, and that entity conducted several tests before submitting a plan in 1987 as to how to investigate the groundwater. That plan was accepted by NJDEP. The investigation was completed in 1988 and the results submitted in a report to NJDEP. The report determined that Tiffany was not the source of the identified groundwater contamination. See Dorsey Certification, Exhibit C, Letter of September 20, 1988, pages 1 to 4 (source of groundwater contamination "upgradient groundwater contamination that is migrating" to Tiffany's site).

NJDEP reviewed the report and accepted the findings, and, in 1989, determined that no further work was necessary with respect to the groundwater. See Dorsey Certification, Exhibit C, NJDEP letter of June 30, 1989, page 2, item III ("no further ground water quality investigation or remediation is necessary.").

A new cleanup plan was required to address the soil issues and was submitted to NJDEP. NJDEP accepted that plan in 1989 (the "1989 Cleanup Plan"). From 1989 until 1991, Tiffany engaged in both soil sampling and excavation under the approved the 1989 Cleanup Plan. Tiffany submitted its initial report in 1991. NJDEP required further data, which was gathered and submitted in 1992. The submissions reported that, while contamination was identified through the soil sampling, such contamination was remediated through excavation. As a result of the submissions NJDEP accepted and approved what was then called the Final Report and determined that no further remediation of the site was necessary. See Dorsey Certification, Exhibit D, all work was approved and found to "be in full compliance with ISRA". While the review period was extensive, the final sign off as to ECRA compliance by NJDEP occurred in 1993 prior to the effective date of the Industrial Site Remediation Act that amended ECRA. Accordingly, the final remediation document was the Letter of NJDEP of July 30, 1993, stating that Tiffany was in full compliance with the 1989 Cleanup Plan. See Dorsey Certification, Exhibit D. To reiterate, this letter evidences the fact that any soil contamination on site had been remediated. That is to say that the contaminants identified in the soil were not present in the groundwater, as noted above, and that those that were present in the soil had been remediated by excavation.

These determinations from the 1984 and 1989 Cleanup Plans were important: (1) Geraghty & Miller determined, and NJDEP accepted, the conclusion that the groundwater contamination on site was from an off-site source, which was further supported by the fact that none of the contaminants in the groundwater were chemicals used by Tiffany, and also by the groundwater flow (See Dorsey Certification, as Exhibit C, Letter of September 20, 1988 enclosing the Geraghty & Miller report); (2) the contaminants in the soil that were identified in the 1989 Cleanup Plan were remediated and were determined not to be present in the groundwater; and (3) after excavation, none of the post excavation samples exceeded NJDEP soil standards for residential use. See Report of Aguilar & Associates attached hereto as Exhibit 6.

The real estate developers who purchased the Tiffany facility constructed new homes in Tiffany Park and gutted the plant (but retained the walls). By doing so, the facility was preserved and its architectural heritage continued through the development of 130 luxury apartments called "Tiffany Manor". The new homes in Tiffany Park were completed in 1988, and Tiffany Manor was completed in 1993.

It appears, based on the material submitted to EPA by Occidental Chemical Company ("OCC"), that OCC sought the designation of Tiffany as a potentially responsible party under CERCLA. However, the argument presented by OCC is based on a selection of some of the materials from the ECRA file, particularly the initial groundwater sampling. While OCC stressed the groundwater contamination, it failed to advise EPA that NJDEP and Geraghty and Miller had concluded that the groundwater contamination was not from Tiffany's operations but rather from an offsite, upgradient source, namely Conrail. This is supported by the fact that none of the contaminants in the groundwater were chemicals used by Tiffany, a fact also not disclosed by OCC to EPA. Further, OCC did not disclose to EPA that the soil contaminants identified by Tiffany had been remediated to NJDEPs satisfaction, and that the contaminants in the soil were not present in the groundwater. These were key facts in NJDEP's approval of the Final Report of Tiffany: no groundwater contamination was caused by Tiffany, and the delineation and removal of the soil contaminates remediated the soil contamination, which had not spread to the groundwater. Indeed, the extensiveness of the environmental work done by Tiffany allowed the property to be developed for residential use by the real estate developers who purchased the site from Tiffany. It is worth noting that, at or around that time, there were two standards of remediation being proposed under ISRA - one a higher residential standard and the other a lesser non-residential standard. This property was remediated by Tiffany to the higher proposed residential standard.

When Tiffany received EPA's original PRP notice in 2006, Tiffany had two choices: to attempt to cooperate with the EPA by joining the parties who signed the Administrative Consent Order ("ACO") on the remedial investigation and feasibility study or to withhold cooperation and take no action on the general notice letter. There simply was, and there remains, no process to seek to "delist" a PRP from EPA's list. Had there been such a process, Tiffany would have instead pursued that process in light of the facts set forth above. However, as this was not an option, and since cooperation with the EPA is one of the Gore factors, and further because Tiffany believes that cooperation in finding solutions to environmental problems is a responsible corporate practice, Tiffany elected to sign the ACO with EPA to conduct the remedial investigation and feasibility study as one of the cooperating group members.

For the first time, EPA's March 31, 2016 letter presents Tiffany with the opportunity to explain why it is not a PRP and to seek a de minimis or de micromis cash out settlement.

Typically, the Comprehensive Environmental, Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9607 is read to impose liability on anyone who generates hazardous substances, arranges for their disposal, transports hazardous materials or accepts hazardous waste for disposal. 42 U.S.C.¶ 9607(a). There is no liability if a third party causes by act or omission a release where the party has exercised due care and took all reasonable precaution against such acts. Id. at (o).

As noted above, NJDEP determined that Tiffany had remediated the identified soil contamination (which did not contaminated the groundwater) and was not responsible for the identified groundwater contamination, which moved onto its site from a neighboring site.

NJDEP further determined, in light of these facts, that Tiffany was in full compliance with ECRA (although by the time its Final Report (the report that itemized all elements of the approved Cleanup Plan) was approved, ISRA had been enacted, as noted in the compliance letter of NJDEP). Dorsey Certification, as Exhibit D. The letter Tiffany received on July 30, 1993 under ECRA was the equivalent of a No Further Action letter ("NFA") under ISRA.[1]

Pursuant to ISRA, the entity performing a remediation is provided with liability protections from the State after it implements the approved remediation. N.J.S.A. 58:10B-13e (whenever contamination has been remediated by standards in effect at the time of remediation, the remediating party is not responsible to clean up to a greater standard). Moreover, ISRA does not require remediation for contamination moving onto a site from a neighboring site. N.J.S.A. 58:10B-12g(5) (6).

Under ISRA, when as here a neighbor causes the discharge, it is not a discharge that Tiffany is responsible for, i.e., a third party has caused the discharge.

As evidenced by the NJDEP's findings, Tiffany is neither a generator of contaminants reaching the Passaic River nor arranger for the discharge of contaminants to the Passaic River. CERCLA, supra, § 9607 (a)(1),(2). The Final Report of NJDEP evidences and agrees that the groundwater contamination under the Tiffany Site was not caused by a discharge from Tiffany, and the soil contamination on the site was not impacting the groundwater. All soil contamination was combined in an upper layer far above the saturated zone, and none of the onsite soil contaminants were found in the groundwater samples taken. Thus, Tiffany is neither a generator nor arranger for the groundwater contaminants identified on its site and therefore has no responsibility for any groundwater contaminants under the site. The only contaminated groundwater found was from its neighbor, Conrail. Under ISRA and CERCLA, Tiffany cannot be responsible for these alleged discharges of another. Outside of the groundwater contamination, there is no additional pathway to the Passaic River for any contaminants in the soils; further such contaminants were delineated and removed and the soil on site was remediated to NJDEP standards.

[1] Subsequent to the approval of the Final Report, the ISRA regulations were adopted, and the documentation evidencing the finality of a cleanup began to be called an NFA from NJDEP. The NFA under ISRA was the substantive equivalent of ECRA's final approval of a Final Report, outlining that the site has been cleaned up in accordance with an agreed or approved cleanup plan. N.J.S.A. 58:10B-13e.

In closing, as outlined above, Tiffany is not a generator or arranger of hazardous wastes for the contamination at issue in the lower 17 miles of the Lower Passaic River. Tiffany is also not, by definition, a transporter or disposal site owner. Thus, as Tiffany is not a generator, arranger, transporter or disposal site owner, Tiffany accordingly has no liability under CERCLA or any other applicable environmental statute. Tiffany, therefore, would be poised to accept EPA's offer to negotiate a cash out settlement.

Very truly yours,

John H. Klock
Director

JHK/ia

CRUMMY, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE

RALPH N. DEL DEO
JOHN T. DOLAN
MICHAEL R. GRIFFINGER
FRANK J. VECCHIONE
PETER J. CARTON
PETER E. HENRY
JOHN A. RIDLEY
ROBERT W. DELVENTHAL
DAVID J. SHEEHAN
DAVID M. HYMAN
DONALD H. STECKROTH
RICHARD S. ZACKIN
FRANK B. REILLY, JR.
ARNOLD B. CALMANN
JOHN H. KLOCK
ANN G. McCORMICK
FREDERICK C. KENTZ, III
PAUL R. DeFILIPPO
BRIAN J. McMAHON
MICHAEL D. LOPRETE
BARRY A. OSMUN

ANDREW B. CRUMMY (1895-1981)

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

GATEWAY I

NEWARK, N. J. 07102

201-622-2235

SUBURBAN OFFICE
MAIN STREET
P.O. BOX 74
BEDMINSTER, N.J. 07921
201-781-0200

CABLE-TELEX:
CRUMMY-NWK
138154

KAREN A. GIANNELLI
PHILIP W. CRAWFORD
IRA J. HAMMER
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FAITH H. BENNETT
MARK T. KARINJA
MARY ANNE McDONALD
FREDRICA HOCHMAN
RUSSELL B. BERSHAD
KERRY M. PARKER
SUSANNE PETICOLAS
MICHAEL F. QUINN
JOSEPH R. D'AMORE
ALAN H. PERZLEY
CARLENE G. CARRABBA
GERALDINE E. PONTO
JOANNE M. CALANDRA
MICHAEL J. LERNER
ALYCE C. HALCHAK
HERBERT B. BENNETT
JOSEPH P. CRAVEN, III
A. EUGENE HULL, JR.
CORNELIUS P. McCARTHY, III

March 6, 1985

Jonathan Berg
Bureau of Industrial Site Evaluation
Division of Waste Management
Department of Environmental Protection
428 East State Street
CN-028
Trenton, New Jersey 08625

Re: Tiffany & Company
820 Highland Avenue
Newark, New Jersey
ECRA Case No.84-257

Dear Mr. Berg:

In response to the correspondence dated February 13, 1985 from Anthony McMahon concerning the responses required regarding the sampling plan submitted in the above-referenced matter, attached please find the response to Questions 1 through 14, inclusive, prepared by Princeton Aqua Science in response to your request. The information set forth below is provided in response to Questions 15 through 20, inclusive, as contained in the February 13, 1985 correspondence.

Question 15: the number of transformers on site. There are eight large transformers on site, five of which are owned by Tiffany & Company, all of which are dry and contain no fluids. The three remaining transformers are owned by Public Service Electric & Gas Company and contain approximately 30 gallons of fluid in each transformer. PSE&G will provide a written response to Tiffany & Company concerning the composition of the fluid and would not provide this information verbally. As soon as this information is provided from PSE&G, it will be forwarded directly to you.

Question 16: floor drains in the buildings. The locations of these drains have been set forth on the site map enclosed herein, with a description of the discharge points for each floor drain located at the site.

Question 17: history of the former spray pond for steam condensate. There are no maps concerning the former spray pond, which was abandoned in 1940. Steam condensate was discharged into the spray pond and the water was thereafter recycled back to the boilers located at the Tiffany facility. To the best of our knowledge, no substances were used as "additive" or added to the water in this process.

Question 18: where the catch basin in the area of sample location 10 leads to. This catch basin discharges into the storm sewer.

As I discussed over the telephone, there are no maps of the underground pipes and trenches at the site and a detailed, complete determination as to the actual location of the pipes and trenches would be virtually impossible to accomplish. All of the underground pipes and trenches discharge to the settling tank on the site.

Question 19: when the company began its discharge of silver manufacturing wastes to the Passaic Valley Sewerage Commission. Based upon information provided from the Passaic Valley Sewerage Commission, the company has so disposed of its wastes since operations began in 1898. As such, there was no prior practice of waste disposal other than the direct discharge to the Passaic Valley Sewerage Commission sewerage lines.

Question 20: copies of discharge monitoring reports. I have enclosed the monitoring reports which were intended to have been provided in the Initial Submission in Appendix 4.

If you require any additional information, please so advise. I appreciate your time and consideration in this matter.

Very truly yours,

Herbert B. Bennett

Herbert B. Bennett

HBB:cw
Enc.

PASSAIC VALLEY SEWERAGE COMMISSIONERS

SEWER CONNECTION PERMIT

PERMIT # 20400950

(Please use the Permit Number on any correspondence with PVSC)

In compliance with the provisions of the Federal Water Pollution Control Act, its amendments, the Clean Water Act and the Rules and Regulations of the Passaic Valley Sewerage Commissioners:

TIFFANY AND COMPANY, INC.

(herein, after referred to as the Permittee)

is authorized to discharge from a facility located at

820 Highland Avenue

Newark, New Jersey 07104

to the Passaic Valley Sewerage Commissioners Treatment Works in accordance with discharge limitations, monitoring requirements and other conditions set forth herein.

Effective Date 5/29/81

Expiration Date 5/29/86

PASSAIC VALLEY SEWERAGE COMMISSIONERS

by: _____

Executive Director

CONDITIONS

A. General Prohibitions

(1) No person shall discharge or deposit or cause or allow to be discharged or deposited into the treatment works or public sewer any waste which contains the following:

(A) Explosive Mixtures. Pollutants which create a fire or explosion hazard to the treatment works, collection system or to the operation of the system. Prohibited materials include, but are not limited to, gasoline, kerosene, naphta, benzene, toluene, xylene, ethers, etc.

(B) Corrosive Wastes. Any waste which will cause corrosion or deterioration of the treatment works. All wastes must have a pH not less than 5. Unless otherwise stated in the Sewer Connection Permit, all waste shall have a pH not more than 10.5. Prohibited materials include, but are not limited to, acids, sulfides, concentrated chloride or flouride compounds, etc.

(C) Solid or Viscous Wastes. Solid or viscous wastes which would cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the treatment works. Prohibited materials include, but are not limited to, uncomminuted garbage, bones, hides or fleshings, cinders, sand, stove or marble dust, glass, etc.

(D) Oils and Grease. (a) any industrial wastes containing floatable fats, wax, grease or oils. (b) any industrial wastes containing more than 100 mg/l of emulsified mineral oil or grease.

(E) Noxious Material. Noxious or malodorous solids, liquids or gases, which, either singly or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.

(F) Radioactive Wastes. Radioactive wastes or isotopes of such half life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and which will, or may, cause damage or hazards to the treatment works or personnel operating the system.

(G) Excessive Discharge Rate. Industrial wastes discharged in a slug of such volume or strength so as to cause a treatment process upset and subsequent loss of treatment efficiency.

(H) Heat. (a) any discharge in excess of 150°F (65°C) (b) Heat in amounts which would inhibit biological activity in the PVSC treatment works resulting in a treatment process upset and subsequent loss of treatment efficiency, but in no case shall heat be introduced into the PVSC treatment works in such quantities that the temperature of the influent waters at the treatment plant exceed 40°C (104°).

(I) Unpolluted Waters. Any unpolluted water including, but not limited to, cooling water or uncontaminated storm water, which will increase the hydraulic load on the treatment system, except as approved by PVSC.

(J) Water. Any water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limits.

(2) No person shall discharge or convey, or permit to be discharged or conveyed, to the treatment works any wastes containing pollutants of such character or quantity that will:

(A) Not be susceptible to treatment or interfere with the process or efficiency of the treatment system.

(B) Violate pretreatment standards. As pretreatment standards for toxic or other hazardous pollutants are promulgated by USEPA for a given industrial category, all industrial users within that category must immediately conform

to the USEPA timetable as well as any numeric limitations imposed by USEPA. In addition, an industrial user shall comply with any more stringent standards as determined by PVSC or other agency.

(C) Cause the PVSC treatment plant to violate its NPDES permit, applicable receiving water standards, permit regulating sludge which is produced during treatment or any other permit issued to PVSC.

B. INSTALLATION OF SAMPLERS

The permittee shall install - 24 hour composite sampler on outlet acceptable to PVSC with attachments for affixing seals,

which shall be maintained in proper working order at all times. The installed samplers shall draw a sample, which shall be representative of plant waste, in accordance with the monitoring schedule contained in Section C, Page (s) 5 of 13.

C. EFFLUENT LIMITATIONS, MONITORING AND COMPLIANCE REQUIREMENTS

1. During the period beginning (5/29/81) and lasting through (5/29/86) the permittee is authorized to discharge from outlet(s) number(s) (20400950-41100-0201). Such discharges shall be monitored by the permittee as specified below. Volume to be determined from water consumption data less 5% Credit for evaporation.

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	~~MAXIMUM~~ ~~AVERAGE~~	~~MAXIMUM~~ ~~MINIMUM~~	MEASUREMENT FREQUENCY	SAMPLE TYPE	REPORTING PERIOD
BOD (0310)	xxxxxxxxx	xxxxxxxxxxxxx	Quarterly*	24 hr. comp.	Quarterly
TSS (0530)	xxxxxxxxx	xxxxxxxxxxxxx	Quarterly*	24 hr. comp.	Quarterly
VOLUME	xxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	Quarterly

*Sampling has commenced.

Rev: 3/83

D. Monitoring and Reporting

1. Monitoring results obtained during the previous 3 months shall be reported on the designated Discharge Monitoring Report, PVSC Form MR-1 or 2. Reports are due January 21, April 21, July 21, October 21. The first report is due on (*). If an Industrial user fails to submit Form MR-1 or 2 on a timely basis, the Executive Director shall estimate the use for the period. The estimates may be made 30 days after the due date of the report, except for the fourth quarter where the estimates may be made after October 21. Properly signed reports required herein shall be submitted to PVSC at the following address:

   Executive Director
   Passaic Valley Sewerage Commissioners
   600 Wilson Avenue
   Newark, NJ 07105

2. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

3. Test Procedures:

   Test procedures for the analysis of pollutants shall conform to regulations contained in the PVSC Rules and Regulations, Federal, State and local laws or regulations.

4. Recording of Results:

   For each measurement of a sample taken pursuant to the requirements of this permit, the permittee shall maintain a record of the following information:

   a) The date, exact place and the time of sampling;

   b) The dates the analyses were performed;

   c) The person(s) who performed the analysis;

   d) The analytical techniques or methods used; and

   e) The results of all required analyses.

*Permittee has been required to submit monitoring reports since 7/15/81.

5. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using the approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Forms (PVSC Form MR-1 or MR-2). Such increased frequency shall also be indicated.

6. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of (5) years.

7. Definitions

a) The "30 day average" discharge means the average of daily values for 30 consecutive monitoring days. For the purpose of enforcement of Pretreatment Standards, consecutive samples taken and analyzed shall be considered as being taken on consecutive days even though one or more non-sampling days intervene. In applying the Pretreatment Standards where more than one but less than 30 samples have been taken and analyzed during any month, a formula, specified by USEPA, will be used to calculate the "30 day average".

b) The "daily maximum" discharge means the highest discharge by weight or other appropriate units, as specified herein, during any caldendar day.

c) The "Daily" - each operating day.

d) "Weekly" - one day each week during a normal operation day

e) "Monthly" - one day each month during a normal operating day.

f) "Composite" - a combination of individual samples obtained at regular intervals over the entire discharge day.

TIFFANY & CO.
MANUFACTURING DIVISION
820 HIGHLAND AVENUE
NEWARK, NEW JERSEY 07104

October 21, 1983

Passaic Valley Sewerage Commission
600 Wilson Avenue
Newark, New Jersey 07105

Attention: Mr. Harold Carscadden

Dear Mr. Carscadden:

Enclosed please find a copy of the revised Monitoring Report for the months indicated.

As per our conversation again I apologize for the inconvenience that may have caused a problem on your end.

If there are anymore further question that was left unanswered please feel free to call me. Thank-you

Sincerely,

Catherine Wilson

Catherine Wilson
Secretary/Facilities

Enc.

cc: P.J. Orson

	FROM	TO	PREVIOUS	CURRENT	CONSUMPTION (100 CU. FT.)		CURRENT AMOUNT	PREVIOUS BALANCE	AMOUNT
	NEXT READING								
11	03/22	06/2							
11	03/02	06/	4325		3621				2,600.2
	03/22				3621				3,802.0
								27.25	27.25

ADDITIONAL CHARGES

PAY THIS AMOUNT	6,430.25
BILL MAILED DATE	06/20/83
PAY BY THIS DATE	07/20/83

DEPT APPROVAL 8/9/83

SEE REVERSE SIDE FOR PAYMENT INSTRUCTIONS

PRICES O. K.

PENSIONS O. K.

792 HIGHLAND AVE
NEWARK NJ 07114

792 HIGHLAND AVE

RETURN THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THE BILL FOR YOUR RECORDS.

TIFFANY & CO.
MANUFACTURING DIVISION
820 HIGHLAND AVENUE
NEWARK, NEW JERSEY 07104

July 28, 1983

Mr. Harold Carscadden
Passaic Valley Sewerage Commission
600 Wilson Avenue
Newark, New Jersey 07105

Dear Mr. Carscadden:

As per our conversation of July 29, 1983, again please except my apology with this late report.

As I stated I am new with this company and misunderstood about what was to be done with this report.

Enclosed please find the sewerage report. If you have any questions please feel free to call, Mrs. Catherine Wilson at 483-0140.

Sincerely,

Catherine Wilson

Catherine Wilson

* Next report due 10/15/83

7/7/83

Work Sheet

Conversion of Ft^3 to gal. &

Reduced by 5%

3621	100/cu Ft.
x 100	
362100	Ft^3
x 7.46	gal / Ft^3
2701266	
— 5%	LESS = 135063
2,566,203	

File

TIFFANY & CO.
MANUFACTURING DIVISION
820 HIGHLAND AVENUE
NEWARK, NEW JERSEY 07104
201 483-0140

October 10, 1983

Mr. Harold Carscadden
Passaic Valley Sewerage Commission
600 Wilson Avenue
Newark, New Jersey 07105

Dear Mr. Carscadden:

Attached please find the Monitoring Report for the months of July through September.

If there are any question about the report please call Mrs. Catherine Wilson at 483-0140 ext. 242.

Thank you for your cooperation.

344-1800-X 240

Sincerely,

Catherine Wilson

Catherine Wilson
Facilities/Secretary

Enc.

cc: P. J. Orson

1st - 7.48

Lack of receipt (6) September -

Authorization to charge 2,386,195

October 10, 1983

Tiffany & Co.
820 Highland Avenue
Newark, New Jersey 07014

WORK SHEET

Conversion of Ft^3 to gallons and reduced by 5%:

3358	Consumption
X 100	100/cu ft
335800	
X 7.48	Gal/Ft^3
25,117.84	
- 5% =	12,558,92
1,255,895	

95%

2,386,195

2386,195

If this work sheet is incorrect, please call Catherine Wilson on ext. 242 (483-0140) Thank-you

2

1,255,895

CITY OF NEWARK — WATER AND SEWER BILL

462833

RECEIVED

CATEGORY CODE	FOR THE PERIOD FROM	TO	METER READING PREVIOUS	CURRENT	CONSUMPTION 100/CU. FT.	BILL TYPE	CURRENT AMOUNT	PREVIOUS BALANCE	TOTAL AMOUNT
	NEXT	READING	WEEK OF	09/12/83					
01	03/22	06/20	03218	05628	3621	Z	2,600.21		2,600.21
01	03/22	06/20	4329	5540	3621	Z	3,802.05		3,802.05
02	03/22	06/20					33.00		33.00
05		06/20						27.25	27.25
15		06/20							

RECEIVING

DATE GOODS REC'D. _____

QUANTITY O.K. _____

DEPT. APPROVAL _____

PRICES O.K. _____

EXTENSIONS O.K. _____

ACCT'G _____

PAY THIS AMOUNT → 6,435.26

BILLING DATE 06/20/83

PAY BY THIS DATE 07/20/83

SEE REVERSE SIDE FOR RATES AND LEGEND

ACCOUNT NUMBER 1380973000

TIFFANY, CO
792, 806 HIGHLAND AVE
NEWARK 07104

4692049

792 HIGHLAND AVE

RETURN THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD.

CITY OF NEWARK — WATER AND SEWER BILL

459826

CATEGORY CODE	FOR THE PERIOD FROM	FOR THE PERIOD TO	METER READING PREVIOUS	METER READING CURRENT	CONSUMPTION 100 CU. FT.	BILL TYPE	CURRENT AMOUNT	PREVIOUS BALANCE	TOTAL AMOUNT
02	NEXT READING 03/15	06/14	WEEK OF 09/05/8 20299	21100	801	E	841.05		841.05

RECEIVED
JUN 22 1983

DATE GOODS REC'D
QUANTITY O. K.
DEPT. APPROVAL

SEE REVERSE SIDE FOR USE AND LEGEND

PAY THIS AMOUNT → 841.05

ACCOUNT NUMBER	
12802022000	PURCHASING
7527527	TIFFANY AND CO
	820 HIGHLAND AVE
	NEWARK NEW JERSEY 07107

EXTENSIONS O. K.
ACCT 07-141 841.05

BILLING DATE	06/14/83
PAY BY THIS DATE	07/14/83

820 HIGHLAND. RETURN THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD.

CITY OF NEWARK — WATER AND SEWER BILL

552458

CATEGORY CODE	FOR THE PERIOD FROM	FOR THE PERIOD TO	METER READING PREVIOUS	METER READING CURRENT	CONSUMPTION 100/CU. FT.	BILL TYPE	CURRENT AMOUNT	PREVIOUS BALANCE	TOTAL AMOUNT
02	NEXT 09/13	READING 11/12/12	WEEK OF 21893	03/05/84 22678	785	E	824.25		824.25

SEE REVERSE SIDE FOR RATES AND LEGEND

ACCOUNT NUMBER
1280250 2200
7527527

TIFFANY AND CO
820 HIGHLAND AVE
NEWARK NEW JERSEY 07107

820 HIGHLAND AVE

PAY THIS AMOUNT → 824.25

BILLING DATE 12/12/83

PAY BY THIS DATE 01/12/84

RETURN THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD.

CITY OF NEWARK — WATER AND SEWER BILL

554622

CATEGORY CODE	FOR THE PERIOD FROM	FOR THE PERIOD TO	METER READING PREVIOUS	METER READING CURRENT	CONSUMPTION 100/CU. FT.	BILL TYPE	CURRENT AMOUNT	PREVIOUS BALANCE	TOTAL AMOUNT
	NEXT	READING	WEEK OF	03/12/84					
15		12/20						27.25-	27.25
05		12/20					33.00		33.00
08		12/20							.00

SEE REVERSE SIDE FOR RATES AND LEGEND

PAY THIS AMOUNT → 33.00

ACCOUNT NUMBER
1380973010
0000000

TIFFANY & CO
820 HIGHLAND AVE
NEWARK N.J. 07104

BILLING DATE	12/20/83
PAY BY THIS DATE	01/20/84

812 HIGHLAND AVE

RETURN THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD.

PRINTED IN U.S.A.

TIFFANY & CO.
MANUFACTURING DIVISION
820 HIGHLAND AVENUE
NEWARK, NEW JERSEY 07104
201-483-0140

December 13, 1984

Mr. Harold Carscadden
Passaic Valley Sewerage Commission
600 Wilson Avenue
Newark, New Jersey 07105

Dear Sir:

Enclosed please find the Monitoring Report for the months of October thru December. These are the only ones that I received from the Garden State Laboratories, Inc.

If you have any question, please call Catherine Wilson at 483-0140 x242.

Thank you for your assistance.

Sincerely,

Catherine Wilson

Catherine Wilson
Facilities Manager/Secretary

Enc.

CITY OF NEWARK — WATER AND SEWER BILL

	FOR THE PERIOD FROM	TO	METER READING PREVIOUS	CURRENT	CONSUMPTION 100 CU. FT.		CURRENT AMOUNT	PREVIOUS BALANCE	TOTAL AMOUNT
02	16/14				793	E			832.65

RECEIVED SEP 20 1983 ACCOUNTS PAYABLE - NEWARK

ACCOUNT NUMBER	
1 25	TIFFANY
75275	NEWARK

PAY THIS AMOUNT	832.65
BILLING DATE	09/13/83
PAY BY THIS DATE	10/13/83

827 HIGHLAND AVE

RETURN THE PAYMENT STUB WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD

278-001 8157

SEE REVERSE SIDE FOR RATES AND LEGEND

PAY THIS AMOUNT ➡ 5,979.8

BILLING DATE	09/19/8
PAY BY THIS DATE	10/19/8

TIFFANY & CO

NEWARK

07104

DETACH THE PAYMENT CARD WITH YOUR PAYMENT. KEEP THIS CARD FOR YOUR RECORD.

13168

102142

NAME: Tiffany & Co.

ADDRESS: 820 Highland Avenue

FACILITY LOCATION: Newark, New Jersey 07014

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START MON.	DAY	YR.	END MON.	DAY	YR.	(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
200400950 — 41100 — 0201	7	1	'83	9	30	83	1,255,895 Gals.

DATE		7/13	8/10	8/24	9/14														
(mg/l)	0310	1	7	14	1														
(mg/l)	0530	1	15	46	1														
(mg/l)	0310																		
(mg/l)	0530																		

SIGNATURE OF PRINCIPAL

10/11/83

NAME: TIFFANY & Co.

ADDRESS: 820 HIGHLAND AVE

FACILITY LOCATION: NEWARK, N.J. 07014

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START MON.	START DAY	START YR.	END MON.	END DAY	END YR.	(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
220400950 — 41100 — 0201	7	1	83	7	30	83	1,255,895

TE		7/13	8/10	8/24	9/14	9/28											
D (mg/l)	0310	1	7	14	1	43									3358		
S (mg/l)	0530	1	15	46	1	1									X 100		
															335800		
															X 7.48		
															2,511,784		
															— 95%		
															1,255,895		

TE																	
D (mg/l)	0310																
SS (mg/l)	0530																

[illegible]	Manager/Facilities	483-0140	10/21/83

INDIVIDUAL DISCHARGE MONITORING REPORT

NAME: Tiffany & Company

ADDRESS: 820 Highland Avenue

FACILITY LOCATION: Newark, New Jersey 07104

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START MON.	DAY	YR.	END MON.	DAY	YR.	(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
— —	4	1	83	6	30	83	2,566,203 Gals.

DATE		4/27	5/11	5/25	6/8	6/22												
COD (mg/l)	0310	5	5	20	12	11												
TSS (mg/l)	0530	2	1	4	1	2												

3621 100/cu ft.
x 100
362100
x 7.46 GAL/Ft³
2,701,266
135,063 (less 5%)
2,566,203 Gal

DATE																		
COD (mg/l)	0310																	
TSS (mg/l)	0530																	

Charles F. Gould

Managers of Facility Department

Manager of Facilities

ADDRESS: 820 Highland Avenue

FACILITY LOCATION: Newark, New Jersey 07014

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START			MONITORING PERIOD END			(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
200400950 — 41100 — 0201	7 MON.	1 DAY	83 YR.	9 MON.	30 DAY	83 YR.	1,255,894 Gals.

		7/13	8/10	8/24	9/14														
(mg/l)	0310	1	7	14	1														
(mg/l)	0530	1	15	46	1														
(mg/l)	0310																		
(mg/l)	0530																		

SIGNATURE OF PRINCIPAL | Mgr - Facilities Dept. | 483-0140 | 10/11/83

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

TIFFANY & CO
MANUFACTURING DIVISION
[illegible] HIGHLAND AVE
NEWARK NJ 07104

REPORT # 257125
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 09/14/83
SAMPLE TYPE:
SAMPLE LOCATION: #2040095

SAMPLE ID: EFFLUENT

[illegible] RECD
QUANTITY Q. K.
DEPT. AUTHORIZED 9/14/83
BRIDGE Q. K.
EXTENSIONS Q. K.
ACCT.

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 1

TOTAL SUSPENDED SOLIDS-MG/L: 1

RECEIVED
SEP 22 1983
ACCOUNTS PAYABLE - NEWARK

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. — Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

9/1/3

TIFFANY & CO
MANUFACTURING DIVISION
[illegible] HIGHLAND AVE
NEWARK NJ 07104

REPORT # 2209
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

SAMPLE SUBMITTED 08/24/83
SAMPLE TYPE: WASTEWATER
SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 14

TOTAL SUSPENDED SOLIDS-MG/L: 46

RECEIVED
SEP 1 1983
ACCOUNTS PAYABLE - NEWARK

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

PUREST SYSTEM OF LABORATORY CONTROL

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGHLAND AVE
NEWARK NJ 07104

REPORT # 2125
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 08/10/83
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 7

TOTAL SUSPENDED SOLIDS-MG/L: 15

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvasant Avenue
Irvington, N.J. 07111

Telephone
201-373-8007

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Chuck

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGHLAND AVE
NEWARK NJ 07104

REPORT # 1963
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 07/13/83
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

DATE SAMPLED 07/13/83

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 1

TOTAL SUSPENDED SOLIDS-MG/L: 1

C

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

Telephon
201-373-8

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

TIFFANY & CO
MANUFACTURING DIVISION
620 HIGHLAND AVE
NEWARK NJ 07104

REPORT # 271082
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 09/28/83
SAMPLE TYPE: SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 43

TOTAL SUSPENDED SOLIDS-MG/L: 1

RECEIVED
NOV 1983
ACCOUNTS PAYABLE - NEWARK

RESULTS IN MG/L UNLESS NOTED:<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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ADDRESS: 820 Highland Avenue

FACILITY LOCATION: Newark, New Jersey 07104

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START			MONITORING PERIOD END			(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
0400950 — 41100 — 0201	10 MON.	1 DAY	83 YR.	1 MON.	1 DAY	84 YR.	1,505,050

TE			10/12		11/23		12/14		12/28				2118			Consumption		
(mg/l)	0310		35		21		27		22				X 100			100 cu/ft		
(mg/l)	0530		9		44		63		13				211800					
													X 7.48			GALS/FT³		
													1584264					
													X 95%					
													1,505,050					
TE																		
(mg/l)	0310																	
(mg/l)	0530																	

	FACILITIES MANAGER, P.J. ORSON 483-0140	1/13/84

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

Telephone
201-373-8007

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

REPORT # 285176
CLIENT # 50

[illegible]

[illegible] WASTEWATER ANALYSIS

[illegible]

SAMPLE ID: EFFLUENT

[illegible]

[illegible] OXYGEN DEMAND, 5 DAY-MG/L: 36

[illegible] SOLIDS-MG/L: 9

[illegible] LESS THAN [illegible] MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone

201-373-8007

REPORT # 327071

CLIENT # 50

NJ 07104

REPORT OF WASTEWATER ANALYSIS

11/23/83

SAMPLE ID: EFFLUENT

21

NOTED: <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone

201-373-8007

REPORT # [illegible]

CLIENT # 50

[illegible] DIVISION

[illegible] AVE

NJ [illegible]7104

[illegible]

REPORT OF WASTEWATER ANALYSIS

[illegible] 12/14/83

WASTEWATER SAMPLE ID: EFFLUENT

[illegible]ICAL OXYGEN DEMAND,5 DAY-MG/L: 27

SUSPENDED SOLIDS-MG/L: 63

[illegible] NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone

201-373-8007

REPORT # 3&2007

CLIENT # 50

[illegible] DIVISION

[illegible]

[illegible] NJ 07104

[illegible] WASTEWATER SAMPLES 1-8

[illegible] 12/28/83

[illegible]

TOTAL OXYGEN DEMAND, 5 DAY-MG/L: 32

SUSPENDED SOLIDS-MG/L: 13

SEE NOTED: <LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

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GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

Telephon
201-373-8(

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

REPORT # 4270098
CLIENT # 50

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGHLAND AVE
NEWARK NJ 07104
ATTN:KATHY WILSON

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 09/26/84
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 7

TOTAL SUSPENDED SOLIDS-MG/L: 11

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. — Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGHLAND AVE
NEWARK NJ 07104
ATTN:KATHY WILSON

REPORT # 4256042
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 09/12/84
SAMPLE TYPE: WASTEWATER
SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 65

TOTAL SUSPENDED SOLIDS-MG/L: 44

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGH RID AVE
NEWARK
ATTENTION: WILSON NJ 07104

REPORT # [illegible]
CLIENT # [illegible]

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 03/14/84
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 2

TOTAL SUSPENDED SOLIDS-MG/L: 51

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE [illegible]

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone

201-373-8007

REPORT # 4129631

[illegible] 50

[illegible] 07104

[illegible] WASTEWATER ANALYSIS

[illegible] 06/27/84

SAMPLE ID: EFFLUENT

[illegible] BOD, 5 DAY-MG/L: [illegible]

[illegible] SOLIDS-MG/L: 53

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. — Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone

201-373-8007

REPORT # 4165061

CLIENT # 50

[illegible] & CO

MANUFACTURING DIVISION

[illegible] HIGHLAND AVE

NEWARK NJ 07104

ATTN: KATHY WILSON

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 06/13/84

SAMPLE TYPE: WASTEWATER

SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 6

TOTAL SUSPENDED SOLIDS-MG/L: 26

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. – Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

MATHEW KLEIN, M.S., Director

HARVEY KLEIN, M.S., Lab. Supervisor

Telephone 201-373-8007

RECEIVED

JUN 1 REC'D

TIFFANY & CO
MANUFACTURING DIVISION
820 HIGHLAND AVE
NEWARK NJ 07104
ATTN: KATHY WILSON

REPORT # 4144045
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 05/23/84
SAMPLE TYPE: WASTEWATER

SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND, 5 DAY-MG/L: 45

TOTAL SUSPENDED SOLIDS-MG/L: 44

RESULTS IN MG/L UNLESS NOTED; <=LESS THAN, >=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. – Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing

399 Stuyvesant Avenue

Irvington, N.J. 07111

Telephone
201-373-8007

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

REPORT # 4130063
CLIENT # 50

TIFFANY & CO
MANUFACTURING DIVISION
800 HIGHLAND AVE
NEWARK NJ 07104
ATTN:KATHY WILSON

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 05/09/84
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 13

TOTAL SUSPENDED SOLIDS-MG/L: 199

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. — Lab #07044

GARDEN STATE LABORATORIES, INC.

Bacteriological and Chemical Testing
399 Stuyvesant Avenue
Irvington, N.J. 07111

PUREFEST SYSTEM OF LABORATORY CONTROL

MATHEW KLEIN, M.S., Director
HARVEY KLEIN, M.S., Lab. Supervisor

Telephone
201-373-8007

TIFFANY & CO
MANUFACTURING DIVISION
620 HIGHLAND AVE
NEWARK NJ 07104
ATTN:KATHY WILSON

REPORT # 4116176
CLIENT # 50

REPORT OF WASTEWATER ANALYSIS

DATE SAMPLE SUBMITTED 04/25/84
SAMPLE TYPE: WASTEWATER SAMPLE ID: EFFLUENT

BIOCHEMICAL OXYGEN DEMAND,5 DAY-MG/L: 24

TOTAL SUSPENDED SOLIDS-MG/L: 4

RESULTS IN MG/L UNLESS NOTED;<=LESS THAN,>=MORE THAN

THE LIABILITY OF GARDEN STATE LABORATORIES, INC. FOR SERVICES RENDERED SHALL IN NO EVENT EXCEED THE AMOUNT OF THE INVOICE.

Certified by U.S. Public Health Service, N.J. Dept. of Health and N.J.D.E.P. — Lab #07044

Mr. Frank D'Asciensio
Superintendent
Industrial Waste Control
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, New Jersey 07105

Re: Monitoring Requirements for
Total Toxic Organics
40 CFR 433.12(a)(b)

Dear Mr. D'Asciensio:

I am responding to your letter of May 15, 1984. At the present time, Tiffany and Co., whose plant is located at 820 Highland Avenue, Newark, New Jersey, does not discharge any toxic organics into the Passaic Valley Sewerage Authority's treatment facility.

Therefore, on behalf of Tiffany and Co., I make the following certification:

> Based on my inquiry of the person(s) at Tiffany and Co. directly responsible for managing compliance with the Passaic Valley Sewerage Commission permit limitation for total toxic organics, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into Tiffany's wastewaters has occurred since the filing of the last discharge monitoring report. I further certify that this facility does not discharge solvents and therefore does not need to implement any solvent management plan.

This completes our obligation, as I understand it, of the above cited regulation. If you have any questions, please contact the undersigned.

Very truly yours,

GIBBONS P.C.
One Gateway Center
Newark, New Jersey 07102-5310
(973) 596-4500
Attorney for Third-Party Defendant
Tiffany and Company

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION et al. Plaintiffs v. OCCIDENTAL CHEMICAL CORPORATION, TIERRA SOLUTIONS, INC., et als. Defendants. MAXUS ENERGY CORPORATION et al., Third-Party Plaintiffs, v. 3M COMPANY, *et al.*, Third-Party Defendants.	SUPERIOR COURT OF NEW JERSEY LAW DIVISION: ESSEX COUNTY DOCKET NO. L-9868-05 (PASR) CIVIL ACTION CERTIFICATION OF PATRICK DORSEY, TIFFANY GENERAL COUNSEL

I, Patrick B. Dorsey., do hereby certify as follows:

1. I am currently Vice President, Secretary and General Counsel for Third Party Defendant Tiffany and Company ("Tiffany"). I became General Counsel in 1985 and I am fully familiar with the facts herein either as custodian of the files related to Tiffany's former facility located at 820 Highland Avenue, Newark, New Jersey ("Newark Site") or actual involvement in the Environmental Cleanup and Liability Act of 1984 ("ECRA") and its later name, the Industrial Site Remediation Act of 1992 ("ISRA") for the Newark Site.

2. In 1984, Tiffany's employees determined to do an employee buyout from Avon Products, Inc of the stock of Tiffany and Company which had been taken over by Avon in an earlier stock purchase. At the time the sole New Jersey property was Tiffany's facility in Newark, New Jersey located at 820 Highland Avenue, which was engaged in silver smithing. Accordingly, Tiffany submitted the necessary filings under ECRA.

3. Tiffany submitted the ECRA forms to initiate the ECRA process. All workers and records were searched at the time for known discharges of hazardous substances or wastes. See Exhibit B (Question 13 stating that there were no known hazardous substances that occurred during the historical operation of the site.) See ECRA form 2 annexed hereto as Exhibit A.

3. Because soil contamination on site was found on site, however, Tiffany could not complete the remedial investigation before closing on the employee buy out date of October 15, 1984. Tiffany entered into an Administrative Consent Order on or about October 12, 1984. A copy of the Consent Order is attached as Exhibit B.

4. As ECRA was new at the time, much sampling and testing was required. Indeed, in 1987, New Jersey Department of Environmental Protection (NJDEP) Department required a extensive groundwater testing to be conducted of the Tiffany site. In 1988, Tiffany's groundwater consultant determined that any groundwater contamination on Tiffany's site was from an upgradiant source and not Tiffany's responsibility. See Letter of September 20, 1988 and NJDEP letter of June 30, 1989 attached hereto as Exhibit C. The sampling results were examined by NJDEP. NJDEP accepted the report and directed that "no further ground water quality investigation or remediation is necessary". See NJDEP Letter of June 30, 1989 attached hereto as Exhibit D. Thereafter, the issue was soil cleanup which was covered by a further Cleanup Plan that was approved on June 30, 1989 by NJDEP.

5. On July 30, 1993, NJDEP approved Tiffany's final report of its cleanup plan. See NJDEP Letter of July 30, 1993, wherein NJDEP determined that Tiffany was in full compliance with ISRA. There were no known discharges by Tiffany into New Jersey waters. All on site contamination, which was soil contamination only, was completed to the full satisfaction of NJDEP.

6. I have reviewed the nexus statement provided by Third Party Plaintiffs which merely consists of an effluent survey with no wastes other than water listed and a preliminary sampling by Geraghty and Miller in 1987 which was the basis for doing the extensive groundwater sampling that Geraghty and Miller undertook the results of which determined that Tiffany was not the source of the contamination.

7. Tiffany ceased to operate the 820 Highland Avenue plant in 1985. All operations were moved to Parsippany.

I hereby certify that the foregoing statements made by me are true. I further certify that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Patrick B. Dorsey, Esq., Vice President,
Secretary and General Counsel
Tiffany and Company

Dated: September 2, 2010

#1560152 v1
083990-67278

Exhibit A

100% Recycled 30% PCW

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
BUREAU OF INDUSTRIAL SITE EVALUATION

ENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA)

APPLICATION FOR ECRA REVIEW

SITE EVALUATION SUBMISSION

This is the second part of a two part application submittal and must be submit within 30 days following public release of the decision to close operations execution of an agreement of sale or option to purchase.

DATE 9/24/84

NAME OF APPLICANT TIFFANY & COMPANY

ADDRESS 820 HIGHLAND AVENUE

CITY OR TOWN NEWARK, N.J. ZIP CODE 07104

MUNICIPALITY _____ COUNTY ESSEX

SUBMIT THE FOLLOWING:

9. A scaled site map identifying all areas where hazardous substances or was have been or currently are generated, manufactured, refined, transport treated, stored, handled or disposed, above or below ground.

   IS THIS MAP ENCLOSED? X YES, (See Appendix #1) ___ NO

10. A detailed description of the current operations and process at industrial establishment organized in the form of a narrative rep designed to guide the Department step-by-step through a plant evaluati with particular emphasis on areas of the process stream where hazard substances and wastes are generated, manufactured, refined, transport treated, stored, handled or disposed on site, above or below ground. Ple note that establishments which ceased production prior to December 31, 19 but are subject to ECRA because of on-going storage beyond that date, m provide details on past operations.

    IS THIS REPORT ENCLOSED? X YES, (See Appendix #2) ___ NO

    IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

FOR DEP USE ONLY

DATE RECEIVED _____

NOTICE NUMBER _____

11.A. A description of the types, age, construction material, capacity, contents, and locations of storage vessels, surface impoundments, landfills, or other types of storage facilities, including drum storage, containing hazardous substances or wastes.

ARE THESE FACILITIES IDENTIFIED ON YOUR SITE MAP OR DESCRIBED IN A NARRATIVE REPORT? X YES, (See Appendix # 3) ___ NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

11.B. The Department requires that satisfactory leak tests such as the Petrotite (formerly the Kent Moore test) or the Leak Lokator LD-2000 Test or Soil Borings be performed to verify the integrity of all underground tanks and that the results of such tests be submitted to the Department.

ARE THE RESULTS OF THE LEAK DETECTION TEST OR THE SOIL BORINGS ENCLOSED? X YES, (See Appendix #___) ___ NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

12. A complete inventory of hazardous substances and wastes, including description and location of all hazardous substances or wastes generated, manufactured, refined, transported, treated, stored, handled or disposed on site, above and below ground, and a description of the location, types and quantities of hazardous substances and wastes that will remain on site. (Attach additional sheets if necessary.)

MATERIAL	QUANTITY	LOCATION	STORAGE METHOD	TO REMAIN ON SITE (YES OR NO)

NO HAZARDOUS WASTES WILL REMAIN ON SITE.

MATERIAL	QUANTITY	LOCATION	METHOD	TO REMAIN ON SITE (YES OR NO)

13. A detailed description, date and location on a scaled map of any known spill or discharge of hazardous substances or wastes that occurred during the historical operation of the site and a detailed description of any remedial actions undertaken to handle any spill or discharge of hazardous substances or wastes. (Attach additional sheets if necessary.)

IS THIS INFORMATION ENCLOSED? ___ YES, (See Appendix #___) X NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

TO MY KNOWLEDGE NO HAZARDOUS SPILLS OR DISCHARGES HAVE OCCURRED.

ARE THE SPILLS IDENTIFIED ABOVE INDICATED ON THE SCALED SITE MAP? ___ YES X NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

THERE HAVE BEEN NO SPILLS.

14. A detailed sampling or other environmental evaluation measurement plan which includes proposed soil, groundwater, surface water, surface water sediment, and air sampling determined appropriate for the site. (This sampling plan must be developed in conformance with ECRA Regulations N.J.A.C. 7:1-3.14 et seq., and Quality Assurance Guidelines as developed by DEP, copies of which are enclosed.)

IS THE SAMPLING PLAN ENCLOSED? X YES, (See Appendix #___) ___ NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

15. A detailed description of the procedures to be used to decontaminate and/or decommission equipment and buildings involved with the generation, manufacture, refining, transportation, treatment, storage, handling, or disposal of hazardous waste or substances including the name and location of the transporter, the ultimate disposal facility, and any other organizations involved.

IS THE DETAILED DESCRIPTION ENCLOSED? ___ YES, (See Appendix #___) X NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

ALL WASTE MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SIGHT.

16. Copies of all soil, groundwater and surface water sampling results, including effluent quality monitoring, conducted at the site of the industrial establishment during the history of ownership by the owner or operator, including a detailed description of the location, collection, chain of custody, methodology, analyses, laboratory, quality assurance/quality control procedures, and other factors involved in preparation of the sampling results;

ARE HISTORICAL RESULTS ENCLOSED? ___ YES, (See Appendix #___) ___ NO

IF YOU HAVE CHECKED "NO," STATE THE REASON(S): _____

17. If you currently have a Spill Prevention Control and Countermeasure Plan (SPCC) for this facility, enclose a copy with this submittal.

IS YOUR SPCC PLAN ENCLOSED? ___ YES, (See Appendix #___)
_X_ NO, this facility is not required to have an spcc plan.

18. Please list any other information you are submitting: _____

_____

_____

_____

Send complete information package to:

BUREAU OF INDUSTRIAL SITE EVALUATION
DIVISION OF WASTE MANAGEMENT
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CN-028
TRENTON, N.J. 08625
ATTN: ECRA NOTICE SUBMISSION

TIFFANY & COMPANY
MANUFACTURING CENTER
NEWARK, NEW JERSEY

APPENDIX #2
#10

Silver Manufacturing Operation

The current operations and processing at this sight are the same as they have been since the building was erected in 1897. The operations consist of the manufacture of sterling silver products and the printing of high quality personal paper products (stationery, business cards, and Christmas cards).

The silver manufacturing process starts with "O" guage (.375 thick) silver plates. The plates are then rolled to the various thicknesses required. These rolled plates are then processed into flatware and hollow ware items. In the process, annealing is required and this annealing is accomplished in molten cyanide salts. The parts are then dipped into a 4% solution of sulfuric acid. The residues from these salts and acid are flushed into a below ground concrete holding,diluting and settling tank. The effluent, which is approximately 10,000 gallons per day, is accepted by the Passaic Valley Sewerage Commission under permit #20400950. Our effluent is analyzed by Garden State Laboratories on a monthly basis to insure compliance with the terms of the permit. This settling tank is then pumped out approximately once a year and the sludge is refined to reclaim any sterling silver.

Another area that could possibly contain hazardous waste is our finishing room. During the process of manufacturing silver products, it sometimes becomes necessary to clean these parts in a solution of warm nitric acid. Also when completed, these pieces are washed in a very strong solution of ammonia. The residues of the acid and ammonia are also funneled to our holding, diluting, and settling tank.

Stationery Manufacturing Operation

The stationery manufacturing is separated into three main areas, engraving and two printings.

In the engraving area we engrave on copper and steel dies. After pantographing, we put the dies or plates in a etching tank that has iron perchloride. This tank gets emptied about every four to six weeks. The remains of this is flushed into a below the ground concrete holding tank and is accepted by the Passaic Valley Sewerage Commission under permit #20400950.

In both printing areas we use sub-turps to reduce the thinness of our varnish ink which has no chemical hazardous wastes. The contaminated sub-turps is put into a container and taken away to be disposed of in our regular rubbish disposal system.

TIFFANY & COMPANY
MANUFACTURING CENTER
NEWARK, NEW JERSEY

APPENDIX #3

11A

We have a hazardous waste collection area in a locked, concrete floored, brickwalled enclosure. Our hazardous wastes are collected in approved ply drums for commercial disposal. This area has been set up fairly recently and we as yet have not had a commercial pickup.

Exhibit B

100% Recycled 30% PCW

EC0001

RECEIVED
OCT 2 5 1984
DEBORAH L. KRAMM

ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF

TIFFANY AND COMPANY

The following findings are made and Order is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP") by the Environmental Cleanup Responsibility Act, N.J.S.A. 13:1K-6, et seq., and duly delegated to the Assistant Director for Enforcement and Field Operations within the Division of Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. The State of New Jersey enacted the Environmental Cleanup Responsibility Act (ECRA or the Act), N.J.S.A. 13:1K-6, et seq. (P.L. 1983, c.330), which was signed into law by Governor Thomas H. Kean on September 2, 1983.

2. ECRA requires the NJDEP to adopt rules and regulations to implement the Act.

3. NJDEP promulgated Interim ECRA regulations, N.J.A.C. 7:1-3, on December 30, 1983 on an emergency basis pursuant to N.J.S.A. 52:14B-4(c) as implemented by N.J.A.C. 1:30-4.4. On March 6, 1984, NJDEP readopted the Interim ECRA Regulations, N.J.A.C. 7:1-3 (Regulations) in compliance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., upon acceptance for filing by the office of Administrative Law pursuant to N.J.A.C. 1:30-4.4(d).

4. ECRA and the Regulations establish certain requirements for owners or operators of industrial establishments planning to sell or transfer operations.

5. ECRA requires that the owner or operator of an industrial establishment planning to sell or transfer operations (a) notify the NJDEP in writing within five days of the execution of an agreement of sale, (b) submit within 60 days prior to transfer of title a negative declaration to the NJDEP for approval, or within 60 days prior to transfer of title, attach a copy of any cleanup plan to the contract or agreement of sale which may be entered into with respect to the transfer of operations and (c) obtain, upon approval of the cleanup plan by the NJDEP, a surety bond or other financial security approved by the NJDEP guaranteeing performance of the cleanup plan in an amount equal to the cost estimate for the cleanup plan.

6. Section 8 of ECRA provides that failure to submit a negative declaration or cleanup plan pursuant to the Act is grounds for voiding the sale by the NJDEP.

7. Tiffany and Company (hereinafter "Tiffany"), whose stock is owned by Avon Products, Inc., operates a manufacturing facility at 820 Highland Avenue, Newark, New Jersey identified as Blocks 848-B and 852, lots 1, 7, 9, 15 and 19, City of Newark, County of Essex, New Jersey 07104, which is subject to the provisions of ECRA and the Regulations.

8. On September 12, 1984, Tiffco, Inc., (Tiffco), a Delaware Corporation, entered into an Agreement to purchase the stock of Tiffany which stock is presently owned by Avon Products, Inc.

9. The above Agreement provides for transfer on October 15, 1984. This transaction involves substantial properties, of which the Newark facility is but a small part and is the site which is the subject of this Order. This transaction involving the Newark facility requires transfer in accordance with the agreement noted herein.

10. However, Tiffany did contract with Princeton Aqua Science to perform soil and water sampling at the Newark facility pursuant to ECRA. Samples were collected by members of Princeton Aqua Science on August 3, 1984 and August 8, 1984. The analysis of these samples indicate the presence of lead, cyanide, and petroleum hydrocarbon contamination on site. Accordingly, Tiffany has advised the NJDEP that it cannot comply with all of the requirements of ECRA and the Regulations prior to transfer.

11. Subsequent to the transfer on October 15, 1984, Tiffany intends to close the Newark facility on or about December 14, 1984. This Order will enable the transfer on October 15, 1984, and the closure anticipated on or about December 14, 1984 to be undertaken in a comprehensive manner,

thereby eliminating a subsequent duplicative ECRA review and approval. The comprehensive ECRA review and approval for the transfer and subsequent closure in a single process is to the benefit of all parties hereto.

12. The submission and implementation of a cleanup plan pursuant to ECRA may be necessary and required for the Newark facility because hazardous substances and wastes may have been, and may continue to be, used and generated on site.

13. The Company has submitted to the NJDEP the initial notice and other information required under ECRA Section 4(b)(1) and N.J.A.C. 7:1-3.7.

14. N.J.S.A. 13:1K-6(b) requires that NJDEP, within 45 days of submission, approve a negative declaration, or inform the industrial establishment that a cleanup plan must be submitted.

ORDER

15. NOW, THEREFORE, IT IS HEREBY ORDERED AND AGREED that Tiffany and Company, its principals, agents, employees, successors, assigns, tenants and any receiver or trustee in bankruptcy (should such an entity be appointed to take control of the facility which is the subject of this Order) shall:

(1) Arrange for any preliminary inspection required by NJDEP, under N.J.A.C. 7:1-3.8 within five (5) days after receipt of a request by NJDEP to arrange such an inspection.

(2) Initiate the approved sampling plan pursuant to N.J.A.C. 7:1-3.9 within 45 days of the receipt of NJDEP approval and complete the sampling plan in accordance with the schedule established in the approved sampling plan.

(3) Submit to NJDEP a negative declaration or a cleanup plan pursuant to ECRA Section 4(b)(2) and N.J.A.C. 7:1-3.10 through 7:1-3.12 within 180 days after receipt of NJDEP's approval of the sampling plan.

(4) Upon approval of the cleanup plan by NJDEP, the Company shall implement the plan in accordance with the approved time schedule or defer implementation of all or part of the plan subject to NJDEP approval pursuant to Section 6(b) of ECRA and N.J.A.C. 7:1-3.14.

16. Tiffany shall obtain and provide to NJDEP a Surety Bond in the amount of $ 100,000 to comply with Section 4.b(3) of ECRA and N.J.A.C. 7:1-3.10. In the event Tiffany submits a cleanup plan under paragraph 15(3) hereof, Tiffany shall either amend said Bond or provide such other financial assurance as may be approved by the NJDEP in an amount equal to the estimated cost to implement such cleanup plan, whether lesser or greater than the amount of the original bond. Within seven (7) days after the effective date of this Order, Tiffany shall establish a standby trust fund into which all amounts paid pursuant to a demand by the NJDEP shall be deposited promptly and directly by the issuing institution.

17. In the event the NJDEP determines that Tiffany has failed to comply with any of the terms or conditions of this Order or has failed to implement the cleanup plan or performs any cleanup not in accordance with the cleanup plan, the NJDEP shall notify Tiffany and give Tiffany fifteen (15) days to meet with NJDEP to resolve alleged noncompliance by Tiffany. In the event Tiffany fails to comply with the terms and conditions of this Order or fails to implement the cleanup plan or performs any cleanup not in accordance with the cleanup plan, and such failure or performance is not resolved at the Tiffany meeting with NJDEP, then the NJDEP may draw against said Surety Bond for the purpose of correcting such failure to performance.

18. The NJDEP agrees it will not bring any action, nor will it recommend that the Attorney General's Office bring any action seeking to void the sale of the Newark facility to the Buyer for failure to comply with (1) the time requirements in Section 4(b)(2) of ECRA that a negative declaration or cleanup plan be submitted 60 days prior to transfer of title; or (2) with respect to the sampling already done by Tiffany with NJDEP approval as required by 7:1-3.9(b). NJDEP also agrees that it will not bring any action, nor will it recommend that the Attorney General's Office bring any action seeking monetary penalties from Tiffany or any other person or entity for

the failure to comply with Items (1) and (2) set forth in this paragraph or for any other violation of ECRA and its regulations presently known to NJDEP or its agents, servants or employees.

19. Tiffany's failure to comply with the provisions of paragraph 15(3) or of this Order shall constitute grounds for the NJDEP to void the sale of the Newark facility to the Buyer.

20. In the event that Tiffany fails to comply with any of the provisions of this Order, on proper demand of NJDEP, Tiffany shall pay to the NJDEP stipulated penalties in the amount of $5,000.00 for each day on which Tiffany fails to comply with its obligation under this Order; provided however, that no such stipulated penalty shall be payable by Tiffany with respect to such period that Tiffany's said failure to comply results from causes beyond the reasonable control of Tiffany, such as acts of God, strike, contractor delays or delays in obtaining necessary permits and approvals from governmental agencies.

21. No obligations imposed by this Order (other than paragraph 20) are intended to constitute a debt, claim, penalty or other civil action which could be limited or discharged in a bankruptcy proceeding. All obligations imposed by this Order shall constitute continuing regulatory obligations imposed pursuant to the police power of the State of New Jersey, intended to protect the public health, safety and welfare.

22. In the event that the transfer as contemplated in Paragraph 8 hereinabove does not take place and Tiffany does not close the Newark facility as set forth in Paragraph 11 herein, Tiffany shall no longer be subject to the provisions of this Order and this Order shall be null and void.

23. This order shall take effect upon the signature of all parties.

RESERVATION OF RIGHTS

This Administrative Consent Order shall be fully enforceable in the New Jersey Superior Court having jurisdiction over the subject matter and signatory parties upon filing of a summary action for compliance pursuant to the Environmental Cleanup Responsibility Act, N.J.S.A. 13:1K-6 et seq. This Consent Order may be enforced in the same manner as an Administrative Order issued by the NJDEP pursuant to the foregoing statutory authority and shall not preclude the NJDEP from taking whatever action it deems appropriate to enforce the environmental protection laws of the State of New Jersey in any manner not inconsistent with the terms of this Order. It is expressly recognized by the NJDEP and Tiffany that nothing in the Order shall be construed as a waiver (1) by the NJDEP of its rights with respect to enforcement of ECRA on bases other than those set forth in Paragraphs 18 and 19; or (2) Tiffany's right to seek review of any administrative decision or enforcement action made under this Order or otherwise as provided by the Administrative Procedure Act, N.J.S.A. 32:14B-1 et seq.

Furthermore, nothing in this Order shall constitute a waiver of any statutory right of NJDEP to require Tiffany to implement additional remedial measures should NJDEP determine that such measures are necessary to protect the public health, safety and welfare.

Tiffany and Company hereby consents to entry of this Order and waives its right to a hearing concerning the terms hereof pursuant to N.J.S.A. 52:14B-1 et seq.

NEW JERSEY DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Date 10/12/84

By: Joseph A. Rogalski
Joseph A. Rogalski
Assistant Director
Field Operations,
Compliance and Enforcement

TIFFANY & COMPANY

Date October 12, 1984

By: William R. Chaney

Name: William R. Chaney

Title: Chairman of the Board

Exhibit C

30% PCW 100% Recycled

CRUMMY, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE

A PROFESSIONAL CORPORATION

ATTORNEYS AT LAW
ONE GATEWAY CENTER
NEWARK, N.J. 07102-5311
201-622-2235

CABLE-TELEX:
138154

TELECOPIERS:
(201) 877-4401
(201) 877-3550
(201) 877-3556
WRITER'S DIRECT LINE: (201) 877-

N. DEL DEO
T. DOLAN
R. GRIFFINGER
J. VECCHIONE
J. CARTON
A. RIDLEY
W. DELVENTHAL
J. SHEEHAN
H. HYMAN
H. STECKROTH
S. ZACKIN
B. REILLY, JR.
B. CALMANN
K. KLOCK
S. McCORMICK
FREDERICK C. KENTZ, III
PAUL R. DeFILIPPO
BRIAN J. McMAHON
MICHAEL D. LOPRETE
BARRY A. OSMUN
KAREN A. GIANNELLI
ALYCE C. HALCHAK
TERRY R. BRODERICK*+
PHILIP W. CRAWFORD
IRA J. HAMMER
RUSSELL B. BERSHAD
KERRY M. PARKER
MICHAEL F. QUINN
HERBERT B. BENNETT
JAMES B. KEENAN*

ANDREW B. CRUMMY (1895-1981)

*BRUSSELS, BELGIUM
*MEMBER NEW YORK BAR ONLY
+MEMBER PENNSYLVANIA BAR ONLY
◊MEMBER ZURICH BAR ONLY
MEMBER NEW YORK AND CALIFORNIA BARS ONLY

MARY ANNE McDONALD
SUSANNE PETICOLAS
GERALDINE E. PONTO
MICHAEL J. LERNER
PAUL M. ANTINORI
ANN M. SCHMIDT
GARY F. WERNER
STEPHEN R. REYNOLDS
VIRGINIA L. HARDWICK
CHRISTINE A. AMALFE
ROBERT J. INGATO
ANTHONY P. LA ROCCO
PAUL F. CAMPANO
DOUGLAS J. JANACEK
ROBERT K. MALONE
MARTIN B. O'CONNOR, II
JEFFREY P. FLYNN
KIM M. GIVEN
JOHN W. FITZGIBBON
MARIA I. KENNEDY
SHARON BEY-CHRISTOPHER
DEBORAH DEL NOBILE TANENBAUM
STEVEN H. SHOLK

ERNST A. WIDMER◊
JEFF ELLENTUCK
SYLVIA M. ORENSTEIN
MARY FRASCA DOLES
PHYLLIS L. LIEBERMAN
JOSEPH P. CRAVEN, III
GUY V. AMORESANO
LISA S. GROSSKREUTZ
ALISON STEWART KERBER
RUSSELL J. PASSAMANO
PATRICIA A. MURPHY
DAVID B. GELFARB
MICHAEL N. AQUINO
SARA L. SAWYER+
THOMAS R. DEAN†
MATTHEW J. KIRNAN
LAURA J. MANZIONE
CHARLES V. STILLITANO
DONNA M. AMBROSIO
MICHAEL R. McDONALD
JUDITH J. SULLIVAN
ROZANNE F. SULLIVAN
DIANE C. URCIUOLI

DOROTHEA GARBER CRACAS
W. THOMAS MARGETTS
PETER E. THAUER*
OF COUNSEL

September 20, 1988

Mr. Ravi Gupta
Industrial Site Evaluation Element
Division of Hazardous Waste Management
Department of Environmental Protection
401 East State Street
CN-028
Trenton, NJ 08625

Re: Tiffany & Company
Newark, New Jersey
ECRA Case No. 84257

Dear Mr. Gupta:

I am writing with regard to the above-referenced matter and the sampling plan implementation reports required to be provided to the Department of Environmental Protection (DEP) by September 23, 1988. In accordance with these requirements, enclosed please find the following documents:

1. Soil Sampling Plan Implementation Results and Proposed Cleanup Plan performed and prepared by Aguilar Associates;

2. Quality Assurance/Quality Control documents pertaining to the soil sampling program data;

3. Phase II Hydrogeological Investigation performed by Geraghty & Miller, Inc. (this report comprises the groundwater investigation program data performed by Geraghty & Miller);

4. Quality Assurance/Quality Control documents pertaining to the groundwater sampling performed by Geraghty & Miller.

The soil investigation program performed by Aguilar Associates identifies several areas required for cleanup pursuant to the present ECRA guidelines. The enclosed report designates those areas, identifies the extent of cleanup proposed and quantifies the soil proposed for removal and disposal from the site. It is important to note that with the exception of one sample point, all of the sampling data demonstrate compliance with standards for volatile organic substances in the soils. The cleanup is required due to the levels of petroleum hydrocarbons, various heavy metals and cyanide in the soils.

The soil investigation program comprising this phase of the ECRA compliance activities was undertaken in a grid pattern over the remaining areas at the establishment which had previously not been sampled and which were subject to industrial activities. As such, it represents a comprehensive review of the soil conditions at the establishment and, as documented, provides ample justification for approval of the soil cleanup program as proposed to remediate existing levels of petroleum hydrocarbons, heavy metals and cyanide in the soils.

Geraghty & Miller has performed a hydrogeological investigation at the establishment and has prepared the enclosed Phase II Hydrogeological Investigation report. Geraghty & Miller has concluded that groundwater remediation is not required at the Tiffany & Company establishment. The basis for the Geraghty & Miller conclusion is:

1. <u>The absence of volatile organic substance contamination in the soils at the establishment revealed by</u>

the comprehensive soil investigation program completed. Geraghty & Miller has reviewed the most recent Aguilar Associate reports (enclosed) and the prior soil sampling data submissions completed by Princeton Aqua Science and IT Corporation. As noted in the Geraghty & Miller report, the virtual absence of volatile organic substance contamination in the soils demonstrates that there is no on-site source for volatile organic substance contamination to the groundwater.

2. The presence and concentration of volatile organic substances in the upgradient well drilled at (vos) the establishment. The upgradient shallow well revealed total levels of 470 parts per billion (ppb) of vos in the groundwater. This concentration was higher than all remaining groundwater wells sampled, with the exception of two wells immediately downgradient of the upgradient sampling point. These two wells, immediately downgradient of the upgradient well, contained total elevations of vos slightly in excess of concentrations found in the upgradient well. Given the concentrations of contaminants in the upgradient well, the relative relationship of the contaminants in all other groundwater monitoring wells installed and sampled justifies Geraghty & Miller's conclusions that the vos groundwater contamination at the establishment derives from off-site, upgradient sources.

Based upon the reports and soil cleanup plan enclosed herein, Tiffany & Company respectfully requests a final cleanup plan approval from the DEP, pursuant to ECRA, for this establishment. The soil investigation program and proposed cleanup plan conclusively delineates the soils required for removal pursuant to the present ECRA guidelines. The groundwater investigation program has documented that the source of vos at the establishment is off-site, upgradient activities. The approval of the enclosed reports and our recommendations is totally consistent with the DEP's position concerning the requirements for on-site soil contamination and off-site groundwater contamination sources, conditions and remedial guidelines.

Final approval of the enclosed documents is also requested on an expeditious basis, inasmuch as this matter has been before the DEP for years. Numerous plans and reports have been submitted to the DEP, which process has been time-consuming. This matter has also been the subject of approximately eight months delay while attempting to obtain the necessary authorizations from the Consolidated Rail Corporation for the installation of upgradient monitoring wells. Every action requested and required by the DEP has been taken in this matter. It was the position of Tiffany & Company, nearly two years ago, that the constituents of concern, i.e. petroleum hydrocarbons, heavy metals and cyanides would not be found in the groundwater and that a groundwater investigation program was not necessary. The Department required the initiation of this program, which was then undertaken by Tiffany & Company, and two rounds of sampling have confirmed the company's original position.

During the first round of sampling, vos's were revealed in the groundwater with no apparent on-site source. Numerous additional wells were installed and an additional round of sampling was performed which has resulted in the enclosed report documenting the upgradient groundwater contamination that is migrating to the Tiffany & Company establishment.

Accordingly, it is requested that the final review and approval of the enclosed documents be forthcoming as expeditiously as possible. We are also requesting an opportunity to meet with representatives from the DEP should there be any questions or concerns with respect to the enclosed documents, prior

to the issuance of any formal documents in this regard from the DEP, in order to expedite the resolution of any such matters in order that this matter can be resolved and completed in a timely manner.

If you have any questions concerning the enclosed, please feel free to call me. I will be contacting you within the next several weeks to determine the status of the review in this matter. In the event that you deem it appropriate to have a meeting with technical and company representatives, please contact me, and I will make the necessary arrangements for such a meeting.

Very truly yours,

HERBERT B. BENNETT

HBB:gmw
Enclosures

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Director
401 East State St.
CN 028
Trenton, N.J. 08625-0028
(609)633-1408

Michele M. Putnam
Deputy Director
Hazardous Waste Operations

Janice R. Miller
Deputy Director
Responsible Party Remedial Action

JUL 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Herbert B. Bennett
Crummy, Del Deo, Dolan, Griffinger
Gateway One
Newark, NJ 07102

JUN 30 1989

Dear Mr. Bennett:

RE: Industrial Establishment: Tiffany & Co.
Location: 820 Highland Avenue, Newark City, Essex County
Block: 848B; 852 Lot: 1, 7, 9, 15
Transaction: Cessation of Operations and Sale of Stock
Cleanup Plan Dated: September 1988 and Amendments thereto
ECRA Case #84257

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection ("NJDEP") by the Environmental Cleanup Responsibility Act, N.J.S.A. 13:1K-6 et seq. (ECRA), and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the above referenced Cleanup Plan submitted on behalf of Tiffany & Co. is hereby approved by NJDEP as conditioned below:

I. Soil Modifications

1. The proposal to leave residual soil contamination is acceptable if:

   a. B-20 area is excavated instead of B-19 area as proposed.

   b. paving is implemented as proposed (if paving does not occur, then the 250 ppm action level for lead shall be achieved).

   Residual soils above action level will remain since, (i) contamination is not present in ground water, (ii) process and waste disposal areas (sources) shall be remediated, (iii) competent bedrock is encountered at two feet.

2. Post excavation sampling shall include at least one (1) sample for each sidewall in each excavation area for target parameters in addition to the proposed samples. For the 10 ft. x 10 ft. excavations, two (2) sidewall samples are required.

3. Tiffany & Co. shall use a site-specific Health and Safety Plan that meets the criteria outlined in 29 CFR and 20 CFR for this soil excavation/sampling episode.

4. Tiffany & Co. shall analyze the soil samples per the analytical methods approved in the ECRA Draft Sampling Plan Guide (June 1986, attachment 2C).

II. Interior Cleanup Plan

1. The work plan shall conform to the following.

   i. Accepted Engineering Practices shall be adhered to,

   ii. Subpart A & B of 40 CFR, Part 61 National Emission standards for Hazardous Air Pollution,

   iii. N.J.A.C. 7:26 Non Hazardous Waste Regulation, and

   iv. Asbestos Hazard Abatement Code N.J.A.C. 5:28-8.

2. Tiffany & Co. shall submit documentation supporting proper disposal of waste including wash water.

3. Tiffany & Co. shall analyze all the wipe samples for PCB's. Wipe samples shall be collected in accordance with the NJDEP Field Sampling Procedures Manual.

4. Tiffany & Co. shall obtain the Department's approval in writing prior to initiation of any construction in these areas.

III. Ground Water Cleanup

Tiffany & Co. shall seal all the monitoring wells at the site in accordance with N.J.S.A. 58:4-4.1.

As no potable water wells exist in the immediate vicinity of the site, and the soils proposed to remain on-site will be within acceptable levels upon completion of the soil remediation, no further ground water quality investigation or remediation is necessary.

IV. General

1. Tiffany & Co. shall comply with all federal, state and local laws, regulations and ordinances in implementing the approved Cleanup Plan.

2. Tiffany & Co. shall obtain all federal, state and local permits prior to implementation of the approved Cleanup Plan. Should any conditions or limitation of said permits be more stringent than those in the approved Cleanup Plan, then said permit requirements shall supersede the terms of this approval.

3. Upon the written request of NJDEP Tiffany & Co. shall submit for NJDEP review and approval any additional sampling plans deemed necessary by NJDEP during the implementation of a Cleanup Plan to fully delineate

the nature and extent of environmental contamination on or from the referenced site. Tiffany & Co. shall implement and complete any such additional Sampling Plans, and submit the results thereof, in accordance with the timeframe set forth in the approved additional Sampling Plan. Furthermore, Tiffany & Co. shall prepare and submit to NJDEP for approval, any revisions to the Cleanup Plan necessary to remediate any additional environmental contamination on or from the referenced site as identified during the cleanup plan implementation, by any additional sampling, or from any other source. Tiffany & Co. shall revise and submit the required information within a reasonable time not to exceed thirty (30) calendar days from receipt of written notification from NJDEP.

4. The ECRA requirement for remediation of all environmental contamination on or from the referenced site and the terms and conditions of the approved Cleanup Plan shall be binding upon Tiffany & Co., and its officers, management officials, successors in interest, assigns, tenants and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity.

5. Tiffany & Co. within fourteen (14) days of receipt of this Cleanup Plan approval, shall amend the amount of posted financial assurance specified in paragraph 16 of the Administrative Consent Order to equal the amount of $309,668.00 the estimated cost of implementation of the Cleanup Plan or shall provide alternative financial assurance in accordance with the regulatory requirements of N.J.A.C. 7:26B-6 in the amount specified above. Furthermore, Tiffany & Co. shall maintain the required financial assurance until NJDEP issues Tiffany & Co. a written notification that the Cleanup Plan had been fully implemented to NJDEP's satisfaction.

6. Tiffany & Co. shall initiate this Cleanup Plan as conditioned in this letter within four (4) weeks of receipt of this letter and in accordance with N.J.A.C. 7:26B-5.5(c) begin and complete implementation of the Cleanup Plan according to the proposed time schedule. If any delay or anticipated delay had been or will be caused by events beyond the control of Tiffany & Co. then Tiffany & Co. shall notify NJDEP in writing within ten (10) days of the delay or anticipated delay, as appropriate, describing the anticipated delay and precise cause or causes and request for a extension. Increases in the costs or expenses incurred in fulfilling the requirements contained in this letter shall not be a basis for an extension and such extension requests will not be granted. If Tiffany & Co. fails to implement the Cleanup Plan in accordance with the proposed schedule then NJDEP reserves the right to implement full enforcement measures and assess penalties pursuant to N.J.A.C. 7:26B-9.

7. Tiffany & Co. shall prepare and submit to NJDEP monthly written progress reports detailing the implementation of the Cleanup Plan.

8. Tiffany & Co. shall prepare and submit a final written report detailing the actual cleanup actions performed and final cleanup costs including overhead, compared to the cleanup actions, schedule and costs approved in the Cleanup Plan. The report should also include dates of cleanup activities, additional sampling results and other pertinent information.

Exhibit D

100% Recycled 30% PCW

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0028

Scott A. Weiner
Commissioner

Carl J. Delaney
Director

AUG 1993
RECEIVED
Crummy, Del Deo, Dolan
Griffinger & Vecchione

JUL 30 1993

Mr. John Klock
Crummy, Del Deo, et. al
One Riverfront Plaza
Newark, NJ 07102-5497

Re: Industrial Establishment: Tiffany & Company
Location: 820 Highland Ave., Newark City, Essex County
Block: 848B and 852 Lot: 1, 7, 9, 15
Transaction: Cessation of Operation and Sale of Business
ISRA Case #: 84257
Final Report by owner/operator dated: April 1991, amended May 17, 1993 and June 23, 1993

Dear Mr. Klock:

Pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection and Energy (NJDEPE) by the Industrial Site Recovery Act (ISRA), (N.J.S.A. 13:1K-6 et seq.), and duly delegated to the Assistant Director of the Industrial Site Evaluation Element pursuant to N.J.S.A. 13:1B-4, the referenced Final Report and amendments are hereby approved and the referenced Industrial Establishment is considered to be in full compliance with ISRA.

This approval is based on the implementation and completion of the Cleanup Plan in accordance with the terms of the June 30, 1989 Cleanup Plan Approval letter and any Cleanup Plan addenda as supported by the referenced Final Report and amendments as well as NJDEPE investigation of the site.

This approval shall be limited to the above referenced transactions only and shall not restrict or prohibit the NJDEPE or any other agency from taking regulatory action under any other statute, rule or regulation. By issuing this Full Compliance Letter, NJDEPE continues to reserve its right to pursue any penalties allowable under the law for violations of ISRA or the regulations associated with this transaction.

This notice will serve to release and return the Financial Assurance to Tiffany & Company and any other funds held pending compliance with ISRA.

Sincerely,

Kenneth T. Hart, Assistant Director
Industrial Site Evaluation Element

c: Anthony Cinque, BAC, Registration number, 0117344
Frank Camera, BEERA
Renee Bancroft, BGWPA
Mike Festa, Health Officer

Telephone 908/290-7800 Fax 908/290-7806

AGUILAR ASSOCIATES & CONSULTANTS, INC.

30 Freneau Avenue

Matawan, New Jersey 07747

PRESENTATION OF FINDINGS

for

TIFFANY and COMPANY
Newark, New Jersey

ECRA CASE NO. 84257

prepared for

CRUMMY, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE
One River Front Plaza
Newark, New Jersey

prepared by

AGUILAR ASSOCIATES & CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey

Roy J. Rittman
Project Manager

Douglas L. Harm, P.G.
Senior Hydrogeologist

April 1991

T-GIB02785

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Figures

Figure 1 - Site Location Map
Figure 2 - Soil Plan Map
Figure 3 - Areas 1,2 & 3 Soil Sample Location Map
Figure 4 - Area 4 - Soil Sample Location Map
Figure 5 - Area 5 - Soil Sample Location Map
Figure 6 - Area 10 - Soil Sample Location Map
Figure 7 - Machinery Pits - Sample Location Map

T-GIB02786

<u>Appendices</u>

Appendix I - NJDEP comment letter dated (06-30-89)
Appendix II - Clean fill Documentation
Appendix III - Health & Safety Plan
Appendix IV - Sampling Procedures QA/QC
Appendix V - Analytical Data Package
Appendix VI - Water Disposal Documentation
Appendix VII - Soil Disposal Documentation
Appendix VIII - Chlordane Disposal Documentation

<u>Addendum</u>

Addendum I - Asbestos Removal Report
Addendum II - Tier II Analytical Data Packages

T-GIB02787

1.0 INTRODUCTION

Aguilar Associates & Consultants, Inc. (AA&C) was retained by Tiffany & Company to oversee the implementation of cleanup activities and conduct sampling activities at the Tiffany & Company facility located at 820 Highland Avenue, Newark, New Jersey (see Figure 1 - Site Location Map).

All cleanup and sampling activities were performed as outlined in the approved Interior and Exterior Cleanup Plans prepared by AA&C, and the New Jersey Department of Environmental Protection (NJDEP) Comment Letter dated June 30, 1989 (Appendix I). All remedial site work was conducted by Rainbow Environmental Inc. Post excavation sampling activities were conducted by AA&C technical personnel.

The following report outlines exterior excavation activities, post excavation analytical results and soil disposal. Interior activities included remedial site work in the former machinery pits and chlordane mitigation and sampling. The final report summarizing the removal of all asbestos at the facility was prepared by Environmental Connection, Inc., and is presented as Addendum I.

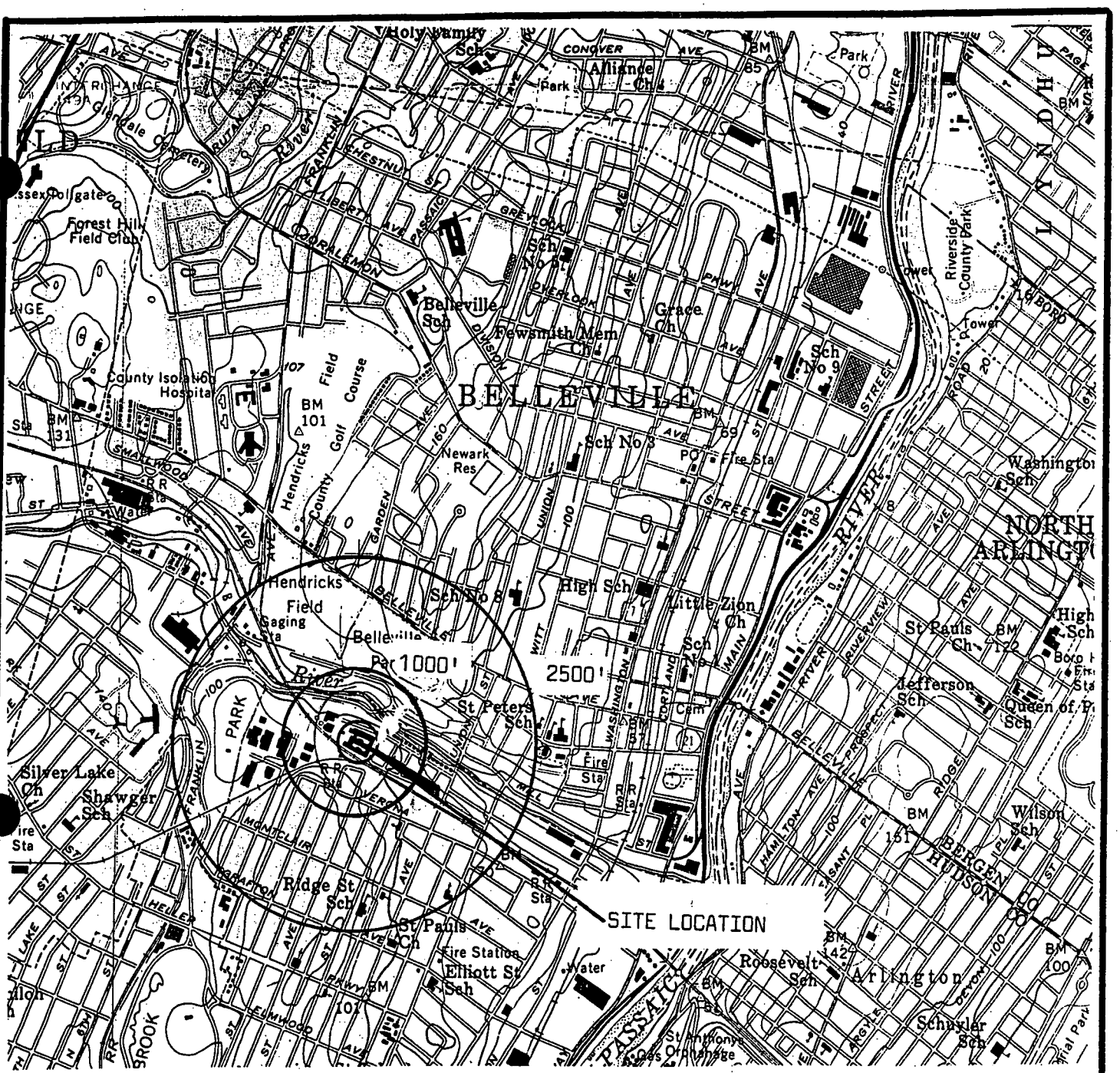


Figure 1: SITE LOCATION MAP

1 ½ 0 1 mile

1000 0 7000 ft.

1 .5 0 1 km

T-GIB02789

CONTOUR INTERVAL 20'

COUNTY HUDSON

NEW JERSEY

quadrangle location

SOURCE: U.S.G.S. QUAD. ORANGE

AGUILAR ASSOCIATES AND CONSULTANTS, INC.

30 Freneau Avenue

Matawan, New Jersey 07747

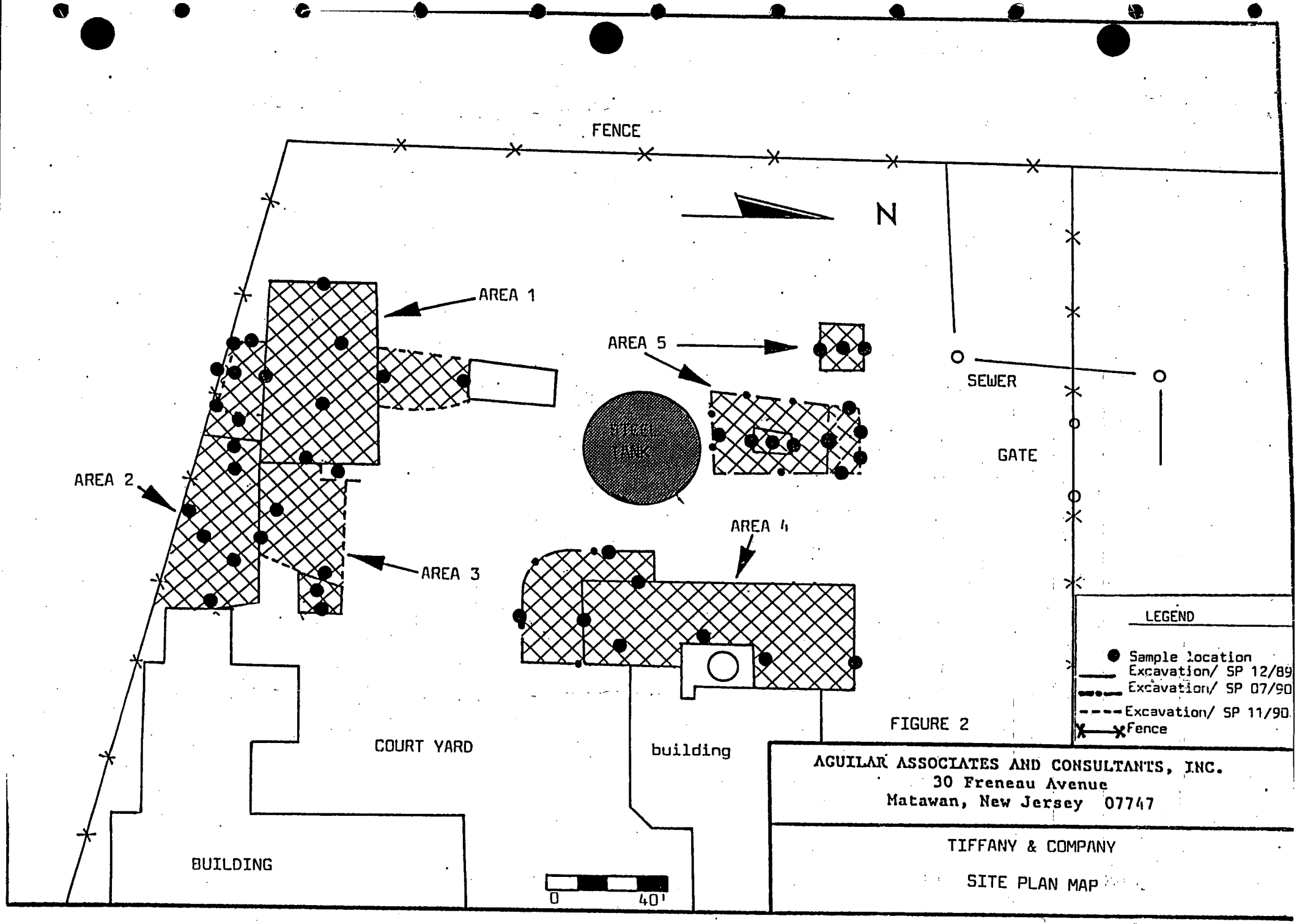
2.0 EXTERIOR SITE ACTIVITIES

Soil excavation and sampling activities at the Tiffany & Company facility commenced on December 4, 1989 and were completed on November 29, 1990. Each area was excavated as outlined in the approved Exterior Cleanup Plan. The final depth of each excavation was dependent on the depth to competent bedrock. All five excavations were advanced to competent bedrock. All excavations were lined with plastic sheeting and backfilled with certified clean fill(see Appendix II - Clean Fill Analytical Documentation). All excavated soil was placed on and covered with plastic sheeting on-site, until arrangements were made for disposal (see Section 2.7 Soil Disposal). A site-specific Health and Safety Plan was implemented for all exterior cleanup activities. The Health and Safety Plan is presented in Appendix III.

Following soil excavation activities, post excavation sampling was performed. Soil samples were taken from the sidewalls and from the base of each excavation. Soil sampling was conducted in accordance with the NJDEP ECRA Remedial Investigation Guide. AA&C's sampling procedures are presented in Appendix IV.

The limits of each excavated area and soil sample locations are illustrated in Figure 2 - Site Plan Map.

T-GIB02790


FENCE
N
AREA 1
AREA 5
SEWER
GATE
AREA 2
AREA 3
AREA 4
COURT YARD
building
BUILDING
0
40'
LEGEND
Sample location
Excavation/ SP 12/89
Excavation/ SP 07/90
Excavation/ SP 11/90
Fence
FIGURE 2
AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747
TIFFANY & COMPANY
SITE PLAN MAP

T-GIB02791

2.1 Area 1 - Post Excavation Sampling Results

Excavation and sampling activities were conducted on December 15, 1989 (see Figure 3 - Soil Sample Location Map). The total volume of soil excavated from this area was approximately 230 cubic yards. Competent bedrock was encountered at a depth of approximately 2.5 feet.

A total of six post excavation samples were collected from the area, two samples from the base of the excavation and one from each sidewall. All soil samples collected from this area were analyzed for arsenic. The analytical results are summarized below in Table I. The analytical data packages are presented in Appendix V. The complete Tier II Data Package is presented as Addendum II.

TABLE I
TIFFANY & COMPANY
AREA 1 - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	Arsenic	Report No.
1-01 B (12-15-89)	27*	A20815
1-02 B	12	A20815
1-03 SW	49*	A20815
1-04 SW	84*	A20815
1-05 SW	9.4	A20815
1-06 SW	4.7	A20815
Field Blank	ND	
3-02A SW (05-09-90)	5.9	A21863
Field Blank	ND	A21863

Notes: *B - Base Sample*
SW - Sidewall
ND - Not Detected
** - Result exceeds NJDEP Soil Action Level*
All results in parts per million (ppm)

T-GIB02792

As indicated in Table I, elevated arsenic levels were detected in one of the base samples (1-01B) and in the sidewall samples to the North and East (1-03, 1-04) of the excavation.

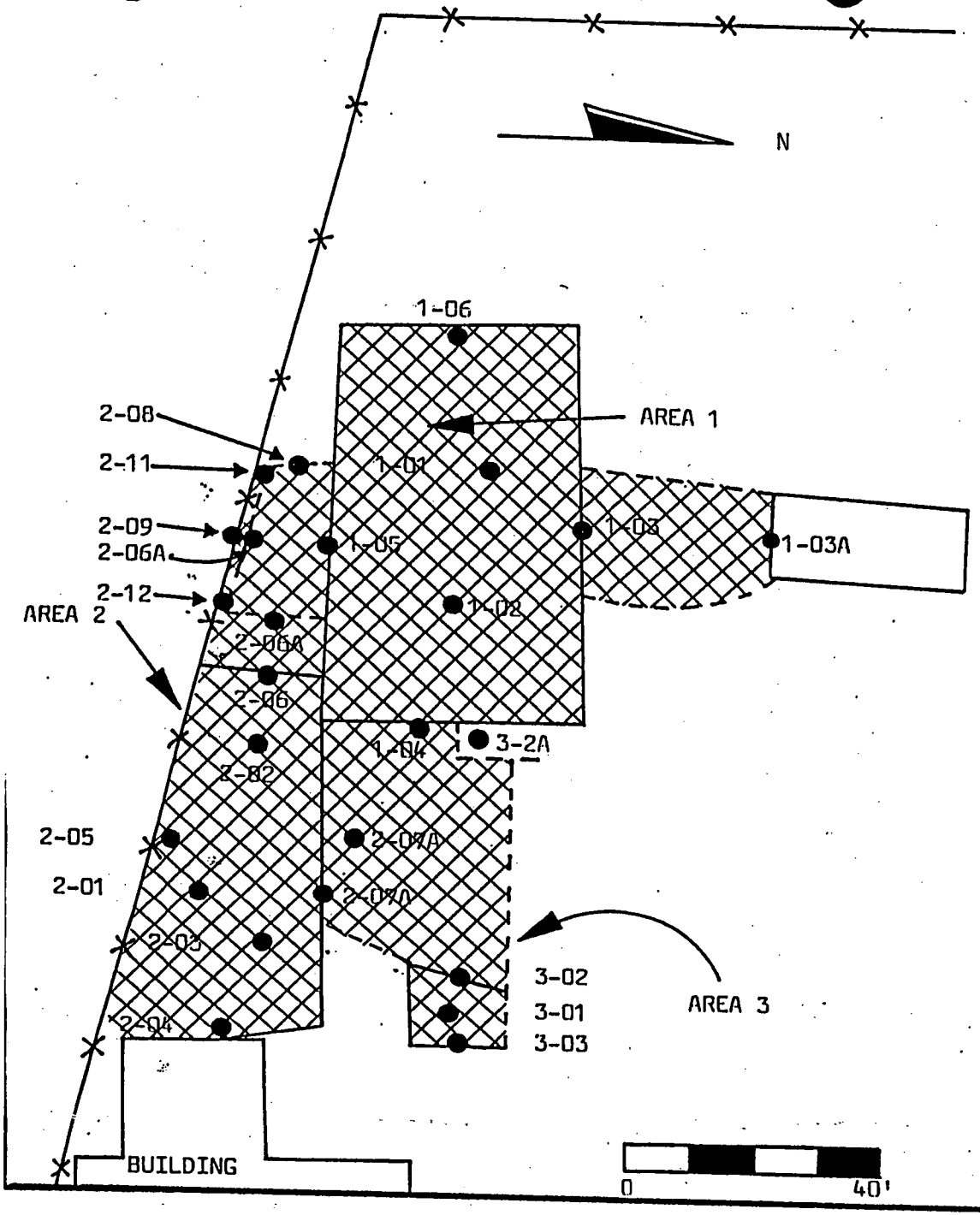
On May 9, 1990, further excavation and sampling activities were conducted in Area 1. Approximately 60 additional cubic yards of soil were excavated. Post excavation sampling results indicated trace concentrations of arsenic not in excess of ECRA Soil Action levels.

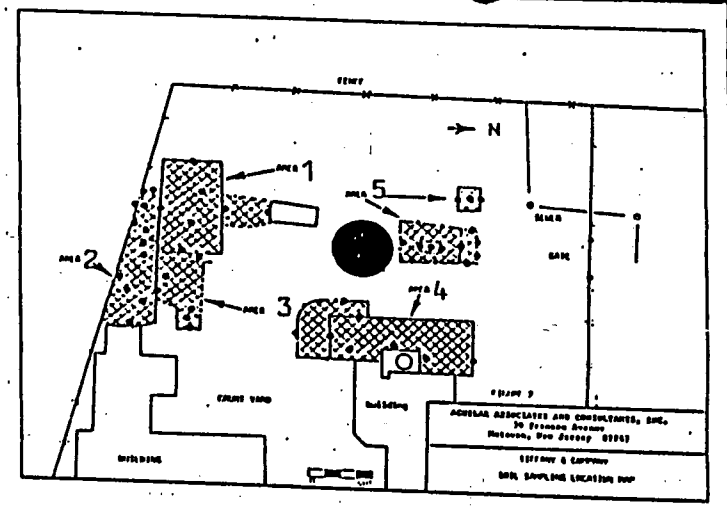
2.2 Area 2 - Post Excavation Sampling Results

On December 4, 1989, AA&C personnel oversaw the commencement of soil excavation in Area 2 (see Figure 3 - Soil Sample Location Map). On December 6, 1989, water accumulated in the bottom of the Area 2. The water in the excavation was pumped out and disposed of off the site. Disposal Documentation is presented in Appendix VI. Approximately 250 to 340 cubic yards of soil were excavated from this area. Depth to competent bedrock ranged from 10.5 to 2.0 feet below grade.

A total of seven post excavation samples were collected from the excavation. Soil samples were analyzed for base neutral semi-volatile organics, total petroleum hydrocarbons, lead and copper. Analytical results are summarized in Table II.

T-GIB02793





AREA INDEX MAP

T-GIB02794

LEGEND

- ● Sample location
- Excavation/ SP 12/89
- Excavation/ SP 11/90
- Fence

FIGURE 3

AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747

TIFFANY & COMPANY
SOIL SAMPLE LOCATION MAP OF
AREA 1, 2 & 3

TABLE II
TIFFANY & COMPANY
AREA 2 - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	BN	NTBN	TPHC	pb	Cu	Report No.
2-01 B (12-05-89)	34*	24	66	NR	NR	A20750
2-02 B	8.8	12	190*	58	NR	A20750
2-03 B	NR	NR	NR	69	7.9	A20750
2-04 SW	.34J	1.2	ND	110	11	A20750
2-05 SW	.46	4.9	ND	130	34	A20750
2-06 SW	3.3	23	130*	560*	370*	A20750
2-07 SW	1.8	2.3	120*	1,100*	1,100*	A20750
Field Blank	ND	ND	ND	ND	ND	A20750
2-06 A (05-10-90)	NR	NR	240*	2,000*	1,200*	A21863
2-07 A	NR	NR	1,000*	290*	290*	A21863
Field Blank	NR	NR	ND	ND	ND	A21863
2-08 SW (07-20-90)	NR	NR	ND	32	27	A22352
2-09 SW	NR	NR	960*	57	19	A22352
Field Blank	ND	NR	ND	ND	ND	A22352
2-10 SW (08-29-90)	NR	NR	ND	NR	NR	A22716
2-11 SW	NR	NR	ND	NR	NR	A22716
2-12 SW	NR	NR	ND	NR	NR	A22716
Field Blank	NR	NR	ND	NR	NR	A22716

Notes:
BN - Base Neutrals
NTBN - Non-Targetted Base Neutrals
TPHC - Total Petroleum Hydrocarbons
pb - Total Lead
Cu - Copper
B - Base Sample
SW - Sidewall
NR - Analysis Not Requested
ND - Not Detected
J - Compound Detected below Practical Quantitation Limit
** - Result Exceeds NJDEP's Soil Action Level*
All Results in Parts Per Million (ppm)

Post excavation analytical results indicated base neutral compounds exceeding ECRA soil levels in only one sample, 2-01B, obtained from the base of the excavation.

T-GIB02795

Slightly elevated levels of petroleum hydrocarbon compounds were detected in the base sample 2-02 and the sidewall samples, 2-06 and 2-07. Elevated levels of lead and copper were also detected in sidewall samples, 2-06 and 2-07.

On May 5, 1990 additional excavation and sampling activities were initiated in Area 2 to remediate elevated levels of total petroleum hydrocarbons and heavy metals. As indicated in Table II, levels still exceeded ECRA limits. The area was excavated and resampled again on July 20, 1990. Analytical results from this sampling episode indicated a significant decrease in lead and copper contamination. Elevated petroleum hydrocarbons were detected in sample No. 2-09, located approximately 2 feet from the fenceline.

On August 29, 1990, AA&C personnel extracted three soil samples from the south sidewall at the edge of the fenceline. The samples were analyzed for total petroleum hydrocarbons, the only contaminant detected above ECRA limits. The analytical results indicated non-detectable levels of the TPHC in the three delineation samples.

Since delineation samples extended to the edge of the property line, and analytical results defined the extent of the petroleum hydrocarbons, no post excavation sampling was performed during the final soil excavation.

T-GIB02796

On November 29, 1990, Rainbow Environmental completed the final soil excavation in Area 2. The soil was excavated to the edge of the fenceline (the locations of the delineation samples).

2.3 Area 3 - Post Excavation Sampling Results

Soil excavation and sampling were conducted on December 07, 1989 in Area 3 (see Figure 3 - Soil Sample Location Map). Approximately 15 cubic yards of soil were excavated from Area 3. The total depth of the excavation was 2.5 below grade.

AA&C extracted three samples from the excavation, one base sample and one sample each from the east and west sidewalls. The soil samples were analyzed for base neutral semi-volatile organic compounds, total petroleum hydrocarbons, copper, arsenic and lead. Analytical results are summarized below in Table III.

TABLE III
TIFFANY & COMPANY
AREA 3 - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	BN	NTBN	Cu	pb	As	Report No.
3-01 B (12-07-89)	.031J	3.74	17	12	.028J	A20750
3-02 SW	26.9*	2.6	210	620*	ND	A20750
3-03 SW	.097J	.98	48	23	ND	A20750
Field Blank	ND	ND	ND	ND	ND	A20750
3-02A SW (5-10-90)	.039J	.170	20	16	20	A21863
Field Blank	ND	ND	ND	ND	ND	A21863

Notes:
BN - Base Neutrals
NTBN - Not Targetted Base Neutrals
pb - Total Lead
Cu - Copper
As - Arsenic
SW - Sidewall
NR - Analysis Not Requested
J - Estimated quantity
ND - Not Detected
All results in parts per million (ppm)
** - Results Exceeds NJDEP's Soil Action Level*

T-GIB02797

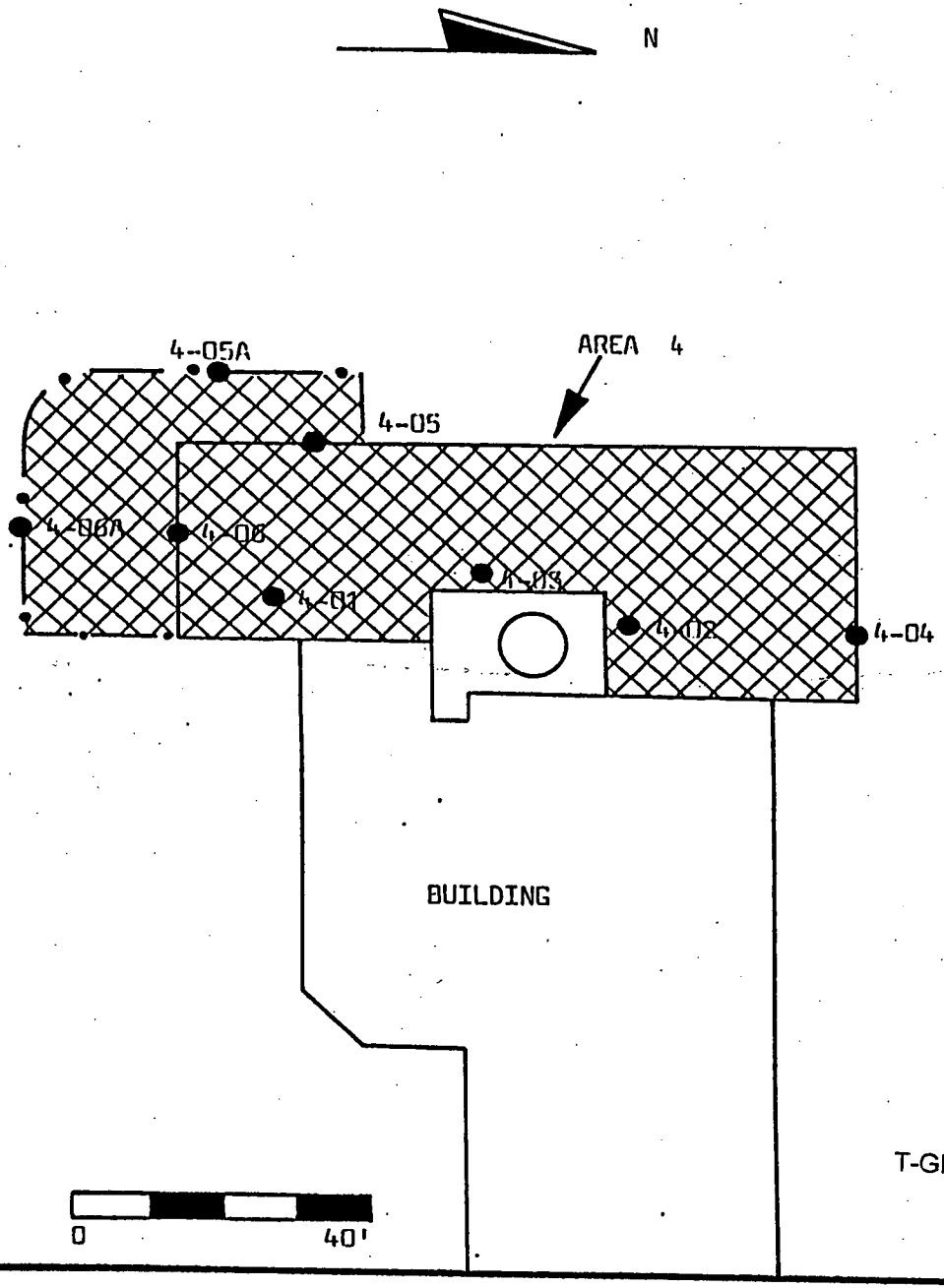
Post excavation analytical results indicated elevated levels of base neutral compounds and lead in sample number 3-02 taken from the west sidewall. Additional excavation in the area west of sample location 3-02 was conducted on May 10, 1990. Soil samples taken from the edge of the new excavation indicated no compounds or metals in excess ECRA guidelines.

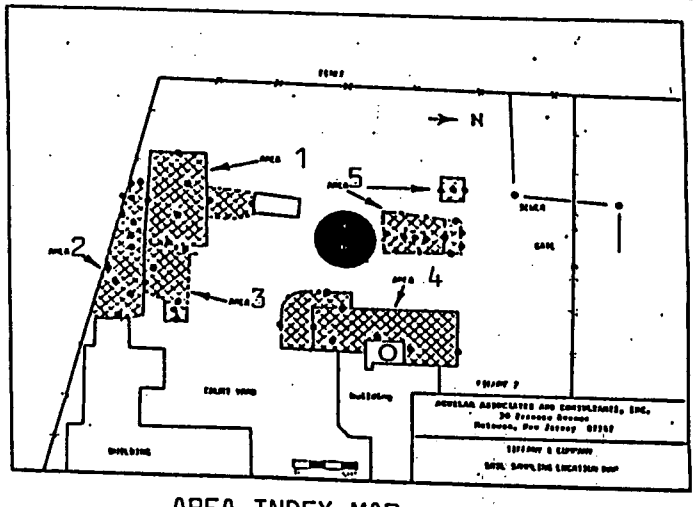
2.4 Area 4 - Post Excavation Sampling Results

On December 15, 1990, soil excavation and sampling activities were conducted in Area 4 (see Figure 4 - Soil Sample Location Map). Appproximately 17 cubic yards of soil were excavated from Area 4. The average depth of the excavation was 2.5 feet.

A total of six post excavation soil samples were extracted from Area 4. Samples were analyzed for base neutrals, copper, lead and arsenic. Two samples were taken from the base of the excavation, and one sample was taken from each of the four sidewalls of the excavation. Analytical results are summarized below in Table IV.

T-GIB02798





AREA INDEX MAP

LEGEND

- Sample location
- Excavation/ SP 12/89
- Excavation/ SP 07/90

FIGURE 4

T-GIB02799

AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747

TIFFANY & COMPANY
SOIL SAMPLE LOCATION MAP OF
AREA 4

TABLE IV
TIFFANY & COMPANY
AREA 4 - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	BN	NTBN	TPHC	As	pb	Report No.
4-01 B (12-15-90)	NR	NR	ND	17	28	A20815
4-02 B	.644	7.94	5,300*	NR	89	A20815
4-03 SW	7.3	156.6	3,000*	10	250*	A20815
4-04 SW	.734	7.62	ND	9.6	110	A20815
4-05 SW	.312	6.3	81	25*	140	A20815
4-06 SW	2.36	12.46	310*	78*	150	A20815
4-05A SW (05-08-90)	NR	NR	NR	3.7	NR	A21863
4-06A SW	NR	NR	290*	1.0J	NR	A21863

Notes:
BN - Base Neutrals
NTBN - Non-Targetted Base Neutrals
TPHC - Total Petroleum Hydrocarbons
As - Arsenic
pb - Total Lead
B - Base Sample
SW - Sidewall
NR - Analysis Not Requested
ND - Not Detected
J - Compound Detected below Practical Quantitation Limit
** - Result Exceeds NJDEP's Soil Action Level*
All Results in Parts Per Million (ppm)

Analytical results indicate elevated levels of TPHC compounds in the base sample number 4-02 and the sidewall samples extracted from the south and east sidewalls, 4-03 and 4-04. Elevated arsenic levels were detected in sample numbers, 4-05 and 4-06.

On May 08, 1990, additional soil excavation and sampling activities were performed at Area 4. An additional 20 cubic yards of soil were excavated and two samples extracted from the sidewalls of the excavation. As shown in Table IV, analytical results indicate a significant decrease in TPHC levels, and significantly lower arsnic levels than ECRA Soil Limits.

T-GIB02800

2.5 Area 5A Post Excavation Sampling Results

December 15, 1990 soil excavation and sampling activities were conducted at the area denoted as Area 5A (see Figure 5 - Soil Sample Location Map). Approximately 15 cubic yards of soil were removed from the excavation. The depth of the excavation averaged 2 feet below grade. A total of three soil samples was extracted from the excavation, one from the base and two samples from the north and south sidewalls. The samples were analyzed for total petroleum hydrocarbons, silver, zinc and lead. Analytical results are summerized in Table V.

TABLE V
TIFFANY & COMPANY
AREA 5A - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	TPHC	Ag	Zn	Pb	Report No.
5-01 B (12-15-90	ND	1.1J	180	8.4	A20815
	ND	NR	NR	NR	A20815
	ND	NR	NR	NR	A20815

Total Petroleum Hydrocarbons
B - Base Sample
SW - Sidewall
NR - Analysis Not Requested
ND - Not Detected
J - Compound Detected below Practical Quantitation Limit
** - Results Exceed NJDEP's Soil Action Level*
All Results in Parts Per Million (ppm)
Silver
Zinc
Pb - Lead

T-GIB02801

Analytical results indicated no TPHC, silver, zinc or lead levels in excess of ECRA soil limits.

2.6 Area 5B Post Excavation Sampling Results

On December 15, 1990 soil excavation and sampling activities were conducted at the area of concern denoted as Area 5B (see Figure 5 - Soil Sample Location Map).

TABLE VI
TIFFANY & COMPANY
AREA 5B - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	TPHC	Ag	Zn	Pb	As	Report No.
55-04 B (2-15-90)	85	NR	NR	94	5.6	A20815
5-05 SW	180*	NR	NR	21	9.5	A20815
5-06 SW	320*	NR	NR	460*	15	A20815
Field Blank	ND	ND	ND	ND	ND	A20815
5-06 A SW (05-08-90)	440*	NR	NR	45	NR	A21863
5-05 A SW	100	NR	NR	710*	NR	A21863
Field Blank	ND	NR	NR	ND	NR	A21863
5-07 SW (07-17-90)	53	NR	NR	37	NR	A22352
5-08 SW	56	NR	NR	300*	NR	A22352
5-09 SW	ND	NR	NR	71	NR	A22352
5-10 SW	170*	NR	NR	190	NR	A22352
Field Blank	ND	NR	NR	ND	NR	A22352

Notes: *TPHC - Total Petroleum Hydrocarbons*
B - Base Sample
SW - Sidewall
NR - Analysis Not Requested
ND - Not Detected
J - Compound Detected below Practical Quantitation Limit
All Results in Parts Per Million (ppm)

Ag - Silver
Zn - Zinc
Pb - Lead
As - Arsenic

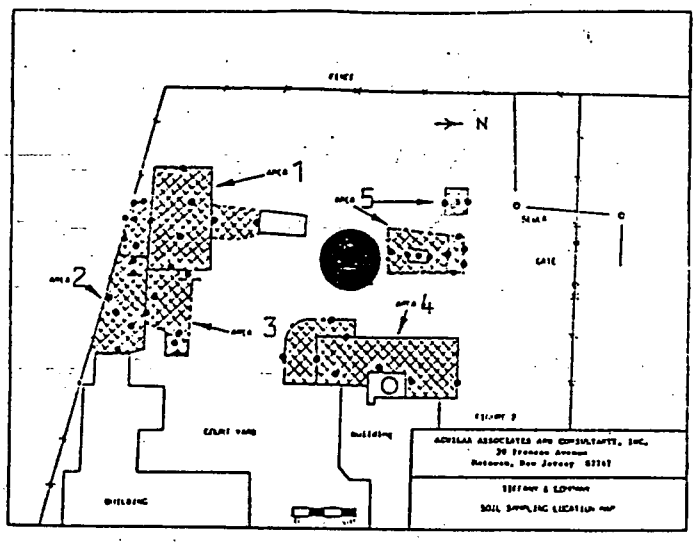
T-GIB02802

Approximately 15 cubic yards of soil were removed from the excavation. A total of three soil samples were extracted from the excavation, one from the base and one from each of the north and south sidewalls. The samples were analyzed for total petroleum hydrocarbons, silver, zinc, lead and arsenic. Analytical results are summerized in Table VI. Analytical results indicate elevated levels of TPHC and Lead in the two samples extracted from the north and south walls of the excavation.

On May 8, 1990 additional excavation and sampling activities were conducted in Area 5B. An additional 10 feet of soil was excavated from the perimeter of area 5B. Two post excavation sidewall samples were collected. Analytical results again indicated slightly elevated TPHC and lead levels in the north sidewall.

Area 5B was excavated a third time on July 17, 1990. The northern edge of the excavation was extended an additional 10 feet. A total of four samples were extracted and analyzed for lead. Analytical results indicated a significant decrease in both TPHC and lead levels in this area.

T-GIB02803



AREA INDEX MAP

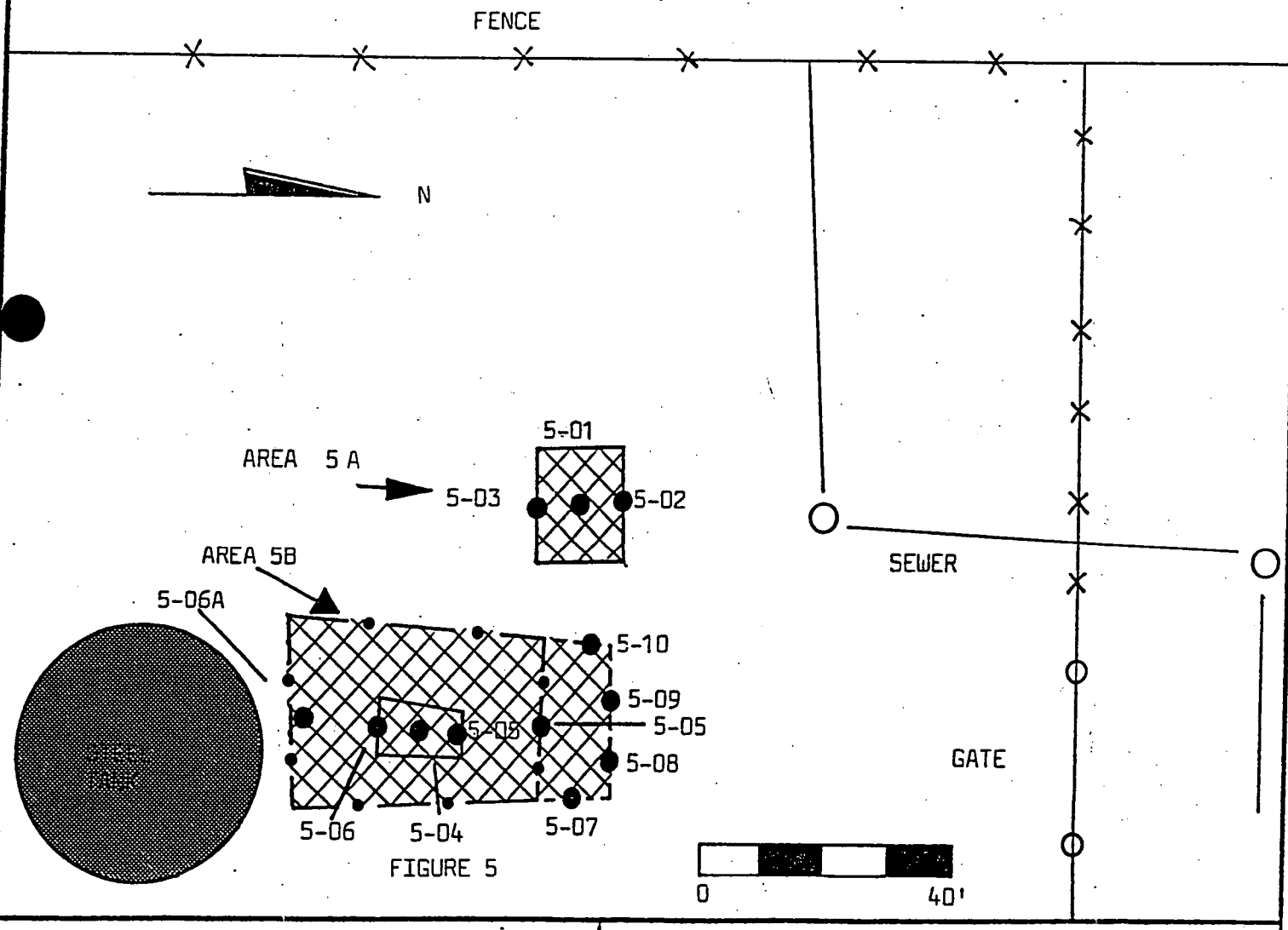


FIGURE 5

LEGEND

- Sample location
- Excavation/ SP 12/89
- Excavation/ SP 07/90
- Excavation/ SP 11/90
- Fence

AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747

T-GIB02804

TIFFANY & COMPANY
SOIL SAMPLE LOCATION MAP OF
AREA 5

2.7 Area 10 - Post Excavation Sampling Results

At an ECRA inspection conducted on August 15, 1990, a drum in the interior courtyard was observed to be leaking an oily substance onto the ground. In response, Rainbow Environmental repacked the drum and excavated stained soils to prevent further leakage or migration of contaminants.

On August 30, 1990, AA&C personnel extracted one post excavation sample from the previously excavated area (See Figure 6 sample location map). The sample was obtained from the north sidewall of the excavation. The sample was analyzed for base neutral semi-volatile organics and total petroleum hydrocarbons. Analytical results are summarized in Table VII.

TABLE VII
TIFFANY & COMPANY
AREA 10 - POST EXCAVATION ANALYTICAL SUMMARY

Sample No./Date	BN	NTBN	TPHC	Report No.
6-01 (08-29-90)	3.3	8.9	ND	A22718
Field Blank	.66J	ND	ND	A22718

Notes: *BN - Base Neutrals*
NTBN - Non-Targetted Base Neutrals
TPHC - Total Petroleum Hydrocarbons
ND - Not Detected
All Results in Parts Per Million (ppm)
J - Compound detected below practical quantitation limit

The analytical results indicated no base neutral or total petroleum hydrocarbon compounds exceeding ECRA soil action levels.

T-GIB02805

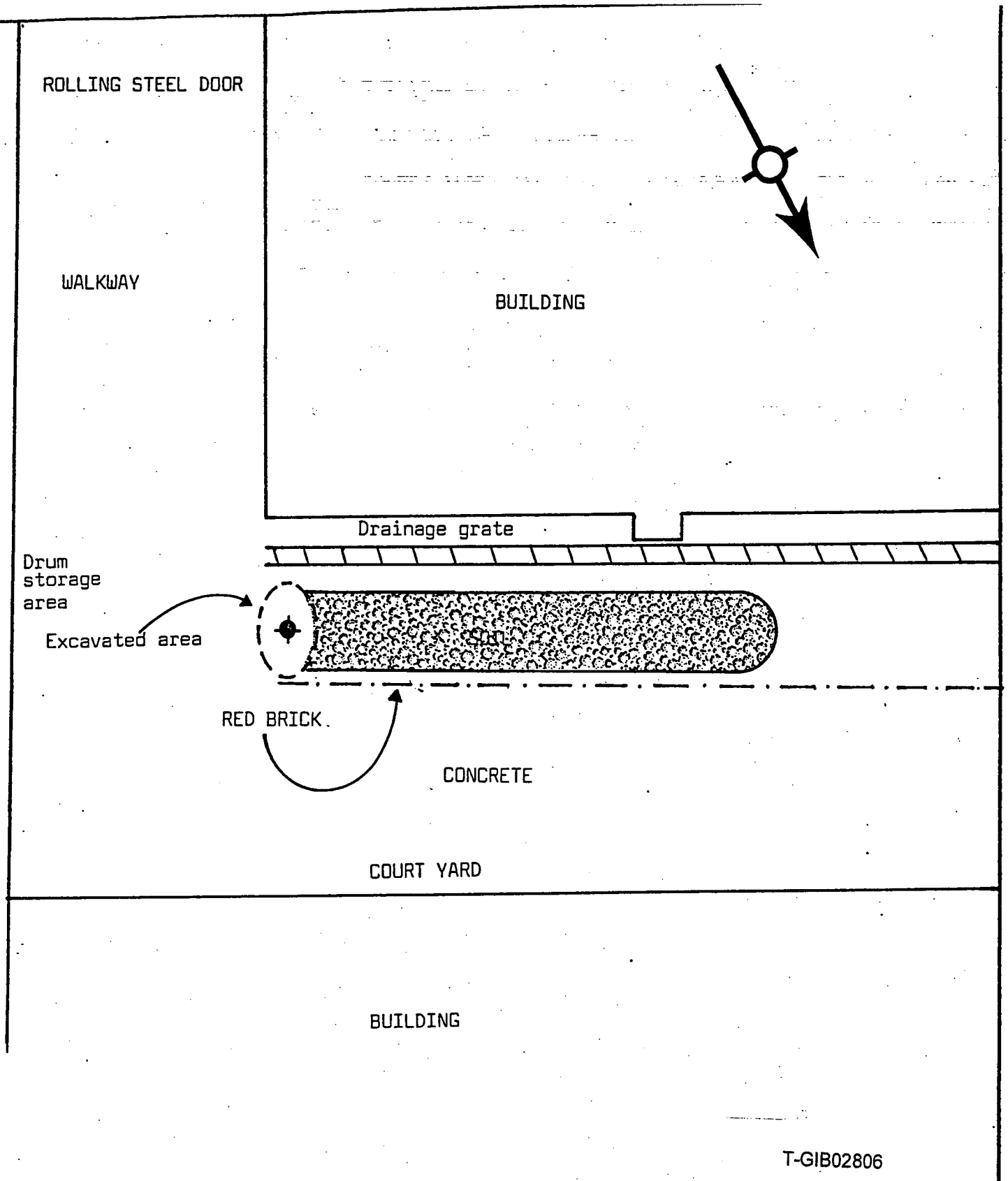


FIGURE 6

SAMPLE LOCATION

EXCAVATED AREA

RED BRICK

AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747

SAMPLE LOCATION MAP
TIFFANY AND COMPANY
AREA 5

2.8 Soil Disposal

Soil generated during excavation activities was transported to General Aggregates, a recycling facility located in Kinsman, Ohio. Approximately 1800 tons of soil was transported on April 16, 17, and 18, 1990. A second disposal were performed on May 2 and 3, with approximately 300 tons of soil being transported to General Aggregates.

Soil classification sampling and analysis were handled by Rainbow Environmental Inc. All solids were determined to be non-hazardous for disposal purposes.

The bills of lading and weight tickets are presented in Appendix VII.

T-GIB02807

3.0 Interior Cleanup Activities & Sampling Results

3.1 Machinery Pits - Cleanup & Disposal

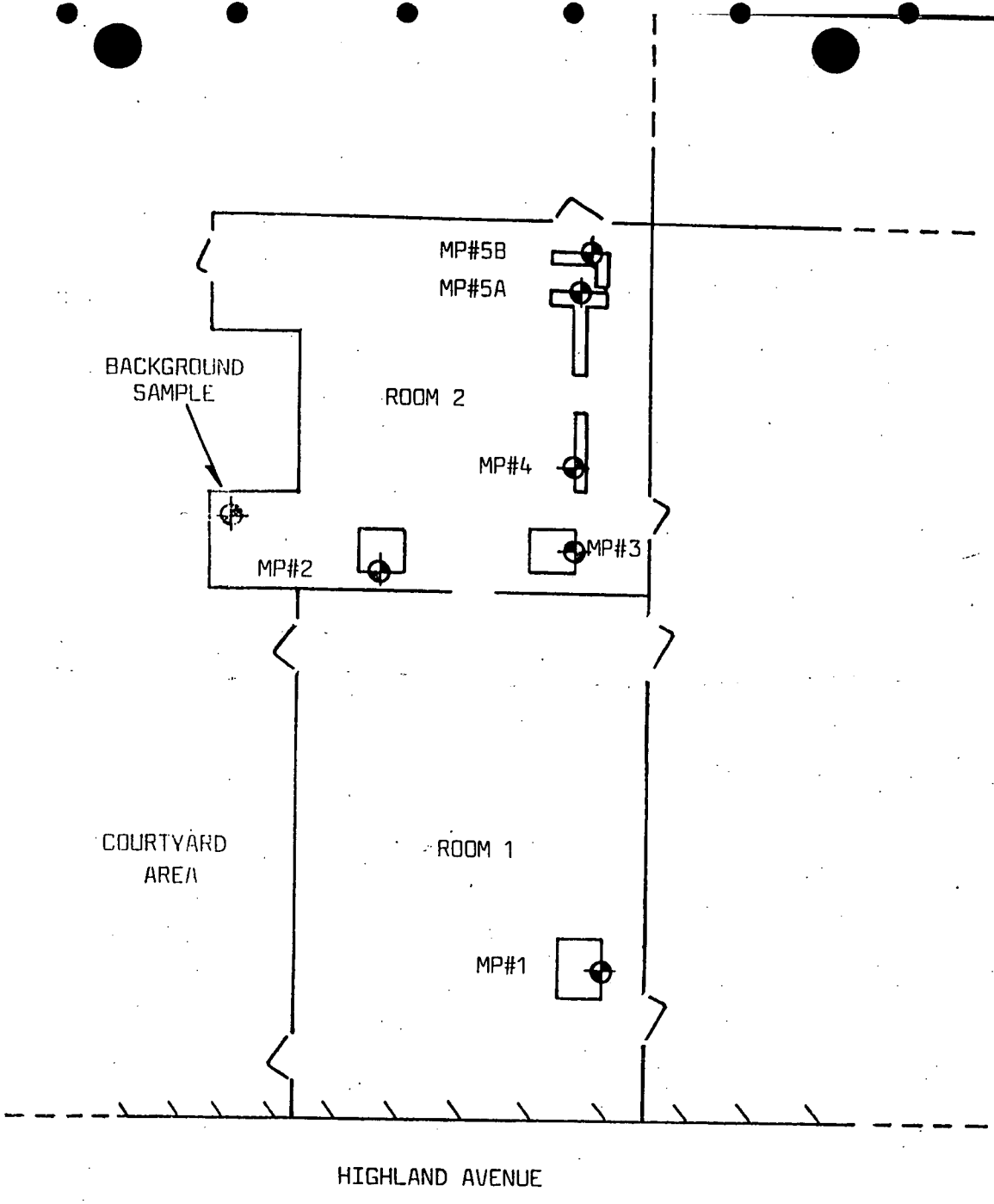
According to Mr. George MacEachern, President of Rainbow Environmental Inc., the five machinery pits were cleaned in the following manner. All solid debris was removed from the pits. The interior walls and floors of the machinery pits were cleaned using a high pressure washer. All accumulated water and oil was disposed of by S&M Waste Oil, Inc. Disposal documentation is presented in Appendix VI.

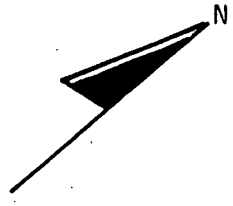
3.2 Machinery Pits - Wipe Sampling Results

On December 6, 1989, AA&C personnel conducted sampling activities within the five machinery pits. One wipe sample was taken from the wall of each machinery pit to insure adequate remediation of the pits. All samples were analyzed for petroleum hydrocarbons and polychlorinated biphenyls.

Each sample was extracted using laboratory prepared gauze pads soaked in hexane. A 100 cm^2 area was marked on each wall surface with a decontaminated awl. Then the soaked gauze was wiped across the area 5 times from top to bottom and 5 times from side to side.

The pads were then placed in laboratory prepared 40 ml vials and transported to a New Jersey Certified Laboratory for analysis. A machinery pit sample location map is presented in Figure 7.





LEGEND

Scale: Not to scale

MP= Machinery pit

= Wipe sample location

FIGURE 7

MACHINERY PIT SAMPLE LOCATION MAP

AGUILAR ASSOCIATES AND CONSULTANTS, INC.
30 Freneau Avenue
Matawan, New Jersey 07747

TIFFANY & COMPANY FACILITY
TIFFANY BOULEVARD
NEWARK, NJ

T-GIB02809

A background sample was taken, away from the production area, to be utilized as a guideline in evaluating petroleum hydrocarbons within the machinery pits.

Analytical results are summarized in Table VIII.

TABLE VIII
TIFFANY & COMPANY
MACHINERY PITS - WIPE SAMPLING RESULTS

Sample No./Date	TPHC	PCBS	Report No.
Field Blank (12-07-90)	ND	ND	A20750
MP # 1	40	ND	A20750
MP # 2	ND	ND	A20750
MP # 3	210	ND	A20750
MP # 4	280	ND	A20750
MP # 5A	6,200	ND	A20750
MP # 5B	10,000	ND	A20750
Background	9,000	ND	A20750

Notes: ND - Not Detected
TPHC - Total Petroleum Hydrocarbons
PCBS - Polychlorinated Biphenyls
All results in parts per million (ppm)

No PCB contamination was detected in the five wipe samples. TPHC contamination levels ranged from non-detectable to 10,000 parts per million. No visible oil stains were observed on the walls or floors of the previously cleaned machinery pits.

The TPHC compounds within the machinery pits are within acceptable range compared with the results of the background sample. Based on the sampling results, and due to the installation of a new floor surface which insures that the former machinery pits and surrounding flooring will not be in contact with the future occupants of the building, no further action is proposed in this area.

3.3 Printing Room - Chlordane Remediation & Disposal

During December 1989 and January 1990, Rainbow Environmental Inc. conducted chlordane remediation activities in the former printing room.

According to Rainbow Environmental Inc., approximately 160 linear feet of wood shelving and flooring were disassembled, cut and drummed for disposal. The chlordane contaminated wood was transported by Freehold Cartage Inc., EPA ID Number NJ0054126164, to GSX Services of South Carolina, EPA ID number SC0070375985, on April 20 and 21, 1990. Disposal documentation is presented in Appendix VIII.

In February 1990, the concrete surfaces of the pit were cleaned and sealed with 2 coats of a silicone sealer. On March 01, 1990, AA&C personnel collected four wipe samples from the base of the pit. Analytical results indicated trace levels of residual chlordane. Analytical results are summarized in Table VIII.

In April 1990, an epoxy material was utilized to reseal the concrete pit, after wipe samples from the first application indicated elevated chlordane levels. The wipe samples taken from the pit following the second round of sealing indicated no residual chlordane levels. No further action is proposed in this area.

T-GIB02811

TABLE VIX
TIFFANY & COMPANY
CHLORDANE WIPE SAMPLING RESULTS

Sample No./Date	Chlordane	Report No.
W-1 (03-01-90)	ND	A21377
W-2	ND	A21377
W-3	1.7	A21377
W-4	51	A21377
Field Blank	ND	A21377
W-1 (06-19-90)	ND	A22148
W-2	ND	A22148
W-3	ND	A22148
W-4	ND	A22148
Field Blank	ND	A22148

Notes: All results in parts per billion (ppb)
ND - Not Detected

T-GIB02812

4.0 CLEANUP COST SUMMARY

Asbestos Remediation.....$116,704.00

(exluding analytical but including disposal costs)

Laboratory Analytical Costs.....$ 36,416.00

Consulting Costs.....$ 87,658.00

Disposal (includes excavation and loading)*.....$269,653.00

Legal fees.....$ 12,000.00

TOTAL CLEANUP COSTS TO DATE $522,431.00

* Final costs to be included when final soil disposal is completed.

T-GIB02813