PRELIMINARY SITE ASSESSMENT REPORT

PRECISION FABRICATORS SITE

(REGISTRY NO. 1-30-073B)

TOWN SHEET METAL SITE

(REGISTRY NO. 1-30-073E)

Garden City Park Industrial Area
Garden City Park, New York

WORK ASSIGNMENT NO. D003600-9

Prepared For

New York State Department of Environmental Conservation

AUGUST 1999

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

RLA/PF1622-3(8/11/99)

PRELIMINARY SITE ASSESSMENT REPORT

FOR

PRECISION FABRICATORS SITE (REGISTRY NO. 1-30-073B)
TOWN SHEET METAL SITE (REGISTRY NO. 1-30-073E)
GARDEN CITY PARK INDUSTRIAL AREA
GARDEN CITY PARK, NEW YORK

WORK ASSIGNMENT NO. D003600-9

PREPARED FOR

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

BY

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
WOODBURY, NEW YORK

AUGUST 1999

PRELIMINARY SITE ASSESSMENT REPORT
PRECISION FABRICATORS SITE (REGISTRY NO. 1-30-073B)
TOWN SHEET METAL SITE (REGISTRY NO. 1-30-073E)
GARDEN CITY PARK INDUSTRIAL AREA
GARDEN CITY PARK, NEW YORK
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TABLE OF CONTENTS

List of Appendices

TABLE OF CONTENTS (continued)

List of Appendices (continued)

List of Figures

List of Tables

1.0 PRECISION FABRICATORS SITE

1.1 NYSDEC Site Investigation Information Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Precision Fabricators Site	1-30-073B	Garden City Park	Nassau

5. REGION	6. CLASSIFICATION		
1	CURRENT	PROPOSED	MODIFY

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Lynbrook, New York

b. Site Latitude 40° 44' 15" Site Longitude 73° 39' 15"

c. Tax Map Numbers 33-166-340

d. Site Street Address 200 Broadway, Garden City Park, New York

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

The site is approximately 1.2 acres in size and is located at the southwest corner of Broadway and Armstrong Road in Garden City Park, New York. The site location is shown on Figure 1-1. The property consists of a one-story, 45,000 square foot masonry building. The building covers most of the site with small grass areas on the north and east sides of the building (see Figure 1-2). Site photographs are included in Appendix A.

Precision Fabricators, Inc. occupied the building from 1968 until December 1994 when the business closed. Operations reportedly conducted by Precision Fabricators included fabrication, plating, painting and storage of metal parts, primarily for the aircraft industry. The building was vacant during the September 1998 site inspection and December 1998-January 1999 field investigation.

According to Nassau County Department of Health (NCDH) files, a dry well existed at the rear of the facility (along Fulton Avenue). This dry well reportedly received cooling water from transformers until approximately 1977, when Precision Fabricators was notified to cease discharging to the dry well and connect this discharge to the Nassau County sewer system. Attempts to locate this dry well for sampling during investigations conducted in 1994 and 1995, as well as during this investigation, were unsuccessful.

A 1986 NCDH report entitled "Contaminated Aquifer Segments, Nassau County, New York" identified regional groundwater contamination in the Garden City Park Industrial Area (GCPIA). The plume consisted of volatile organic compounds (VOCs), predominantly chlorinated solvents, including tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE) and 1,1,1-trichloroethane (TCA). A follow-up investigation by NCDH and the Nassau County Department of Public Works (NCDPW) in 1991 confirmed elevated VOCs, in particular PCE, in groundwater within the Garden City Park Industrial Area (GCPIA). In 1994, an area-wide Preliminary Site Assessment (PSA) was performed on behalf of the New York State Department of Environmental Conservation (NYSDEC) in the GCPIA to identify potential sources for the observed VOC contamination. The results of sampling conducted during that investigation led NYSDEC to perform PSAs in 1995 at four facilities that had been identified as potential sources in 1994. One of the sites investigated in 1995 was the former Precision Fabricators facility.

This focused PSA was conducted on behalf of NYSDEC in response to the 1995 PSA, which had concluded that the former Precision Fabricators facility was a potential contributor to the regional groundwater contamination. The scope of work for this investigation included collection of shallow groundwater and subsurface soil samples for VOC analysis, to determine whether the facility is a source of the regional VOC contamination in groundwater

a. Area 1.2 acres b. EPA ID Number NYD068047513

c. Completed ( ) Phase I ( ) Phase II (X) PSA ( ) RI/FS ( ) PA/SI ( ) Other

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

The facility has been out of business since December 1994. During its operational period, Precision Fabricators was a large-quantity generator of hazardous waste. NCDH files indicate that the generated wastes were disposed by various waste haulers.

10. ANALYTICAL DATA AVAILABLE

a. ( ) Air (X) Groundwater ( ) Surface Water ( ) Sediment (X) Soil ( ) Waste ( ) Leachate ( ) EPTox ( ) TCLP

b. Contravention of Standards or Guidance Values — Groundwater samples collected from locations upgradient and downgradient of the former Precision Fabricators building contained several VOCs at concentrations exceeding NYSDEC standards or guidance values (see Table 1-1, Table 1-2 and Figure 1-3). Subsurface soil samples did not contain VOCs at concentrations exceeding NYSDEC Recommended Soil Cleanup Objectives (RSCOs).

11. CONCLUSION

The PSA field investigation was conducted on December 29 and 30, 1998 and January 4 and 5, 1999. The field investigation consisted of collection of shallow groundwater and subsurface soil samples for laboratory analysis. Groundwater samples were collected from eleven Geoprobe points (GW-1 through GW-11) and two existing shallow monitoring wells (PF-2 and PF-3) located around the perimeter of the former Precision Fabricators facility (see Figure 1-2). Geoprobe samples collected upgradient of the former Precision Fabricators building included GW-1 through GW-7. GW-8, GW-9 and GW-10 were collected downgradient of the building and GW-11 was collected downgradient of the building immediately west of the site, which is currently occupied by Gold's Gym. Monitoring well PF-3 is located upgradient of the building and PF-2 is downgradient of the building. Existing monitoring well PF-1 had been reported as damaged and was therefore not sampled. The Geoprobe groundwater samples were collected from the upper five feet of the water table aquifer (depth to water ranged from 39 to 40 feet below ground surface). The groundwater samples were analyzed for Target Compound List (TCL) VOCs using Method 95-1. Analytical results for the groundwater samples are summarized in Tables 1-1 (Geoprobe samples) and 1-2 (monitoring well samples).

Compounds detected in the upgradient Geoprobe samples included TCA, carbon disulfide, PCE, TCE and 1,2-DCE. TCA was detected in GW-7 at an estimated concentration of 3 micrograms per liter (ug/l) and carbon disulfide was detected in GW-2 at an estimated concentration of 5 ug/l. The NYSDEC Class GA groundwater standard for TCA is 5 ug/l. There is no Class GA groundwater standard for carbon disulfide. TCE was detected in GW-1 (38 ug/l) and GW-2 (7 ug/l, estimated). These values both exceed the NYSDEC Class GA groundwater standard for TCE of 5 ug/l. GW-1 also contained 1,2-DCE at 33 ug/l which exceeds the Class GA groundwater standard of 5 ug/l. PCE was detected in GW-2 (5 ug/l, estimated), GW-3 (11 ug/l), GW-4 (12 ug/l), GW-5 (14 ug/l), GW-6 (25 ug/l) and GW-7 (7 ug/l, estimated). These concentrations are at or exceed the Class GA groundwater standard for PCE of 5 ug/l.

Similar concentrations were detected in the downgradient Geoprobe groundwater samples. TCA was detected in GW-8 at 10 ug/l, which exceeds the standard. This sample also contained PCE at 13 ug/l and both TCE and 1,2-DCE at 6 ug/l (estimated). These concentrations all exceed the Class GA groundwater standards for these compounds, which is 5 ug/l for each. No VOCs were detected in sample GW-9. PCE (5 ug/l, estimated), TCE (36 ug/l), 2-butanone (14 ug/l) and 1,2-DCE (6 ug/l, estimated) were detected in sample GW-10. The Class GA Groundwater guidance value for 2-butanone is 50 ug/l. GW-11 contained 2-butanone (6 ug/l, estimated), PCE (12 ug/l), TCE (14 ug/l) and 1,2-DCE (7 ug/l, estimated). Both monitoring well samples contained acetone and PCE. Upgradient well PF-3 contained acetone at an estimated concentration of 6 ug/l and PCE at 42 ug/l. The Class GA groundwater guidance value for acetone is 50 ug/l. The acetone and PCE concentrations in downgradient well PF-2 were 8 ug/l (estimated) and 7 ug/l (estimated), respectively. The concentrations of PCE, TCE and TCA detected in groundwater samples are summarized on Figure 1-3. The similar group of compounds and the approximately equal concentrations detected in the upgradient and downgradient samples indicate that the site is not impacting groundwater. This distribution suggests an upgradient source for the PCE detected across the site, the TCE detected in the samples from the western portion of the site and the TCA detected in the samples collected from the southeastern portion of the site.

Subsurface soil samples were collected from five locations along the rear (south) wall of the building. The soil samples were all located beneath pipes exiting the wall. Each sample was collected from a depth of six to eight feet below ground surface and was analyzed for TCL VOCs using Method 95-1. Analytical results for the subsurface soil samples are summarized in Table 1-3. As shown on this table, acetone was detected in three of the five samples (S-1, S-2 and S-4) at estimated concentrations of 6 micrograms per kilogram (ug/kg) in S-1 and S-4 and 8 ug/kg in S-2. No other VOCs were detected in the subsurface soil samples. None of these concentrations exceed the NYSDEC RSCO for acetone which is 200 ug/kg.

The data presented in the referenced tables and discussed above show similar concentrations of VOCs in groundwater samples collected upgradient and downgradient of the former Precision Fabricators facility. These results provide no evidence that operations at the former Precision Fabricators Site have contributed to the regional VOC contamination in groundwater or have impacted subsurface soils around the building. The distribution of VOCs in the groundwater samples suggests upgradient sources for the PCE, TCE and TCA.

12. SITE DATA

a. Nearest Surface Water: Distance 2,800 ft. Direction Northeast Classification Unnamed pond, unclassified

b. Nearest Groundwater: Depth 39-40 ft. Flow Direction Southwest (X) Sole Source ( ) Primary ( ) Principal

c. Nearest Water Supply: Distance 1,000 ft. Direction Northwest Active (X) Yes ( ) No

d. Nearest Building: Distance On-site ft. Direction ---- Use Vacant during investigation

e. In State Economic Development Zone?	( ) Y	(X) N	**i. Controlled Site Access?**	( ) Y	(X) N
f. Crops or livestock on site?	( ) Y	(X) N	j. Exposed hazardous waste?	( ) Y	(X) N
g. Documented fish or wildlife mortality?	( ) Y	(X) N	k. HRS Score		
h. Impact on special status fish or wildlife resource?	( ) Y	(X) N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	**14. ADDRESS**	**15. TELEPHONE NUMBER**
Gordon Broadway Corporation	1 Jericho Turnpike, New Hyde Park, New York 11040	(516) 354-4300

16. PREPARER	**17. APPROVED**
Signature Date	Signature Date
Name, Title, Organization	Name, Title, Organization

1.2 USEPA Site Inspection Questionnaire

USEPA SITE INSPECTION QUESTIONNAIRE

PRECISION FABRICATORS SITE

GARDEN CITY PARK INDUSTRIAL AREA

GARDEN CITY PARK, NASSAU COUNTY, NEW YORK

AUGUST 1999

SUBMITTED BY:

_____

xxxxxxxxxxxxxxxxxxxxxx
SITE MANAGER

_____

xxxxxxxxxxxxxxxxxxxx
TASK LEADER

SITE SUMMARY

Provide a brief description of the site and its operational history. State the site name, owner, operator, type of facility and operations, size of property, active or inactive status and years of waste generation. Summarize waste treatment, storage or disposal activities that have or may have occurred at the site; note whether these activities are documented or alleged. Identify all source types and prior spills, floods or fires. Summarize highlights of the PA and other investigations if available. Include the following:

Site Conditions And Background

1. Physical Location (address, latitude, longitude, map reference)

The Precision Fabricators Site is located at latitude 40°44'15" and longitude 73°39'15", and is found on the USGS Lynbrook, New York quadrangle (Figure 1-1).

The site consists of the property on the southwest corner of the Broadway and Armstrong Road. The site address is 200 Broadway in Garden City Park, New York. The site is owned by Gordon Broadway Corporation.

Precision Fabricators, Inc. occupied the site from 1968 until 1994 when the business closed. Operations reportedly conducted by Precision Fabricators included fabrication, plating, painting and storage of metal parts, primarily for the aircraft industry. The building was vacant during the September 1998 site inspection and December 1998-January 1999 field investigation and has since been occupied by Coffee Distributing Corporation.

2. Site Characteristics

The site is approximately 1.2 acres. The property consists of a one-story, 45,000 square foot masonry building. The building covers most of the site with small grass areas on the north and east sides of the building (see Figure 1-2). Site photographs are included in Appendix A.

3. Release Or Threatened Release Into the Environmental
Of a Hazardous Substance or Pollutant or Contaminant

According to Nassau County Department of Health (NCDH) files, a dry well existed at the rear of the facility. This dry well reportedly received cooling water from transformers, a portion of which was then used to rinse parts prior to and after

samples from the western portion of the site and the TCA detected in the samples collected from the southeastern portion of the site.

Subsurface soil samples were collected from five locations along the rear (south) wall of the building. The soil samples were all located beneath pipes exiting the wall. Each sample was collected from a depth of six to eight feet below ground surface and was analyzed for TCL VOCs using Method 95-1. Analytical results for the subsurface soil samples are summarized in Table 1-3. As shown on this table, acetone was detected in three of the five samples (S-1, S-2 and S-4) at estimated concentrations of 6 micrograms per kilogram (ug/kg) in S-1 and S-4 and 8 ug/kg in S-2. No other VOCs were detected in the subsurface soil samples. None of these concentrations exceed the NYSDEC Recommended Soil Cleanup Objective (RSCO) for acetone which is 200 ug/kg.

The data presented in the referenced tables and discussed above show similar concentrations of VOCs in groundwater samples collected upgradient and downgradient of the former Precision Fabricators facility. These results provide no evidence that operations at the Precision Fabricators Site have contributed to the regional VOC contamination in groundwater or have impacted subsurface soils around the building. In addition, the distribution of VOCs in the groundwater samples suggests an upgradient source for the PCE detected across the site, the TCE detected in the samples from the western portion of the site and the TCA detected in the samples collected from the southeastern portion of the site.

5. CERCLA Status

Not assigned.

6. Other Actions to Date

To date, no federal or state remedial actions have occurred at the site.

7. State and Local Authorities Role

Information in the NCDH files related to the former Precision Fabricators facility included a September 1977 inspection report noting that the facility should apply for a State Pollution Discharge Elimination (SPDES) permit for discharge of cooling and rinse water (Outflow 1) to a dry well located in the rear of the building. This report also noted that "only inorganics used [in the area of the dry well]". A November 4, 1977 letter from NCDH to the facility denied the SPDES permit application because discharge into the dry well was in violation of the Nassau County sewer ordinance. A letter from Precision Fabricators to NCDH dated November 14, 1977 stated their intent to connect the rinse water discharge to the Nassau County sewer system. NCDH files report that this was performed by November 1979 (the next inspection report in the file). Outflow 2, which included all other industrial and sanitary

discharges, had reportedly been connected to the Nassau County sewer system since the building was constructed in 1966. No subsequent references to the dry well were found in the NCDH or Town of North Hempstead Building Department files. Attempts to locate the dry well for sampling during the 1994 PSA, 1995 PSA and this PSA were unsuccessful.

Reports from various NCDH inspections of the facility dating from 1977 indicate that chemicals used in the Precision Fabricators' operations included TCE, TCA, methyl ethyl ketone (also known as 2-butanone) and xylenes. During a May 1993 inspection, dye-testing of two floor drains and two slop sinks within the building by NCDH confirmed that the floor drains and slop sinks were connected to the Nassau County sewer system. An interior TCE aboveground tank with a capacity of 275 gallons was reportedly installed in 1966 and was removed from service in 1992.

In 1994, NYSDEC Spill Number 94-06755 was opened for the site. This occurred in response to an August 1994 tank test failure for the 5,000-gallon fuel oil UST. A subsequent re-test (October 1994) showed that the tank was tight. According to NYSDEC Region 1, this spill number has been closed.

As discussed previously, the 1986 NCDH contaminated aquifer segments report identified regional VOC contamination in groundwater within the GCPIA. The plume consisted of predominantly chlorinated solvents, including PCE, TCE, DCE and TCA. The elevated VOC concentrations were subsequently confirmed by the joint NCDH/NCDPW investigation in 1991. In 1994, an area-wide PSA was performed on behalf of NYSDEC, to identify potential sources for the observed VOC contamination. The results of sampling conducted during that investigation led to the 1995 PSA program, again performed on behalf of NYSDEC, at four facilities that had been identified as potential sources in 1994. One of the investigated sites was Precision Fabricators.

The current focused PSA was conducted in response to the 1995 PSA, which had concluded that the former Precision Fabricators facility was a potential contributor to the regional groundwater contamination. The scope of work for this investigation included collection of shallow groundwater and subsurface soil samples for VOC analysis to determine whether the facility is a source of the regional VOC contamination in groundwater.

Possible Threat to Public Health or Welfare or the Environment, and Statutory and Regulatory Authorities

1. Possible Threats to Public Health or Welfare

Groundwater contamination was previously detected in the area of the site. Downgradient groundwater contamination has also been identified, due to the regional VOC plume, and public water supply wells have reportedly been impacted.

Regional groundwater flow is to the southwest. The analytical results from the current investigation indicate that the site is not contributing VOCs to shallow groundwater.

The area is served by public water. The nearest public water supply well is located on Court House Road, approximately 1,000 feet northwest of the site. This well is screened at a depth of 400 feet below ground surface in the Magothy aquifer. The nearest public water supply well screened in the Upper Glacial aquifer that is in use is located approximately 1.75 miles southwest of the site.

The nearest surface water body is an unnamed pond located approximately 2,800 feet northeast of the site. The pond is not classified by NYSDEC. No evaluation of the potential for impacts to the public supply wells or surface water was made, due to the absence of site-derived contamination.

2. Possible Threats to the Environment

As previously stated, contamination of groundwater and subsurface soil by VOCs from the site was not found. Also, VOC readings measured in ambient air during sample collection activities were at background levels. Therefore, threats to the environment (air, groundwater or surface water) by VOCs from this site are unlikely.

3. Permits - Local, State, Federal

Permit Information

Permit	*Permit Number*	*Date Issued*	*Expiration Date*
Drainage Permit (steel sump receptor)	---	*5/24/78*	---
Sewer Connection	*S000457*	*6/29/66*	---

Expected Change in the Environmental Conditions: Should Action be Delayed or Not Taken as Consistent with Report Information and Recommendation

Based on analysis of groundwater samples collected upgradient and downgradient of the former Precision Fabricators facility, no impacts to groundwater due to site operations have been identified. In addition, no VOCs were detected at levels exceeding RSCOs in the subsurface soil samples. Therefore, no additional investigative or remedial actions are recommended for the site based on this PSA.

Enforcement History of the Site

The only enforcement action identified for the site was NYSDEC Spill Number 94-06755 which was opened as a result of an August 1994 tank test failure for the 5,000-gallon fuel oil UST. A subsequent re-test (October 1994) showed that the tank was tight. According to NYSDEC Region 1, this spill number has been closed.

LOCATION MAP

Provide a location map. Indicate site location, site address, latitude, longitude, USGS map reference (quadrangle name) and north arrow.

See Figure 1-1

SITE SKETCH

Provide a sketch of the site drawn to scale. Indicate all pertinent features of the site and nearby environments including: delineation of site boundary, land cover/trees and other vegetation, utilities (water, electrical, gas, sewage, storm drains), sources of wastes, areas of visible and buried wastes, buildings, residences, access roads, parking areas, fences or other barriers restricting access to the site, fields, drainage channel or pathways, water bodies, wells, sensitive environments and other features such as hills and valleys. Indicate a north arrow.

See Figure 1-2

REFERENCES

1. Dvirka and Bartilucci Consulting Engineers. April 1996. Preliminary Site Assessment Report – Sprague Goodman Electronics, Joseph Struhl Company, Precision Fabricators, Mercury Electric.

2. U.S. Soil Conservation Service. February 1987. Soil Survey of Nassau County, New York.

3. Fedelen, Roy (Suffolk County Department of Planning). March 1999. Telecommunication regarding population based on 1990 census.

4. New York State Department of Environmental Conservation. 1983. Groundwater Management Program for Long Island.

5. Long Island Regional Planning Board. 1984. 208 Non-point Source Management Handbook.

6. New York State Department of Environmental Conservation. 1998. The 1996 Priority Waterbodies List for Atlantic Ocean/Long Island Sound Basin.

7. Cassella, Victor (Brookhaven National Laboratory). Telecommunication regarding precipitation data for Long Island.

8. New York State Department of Environmental Conservation. 1998. Fish Stocking List for DEC Region 1.

9. 1996 Long Island Water Conference Directory.

10. Sweeney, John (Garden City Park Water and Fire District). April 1999. Telecommunication regarding public water supply distribution system.

11. Federal Emergency Management Agency. April 1997. Flood Insurance Rate Index Map.

12. Surface water classification information from Article 15 Environmental Conservation Law Book, reviewed at NYSDEC offices.

13. New York State Department of Environmental Conservation. Freshwater Wetlands Maps – Freeport Quadrangle (1991) and Lynbrook Quadrangle (1991).

14. U.S. Fish and Wildlife Service. National Wetlands Inventory Maps - Freeport Quadrangle (1981) and Lynbrook Quadrangle (1981).

15. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources. 1998. Natural Heritage Program Report.

16. Nassau County Department of Health. 1997. Ground Water and Public Water Supply Facts for Nassau County, New York.

17. Fitzgerald, David (Nassau County Department of Health). 1999. Telecommunication regarding the definition of designated wellhead protection areas in Nassau County.

18. Swartz, Robert (Water Authority of Western Nassau). 1999. Telecommunication regarding service area, population served and current status of Upper glacial aquifer wells.

SITE ASSESSMENT REPORT: SITE INSPECTION

PART I: SITE INFORMATION

1. Site Name/Alias *Precision Fabricators Site*

   Street *246 Broadway*

   City *Garden City Park* State *New York* Zip *11040*

2. County *Nassau* County Code *30* Cong. Dist. *NY-4*

3. CERCLIS ID NO. *Not Assigned*

4. Tax Map No.

   Section No. *33* Block No. *177* Lot No. *36*

5. Latitude *40°44'15"* Longitude *73°39'15"*

   USGS Quads. *Lynbrook, NY*

6. Approximate size of site *1.2 acres*

   Owner *Gordon Broadway Corp.* Telephone No. *(516) 354-4300*

   Street *1 Jericho Turnpike*

   City *New Hyde Park* State *New York* Zip *11040*

8. Operator *Vacant during PSA* Telephone No. ---

   Street *200 Broadway*

   City *Garden City Park* State *New York* Zip *11040*

9. Type of Ownership

   X Private ____ Federal ____ State

   ____ County ____ Municipal ____ Unknown ____ Other

10. Owner/Operator Notification on File

    ____ RCRA 3001 ____ Date ____ CERCLA 103c ____ Date

    X None ____ Unknown ____ Other ____

11. Permit Information

Permit	Permit No.	Date Issued	Expiration Date	Comments
Drainage Permit	---	*5/24/78*	---	
Sewer Connection	*S000457*	*6/29/66*	---	

12. Site Status

_____ Active _X_ Inactive _____ Unknown

13. Years of Operation *1968* to *1984*

14. Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above or below ground tanks or containers, land treatment, etc.) on-site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

(a) Waste Sources

Waste Unit No.	Waste Source Type	Facility Name for Unit
1	*Subsurface soils*	*Subsurface soils*

(b) Other Areas of Concern *None*

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

Review of regulatory agency files, the September 1998 site inspection and the December 1998 field investigation revealed no records or evidence of spills or dumping at the site except for the closed NYSDEC Spill Number 94-06755 which was discussed above.

15. Describe the regulatory history of the site, including the scope and objectives of any previous response actions, investigations and litigation by State, Local and Federal agencies (indicate type, affiliation, date of investigations).

Several investigations performed within the GCPIA have included information about the Precision Fabricators Site and/or the regional VOC contamination. These include the 1986 NCDH contaminated aquifer segments investigation, the 1991 follow-up investigation performed by NCDH/NCDPW in 1991, and the 1994 and 1995 PSAs. The results of these investigations were discussed previously.

Ref. No. 1

a) Is the site or any waste source subject to Petroleum Exclusion? Identify petroleum products and by products that justify this decision.

No.

b) Are pesticides produced and stored on site? Does the facility apply pesticides (FIFRA or Federal Insecticide, Fungicide, and Rodenticide Act) to any part of the property?

No.

c) Is the site or any waste source subject to RCRA Subtitle C (briefly explain)?

No. Precision Fabricators was listed as a large-quantity generator of hazardous waste, but went out of business in December 1994.

d) Is the site or any waste source maintained under the authority of the Nuclear Regulatory Commission (NRC)?

No.

16. Information available from:

Contact *Hayden Brewster* Agency *NYSDEC* Telephone No. *518-457-0639*

Preparer _____ Agency _____ Date _____

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit 1 - *Subsurface Soils*

Source Type:

_____ Landfill	_X_ Contaminated Soil
_____ Surface Impoundment	_____ Pile
_____ Drums	_____ Land Treatment
_____ Tanks/Containers	_____ Other

Description:

1. Describe the types of containers, impoundments or other storage systems (i.e. concrete lined surface impoundment) and any labels that may be present.

   During the field investigation, subsurface soil samples were collected from five locations at the rear (south side) of the building. The sample locations selected were beneath pipes exiting the building through the wall.

2. Describe the physical condition of the containers or storage systems (i.e. rusted and/or bulging metal drums).

   Not applicable.

3. Describe any secondary containment that may be present (e.g. drums on concrete pad in building or above ground tank surrounded by berm).

   Not applicable.

Hazardous Waste Quantity

No VOCs were detected in any of the subsurface soil samples at concentrations above NYSDEC Recommended Soil Cleanup Objectives.

Hazardous Substances/Physical State

No hazardous substances were observed during the site inspection or field investigation at the site.

PART III. SAMPLING RESULTS

Existing Analytical Data

Review and summarize any previously existing groundwater, soil, sediment, surface water, air, or waste sample analyses. Discuss the precision, accuracy, representativeness and completeness of previous sampling efforts. Describe the concentrations of chemicals of concern based on available data and media impacted. These parameters should be evaluated by examining the results of routine quality control procedures. Any suspected problems with this data should be identified. This is especially if the data cannot be used for HRS purposes. Any problems should receive the immediate attention of the work assignment manager. Identify data gaps.

The NCDH files did not contain any references to sample collection at the former Precision Fabricators facility during site inspections. The 1986 NCDH contaminated aquifer segments investigation report showed a plume of VOCs within the GCPIA, with detected PCE concentrations up to 50,000 micrograms per liter (ug/l) in well GCP-1 located approximately 1,000 feet southwest of the Precision Fabricators Site. During the subsequent NCDH/NCDPW investigation, well GCP-1 also contained the highest PCE concentration at 13,000 ug/l. The validity of these data could not be assessed since QA/QC data and/or usability summaries were not available.

Fourteen Geoprobe groundwater samples and five monitoring well samples were collected in the vicinity of the Precision Fabricators Site during the 1994 and 1995 PSAs. Each sample was analyzed for selected VOCs, including PCE, TCE, 1,2-DCE and TCA. The analytical results for samples collected during the 1995 PSA were validated in accordance with appropriate protocols and were deemed valid. As summarized in the report documenting the 1995 PSA results, samples collected from locations upgradient of the facility contained PCE concentrations ranging from below detection limits (BDL) to 12 ug/l, TCE concentrations ranging from BDL to 16 ug/l, 1,2-DCE concentrations ranging from BDL to 2.4 ug/l and TCA concentrations ranging from BDL to 59 ug/l. Downgradient samples contained PCE from BDL to 47 ug/l, TCE from BDL to 80 ug/l and TCA from BDL to 170ug/l. No downgradient samples

contained 1,2-DCE. *In addition, samples collected from north of the building generally contained lower VOC concentrations than samples collected from south, southeast and southwest of the building. The similar upgradient and downgradient PCE, TCE and 1,2-DCE results led to the conclusion that there was an upgradient source for these compounds. The distribution of TCA, however, appeared to be the result of a source in the vicinity of the southeastern portion of the former Precision Fabricators facility. No specific source for the TCA could be identified at Precision Fabricators or immediately upgradient property (Town Sheet Metal). Due to the limited extent of the contamination and the absence of documented hazardous waste disposal, no additional investigation of the site was recommended.*

Site Inspection Sampling Results

As appropriate to the particular site collect samples from air, drainage ditches, soil (surface and subsurface), standing pools of liquids, storage containers, stream and pond surface water, sediments (up gradient, at suspected source and down gradient) and ground water (up gradient, beneath site and down gradient). Samples are to be used for NPL listing purposes or to support an EE/CA (Engineering Evaluation/Cost Analysis) (as opposed to sampling used to determine immediate fire, explosion or direct contact hazards), and should go through CLP for full TAL and TCL analysis. Background samples are always necessary to document an observed release. Those samples that are considered background samples should be clearly identified.

Groundwater (from Geoprobe points and monitoring wells) and subsurface soil samples were collected during the PSA field investigation. Analytical results are summarized in Tables 1-1 (Geoprobe groundwater samples), 1-2 (monitoring well samples) and 1-3 (subsurface soil samples). The results are discussed below and in Section 4 of the Site Summary Site Assessment Activities and Observations.

Geoprobe groundwater samples were collected by driving the Geoprobe rods to the sample depth and retracting them two feet to expose a stainless steel screen. Dedicated polyethylene tubing and a decontaminated stainless steel check valve were inserted into the rod

assembly and used to purge approximately one gallon of groundwater. The groundwater sample was then collected from the tubing/check valve assembly. Monitoring well samples were collected after three to four well volumes were purged using a dedicated polyethylene bailer. The purge volumes were calculated based on the depth to water and depth to bottom in the well as measured using an electronic water level indicator.

Filled sample vials were placed into an iced cooler for subsequent shipment to Mitkem Laboratories of Warwick, Rhode Island for analysis utilizing Method 95-1. Mitkem is certified by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for this analysis.

Subsurface soil samples were also collected using the Geoprobe rig. Each sample was collected using a soil sampler with a dedicated polyethylene liner. All non-dedicated equipment was decontaminated between sample locations (groundwater and subsurface soil) using high-pressure steam. Decontamination and purge fluids generated during this investigation were discharged to the Nassau County sanitary sewer system with approval of NCDPW.

Quality Assurance/Quality Control (QA/QC) samples included matrix spike/matrix spike duplicate sets for each medium, as well as trip blanks. Data validation was performed on all data packages by a third party validator, Nancy Potak, a subcontractor to Dvirka and Bartilucci Consulting Engineers. Based on calibration criteria the acetone results for monitoring well groundwater samples PF-2 and PF-3 have been qualified as estimated. The acetone results for Geoprobe groundwater samples GW-10 and GW-11 have been qualified as non-detect due to laboratory contamination. The results have been deemed valid and usable, as qualified above, in accordance with NYSDEC 10/95 ASP Quality Assurance/Quality Control Requirements. Copies of the data validation summaries are presented in Appendix B.

Groundwater samples were collected from eleven Geoprobe points (GW-1 through GW-11) and two existing shallow monitoring wells (PF-2 and PF-3) located around the perimeter of the former Precision Fabricators facility (see Figure 1-2). Geoprobe samples collected

upgradient of the former Precision Fabricators building included GW-1 through GW-7. GW-8, GW-9 and GW-10 were collected downgradient of the building and GW-11 was collected downgradient of the building immediately west of the site, which is currently occupied by Gold's Gym. Monitoring well PF-3 is located upgradient of the building and PF-2 is downgradient of the building. Existing monitoring well PF-1 had been reported as damaged and was therefore not sampled.

As shown in Table 1-1, compounds detected in the upgradient Geoprobe samples included TCA, carbon disulfide, PCE, TCE and 1,2-DCE. TCA was detected in GW-7 at an estimated concentration of 3 ug/l and carbon disulfide was detected in GW-2 at an estimated concentration of 5 ug/l. The NYSDEC Class GA groundwater standard for TCA is 5 ug/l. There is no Class GA groundwater standard for carbon disulfide. PCE was detected in GW-2 (5 ug/l, estimated), GW-3 (11 ug/l), GW-4 (12 ug/l), GW-5 (14 ug/l), GW-6 (25 ug/l) and GW-7 (7 ug/l, estimated). These concentrations are at or exceed the Class GA groundwater standard for PCE of 5 ug/l. TCE was detected in GW-1 (38 ug/l) and GW-2 (7 ug/l, estimated). These values both exceed the Class GA groundwater standard for TCE of 5 ug/l. GW-1 also contained 1,2-DCE at 33 ug/l, which exceeds the Class GA groundwater standard of 5 ug/l.

Similar concentrations were detected in the downgradient Geoprobe groundwater samples. TCA was detected in GW-8 at 10 ug/l, which exceeds the groundwater standard. This sample also contained PCE at 13 ug/l and both TCE and 1,2-DCE at 6 ug/l (estimated), all of which exceed their 5 ug/l groundwater standards. No VOCs were detected in sample GW-9. PCE (5 ug/l, estimated), TCE (36 ug/l), 2-butanone (14 ug/l) and 1,2-DCE (6 ug/l, estimated) were detected in sample GW-10. The Class GA guidance value for 2-butanone is 50 ug/l. GW-11 contained 2-butanone (6 ug/l, estimated), PCE (12 ug/l), TCE (14 ug/l) and 1,2-DCE (7 ug/l, estimated).

As shown in Table 1-2, both monitoring well samples contained acetone and PCE. Upgradient well PF-3 contained acetone at an estimated concentration of 6 ug/l and PCE at 42 ug/l, while the acetone and PCE concentrations in PF-2, which is downgradient of the building,

were 8 ug/l (estimated) and 7 ug/l (estimated), respectively. The Class GA groundwater guidance value for acetone is 50 ug/l.

A summary of the PCE, TCE and TCA results for the groundwater samples is shown on ***Figure 1-3.*** *The similar group of compounds and the approximately equal concentrations detected in the upgradient and downgradient samples indicate that the site has not impacted groundwater. This distribution suggests an upgradient source for the PCE detected across the site, the TCE detected in the samples from the western portion of the site and the TCA detected in the samples collected from the southeastern portion of the site.*

Subsurface soil samples were collected from five locations along the rear (south) wall of the building. The soil samples were all located beneath pipes exiting the wall. Each sample was collected from a depth of six to eight feet below ground surface and was analyzed for TCL VOCs using Method 95-1. Analytical results for the subsurface soil samples are summarized in Table 1-3. As shown on this table, acetone was detected in three of the five samples (S-1, S-2 and S-4) at estimated concentrations of 6 micrograms per kilogram (ug/kg) in S-1 and S-4 and 8 ug/kg in S-2. No other VOCs were detected in the subsurface soil samples. None of these concentrations exceed the NYSDEC RSCO for acetone of 200 ug/kg.

The data presented in the referenced tables and discussed above show similar concentrations of VOCs in groundwater upgradient and downgradient of the former Precision Fabricators facility. These results provide no evidence that operations at the Precision Fabricators Site have contributed to the regional VOC contamination in groundwater or have impacted subsurface soils around the building.

PART IV. HAZARD ASSESSMENT

Groundwater Route

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

   There has not been an observed release to groundwater from the facility.

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, areas of karst terrain, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

   The study area is underlain by glacial deposits, consisting of fine to medium grained sand and gravel, which comprise the Upper Glacial aquifer. Monitoring wells installed near the site during previous investigations showed that the Upper Glacial aquifer extends to a depth of approximately 110 feet below ground surface, with its lower boundary defined by a low-permeability unit (clayey and silty sand). Groundwater contour maps prepared during previous investigations indicate that groundwater flow is in a generally southwesterly direction.

   Ref. No. 1

   During the field investigation, groundwater was encountered at approximately 39 to 40 feet below ground surface, resulting in an approximate saturated thickness for the Upper Glacial aquifer of 70 feet.

3. What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?

   The subsurface soil samples were each collected at a depth of 6 to 8 feet below ground surface. The minimum depth to groundwater at the site was approximately 39 feet below ground surface. Therefore, the minimum distance between the sampled soil and the water table is approximately 31 feet.

4. What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the top of the aquifer of concern?

   No evaluation of stratigraphy was made during this investigation.

5. What is the net precipitation at the site (inches)?

Between 1949 and 1998, the average yearly precipitation for Long Island was 48.3 inches.

Ref. No. 7

6. What is the distance to and depth of the nearest well that is currently used for drinking purposes?

The nearest well utilized for public water supply is located on Court House Road approximately 1,000 feet northwest of the site. This well (N-08409) is screened in the Magothy aquifer, at a depth of 400 feet below ground surface.

Ref. No. 16

7. If a release to groundwater is observed or suspected, determine the number of people that obtain drinking water from wells that are documented or suspected to be actually contaminated by hazardous substance(s) attributed to an observed release from the site.

No release to groundwater was observed or suspected from the site.

8. Identify the population served by wells located within 4 miles of the site that draw from the aquifer of concern.

The area surrounding the site is served by the various water districts. All identified public water supply wells within 1.5 miles of the site that are in use are screened in the Magothy aquifer. Three public water supply wells screened within the Upper Glacial aquifer are in use (N-02414, N-05155 and N-06744). These wells are screened at depths of 88, 90 and 94 feet below ground surface, respectively. The two nearest of these wells (N-05155 and N-06744) are located approximately 2.75 miles southwest of the site. The third (N-02414) is located approximately 3.5 miles southwest of the site. According to Mr. Robert Swartz of the Water Authority of Western Nassau, the water from the Upper Glacial wells is treated via air stripping and mixed with water from other wells before distribution to the Elmont area located southwest of the wells. The estimated population served by wells completed in both the Upper Glacial and Magothy aquifers (determined by population served, site knowledge and water district boundaries) is summarized below. Since water from the Upper Glacial and Magothy wells is mixed before distribution, the estimated population listed below for the Upper Glacial aquifer has also been included in the population estimate for the Magothy aquifer.

Distance	**Population**		
	Aquifer A	**Aquifer B**	**Aquifer C**
0 - ¼ mile	*0*	*2,000*	
>¼ - ½ mile	*0*	*4,100*	

Distance	Population		
	Aquifer A	Aquifer B	Aquifer C
>½ - 1 mile	*0*	*11,750*	
>1 – 2 miles	*0*	*86,100*	
>2 – 3 miles	*2,500*	*127,400*	
>3 – 4 miles	*26,100*	*133,700*	

Aquifer A: *Upper Glacial*
Aquifer B: *Magothy*

Ref. Nos. 11, 12, 18

State whether groundwater is blended with surface water, groundwater, or both before distribution.

The groundwater is blended with other groundwater prior to distribution.

Ref. No. 10, 18

Is a designated wellhead protection area within 4 miles of the site?

No. According to the NCDH, there are no designated wellhead protection areas in Nassau County.

Ref. No. 17

Does a waste source overlie a designated or proposed wellhead protection area? If a release to groundwater is observed or suspected, does a designated or proposed wellhead protection area lie within the contaminant boundary of the release?

No, the waste source does not overlie a designated wellhead protection area.

Ref. No. 17

9. Identify one of the following resource uses of groundwater within 4 miles of the site (i.e., commercial livestock watering, ingredient in commercial food preparation, supply for commercial aquaculture, supply for major, or designated water recreation area, excluding drinking water use, irrigation (5-acre minimum) of commercial food or commercial forage crops, unusable).

None of these groundwater uses was identified at the site location or at nearby facilities. Based on the absence of identified groundwater impacts due to site operations, a more in-depth analysis was not performed with NYSDEC concurrence.

Surface Water Route

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

    Release to surface water would be via groundwater to Valley Stream located approximately 2.5 miles southwest of the site or to Hempstead Lake located approximately 3.2 miles south of the site. However, since there was no indication of a release to groundwater from the site, no release to surface water is likely.

11. Identify the nearest down slope surface water. If possible, include a description of possible surface drainage patterns from the site.

    The nearest surface water body is an unnamed pond located approximately 2,800 feet northeast of the site. The site is not located close enough to this pond to drain directly to the surface water.

12. What is the distance in feet to the nearest down slope surface water? Measure the distance along a course that runoff can be expected to follow.

    The distance to the unnamed pond from the site is approximately 2,800 feet. However, runoff to the pond is not likely due to discharge of storm water to Nassau County catch basins in the streets surrounding the site. According to Reference No. 1, the catch basins discharge to Nassau County recharge basin No. 123 located southeast of the site.

13. Identify all surface water body types within 15 downstream miles.

Name	Water Body Type	Flow (cfs)	Saline/Fresh/Brackish
Valley Stream	*Creek/river*	*Not available*	*Fresh*
Hempstead Lake	*Lake*	*Not available*	*Fresh*
Hempstead South Pond	*Pond*	*Not available*	*Fresh*
Mill River	*Creek/river*	*Not available*	*Fresh*
East Rockaway Channel	*Creek/river*	*Not available*	*Saline*
Hog Island Channel	*Bay*	*Not available*	*Saline*
Reynolds Channel	*Bay*	*Not available*	*Saline*
Atlantic Ocean	*Ocean*	*Not available*	*Saline*

14. Determine the 2-year, 24-hour rainfall (inches) for the site.

Based on the 24-hour weather data generated by Brookhaven National Laboratory, the maximum 24-hour rainfall over a 2 year period (1997-1998) was 3.91 inches.

Ref. No. 7

15. Determine size of the drainage area (acres) for sources at the site.

Since any source would have been located on-site, the drainage area is limited to the 1.2 acres of the property.

16. Describe the predominant soil group in the drainage area.

According to the Nassau County soil survey, the area is classified as Urban Land. The map unit consists of areas where at least 85 percent of the surface is covered with asphalt, concrete or other impervious building material. These are mostly roads, parking lots, shopping centers, industrial parks or institutional sites. Most areas are nearly level or gently sloping. In addition, there are small areas of lawns and other landscaping. In many areas, rapid to very rapid run-off is characteristic.

Ref. No. 2

17. Determine the type of floodplain that the site is located within.

The site location does not fall within a designated flood plain, according to the National Flood Insurance Program flood insurance rate index map.

Ref. No. 11

18. Identify drinking water intakes in surface waters within 15 miles downstream of the point of surface water entry. For each intake identify: the name of the surface water body in which the intake is located, the distance in miles from the point of surface water entry, population served, and stream flow at the intake location.

All drinking water is supplied by public water which is obtained from wells.

Ref. No. 10

Intake	Distance	Population Served	Flow (cfs)

19. Identify fisheries that exist within 15 miles downstream of the point of surface water entry. For each fishery specify the following information:

No designated fisheries were identified. Based on their classification for non-contact recreation, the following surface water bodies south of the site are potential fisheries:

Name	Water Body Type	Flow (cfs)	Saline/Fresh/Brackish
Valley Stream	*Creek/river*	*Not available*	*Fresh*
Hempstead Lake	*Lake*	*Not available*	*Fresh*
Hempstead South Pond	*Pond*	*Not available*	*Fresh*
Mill River	*Creek/river*	*Not available*	*Fresh*
East Rockaway Channel	*Creek/river*	*Not available*	*Saline*
Hog Island Channel	*Bay*	*Not available*	*Saline*
Reynolds Channel	*Bay*	*Not available*	*Saline*
Atlantic Ocean	*Ocean*	*Not available*	*Saline*

In addition, according to the NYSDEC Fish Stocking List for DEC Region 1, fish were not stocked in any of these water bodies in 1997.

Ref. No. 8, 12, 15

20. Identify surface water sensitive environments that exist within 15 miles of the point of surface water entry.

No surface water sensitive environments were identified in the site vicinity.

Environment	Water Body Type	Flow (cfs)	Wetland Frontage

21. If a release to surface water is observed or suspected, identify any intakes, fisheries, and sensitive environments from question Nos. 18-20 that are or may be actually contaminated by hazardous substance(s) attributed to an observed release of from the site.

There has been no observed or suspected release to surface water from the site.

22. Identify whether the surface water is used for any of the following purposes, such as: irrigation (5 acre minimum) of commercial food or commercial forage crops, watering of commercial livestock, commercial food preparation, recreation, potential drinking water supply.

The surface water body nearest the site is not used for any of these purposes.

Soil Exposure Pathway

23. Determine the number of people that occupy residences or attend school or day care on or within 200 feet of observed contamination.

The surrounding area is industrial/commercial. No residences, schools or day care centers are located within 200 feet of the facility.

24. Determine the number of people that regularly work on or within 200 feet of observed contamination.

No contamination attributed to site operations was identified. The business currently located at the site (Coffee Distributing Corporation) employs approximately 45 to 50 people.

25. Identify terrestrial sensitive environments on or within 200 feet of observed contamination.

The area is almost completely paved. No terrestrial sensitive environments were identified.

26. Identify whether there are any of the following resource uses, such as commercial agriculture, silviculture, livestock production or grazing within an observed or suspected soil contamination.

Not applicable.

Air Route

27. Describe the likelihood of release of hazardous substances to air as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them the site. For observed release, define the supporting analytical evidence and relationship to background.

Since the contamination identified at the site is in groundwater that is located at least 39 feet below ground surface and no PID readings significantly above background were detected during sampling of subsurface soils, a release to air is considered highly unlikely.

28. Determine populations that reside within 4 miles of the site.

Distance	Population
On site	*0*
0 - ¼ mile	*374*
>¼ - ½ mile	*2,432*
>½ - 1 mile	*18,358*
>1 - 2 miles	*66,083*
>2 - 3 miles	*111,164*
>3 - 4 miles	*132,798*

Ref. No. 3

29. Identify sensitive environments, including wetlands and associated wetlands acreage, within 4 miles of the site.

Based on discussions with Mr. John Swartwout of NYSDEC, the area for identification of sensitive environments in the vicinity of the site has been modified. Sensitive environments and wetlands within 4 miles south, east and west of the site (downgradient and cross-gradient) and 1 mile north of the site (upgradient) have been included in the following summary.

A review of sensitive environmental areas in the vicinity of the Precision Fabricators Site was conducted. The following environmental parameters were considered in the review:

- *Regulated Wetlands*
- *Endangered, Rare, Threatened, or Protected Plant and Animal Species*
- *Designated Significant Fish and Wildlife Habitats*
- *Coastal Zone Management (CZM) Areas*
- *Designated Wild, Scenic, and Recreational Rivers*
- *Special Groundwater Protection Areas*
- *Parks and Recreation Areas*

Regulated Wetlands

A review of Federal and State Wetlands Maps was conducted to identify regulated wetlands in, adjacent, within a 1-mile radius, or within 4 miles lateral and downgradient. New York State regulated wetlands are shown on NYSDEC Freshwater and Tidal Wetlands maps. Federal regulated freshwater and marine wetlands are shown on the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The following is a summary of the wetlands within various search radii.

Within a 1-mile radius: There are 5 NWI wetlands ranging in size from approximately 1 acre to 10 acres. The nearest regulated wetland is approximately 600 feet southeast of the site.

1 to 2 miles lateral or downgradient: There are approximately 9 NWI wetlands ranging in size from less than 1 acre to approximately 20 acres.

2 to 3 miles lateral or downgradient: There are approximately 8 regulated NWI wetlands ranging is size from less than 1 acre to 10 acres.

3 to 4 miles lateral or downgradient: There are approximately 20 NWI wetlands ranging in size from less than 1 acre to over 50 acres (wetlands associated with the northernmost portion of Hempstead Lake State Park).

The majority of the wetlands identified above are classified by the U.S. Fish and Wildlife Service as Palustrine or Riverine systems.

Endangered, Rare, Threatened, Protected Species

The NYSDEC Natural Heritage Program maintains files and databases on recorded occurrences of Endangered, Rare, Threatened, and Protected species. In order to safeguard the species, the exact locations of the occurrences are not revealed in the reports. The reports indicate a map coordinate and a specific radius within which the occurrences were recorded. From this information, it can generally be determined whether or not such species exist on, adjacent to, or within 1.5 miles of the site.

Based on a Natural Heritage Program report for the vicinity of the Precision Fabricators Site, there are no recorded occurrences of Endangered, Rare, Threatened, or Protected plant or animal species within 1.5 miles of the site. A species of vascular plant known as slender crabgrass (Digitaria filiformis) was apparently recorded in a suitable habitat in the northern part of Hempstead Lake State Park, approximately 4 miles south of the site.

Coastal Zone Management Areas

The New York State Department of State (NYSDOS) administers the New York State Coastal Management Program (CMP). Any project undertaken on a site that is within the designated Coastal Area, as mapped by the NYSDOS, must demonstrate consistency with the policies of the CMP.

The site is not within the mapped Coastal Zone.

Designated Significant Fish and Wildlife Habitats

The NYSDEC Natural Heritage Program reports (referenced above) also indicate whether or not the subject sites are within, adjacent to, or in the vicinity of designated fish

and wildlife habitats. Based on the report referenced above, there are no such habitats in the vicinity of the site.

Designated Wild, Scenic, and Recreational Rivers

Pursuant to the New York State Wild, Scenic and Recreational River System Act, several rivers in New York State, which possess outstanding natural, scenic, historic, ecological, and recreational value, shall be preserved and protected.

There are no designated wild, scenic, or recreational rivers within 4 miles of the site

Special Groundwater Protection Areas

Special Groundwater Protection Areas (SPGA) were identified in the Groundwater Management Program for Long Island and in the 208 Nonpoint Source Management Handbook. These areas are defined as significant, largely undeveloped or sparsely developed geographic areas of Long Island that provide recharge to portions of the deep flow aquifer system.

There is no SPGA within 4 miles of the Precision Fabricators Site. The nearest SPGA is the North Hills SPGA, approximately 10 miles to the north.

Parks and Recreation Areas

The nearest State Park is Hempstead Lake State Park, approximately 4 miles south of the site.

Ref. Nos. 5, 6, 13, 14, 15

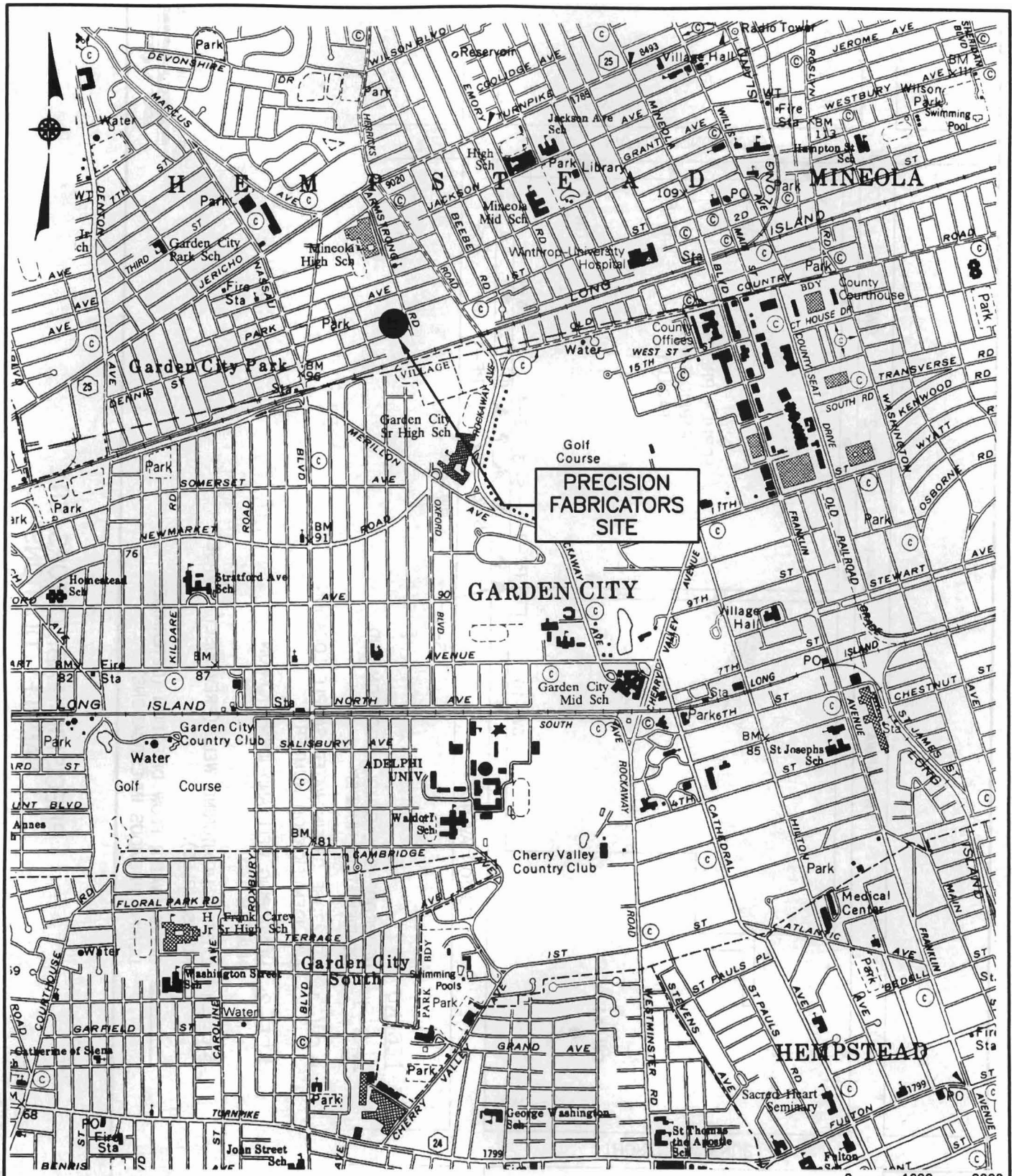
30. If a release to air is observed or suspected, determine the number of people that reside or are suspected to reside within the area of air contamination from the release.

The only people that would be affected by a release would be the employees on-site business (currently Coffee Distributing Corporation). Currently there are approximately 45 to 50 people employed by this business.

31. If a release to air is observed or suspected, identify any sensitive environments, listed in question No. 29, that are or may be located within the area of air contamination from the release.

Not applicable, as an air release is not observed or suspected.

1.3 Figures



SOURCE: LYNBROOK QUADRANGLE NY, 1979
ADDRESS: 200 BROADWAY AVE., LATITUDE: 40° 44' 15", LONGITUDE: 73° 39' 15"

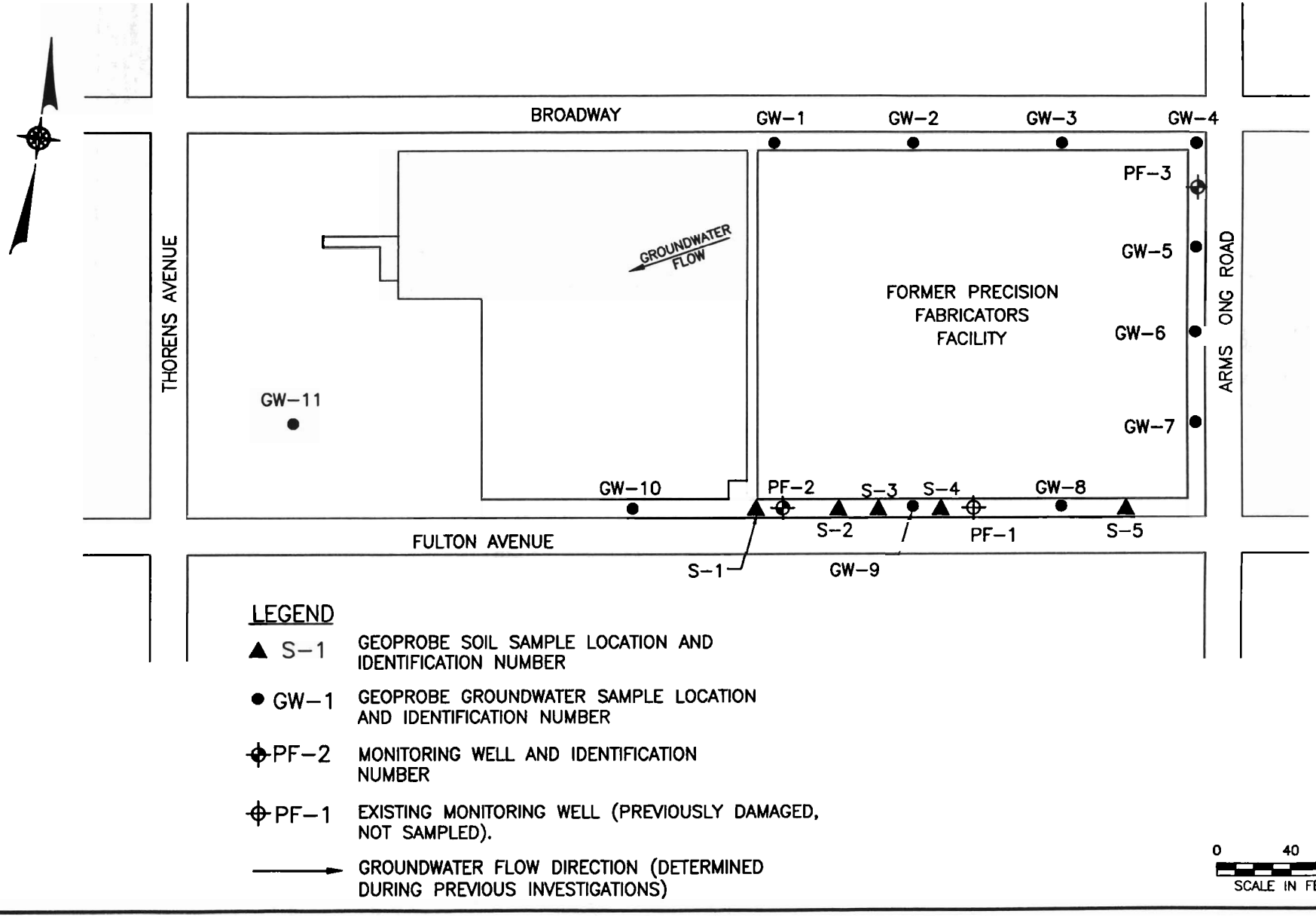
DIR: 1622 FILE: 1622-3A1.DWG (T.MCC/7-21-99)

PRECISION FABRICATORS
200 BROADWAY
GARDEN CITY PARK, NEW YORK

PRECISION FABRICATORS
SITE LOCATION MAP

Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 1-1



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Dvirka and Bartilucci
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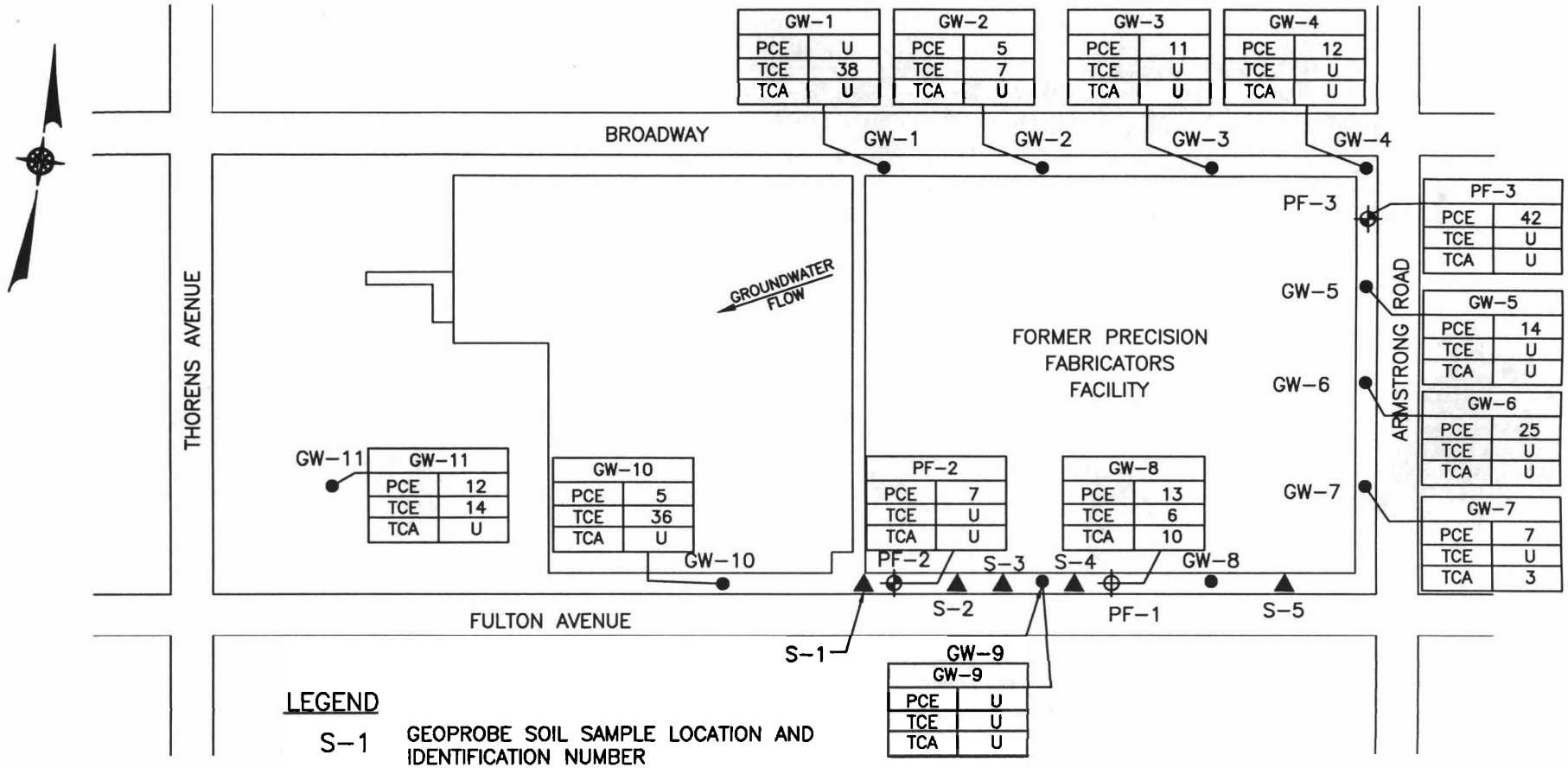
PRECISION FABRICATORS SITE
SAMPLE LOCATIONS

FIGURE 1-2



DIR 1622 FILE: 1622-3A.DWG (T.MCC/7-21-99)

PRECISION FABRICATORS SITE
PCE, TCE AND TCA RESULTS IN GROUNDWATER SAMPLES

Dvirka and Bartilucci Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 1-3

1.4 Tables

Table 1-1

PRECISION FABRICATORS SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06
	SAMPLE ID	PF-P-GW-1 (43')	PF-P-GW-2 (43')	PF-P-GW-3 (43')	PF-P-GW-4 (43')	PF-P-GW-5 (43')	PF-P-GW-6 (43')
	DATE	12/30/98	12/30/98	12/30/98	12/29/98	12/29/98	12/29/98
Carbon tetrachloride		10 U	10 U	10 U	10 U	10 U	10 U
Acetone		10 U	10 U	10 U	10 U	10 U	10 U
Chloroform		10 U	10 U	10 U	10 U	10 U	10 U
Benzene		10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane		10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane		10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride		10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride		10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide		10 U	5 J	10 U	10 U	10 U	10 U
Bromoform		10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane		10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone		10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene		38	7 J	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene		10 U	10 U	10 U	10 U	10 U	10 U
Styrene		10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone		10 U	10 U	10 U	10 U	10 U	10 U
Toluene		10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit. J:Estimated concentration. U*: Estimated due to validation.

Table 1-1

PRECISION FABRICATORS SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06
	SAMPLE ID	PF-P-GW-1 (43')	PF-P-GW-2 (43')	PF-P-GW-3 (43')	PF-P-GW-4 (43')	PF-P-GW-5 (43')	PF-P-GW-6 (43')
	DATE	12/30/98	12/30/98	12/30/98	12/29/98	12/29/98	12/29/98
Dibromochloromethane		10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene		10 U	5 J	11	12	14	25
1,2-Dichloroethene		33	10 U	10 U	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)		10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit. J:Estimated concentration. U*: Estimated due to validation.

Table 1-1

PRECISION FABRICATORS SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-07	GW-08	GW-09	GW-10	GW-11
	SAMPLE ID	PF-P-GW-7 (43')	PF-P-GW-8 (43')	PF-P-GW-9 (43')	PF-P-GW-10(46)	PF-P-GW-11(53)
	DATE	12/29/98	12/30/98	12/30/98	01/04/99	01/04/99
Carbon tetrachloride		10 U	10 U	10 U	10 U	10 U
Acetone		10 U	10 U	10 U	10 U*	10 U*
Chloroform		10 U	10 U	10 U	10 U	10 U
Benzene		10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane		3 J	10	10 U	10 U	10 U
Bromomethane		10 U	10 U	10 U	10 U	10 U
Chloromethane		10 U	10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U	10 U
Vinyl chloride		10 U	10 U	10 U	10 U	10 U
Methylene chloride		10 U	10 U	10 U	10 U	10 U
Carbon disulfide		10 U	10 U	10 U	10 U	10 U
Bromoform		10 U	10 U	10 U	10 U	10 U
Bromodichloromethane		10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U	10 U
2-Butanone		10 U	10 U	10 U	14	6 J
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U	10 U
Trichloroethene		10 U	6 J	10 U	36	14
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U	10 U
Ethylbenzene		10 U	10 U	10 U	10 U	10 U
Styrene		10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone		10 U	10 U	10 U	10 U	10 U
Toluene		10 U	10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit. J:Estimated concentration. U*: Estimated due to validation.

Table 1-1

PRECISION FABRICATORS SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-07	GW-08	GW-09	GW-10	GW-11
	SAMPLE ID	PF-P-GW-7 (43')	PF-P-GW-8 (43')	PF-P-GW-9 (43')	PF-P-GW-10(46)	PF-P-GW-11(53)
	DATE	12/29/98	12/30/98	12/30/98	01/04/99	01/04/99
Dibromochloromethane		10 U	10 U	10 U	10 U	10 U
Tetrachloroethene		7 J	13	10 U	5 J	12
1,2-Dichloroethene		10 U	6 J	10 U	6 J	10 U
2-Hexanone		10 U	10 U	10 U	10 U	7 J
Xylene (total)		10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit. J:Estimated concentration. U*: Estimated due to validation.

Table 1-2

PRECISION FABRICATORS SITE
MONITORING WELL SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	PF-2	PF-3
	SAMPLE ID	PF-MW-GW-PF-2	PF-MW-GW-PF-3
	DATE	01/05/99	01/05/99
Carbon tetrachloride		10 U	10 U
Acetone		8 J	6 J
Chloroform		10 U	10 U
Benzene		10 U	10 U
1,1,1-Trichloroethane		10 U	10 U
Bromomethane		10 U	10 U
Chloromethane		10 U	10 U
Chloroethane		10 U	10 U
Vinyl chloride		10 U	10 U
Methylene chloride		10 U	10 U
Carbon disulfide		10 U	10 U
Bromoform		10 U	10 U
Bromodichloromethane		10 U	10 U
1,1-Dichloroethane		10 U	10 U
1,1-Dichloroethene		10 U	10 U
1,2-Dichloropropane		10 U	10 U
2-Butanone		10 U	10 U
1,1,2-Trichloroethane		10 U	10 U
Trichloroethene		10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U
Ethylbenzene		10 U	10 U
Styrene		10 U	10 U
1,2-Dichloroethane		10 U	10 U
4-Methyl-2-pentanone		10 U	10 U
Toluene		10 U	10 U
Chlorobenzene		10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit.

J: Estimated concentration.

Table 1-3

PRECISION FABRICATORS SITE
SUBSURFACE SOIL SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/kg)	SITE	S-01	S-02	S-03	S-04	S-05
	SAMPLE ID	PF-P-S-1 (6-8)	PF-P-S-2 (6-8)	PF-P-S-3 (6-8)	PF-P-S-4 (6-8)	PF-P-S-5 (6-8)
	DATE	01/04/99	01/04/99	01/04/99	01/04/99	01/04/99
	DEPTH (m)	6.000	6.000	6.000	6.000	6.000
Carbon tetrachloride		10 U	11 U	12 U	12 U	10 U
Acetone		6 J	8 J	12 U	6 J	10 U
Chloroform		10 U	11 U	12 U	12 U	10 U
Benzene		10 U	11 U	12 U	12 U	10 U
1,1,1-Trichloroethane		10 U	11 U	12 U	12 U	10 U
Bromomethane		10 U	11 U	12 U	12 U	10 U
Chloromethane		10 U	11 U	12 U	12 U	10 U
Chloroethane		10 U	11 U	12 U	12 U	10 U
Vinyl chloride		10 U	11 U	12 U	12 U	10 U
Methylene chloride		10 U	11 U	12 U	12 U	10 U
Carbon disulfide		10 U	11 U	12 U	12 U	10 U
Bromoform		10 U	11 U	12 U	12 U	10 U
Bromodichloromethane		10 U	11 U	12 U	12 U	10 U
1,1-Dichloroethane		10 U	11 U	12 U	12 U	10 U
1,1-Dichloroethene		10 U	11 U	12 U	12 U	10 U
1,2-Dichloropropane		10 U	11 U	12 U	12 U	10 U
2-Butanone		10 U	11 U	12 U	12 U	10 U
1,1,2-Trichloroethane		10 U	11 U	12 U	12 U	10 U
Trichloroethene		10 U	11 U	12 U	12 U	10 U
1,1,2,2-Tetrachloroethane		10 U	11 U	12 U	12 U	10 U
Ethylbenzene		10 U	11 U	12 U	12 U	10 U
Styrene		10 U	11 U	12 U	12 U	10 U
1,2-Dichloroethane		10 U	11 U	12 U	12 U	10 U
4-Methyl-2-pentanone		10 U	11 U	12 U	12 U	10 U
Toluene		10 U	11 U	12 U	12 U	10 U
Chlorobenzene		10 U	11 U	12 U	12 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit. J: Estimated concentration.

Table 1-3

PRECISION FABRICATORS SITE
SUBSURFACE SOIL SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/kg)	SITE	S-01	S-02	S-03	S-04	S-05
	SAMPLE ID	PF-P-S-1 (6-8)	PF-P-S-2 (6-8)	PF-P-S-3 (6-8)	PF-P-S-4 (6-8)	PF-P-S-5 (6-8)
	DATE	01/04/99	01/04/99	01/04/99	01/04/99	01/04/99
	DEPTH (m)	6.000	6.000	6.000	6.000	6.000
Dibromochloromethane		10 U	11 U	12 U	12 U	10 U
Tetrachloroethene		10 U	11 U	12 U	12 U	10 U
		10 U	11 U	12 U	12 U	10 U
2-Hexanone		10 U	11 U	12 U	12 U	10 U
Xylene (total)		10 U	11 U	12 U	12 U	10 U
cis-1,3-Dichloropropene		10 U	11 U	12 U	12 U	10 U
trans-1,3-Dichloropropene		10 U	11 U	12 U	12 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U: Compound not detected at indicated detection limit.

J: Estimated concentration.

2.0 TOWN SHEET METAL SITE

2.1 NYSDEC Site Investigation Information Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Town Sheet Metal Site	1-30-073E	Garden City Park	Nassau

5. REGION	6. CLASSIFICATION
1	CURRENT PROPOSED MODIFY

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Lynbrook, New York

b. Site Latitude 40° 44' 15" Site Longitude 73° 39' 15"

c. Tax Map Numbers 33-177-36

d. Site Street Address 246 Broadway, Garden City Park, New York

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

The site consists of the property on the southeast corner of the Broadway and Armstrong Road. The site address is 246 Broadway in Garden City Park, New York. The site is owned by Conair Service, Inc. (Conair). The site location is shown on Figure 2-1. The northern portion of the site is occupied by Conair Service, Inc. and the southern portion of the site is occupied by Bonaire Distributing Corporation (Bonaire). The size of the site is approximately 0.5 acres. The property consists of a one-story, 11,200 square foot masonry building which houses an active heating, ventilation and air conditioning contractor (Conair) in the front (northern) portion and a snack food distributor (Bonaire) in the rear (southern) portion. Most of the site is paved with a small grass area in the front (northwest side) of the building (see Figure 2-2). Site photographs are included in Appendix C.

The rear portion of the building was occupied by Town Sheet Metal Works, Inc. from 1975 until September 1985. Operations at the site reportedly involved fabrication of sheet metal, in particular ductwork. According to Nassau County Department of Health (NCDH) files, no chemicals were used at the site.

A 1986 NCDH report entitled "Contaminated Aquifer Segments, Nassau County, New York" identified regional groundwater contamination in the Garden City Park Industrial Area (GCPIA). The plume consisted of volatile organic compounds (VOCs), predominantly chlorinated solvents, including tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE) and 1,1,1-trichloroethane (TCA). A follow-up investigation by NCDH and the Nassau County Department of Public Works (NCDPW) in 1993 confirmed elevated VOCs, in particular PCE, in groundwater within the GCPIA. In 1994, an area-wide Preliminary Site Assessment (PSA) was performed on behalf of the New York State Department of Environmental Conservation (NYSDEC) in the GCPIA, to identify potential sources of the VOC contamination. The results of sampling conducted during that investigation led the NYSDEC to conduct PSAs in 1995 at four facilities that had been identified as potential sources in 1994. As summarized in the report documenting the 1995 PSA results ("Preliminary Site Assessment Report – Sprague Goodman Electronics, Joseph Struhl Company, Precision Fabricators, Mercury Electric"), samples collected from locations upgradient of the Town Sheet Metal facility contained PCE concentrations ranging from below detection limits (BDL) to 8.2 micrograms per liter (ug/l), TCE concentrations ranging from BDL to 1.2 ug/l and TCA concentrations ranging from BDL to 3.6 ug/l. No upgradient samples contained 1,2-DCE. Downgradient samples contained PCE from BDL to 9.6 ug/l, TCE from BDL to 1.8 ug/l, 1,2-DCE from BDL to 2.4 ug/l and TCA from 4.7 ug/l to 59 ug/l. The similar upgradient and downgradient PCE, TCE and 1,2-DCE results led to the conclusion that there was an upgradient source for these compounds. The distribution of TCA, however, suggested that there was a source in the vicinity of the Town Sheet Metal Site, even though no chemical use was documented at the site. No specific on-site source for the TCA could be identified.

This focused PSA specifically for the Town Sheet Metal Site was conducted on behalf of the NYSDEC in response to the 1995 PSA. The scope of work for this investigation included collection of shallow groundwater and storm water dry well sediment samples for VOC analysis to determine whether the facility is a source of the regional VOC contamination in groundwater.

a. Area 0.4 acres b. EPA ID Number None identified

c. Completed ( ) Phase I ( ) Phase II (X) PSA ( ) RI/FS ( ) PA/SI ( ) Other

9. HAZARDOUS WASTE DISPOSED (Include EPA Hazardous Waste Numbers)

None identified.

10. ANALYTICAL DATA AVAILABLE

a. ( ) Air (X) Groundwater ( ) Surface Water (X) Sediment ( ) Soil ( ) Waste ( ) Leachate ( ) EPTox ( ) TCLP

b. Contravention of Standards or Guidance Values	Several VOCs, including PCE, TCE, 1,2-DCE and TCA, were detected at levels above NYSDEC Class GA groundwater standards in samples collected upgradient and downgradient of the former Town Sheet Metal facility. In particular, standards were exceeded in samples around the south portion of the building (see Table 2-1 and Figure 2-3). Sediment samples collected from three storm water dry wells, one interior dry well and two drains did not contain VOCs at concentrations exceeding NYSDEC Recommended Soil Cleanup Objectives (RSCOs).

11. CONCLUSION

The PSA field investigation was conducted on December 22 and 23, 1998, and December 28, 1998. The field investigation consisted of the collection of groundwater, and dry well and drain sediment samples for laboratory analysis. Groundwater samples were collected from ten Geoprobe points, GW-1 through GW-10, located around the perimeter of the former Town Sheet Metal facility (see Figure 2-2). Sample locations GW-1 and GW-6 through GW-9 are located upgradient of the on-site building and locations GW-2, GW-3, GW-4 and GW-10 are downgradient of the building. GW-5 is located cross-gradient to the former Town Sheet Metal facility. All samples were collected from the upper five feet of the water table aquifer (depth to water ranged from 39 to 40 feet below ground surface) and analyzed for Target Compound List (TCL) VOCs using Method 95-1. Analytical results for the groundwater samples are summarized in Table 2-1. As shown in this table, acetone, TCA, carbon disulfide, PCE, TCE, and 1,2-DCE were detected in the Geoprobe groundwater samples.

Acetone and PCE were detected in sample GW-1 at concentrations of 5 ug/l (estimated) and 18 ug/l, respectively. The acetone concentration does not exceed the NYSDEC Class GA groundwater guidance value of 50 ug/l, but the PCE concentration is above the Class GA groundwater standard of 5 ug/l. PCE was detected in all of the other upgradient locations except GW-9. The concentrations **detected were 24 ug/l (GW-6), 50 ug/l (GW-7) and 54 ug/l (GW-8). GW-7 and GW-8 also contained 1,2-DCE at estimated** concentrations of 9 ug/l and 8 ug/l, respectively, and GW-8 contained TCA at 8 ug/l (estimated). The Class GA groundwater standards for 1,2-DCE and TCA are each 5 ug/l. No VOCs were detected in the sample from GW-9.

PCE was detected in each of the downgradient groundwater samples at levels above the groundwater standard. Concentrations detected were 43 ug/l (GW-2), 17 ug/l (GW-3), 7 ug/l (estimated, GW-4) and 12 ug/l (GW-10). TCA was also detected in each of these samples at 14 ug/l (GW-2), 18 ug/l (GW-3), 11 ug/l (GW-4) and 5 ug/l (estimated, GW-10). GW-2 and GW-3 contained 1,2-DCE at estimated concentrations of 7 ug/l and 8 ug/l, respectively, and TCE was found in GW-3 at an estimated concentration of 6 ug/l. The Class GA groundwater standard for TCE is 5 ug/l. GW-4 also contained carbon disulfide at an estimated concentration of 6 ug/l. There is no Class GA groundwater standard or guidance value for carbon disulfide.

The sample from GW-5 contained TCA at 14 ug/l, carbon disulfide at 7 ug/l (estimated) and PCE at 20 ug/l. This sample location is at the southeast corner of the site, cross-gradient to the former Town Sheet Metal facility.

Sediment samples were collected from three storm water dry wells (DW-1, DW-3 and DW-4), one interior dry well (DW-2) and two sediment-filled vertical pipes (D-5 and D-6) installed at the Island Fence Company immediately east of the site at 5 Tulip Place (see Figure 2-2). According to Mr. Larry Gordon of Island Fence, these drains are pieces of pipe that were installed through the asphalt to promote drainage in areas where storm water had frequently collected. Sediment samples were collected from the upper two feet of material in each dry well or drain. Each sample was analyzed for TCL VOCs using Method 95-1. Analytical results for the sediment samples are summarized in Table 2-2.

Acetone was detected in the sample from DW-1 at 130 micrograms per kilogram (ug/kg) which is less than the RSCO of 200 ug/kg. It should be noted that acetone was also detected in a blank associated with this sample, but due to the relatively high concentrations detected, the acetone could not be negated by the data validation. The sample from DW-1 also contained TCA at 32 ug/kg, 2-butanone at 12 ug/kg, ethylbenzene at 6 ug/kg (estimated), toluene at 17 ug/kg and xylenes at 32 ug/kg. These levels do not exceed the RSCOs which are 800 ug/kg (TCA), 300 ug/kg (2-butanone), 5,500 ug/kg (ethylbenzene), 1,500 ug/kg (toluene) and 1,200 ug/kg (xylenes). No VOCs were detected in either of the two other storm water dry wells that were sampled (DW-3 and DW-4).

The sediment sample collected from the interior dry well (DW-2) contained only xylenes at 11 ug/kg. This concentration does not exceed the RSCO for xylenes. Acetone was detected in both sediment samples collected from the drains (D-5 and D-6) at concentrations of 110 ug/kg and 6 ug/kg (estimated), respectively. The sample from D-5 also contained TCA (32 ug/kg), 2-butanone (24 ug/kg) and xylenes (29 ug/kg). No other VOCs were detected in the sample from D-6. No VOCs were detected at concentrations exceeding RSCOs.

PCE and TCA concentrations in the groundwater and sediment samples are summarized on Figure 2-3. The concentrations of PCE in groundwater during this PSA were similar to those detected during the 1994 and 1995 PSAs. Upgradient and downgradient groundwater samples contained similar levels of PCE, indicating an upgradient PCE source. In contrast, TCA was not detected in upgradient samples GW-1, GW-6, GW-7 and GW-9, but was detected in downgradient samples GW-2, GW-3, GW-4 and GW-10 at concentrations ranging from 5 ug/l to 18 ug/l. This suggests that there is an on-site source of TCA that is impacting groundwater to a

minor extent. Sample location GW-8, while upgradient of the former Town Sheet Metal facility, is downgradient of drain D-5 where TCA was detected in the sediments. D-5 is located on the property of Island Fence Company. No use of solvents could be documented for the Island Fence facility.

In addition, detected VOC concentrations in the dry well and drain sediment samples do not exceed RSCOs, indicating that these structures are not significantly contributing to groundwater contamination, even though TCA was detected in two on-site sediment samples.

The analytical results obtained from the dry well and drain sediment samples and groundwater samples collected during this PSA indicate that the Town Sheet Metal Site is a potential contributor to TCA contamination in groundwater. However, the detected concentrations show that the site is not a major source of contamination. No specific on-site source for the TCA could be identified.

12. SITE DATA

a. Nearest Surface Water: Distance 2,800 ft. Direction Northeast Classification Unnamed pond, unclassified

b. Nearest Groundwater: Depth 39-40 ft. Flow Direction Southwest (X) Sole Source ( ) Primary ( ) Principal

c. Nearest Water Supply: Distance 1,000 ft. Direction Northwest Active (X) Yes ( ) No

d. Nearest Building: Distance On-site ft. Direction ---- Use HVAC/Warehouse

e. In State Economic Development Zone?	( ) Y	(X) N	**i. Controlled Site Access?**	**(X) Y**	**( ) N**
f. Crops or livestock on site?	( ) Y	(X) N	j. Exposed hazardous waste?	( ) Y	(X) N
g. Documented fish or wildlife mortality?	( ) Y	(X) N	k. HRS Score		
h. Impact on special status fish or wildlife resource?	( ) Y	(X) N	l. For Class 2: Priority Category		

13. SITE OWNER'S NAME	**14. ADDRESS**	**15. TELEPHONE NUMBER**
Conair Service, Inc.	246 Broadway, Garden City Park, New York 11040	(516) 294-8820

16. PREPARER	**17. APPROVED**
Signature Date	Signature Date
Name, Title, Organization	Name, Title, Organization

2.2 USEPA Site Inspection Questionnaire

SITE SUMMARY

Provide a brief description of the site and its operational history. State the site name, owner, operator, type of facility and operations, size of property, active or inactive status and years of waste generation. Summarize waste treatment, storage or disposal activities that have or may have occurred at the site; note whether these activities are documented or alleged. Identify all source types and prior spills, floods or fires. Summarize highlights of the PA and other investigations if available. Include the following:

Site Conditions And Background

1. Physical Location (address, latitude, longitude, map reference)

   The Town Sheet Metal Site is located at latitude 40°44'15" and longitude 73°39'15", and is found on the USGS Lynbrook, New York quadrangle (Figure 2-1).

   The site consists of the property on the southeast corner of the Broadway and Armstrong Road. The site address is 246 Broadway in Garden City Park, New York. The site is owned by Conair Service, Inc. (Conair). The northern portion of the site is occupied by Conair Service, Inc. and the southern portion of the site is occupied by Bonaire Distributing Corporation (Bonaire).

2. Site Characteristics

   The site is approximately 0.4 acres. The property consists of a one-story, 11,200 square foot masonry building which houses an active heating, ventilation and air conditioning contractor (Conair) in the front (northern) portion and a snack food distributor (Bonaire) in the rear (southern) portion. The rear portion of the building was occupied by Town Sheet Metal Works, Inc. from 1975 until September 1985. Most of the site is paved with a small grass area in the front (northwest side) of the building (see Figure 2). Site photographs are included in Appendix C.

3. Release Or Threatened Release Into the Environmental
   Of a Hazardous Substance or Pollutant or Contaminant

   Two floor drains were observed in the rear portion of the building where Town Sheet Metal was formerly located. The northernmost floor drain is connected by piping to the southernmost floor drain, which is located above a dry well. This dry well (DW-2 on Figure 2-2) was sampled as part of this investigation.

A 1986 Nassau County Department of Health (NCDH) report entitled "Contaminated Aquifer Segments, Nassau County, New York" identified regional groundwater contamination in the Garden City Park Industrial Area (GCPIA). The plume consisted of volatile organic compounds (VOCs), predominantly chlorinated solvents, including tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE) and 1,1,1-trichloroethane (TCA). A follow-up investigation by NCDH and the Nassau County Department of Public Works (NCDPW) in 1991 confirmed elevated VOCs, in particular PCE, in groundwater within the GCPIA. In 1994, an area-wide Preliminary Site Assessment (PSA) was performed on behalf of the New York State Department of Environmental Conservation (NYSDEC) in the GCPIA, to identify potential sources for the observed VOC contamination. The results of sampling conducted during that investigation led the NYSDEC to conduct PSAs in 1995 at four facilities that had been identified as potential sources in 1994.

This PSA for the Town Sheet Metal Site was conducted on behalf of the NYSDEC in response to the 1995 PSA, which had concluded that the former Town Sheet Metal facility was a potential contributor to the regional groundwater contamination, even though no chemical use had been documented at the site. The scope of work for this investigation included collection of shallow groundwater and storm water dry well sediment samples for VOC analysis to determine whether the facility is a source of the regional VOC contamination in groundwater.

4. Site Assessment Activities and Observations

This PSA commenced in September 1998 when a site inspection was performed at the former Town Sheet Metal facility. Present at the site inspection were representatives of the NYSDEC and Dvirka and Bartilucci Consulting Engineers (D&B), as well as the president of Conair (Mr. Mark Stransky). As part of the site inspection, the neighboring properties at 260 Broadway (SKS Industries, an ice cream distributor) and 5 Tulip Place (Island Fence Company) were visited to request access to their properties for sampling. Both companies agreed to allow sampling on their properties.

According to Mr. Stransky, Town Sheet Metal Works, Inc. occupied the rear (southern) portion of the building from 1975 until September 1985. He also stated that operations performed at the site involved fabrication of sheet metal, in particular ductwork. During the site inspection, two floor drains were observed in the southern portion of the on-site building. The northernmost floor drain is apparently connected by piping to the southernmost floor drain, which is located above a dry well. This dry well (DW-2 on Figure 2-2) was sampled as part of this investigation. Storm water dry wells were noted on the north side of the on-site building and around the SKS Industries building. No storm water dry wells were observed on the south side of the on-site building or around the Island Fence property.

The PSA field investigation was conducted on December 22 and 23, 1998, and December 28, 1998. The field investigation consisted of the collection of

groundwater, and dry well and drain sediment samples for laboratory analysis. Groundwater samples were collected from ten Geoprobe points, GW-1 through GW-10, located around the perimeter of the former Town Sheet Metal facility (see Figure 2-2). As shown on Figure 2-2, GW-1 and GW-6 through GW-9 are located upgradient of the on-site building and locations GW-2, GW-3, GW-4 and GW-10 are downgradient of the building. GW-5 was collected cross-gradient to the former Town Sheet Metal facility. All samples were collected from the upper five feet of the water table aquifer (depth to water ranged from 39 to 40 feet below ground surface) and analyzed for Target Compound List (TCL) VOCs using Method 95-1. Analytical results for the groundwater samples are summarized in Table 2-1. As shown in this table, acetone, TCA, carbon disulfide, PCE, TCE and 1,2-DCE were detected in the Geoprobe groundwater samples.

Acetone and PCE were detected in sample GW-1 at concentrations of 5 ug/l (estimated) and 18 ug/l, respectively. The acetone concentration does not exceed the NYSDEC Class GA groundwater guidance value of 50 ug/l, but the PCE concentration is above the Class GA groundwater standard of 5 ug/l. PCE was detected in all of the other upgradient locations except GW-9. The concentrations detected were 24 ug/l (GW-6), 50 ug/l (GW-7) and 54 ug/l (GW-8). GW-7 and GW-8 also contained 1,2-DCE at estimated concentrations of 9 ug/l and 8 ug/l, respectively, and GW-8 contained TCA at 8 ug/l (estimated). The Class GA groundwater standards for 1,2-DCE and TCA are each 5 ug/l. No VOCs were detected in the sample from GW-9.

PCE was detected in each of the downgradient groundwater samples at levels above the groundwater standard. Concentrations detected were 43 ug/l (GW-2), 17 ug/l (GW-3), 7 ug/l (estimated, GW-4) and 12 ug/l (GW-10). TCA was also detected in each of these samples at 14 ug/l (GW-2), 18 ug/l (GW-3), 11 ug/l (GW-4) and 5 ug/l (estimated, GW-10). GW-2 and GW-3 contained 1,2-DCE at estimated concentrations of 7 ug/l and 8 ug/l, respectively, and TCE was found in GW-3 at an estimated concentration of 6 ug/l. The Class GA groundwater standard for TCE is 5 ug/l. GW-4 also contained carbon disulfide at an estimated concentration of 6 ug/l. There is no Class GA groundwater standard or guidance value for carbon disulfide.

The sample from GW-5 contained TCA at 14 ug/l, carbon disulfide at 7 ug/l (estimated) and PCE at 20 ug/l. This sample location is at the southeast corner of the site, cross-gradient to the former Town Sheet Metal facility.

Sediment samples were collected from three storm water dry wells (DW-1, DW-3 and DW-4), one interior dry well (DW-2) and two sediment-filled vertical pipes (D-5 and D-6) installed at the Island Fence Company immediately east of the site at 5 Tulip Place (see Figure 2-2). According to Mr. Larry Gordon of Island Fence, these drains are pieces of pipe that were installed through the asphalt to promote drainage in areas where storm water had frequently collected. Sediment samples were collected from the upper two feet of material in each dry well or drain. Each sample was

analyzed for TCL VOCs using Method 95-1. Analytical results for the sediment samples are summarized in Table 2-2.

Acetone was detected in the sample from DW-1 at 130 micrograms per kilogram (ug/kg) which is less than the NYSDEC Recommended Soil Cleanup Objective (RSCO) of 200 ug/kg. It should be noted that acetone was also detected in a blank associated with this sample, but due to the relatively high concentration detected, the acetone could not be negated by the data validation. The sample from DW-1 also contained TCA at 32 ug/kg, 2-butanone at 12 ug/kg, ethylbenzene at 6 ug/kg (estimated), toluene at 17 ug/kg and xylenes at 32 ug/kg. These levels do not exceed the RSCOs which are 800 ug/kg (TCA), 300 ug/kg (2-butanone), 5,500 ug/kg (ethylbenzene), 1,500 ug/kg (toluene) and 1,200 ug/kg (xylenes). No VOCs were detected in either of the two other storm water dry wells that were sampled (DW-3 and DW-4).

The sediment sample collected from the interior dry well (DW-2) contained only xylenes at 11 ug/kg. This concentration does not exceed the RSCO for xylenes. Acetone was detected in both sediment samples collected from the drains (D-5 and D-6) at concentrations of 110 ug/kg and 6 ug/kg (estimated), respectively. The sample from D-5 also contained TCA (32 ug/kg), 2-butanone (24 ug/kg) and xylenes (29 ug/kg). No other VOCs were detected in the sample from D-6. No VOCs were detected at concentrations exceeding RSCOs.

PCE and TCA concentrations in the groundwater and sediment samples are summarized on Figure 2-3. The concentrations of PCE in groundwater during this PSA were similar to those detected during the 1994 and 1995 PSAs. Upgradient and downgradient groundwater samples contained similar levels of PCE, indicating an upgradient PCE source. In contrast, TCA was not detected in upgradient samples GW-1, GW-6, GW-7 and GW-9, but was detected in downgradient samples GW-2, GW-3, GW-4 and GW-10 at concentrations ranging from 5 ug/l to 18 ug/l. This suggests that there is an on-site source of TCA that is impacting groundwater to a minor extent. Sample location GW-8, while upgradient of the former Town Sheet Metal facility, is downgradient of drain D-5 where TCA was detected in the sediments. D-5 is located on the property of Island Fence Company. No use of solvents could be documented for the Island Fence facility.

In addition, detected VOC concentrations in the dry well and drain sediment samples do not exceed RSCOs, indicating that these structures are not significantly contributing to groundwater contamination, even though TCA was detected in two on-site sediment samples.

The analytical results obtained from the dry well and drain sediment samples and groundwater samples collected during this PSA indicate that the Town Sheet Metal Site is a potential contributor to TCA contamination in groundwater. However, the detected concentrations show that the site is not a major source of contamination. No specific on-site source for the TCA could be identified.

5. CERCLA Status

Not assigned.

6. Other Actions to Date

To date, no federal or state remedial actions have occurred at the site.

7. State and Local Authorities Role

NCDH files contain little information regarding the former Town Sheet Metal facility. The only information concerning the 246 Broadway building were two referrals to the U.S. Environmental Protection Agency that the active dry well inside the building is a Class V dry well, a 1978 Industrial Survey stating that no chemicals were used at the site and a 1990 tank test report for the 550-gallon fuel oil underground storage tank. This tank, located on the east side of the building, passed the tightness test.

As discussed above, the 1986 NCDH contaminated aquifer segments report identified regional VOC contamination in groundwater within the GCPIA. The plume consisted of predominantly chlorinated solvents, including PCE, TCE, 1,2-DCE and TCA. The elevated VOC concentrations were subsequently confirmed by the joint NCDH/NCDPW investigation in 1991. In 1994, an area-wide PSA was performed on behalf of the NYSDEC, to identify potential sources of the VOC contamination. The results of sampling conducted during that investigation led to the 1995 PSA program, again performed on behalf of the NYSDEC, at four facilities that had been identified as potential sources in 1994.

This focused PSA was conducted in response to the 1995 PSA, which had concluded that the former Town Sheet Metal facility was a potential contributor to the regional groundwater contamination, even though no chemical use had been documented at the site. The scope of work for this investigation included collection of shallow groundwater and storm water dry well sediment samples for VOC analysis to determine whether the facility is a source of the regional VOC contamination in groundwater.

Possible Threat to Public Health or Welfare or the Environment, and Statutory and Regulatory Authorities

1. Possible Threats to Public Health or Welfare

Groundwater contamination was previously detected in the area of the site. Downgradient groundwater contamination has also been identified due to the regional VOC plume and public water supply wells have reportedly been impacted. Regional groundwater flow is to the southwest; however, the analytical results from

the current investigation indicate that the site is not contributing significant levels of VOCs to shallow groundwater.

The area is served by public water. The nearest public water supply well is located on Court House Road, approximately 1,000 feet northwest of the site. This well is screened at a depth of 400 feet below ground surface in the Magothy aquifer. The nearest public water supply well screened in the Upper Glacial aquifer that is in use is located approximately 1.75 miles southwest of the site.

The nearest surface water body is an unnamed pond located approximately 2,800 feet northeast of the site. The pond is not classified by the NYSDEC. No evaluation of the potential for impacts to the public supply wells or surface water was made due to the minimal extent of site-derived contamination.

2. Possible Threats to the Environment

As previously stated, significant contamination of groundwater and sediment by VOCs from the site was not found. Also, VOC readings measured in ambient air during sample collection activities were at background levels. Therefore, threats to the environment (air, groundwater or surface water) by VOCs from this site are minor.

3. Permits - Local, State, Federal

Permit Information

Permit	***Permit Number***	***Date Issued***	***Expiration Date***
Building Permit	---	*5/22/56*	---

Expected Change in the Environmental Conditions: Should Action be Delayed or Not Taken as Consistent with Report Information and Recommendation

The analytical results of dry well and drain sediment samples and groundwater samples collected upgradient and downgradient of the Town Sheet Metal Site indicate that the site is a potential contributor to TCA contamination in groundwater. No specific on-site source for the TCA could be identified. However, the detected concentrations show that the site is not a major source of contamination.

Enforcement History of the Site

No enforcement actions were identified for the site.

LOCATION MAP

Provide a location map. Indicate site location, site address, latitude, longitude, USGS map reference (quadrangle name) and north arrow.

See Figure 2-1

SITE SKETCH

Provide a sketch of the site drawn to scale. Indicate all pertinent features of the site and nearby environments including: delineation of site boundary, land cover/trees and other vegetation, utilities (water, electrical, gas, sewage, storm drains), sources of wastes, areas of visible and buried wastes, buildings, residences, access roads, parking areas, fences or other barriers restricting access to the site, fields, drainage channel or pathways, water bodies, wells, sensitive environments and other features such as hills and valleys. Indicate a north arrow.

See Figure 2-2

REFERENCES

1. Dvirka and Bartilucci Consulting Engineers. April 1996. Preliminary Site Assessment Report – Sprague Goodman Electronics, Joseph Struhl Company, Precision Fabricators, Mercury Electric.

2. U.S. Soil Conservation Service. February 1987. Soil Survey of Nassau County, New York.

3. Fedelen, Roy (Suffolk County Department of Planning). March 1999. Telecommunication regarding population based on 1990 census.

4. New York State Department of Environmental Conservation. 1983. Groundwater Management Program for Long Island.

5. Long Island Regional Planning Board. 1984. 208 Non-point Source Management Handbook.

6. New York State Department of Environmental Conservation. 1998. The 1996 Priority Waterbodies List for Atlantic Ocean/Long Island Sound Basin.

7. Cassella, Victor (Brookhaven National Laboratory). Telecommunication regarding precipitation data for Long Island.

8. New York State Department of Environmental Conservation. 1998. Fish Stocking List for DEC Region 1.

9. 1996 Long Island Water Conference Directory.

10. Sweeney, John (Garden City Park Water and Fire District). April 1999. Telecommunication regarding public water supply distribution system.

11. Federal Emergency Management Agency. April 1997. Flood Insurance Rate Index Map.

12. Surface water classification information from Article 15 Environmental Conservation Law Book, reviewed at NYSDEC offices.

13. New York State Department of Environmental Conservation. Freshwater Wetlands Maps – Freeport Quadrangle (1991) and Lynbrook Quadrangle (1991).

14. U.S. Fish and Wildlife Service. National Wetlands Inventory Maps - Freeport Quadrangle (1981) and Lynbrook Quadrangle (1981).

15. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources. 1998. Natural Heritage Program Report.

16. Nassau County Department of Health. 1997. Ground Water and Public Water Supply Facts for Nassau County, New York.

17. Fitzgerald, David (Nassau County Department of Health). 1999. Telecommunication regarding the definition of designated wellhead protection areas in Nassau County.

18. Swartz, Robert (Water Authority of Western Nassau). 1999. Telecommunication regarding service area, population served and current status of Upper glacial aquifer wells.

SITE ASSESSMENT REPORT: SITE INSPECTION

PART I: SITE INFORMATION

1. Site Name/Alias *Town Sheet Metal Site*

   Street *246 Broadway*

   City *Garden City Park* State *New York* Zip 11040

2. County *Nassau* County Code *30* Cong. Dist. *NY-4*

3. CERCLIS ID NO. *Not Assigned*

4. Tax Map No.

   Section No. *33* Block No. *177* Lot No. *36*

5. Latitude *40°44'15"* Longitude *73°39'15"*

   USGS Quads. *Lynbrook, NY*

6. Approximate size of site *0.5 acres*

7. Owner *Conair Service, Inc.* Telephone No. *(516) 294-8820*

   Street *246 Broadway*

   City *Garden City Park* State *New York* Zip *11040*

8. Operator *Conair Service, Inc.* Telephone No. *(516) 294-8820*

   Street *246 Broadway*

   City *Garden City Park* State *New York* Zip *11040*

   Operator *Bonaire Distributing Corp.* Telephone No. *Not available*

   Street *246 Broadway*

   City *Garden City Park* State *New York* Zip *11040*

9. Type of Ownership

   X Private ____ Federal ____ State

   ____ County ____ Municipal ____ Unknown ____ Other

10. Owner/Operator Notification on File

____	RCRA 3001	____	Date	____	CERCLA 103c	____	Date
X	None	____	Unknown	____	Other	____	

11. Permit Information

Permit	Permit No.	Date Issued	Expiration Date	Comments
Building Permit	---	*5/22/56*	---	

12. Site Status

X Active X Inactive ____ Unknown

13. Years of Operation *Town Sheet Metal 1975* to *1985*

14. Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above or below ground tanks or containers, land treatment, etc.) on-site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

(a) Waste Sources

Waste Unit No.	Waste Source Type	Facility Name for Unit
1	*Storm water dry wells*	*Storm water dry wells/drains*
2	*Floor drains/dry well*	*Floor drains/dry well*

(b) Other Areas of Concern *None*

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

Review of regulatory agency files, the September 1998 site inspection and the December 1998 field investigation revealed no records or evidence of spills or dumping.

15. Describe the regulatory history of the site, including the scope and objectives of any previous response actions, investigations and litigation by State, Local and Federal agencies (indicate type, affiliation, date of investigations).

Several investigations performed within the GCPIA have included information about the former Town Sheet Metal facility and/or the regional VOC contamination. These include the 1986 NCDH contaminated aquifer segments investigation, the 1991 follow-up investigation performed jointly by NCDH and NCDPW, and the 1994 and 1995 PSAs. The results of these investigations were discussed previously.

Ref. No. 1

a) Is the site or any waste source subject to Petroleum Exclusion? Identify petroleum products and by products that justify this decision.

No

b) Are pesticides produced and stored on site? Does the facility apply pesticides (FIFRA or Federal Insecticide, Fungicide, and Rodenticide Act) to any part of the property?

No

c) Is the site or any waste source subject to RCRA Subtitle C (briefly explain)?

No.

d) Is the site or any waste source maintained under the authority of the Nuclear Regulatory Commission (NRC)?

No

16. Information available from:

Contact *Hayden Brewster* Agency *NYSDEC* Telephone No. *518-457-0639*

Preparer _____ Agency _____ Date _____

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit 1 - *Storm water dry wells/drains*

Source Type:

____	Landfill	____	Contaminated Soil
____	Surface Impoundment	____	Pile
____	Drums	____	Land Treatment
____	Tanks/Containers	X	Other (Contaminated Sediment)

Description:

1. Describe the types of containers, impoundments or other storage systems (i.e. concrete lined surface impoundment) and any labels that may be present.

   During the September 1998 site inspection, storm water dry wells were noted around the north side of the site building (Conair portion) and around the adjoining property to the east (SKS Industries). No storm water dry wells were observed around the south side of the on-site building or at the Island Fence facility. Sediment samples were collected from three storm water dry wells during the field investigation (DW-1, DW-3 and DW-4). In addition, sediment samples were collected from within two drainage structures (D-5 and D-6) located at the rear of the Island Fence facility (see Figure 2-2 for locations). These drainage structures are reportedly pieces of pipe that were installed through the asphalt to promote drainage in areas where storm water had frequently collected.

2. Describe the physical condition of the containers or storage systems (i.e. rusted and/or bulging metal drums).

   Not applicable.

3. Describe any secondary containment that may be present (e.g. drums on concrete pad in building or above ground tank surrounded by berm).

   Not applicable.

Hazardous Waste Quantity

None of the five sediment samples collected from the storm water dry wells and drains contained VOCs at levels above RSCOs.

Hazardous Substances/Physical State

No hazardous substances were observed during the site inspection or field investigation at the site.

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit 2 - *Floor Drains/Dry Well*

Source Type:

____	Landfill	____	Contaminated Soil
____	Surface Impoundment	____	Pile
____	Drums	____	Land Treatment
____	Tanks/Containers	X	Other (Contaminated Sediment)

Description:

1. Describe the types of containers, impoundments or other storage systems (i.e., concrete lined surface impoundment) and any labels that may be present.

   During the September 1998 site inspection, two floor drains were noted in the area of the building formerly occupied by Town Sheet Metal. The floor drains connect to a dry well inside the building. A sediment sample collected during the 1995 PSA contained only trace levels of PCE (0.9 ug/kg) and TCE (0.6 ug/kg). During the current investigation, a dry well sediment sample collected from 6 to 8 feet below ground surface contained only xylenes, at 11 ug/kg, which is well below the RSCO for xylenes of 1,200 ug/kg.

2. Describe the physical condition of the containers or storage systems (i.e., rusted and/or bulging metal drums).

   Access to the sampled dry well was through a 4-inch diameter drain, so no evaluation of the physical condition of the structure could be made.

3. Describe any secondary containment that may be present (e.g. drums on concrete pad in building or above ground tank surrounded by berm).

   Not applicable.

Hazardous Waste Quantity

No hazardous substances were observed in the area of the floor drains during the site inspection or field investigation at the site.

Hazardous Substances/Physical State

No hazardous substances were observed during the site inspection or field investigation at the site.

PART III. SAMPLING RESULTS

Existing Analytical Data

Review and summarize any previously existing groundwater, soil, sediment, surface water, air, or waste sample analyses. Discuss the precision, accuracy, representativeness and completeness of previous sampling efforts. Describe the concentrations of chemicals of concern based on available data and media impacted. These parameters should be evaluated by examining the results of routine quality control procedures. Any suspected problems with this data should be identified. This is especially if the data cannot be used for HRS purposes. Any problems should receive the immediate attention of the work assignment manager. Identify data gaps.

The 1986 NCDH contaminated aquifer segments investigation report showed a plume of VOCs within the GCPIA, with detected PCE concentrations up to 50,000 micrograms per liter (ug/l) in well GCP-1 located approximately 1,250 feet southwest of the Town Sheet Metal facility. During the subsequent 1991 NCDH/NCDPW investigation, well GCP-1 also contained the highest PCE concentration at 13,000 ug/l. The validity of these data could not be assessed since QA/QC data and/or usability summaries were not available.

Ten Geoprobe groundwater samples were collected in the vicinity of the former Town Sheet Metal facility during the 1994 and 1995 PSAs. Each sample was analyzed for selected VOCs, including PCE, TCE, 1,2-DCE and TCA. The analytical results for samples collected during the 1994 and 1995 PSAs were validated in accordance with appropriate protocols and were deemed valid. As summarized in the report documenting the 1995 PSA results, samples collected from locations upgradient of the former Town Sheet Metal facility contained PCE concentrations ranging from below detection limits (BDL) to 8.2 ug/l, TCE concentrations ranging from BDL to 1.2 ug/l and TCA concentrations ranging from BDL to 3.6 ug/l. No upgradient samples contained 1,2-DCE. Downgradient samples contained PCE from BDL to 9.6 ug/l, TCE from BDL to 1.8 ug/l, 1,2-DCE from BDL to 2.4 ug/l and TCA from 4.7 ug/l to 59 ug/l. The similar upgradient and downgradient PCE, TCE and 1,2-DCE results led to the conclusion that there was an upgradient source for these compounds. The distribution of TCA,

however, suggested that there was a source in the vicinity of the Town Sheet Metal Site, even though no chemical use was documented at the site. No specific on-site source for the TCA could be identified.

Site Inspection Sampling Results

As appropriate to the particular site collect samples from air, drainage ditches, soil (surface and subsurface), standing pools of liquids, storage containers, stream and pond surface water, sediments (up gradient, at suspected source and down gradient) and ground water (up gradient, beneath site and down gradient). Samples are to be used for NPL listing purposes or to support an EE/CA (Engineering Evaluation/Cost Analysis) (as opposed to sampling used to determine immediate fire, explosion or direct contact hazards), and should go through CLP for full TAL and TCL analysis. Background samples are always necessary to document an observed release. Those samples that are considered background samples should be clearly identified.

Groundwater (from Geoprobe points) as well as dry well and drain sediment samples were collected during this PSA field investigation. Analytical results are summarized in Tables 2-1 and 2-2, respectively. The results are discussed below and in Section 4 of the Site Summary, Site Assessment Activities and Observations.

Groundwater samples were collected using Geoprobe equipment. The Geoprobe rods were driven to the sample depth and retracted two feet to expose a stainless steel screen. Dedicated polyethylene tubing and a decontaminated stainless steel check valve were inserted into the rod assembly and used to purge approximately one gallon of groundwater. The groundwater sample was then collected from the tubing/check valve assembly. Filled sample vials were placed into an iced cooler for subsequent shipment to Mitkem Laboratories of Warwick, Rhode Island for analysis. Mitkem is certified by the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for these analyses.

Exclusive of the interior dry well, storm water dry well and drain sediment samples were also collected using the Geoprobe rig. Each sample was collected using a soil sampler with a

dedicated polyethylene liner. The sediment sample from the interior dry well (DW-2) was collected using a decontaminated hand auger. All non-dedicated equipment was decontaminated between sample locations (groundwater and dry well/drain sediment) using high-pressure steam. Decontamination and purge fluids generated during this investigation were discharged to the Nassau County sanitary sewer system with approval of NCDPW.

Quality Assurance/Quality Control (QA/QC) samples included a matrix spike/matrix spike duplicate set for each medium, as well as trip blanks. Data validation was performed on all data packages by a third party validator, Nancy Potak, a subcontractor to Dvirka and Bartilucci Consulting Engineers. No data qualifications were required. The results have been deemed valid and usable in accordance with NYSDEC 10/95 ASP Quality Assurance/Quality Control Requirements. Copies of the data validation summaries are presented in Appendix D.

The PSA field investigation was conducted on December 22 and 23, 1998, and December 28, 1998. The field investigation consisted of collection of groundwater, and dry well and drain sediment samples for laboratory analysis. Groundwater samples were collected from ten Geoprobe points, GW-1 through GW-10, located around the perimeter of the former Town Sheet Metal facility (see Figure 2-2). As shown on Figure 2-2, sample locations GW-1 and GW-6 through GW-9 were collected upgradient of the on-site building. Locations GW-2, GW-3, GW-4 and GW-10 were downgradient of the building. GW-5 was collected cross-gradient to the former Town Sheet Metal facility. All samples were collected from the upper five feet of the water table aquifer (depth to water ranged from 39 to 40 feet below ground surface) and analyzed for TCL VOCs using Method 95-1. Analytical results for the groundwater samples are summarized in Table 2-1. As shown in this table, acetone, TCA, carbon disulfide, PCE, TCE and 1,2-DCE were detected in the Geoprobe groundwater samples.

Acetone and PCE were detected in sample GW-1 at concentrations of 5 ug/l (estimated) and 18 ug/l, respectively. The acetone concentration does not exceed the NYSDEC Class GA groundwater guidance value of 50 ug/l, but the PCE concentration is above the Class GA groundwater standard of 5 ug/l. PCE was detected in all of the other upgradient locations except GW-9. The concentrations detected were 24 ug/l (GW-6), 50 ug/l (GW-7) and 54 ug/l

(GW-8). GW-7 and GW-8 also contained 1,2-DCE at estimated concentrations of 9 ug/l and 8 ug/l, respectively, and GW-8 contained TCA at 8 ug/l (estimated). The Class GA groundwater standards for 1,2-DCE and TCA are each 5 ug/l. No VOCs were detected in the sample from GW-9.

PCE was detected in each of the downgradient groundwater samples at levels above the groundwater standard. Concentrations detected were 43 ug/l (GW-2), 17 ug/l (GW-3), 7 ug/l (estimated, GW-4) and 12 ug/l (GW-10). TCA was also detected in each of these samples at 14 ug/l (GW-2), 18 ug/l (GW-3), 11 ug/l (GW-4) and 5 ug/l (estimated, GW-10). GW-2 and GW-3 contained 1,2-DCE at estimated concentrations of 7 ug/l and 8 ug/l, respectively, and TCE was found in GW-3 at an estimated concentration of 6 ug/l. The Class GA groundwater standard for TCE is 5 ug/l. GW-4 also contained carbon disulfide at an estimated concentration of 6 ug/l. There is no Class GA groundwater standard or guidance value for carbon disulfide.

The sample from GW-5 contained TCA at 14 ug/l, carbon disulfide at 7 ug/l (estimated) and PCE at 20 ug/l. This sample location is at the southeast corner of the site, cross-gradient to the former Town Sheet Metal facility.

Sediment samples were collected from three storm water dry wells (DW-1, DW-3 and DW-4), one interior dry well (DW-2) and two sediment-filled vertical pipes (D-5 and D-6) installed at the Island Fence Company immediately east of the site at 5 Tulip Place (see Figure 2-2). According to Mr. Larry Gordon of Island Fence, these drains are pieces of pipe that were installed through the asphalt to promote drainage in areas where storm water had frequently collected. Sediment samples were collected from the upper two feet of material in each dry well or drain. Each sample was analyzed for TCL VOCs using Method 95-1. Analytical results for the sediment samples are summarized in Table 2-2.

Acetone was detected in the sample from DW-1 at 130 micrograms per kilogram (ug/kg) which is less than the NYSDEC Recommended Soil Cleanup Objective (RSCO) of 200 ug/kg. It should be noted that acetone was also detected in a blank associated with this sample, but due to the relatively high concentration detected, the acetone could not be negated by the data

validation. The sample from DW-1 also contained TCA at 32 ug/kg, 2-butanone at 12 ug/kg, ethylbenzene at 6 ug/kg (estimated), toluene at 17 ug/kg and xylenes at 32 ug/kg. These levels do not exceed the RSCOs which are 800 ug/kg (TCA), 300 ug/kg (2-butanone), 5,500 ug/kg (ethylbenzene), 1,500 ug/kg (toluene) and 1,200 ug/kg (xylenes). No VOCs were detected in either of the two other storm water dry wells that were sampled (DW-3 and DW-4).

The sediment sample collected from the interior dry well (DW-2) contained only xylenes at 11 ug/kg. This concentration does not exceed the RSCO for xylenes. Acetone was detected in both sediment samples collected from the drains (D-5 and D-6) at concentrations of 110 ug/kg and 6 ug/kg (estimated), respectively. The sample from D-5 also contained TCA (32 ug/kg), 2-butanone (24 ug/kg) and xylenes (29 ug/kg). No other VOCs were detected in the sample from D-6. No concentrations exceeding RSCOs were detected.

PCE and TCA concentrations in the groundwater and sediment samples are summarized on Figure 2-3. The concentrations of PCE in groundwater during this PSA were similar to those detected during the 1994 and 1995 PSAs. Upgradient and downgradient groundwater samples contained similar levels of PCE, indicating an upgradient PCE source. In contrast, TCA was not detected in upgradient samples GW-1, GW-6, GW-7 and GW-9, but was detected in downgradient samples GW-2, GW-3, GW-4 and GW-10 at concentrations ranging from 5 ug/l to 18 ug/l. This suggests that there is an on-site source of TCA that is impacting groundwater to a minor extent. Sample location GW-8, while upgradient of the former Town Sheet Metal facility, is downgradient of drain D-5 where TCA was detected in the sediments. D-5 is located on the property of Island Fence Company. No use of solvents could be documented for the Island Fence facility.

In addition, detected VOC concentrations in the dry well and drain sediment samples do not exceed RSCOs, indicating that these structures are not significantly contributing to groundwater contamination, even though TCA was detected in two on-site sediment samples.

The analytical results obtained from the dry well and drain sediment samples and groundwater samples collected during this PSA indicate that the Town Sheet Metal Site is a potential contributor to TCA contamination in groundwater. However, the detected

concentrations show that the site is not a major source of contamination. No specific on-site source for the TCA could be identified.

PART IV. HAZARD ASSESSMENT

Groundwater Route

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

   The analytical results suggest that a release of TCA has occurred to groundwater from the site.

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, areas of karst terrain, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

   The study area is underlain by glacial deposits, consisting of fine to medium grained sand and gravel, which comprise the Upper Glacial aquifer. Monitoring wells installed near the site during previous investigations showed that the Upper Glacial aquifer extends to a depth of approximately 110 feet below ground surface, with its lower boundary defined by a low-permeability unit (clayey and silty sand). Groundwater contour maps prepared during previous investigations indicate that groundwater flow is generally in a southwest direction.

   Ref. No. 1

   During the field investigation, groundwater was encountered at approximately 39 to 40 feet below ground surface, resulting in an approximate saturated thickness for the Upper Glacial aquifer of 70 feet.

3. What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?

   The deepest dry well sediment samples were collected at depths of 10 to 12 feet below ground surface. The minimum depth to groundwater at the site was approximately 39 feet below ground surface. Therefore, the minimum distance between the dry well sediments and the water table is approximately 27 feet.

4. What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the top of the aquifer of concern?

   No evaluation of stratigraphy was made during this investigation.

5. What is the net precipitation at the site (inches)?

   Between 1949 and 1998, the average yearly precipitation for Long Island was 48.3 inches.

Ref. No. 9

6. What is the distance to and depth of the nearest well that is currently used for drinking purposes?

   The nearest well utilized for public water supply is located on Court House Road approximately 1,000 feet northwest of the site. This well (N-08409) is screened in the Magothy aquifer, at a depth of 400 feet below ground surface.

   Ref. No. 16

7. If a release to groundwater is observed or suspected, determine the number of people that obtain drinking water from wells that are documented or suspected to be actually contaminated by hazardous substance(s) attributed to an observed release from the site.

   The trace levels of TCA that may be attributable to the site are unlikely to have impacted public water supply wells, since the nearest public water supply well screened within the Upper Glacial aquifer is located 2.75 miles southwest of the site. As discussed in item 8 below, the population served by public water supply wells screened within the Upper Glacial aquifer that are located within four miles of the site is approximately 28,600.

8. Identify the population served by wells located within 4 miles of the site that draw from the aquifer of concern.

   The area surrounding the site is served by the various water districts. All identified public water supply wells within 1.5 miles of the site that are in use are screened in the Magothy aquifer. Three public water supply wells screened within the Upper Glacial aquifer are in use (N-02414, N-05155 and N-06744). These wells are screened at depths of 88, 90 and 94 feet below ground surface, respectively. The two nearest of these wells (N-05155 and N-06744) are located approximately 2.75 miles southwest of the site. The third (N-02414) is located approximately 3.5 miles southwest of the site. According to Mr. Robert Swartz of the Water Authority of Western Nassau, the water from these wells is treated via air stripping and mixed with water from other wells before distribution to the Elmont area located southwest of the wells. The estimated population served by wells completed in both the Upper Glacial and Magothy aquifers (determined by population served, site knowledge and water district boundaries) is summarized below. Since water from the Upper Glacial and Magothy wells is mixed before distribution, the estimated population listed below for the Upper Glacial Aquifer has also been included in the population estimate for the Magothy Aquifer.

Distance	Population		
	Aquifer A	Aquifer B	Aquifer C
0 - ¼ mile	*0*	*2,000*	
>¼ - ½ mile	*0*	*4,100*	
>½ - 1 mile	*0*	*11,750*	
>1 – 2 miles	*0*	*86,100*	

Distance	Population		
	Aquifer A	Aquifer B	Aquifer C
>2 – 3 miles	*2,500*	*127,400*	
>3 – 4 miles	*26,100*	*133,700*	

Aquifer A: *Upper Glacial*
Aquifer B: *Magothy*

Ref. Nos. 11, 12, 18

State whether groundwater is blended with surface water, groundwater, or both before distribution.

The groundwater is blended with other groundwater prior to distribution.

Ref. No. 10, 18

Is a designated wellhead protection area within 4 miles of the site?

No. According to the NCDH, there are no designated wellhead protection areas in Nassau County.

Ref. No. 17

Does a waste source overlie a designated or proposed wellhead protection area? If a release to groundwater is observed or suspected, does a designated or proposed wellhead protection area lie within the contaminant boundary of the release?

No, the waste source does not overlie a designated wellhead protection area.

Ref. No. 17

9. Identify one of the following resource uses of groundwater within 4 miles of the site (i.e., commercial livestock watering, ingredient in commercial food preparation, supply for commercial aquaculture, supply for major, or designated water recreation area, excluding drinking water use, irrigation (5-acre minimum) of commercial food or commercial forage crops, unusable).

None of these groundwater uses was identified at the site location or at nearby facilities. Based on the absence of identified groundwater impacts due to site operations, a more in-depth analysis was not performed with NYSDEC concurrence.

Surface Water Route

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a

rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

Release to surface water would be via groundwater to Valley Stream located approximately 2.5 miles southwest of the site or to Hempstead Lake located approximately 3.2 miles south of the site. However, as there was no significant release to groundwater from the site, no release to surface water is likely.

11. Identify the nearest down slope surface water. If possible, include a description of possible surface drainage patterns from the site.

The nearest down slope surface water body is an unnamed pond located approximately 2,800 feet northeast of the site. The site is not located close enough to this pond to drain directly to the surface water.

12. What is the distance in feet to the nearest down slope surface water? Measure the distance along a course that runoff can be expected to follow.

The distance to the unnamed pond from the site is approximately 2,800 feet. However, runoff to the pond is not likely due to discharge of storm water to Nassau County catch basins in the streets surrounding the site. According to Reference No. 1, the catch basins discharge to Nassau County recharge basin No. 123 located southeast of the site.

13. Identify all surface water body types within 15 downstream miles.

Name	Water Body Type	Flow (cfs)	Saline/Fresh/Brackish
Valley Stream	*Creek/river*	*Not available*	*Fresh*
Hempstead Lake	*Lake*	*Not available*	*Fresh*
Hempstead South Pond	*Pond*	*Not available*	*Fresh*
Mill River	*Creek/river*	*Not available*	*Fresh*
East Rockaway Channel	*Creek/river*	*Not available*	*Saline*
Hog Island Channel	*Bay*	*Not available*	*Saline*
Reynolds Channel	*Bay*	*Not available*	*Saline*
Atlantic Ocean	*Ocean*	*Not available*	*Saline*

14. Determine the 2-year, 24-hour rainfall (inches) for the site.

Based on the 24-hour weather data generated by Brookhaven National Laboratory, the maximum 24-hour rainfall over a 2 year period (1997-1998) was 3.91 inches.

Ref. No. 7

15. Determine size of the drainage area (acres) for sources at the site.

Since any source would have been located on-site, the drainage area is limited to the 0.4 acres of the property.

16. Describe the predominant soil group in the drainage area.

According to the Nassau County soil survey, the area is classified as Urban Land. The map unit consists of areas where at least 85 percent of the surface is covered with asphalt, concrete or other impervious building material. These are mostly roads, parking lots, shopping centers, industrial parks or institutional sites. Most areas are nearly level or gently sloping. In addition, there are small areas of lawns and other landscaping. In many areas, rapid to very rapid run-off is characteristic.

Ref. No. 2

17. Determine the type of floodplain that the site is located within.

The site location does not fall within a designated flood plain, according to the National Flood Insurance Program flood insurance rate index map.

Ref. No. 11

18. Identify drinking water intakes in surface waters within 15 miles downstream of the point of surface water entry. For each intake identify: the name of the surface water body in which the intake is located, the distance in miles from the point of surface water entry, population served, and stream flow at the intake location.

All drinking water is supplied by public water which is obtained from wells.

Ref. No. 10

Intake	Distance	Population Served	Flow (cfs)

19. Identify fisheries that exist within 15 miles downstream of the point of surface water entry. For each fishery specify the following information:

No designated fisheries were identified. Based on their classification for non-contact recreation, the following surface water bodies south of the site are potential fisheries:

Name	Water Body Type	Flow (cfs)	Saline/Fresh/Brackish
Valley Stream	*Creek/river*	*Not available*	*Fresh*
Hempstead Lake	*Lake*	*Not available*	*Fresh*
Hempstead South Pond	*Pond*	*Not available*	*Fresh*
Mill River	*Creek/river*	*Not available*	*Fresh*
East Rockaway Channel	*Creek/river*	*Not available*	*Saline*
Hog Island Channel	*Bay*	*Not available*	*Saline*
Reynolds Channel	*Bay*	*Not available*	*Saline*
Atlantic Ocean	*Ocean*	*Not available*	*Saline*

In addition, according to the NYSDEC Fish Stocking List for DEC Region 1, fish were not stocked in any of these water bodies in 1997.

Ref. No. 8, 12, 15

20. Identify surface water sensitive environments that exist within 15 miles of the point of surface water entry.

No surface water sensitive environments were identified in the site vicinity.

Environment	Water Body Type	Flow (cfs)	Wetland Frontage

21. If a release to surface water is observed or suspected, identify any intakes, fisheries, and sensitive environments from question Nos. 18-20 that are or may be actually contaminated by hazardous substance(s) attributed to an observed release of from the site.

There has been no observed or suspected release to surface water from the site.

22. Identify whether the surface water is used for any of the following purposes, such as: irrigation (5 acre minimum) of commercial food or commercial forage crops, watering of commercial livestock, commercial food preparation, recreation, potential drinking water supply.

The nearest surface water body to the site is not used for any of these purposes.

Soil Exposure Pathway

23. Determine the number of people that occupy residences or attend school or day care on or within 200 feet of observed contamination.

    The surrounding area is industrial/commercial. No residences, schools or day care centers are located within 200 feet of the facility.

24. Determine the number of people that regularly work on or within 200 feet of observed contamination.

    The businesses located at the site and immediately surrounding properties employ approximately 25 to 35 people.

25. Identify terrestrial sensitive environments on or within 200 feet of observed contamination.

    The area is almost completely paved. No terrestrial sensitive environments were identified.

26. Identify whether there are any of the following resource uses, such as commercial agriculture, silviculture, livestock production or grazing within an observed or suspected soil contamination.

    Not applicable.

Air Route

27. Describe the likelihood of release of hazardous substances to air as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them the site. For observed release, define the supporting analytical evidence and relationship to background.

    Since the contamination identified at the site is in groundwater that is located at least 39 feet below ground surface and no PID readings significantly above background were detected during sampling of dry well or drain sediments, a release to air is considered highly unlikely.

28. Determine populations that reside within 4 miles of the site.

Distance	Population
On site	*0*
0 - ¼ mile	*374*
>¼ - ½ mile	*2,432*
>½ - 1 mile	*18,358*
>1 - 2 miles	*66,083*
>2 - 3 miles	*111,164*

Distance	Population
>3 - 4 miles	*132,798*

Ref. No. 3

29. Identify sensitive environments, including wetlands and associated wetlands acreage, within 4 miles of the site.

Based on discussions with Mr. John Swartwout of NYSDEC, the area for identification of sensitive environments in the vicinity of the site has been modified. Sensitive environments and wetlands within 4 miles south, east and west of the site (downgradient and cross-gradient) and 1 mile north of the site (upgradient) have been included in the following summary.

A review of sensitive environmental areas in the vicinity of the Town Sheet Metal Site was conducted. The following environmental parameters were considered in the review:

- *Regulated Wetlands*
- *Endangered, Rare, Threatened, or Protected Plant and Animal Species*
- *Designated Significant Fish and Wildlife Habitats*
- *Coastal Zone Management (CZM) Areas*
- *Designated Wild, Scenic, and Recreational Rivers*
- *Special Groundwater Protection Areas*
- *Parks and Recreation Areas*

Regulated Wetlands

A review of Federal and State Wetlands Maps was conducted to identify regulated wetlands in, adjacent, within a 1-mile radius, or within 4 miles lateral and downgradient. New York State regulated wetlands are shown on NYSDEC Freshwater and Tidal Wetlands maps. Federal regulated freshwater and marine wetlands are shown on the U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The following is a summary of the wetlands within various search radii.

Within a 1-mile radius: There are 5 NWI wetlands ranging in size from approximately 1 acre to 10 acres. The nearest regulated wetland is approximately 600 feet southeast of the site.

1 to 2 miles lateral or downgradient: There are approximately 9 NWI wetlands ranging in size from less than 1 acre to approximately 20 acres.

2 to 3 miles lateral or downgradient: There are approximately 8 regulated NWI wetlands ranging is size from less than 1 acre to 10 acres.

3 to 4 miles lateral or downgradient: There are approximately 20 NWI wetlands ranging in size from less than 1 acre to over 50 acres (wetlands associated with the northernmost portion of Hempstead Lake State Park).

The majority of the wetlands identified above are classified by the U.S. Fish and Wildlife Service as Palustrine or Riverine systems.

Endangered, Rare, Threatened, Protected Species

The NYSDEC Natural Heritage Program maintains files and databases on recorded occurrences of Endangered, Rare, Threatened, and Protected species. In order to safeguard the species, the exact locations of the occurrences are not revealed in the reports. The reports indicate a map coordinate and a specific radius within which the occurrences were recorded. From this information, it can generally be determined whether or not such species exist on, adjacent to, or within 1.5 miles of the site.

Based on a Natural Heritage Program report for the vicinity of the Town Sheet Metal Site, there are no recorded occurrences of Endangered, Rare, Threatened, or Protected plant or animal species within 1.5 miles of the sites. A species of vascular plant known as slender crabgrass (Digitaria filiformis), was apparently recorded in a suitable habitat in the northern part of Hempstead Lake State Park, approximately 4 miles south of the site.

Coastal Zone Management Areas

The New York State Department of State (NYSDOS) administers the New York State Coastal Management Program (CMP). Any project undertaken on a site that is within the designated Coastal Area, as mapped by the NYSDOS, must demonstrate consistency with the policies of the CMP.

The site is not within the mapped Coastal Zone.

Designated Significant Fish and Wildlife Habitats

The NYSDEC Natural Heritage Program reports (referenced above) also indicate whether or not the subject sites are within, adjacent to, or in the vicinity of designated fish and wildlife habitats. Based on the report referenced above, there are no such habitats in the vicinity of the site.

Designated Wild, Scenic, and Recreational Rivers

Pursuant to the New York State Wild, Scenic and Recreational River System Act, several rivers in New York State which possess outstanding natural, scenic, historic, ecological, and recreational value shall be preserved and protected.

There are no designated wild, scenic, or recreational rivers within 4 miles of the site.

Special Groundwater Protection Areas

Special Groundwater Protection Areas (SPGA) were identified in the Groundwater Management Program for Long Island and in the 208 Nonpoint Source Management Handbook. These areas are defined as significant, largely undeveloped or sparsely developed geographic areas of Long Island that provide recharge to portions of the deep flow aquifer system.

There is no SPGA within 4 miles of the former Town Sheet Metal Site. The nearest SPGA is the North Hills SPGA, approximately 10 miles to the north.

Parks and Recreation Areas

The nearest State Park is Hempstead Lake State Park, approximately 4 miles south of the site.

Ref. Nos. 5, 6, 13, 14, 15

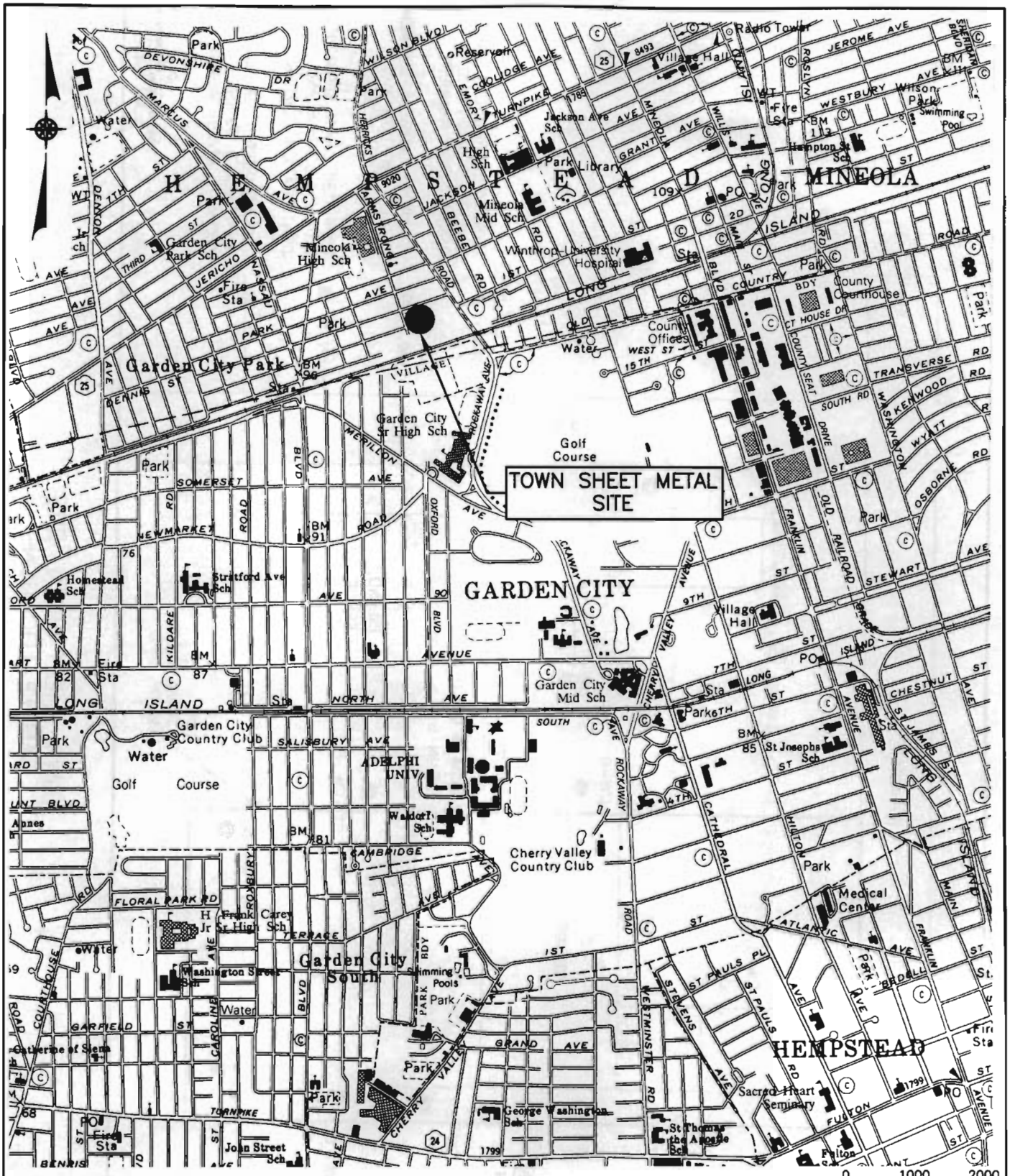
30. If a release to air is observed or suspected, determine the number of people that reside or are suspected to reside within the area of air contamination from the release.

    The only people that would be affected by a release would be the employees of the on-site businesses and possibly businesses on adjoining properties. Currently there are approximately 25 to 35 people employed by these businesses.

31. If a release to air is observed or suspected, identify any sensitive environments, listed in question No. 29, that are or may be located within the area of air contamination from the release.

    Not applicable, as an air release is not observed or suspected.

2.3 Figures



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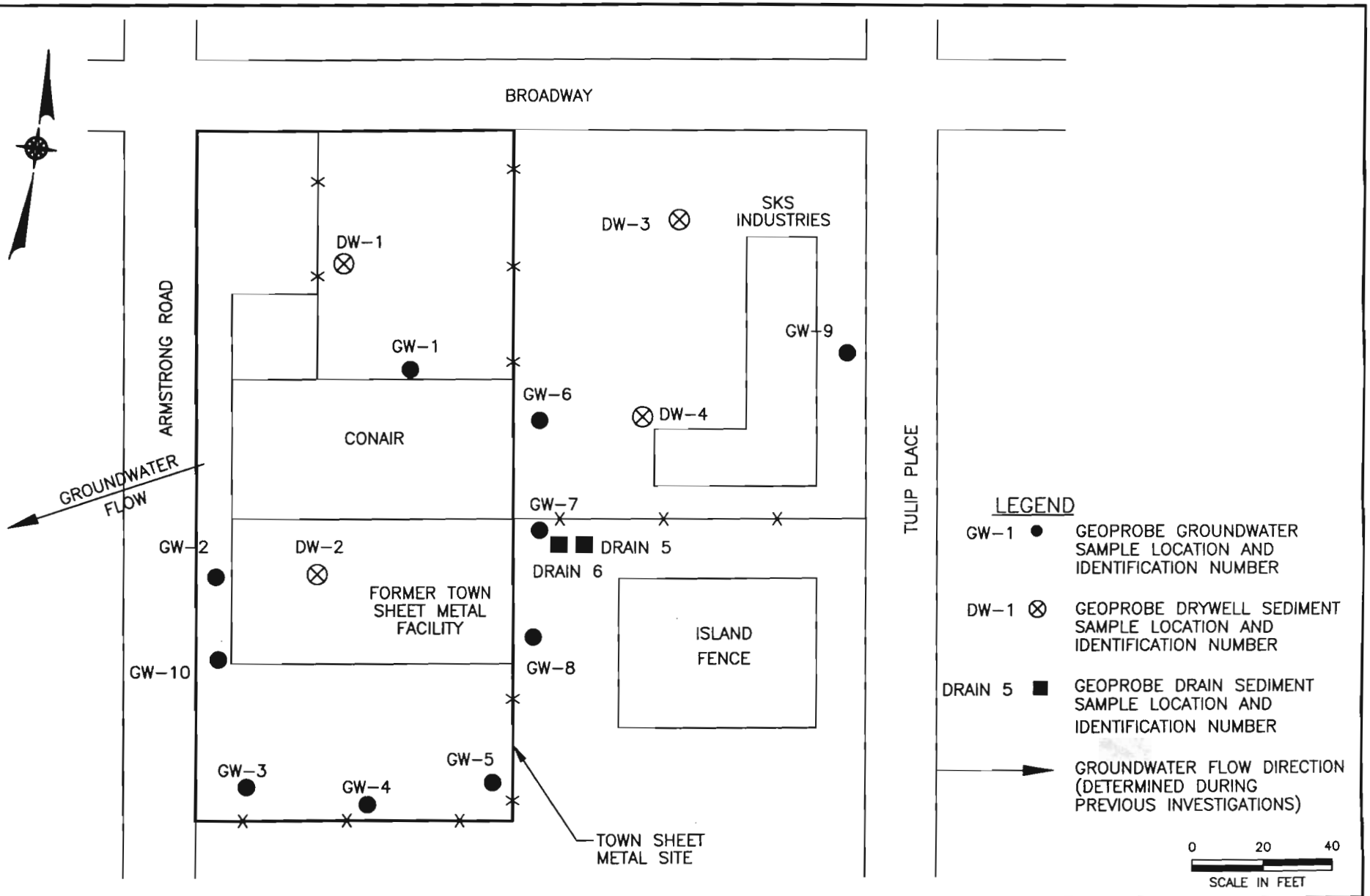
FORMER TOWN SHEET METAL
246 BROADWAY
GARDEN CITY PARK, NEW YORK

TOWN SHEET METAL SITE LOCATION MAP

Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 2-1



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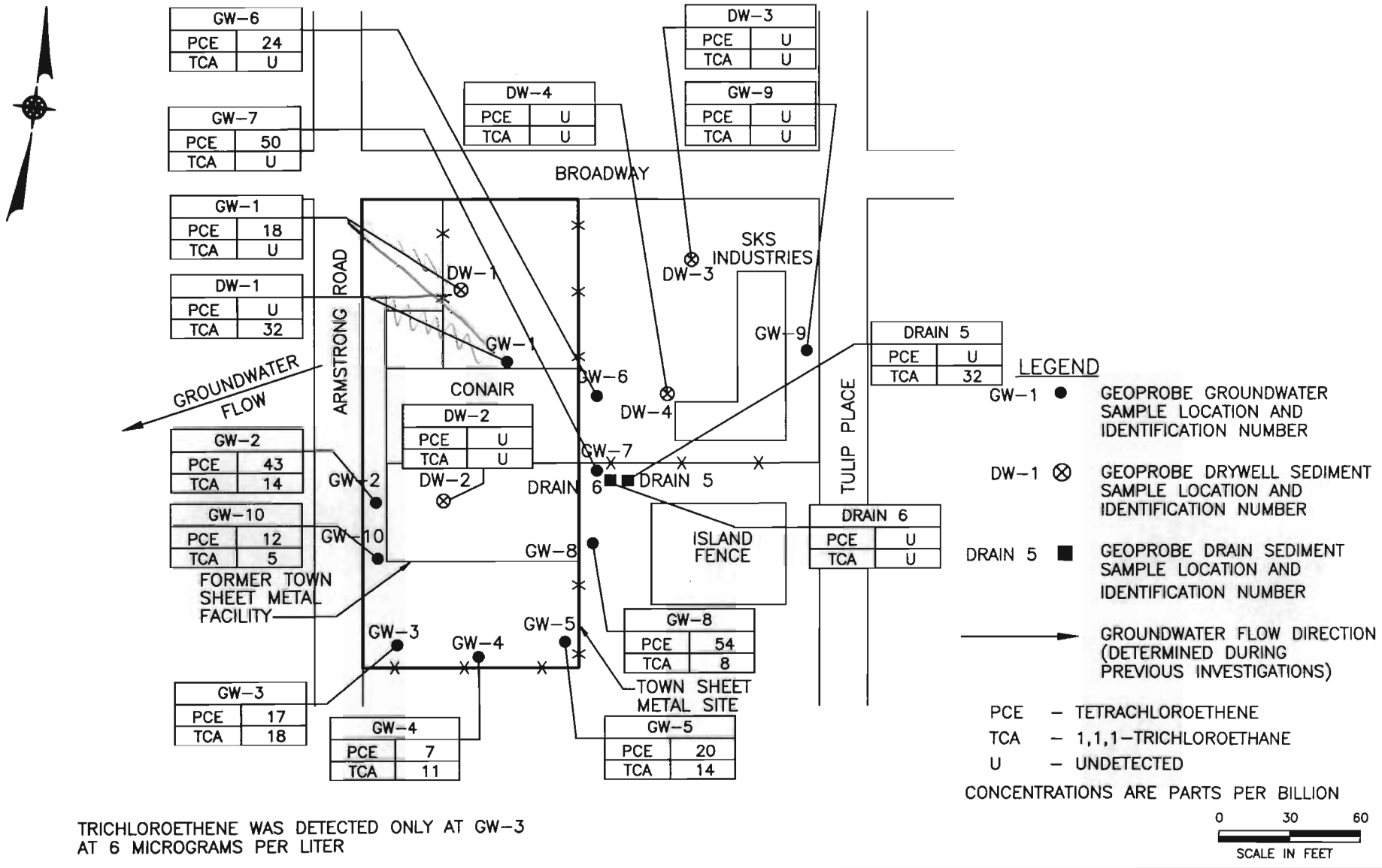
TOWN SHEET METAL SITE
SAMPLE LOCATIONS

FIGURE 2-2



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TOWN SHEET METAL SITE
PCE AND TCA RESULTS

Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 2-3

2.4 Tables

TABLE 2-1

TOWN SHEET METAL SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06
	SAMPLE ID	TSM-P-GW-1 (43'	TSM-P-GW-2 (43'	TSM-P-GW-3 (43'	TSM-P-GW-4 (43'	TSM-P-GW-5 (43'	TSM-P-GW-6 (43'
	DATE	12/22/98	12/22/98	12/22/98	12/22/98	12/28/98	12/23/98
Carbon tetrachloride		10 U	10 U	10 U	10 U	10 U	10 U
Acetone		5 J	10 U	10 U	10 U	10 U	10 U
Chloroform		10 U	10 U	10 U	10 U	10 U	10 U
Benzene		10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane		10 U	14	18	11	14	10 U
Bromomethane		10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane		10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride		10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride		10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide		10 U	10 U	10 U	6 J	7 J	10 U
Bromoform		10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane		10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone		10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene		10 U	10 U	6 J	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene		10 U	10 U	10 U	10 U	10 U	10 U
Styrene		10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone		10 U	10 U	10 U	10 U	10 U	10 U
Toluene		10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

J:Estimated value.

U:Compound not detected at indicated detection limit.

TABLE 2-1

TOWN SHEET METAL SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06
	SAMPLE ID	TSM-P-GW-1 (43'	TSM-P-GW-2 (43'	TSM-P-GW-3 (43'	TSM-P-GW-4 (43'	TSM-P-GW-5 (43'	TSM-P-GW-6 (43'
	DATE	12/22/98	12/22/98	12/22/98	12/22/98	12/28/98	12/23/98
Dibromochloromethane		10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene		18	43	17	7 J	20	24
1,2-Dichloroethene		10 U	7 J	8 J	10 U	10 U	10 U
2-Hexanone		10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)		10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene		10 U	10 U	10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

J:Estimated value.

U:Compound not detected at indicated detection limit.

TABLE 2-1

TOWN SHEET METAL SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-07	GW-08	GW-09	GW-10
	SAMPLE ID	TSM-P-GW-7 (42'	TSM-P-GW-8 (42'	TSM-P-GW-9 (43'	TSM-P-GW-10 (43
	DATE	12/23/98	12/23/98	12/28/98	12/23/98
Carbon tetrachloride		10 U	10 U	10 U	10 U
Acetone		10 U	10 U	10 U	10 U
Chloroform		10 U	10 U	10 U	10 U
Benzene		10 U	10 U	10 U	10 U
1,1,1-Trichloroethane		10 U	8 J	10 U	5 J
Bromomethane		10 U	10 U	10 U	10 U
Chloromethane		10 U	10 U	10 U	10 U
Chloroethane		10 U	10 U	10 U	10 U
Vinyl chloride		10 U	10 U	10 U	10 U
Methylene chloride		10 U	10 U	10 U	10 U
Carbon disulfide		10 U	10 U	10 U	10 U
Bromoform		10 U	10 U	10 U	10 U
Bromodichloromethane		10 U	10 U	10 U	10 U
1,1-Dichloroethane		10 U	10 U	10 U	10 U
1,1-Dichloroethene		10 U	10 U	10 U	10 U
1,2-Dichloropropane		10 U	10 U	10 U	10 U
2-Butanone		10 U	10 U	10 U	10 U
1,1,2-Trichloroethane		10 U	10 U	10 U	10 U
Trichloroethene		10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane		10 U	10 U	10 U	10 U
Ethylbenzene		10 U	10 U	10 U	10 U
Styrene		10 U	10 U	10 U	10 U
1,2-Dichloroethane		10 U	10 U	10 U	10 U
4-Methyl-2-pentanone		10 U	10 U	10 U	10 U
Toluene		10 U	10 U	10 U	10 U
Chlorobenzene		10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

J:Estimated value.

U:Compound not detected at indicated detection limit.

TABLE 2-1

TOWN SHEET METAL SITE
GEOPROBE GROUNDWATER SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/l)	SITE	GW-07	GW-08	GW-09	GW-10
	SAMPLE ID	TSM-P-GW-7 (42'	TSM-P-GW-8 (42'	TSM-P-GW-9 (43'	TSM-P-GW-10 (43
	DATE	12/23/98	12/23/98	12/28/98	12/23/98
Dibromochloromethane		10 U	10 U	10 U	10 U
Tetrachloroethene		50	54	10 U	12
1,2-Dichloroethene		9 J	8 J	10 U	10 U
2-Hexanone		10 U	10 U	10 U	10 U
Xylene (total)		10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene		10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene		10 U	10 U	10 U	10 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

J: Estimated value.

U: Compound not detected at indicated detection limit.

Table 2-2

TOWN SHEET METAL SITE
SEDIMENT SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/kg)	SITE	D-5	D-6	DW-01	DW-02	DW-03	DW-04
	SAMPLE ID	TSM-DRAIN-SD-5	TSM-DRAIN-SD-6	TSM-DW-SD-1 (10	TSM-DW-SD-2 (8.	TSM-DW-SD-3 (7-	TSM-DW-SD-4 (10
	DATE	12/28/98	12/28/98	12/23/98	12/28/98	12/28/98	12/28/98
	DEPTH (m)	0.000	0.000	0.000	0.000	0.000	0.000
Carbon tetrachloride		16 U	12 U	11 U	10 U	10 U	12 U
Acetone		110	6 J	130 B	10 U	10 U	12 U
Chloroform		16 U	12 U	11 U	10 U	10 U	12 U
Benzene		16 U	12 U	11 U	10 U	10 U	12 U
1,1,1-Trichloroethane		32	12 U	32	10 U	10 U	12 U
Bromomethane		16 U	12 U	11 U	10 U	10 U	12 U
Chloromethane		16 U	12 U	11 U	10 U	10 U	12 U
Chloroethane		16 U	12 U	11 U	10 U	10 U	12 U
Vinyl chloride		16 U	12 U	11 U	10 U	10 U	12 U
Methylene chloride		16 U	12 U	11 U	10 U	10 U	12 U
Carbon disulfide		16 U	12 U	11 U	10 U	10 U	12 U
Bromoform		16 U	12 U	11 U	10 U	10 U	12 U
Bromodichloromethane		16 U	12 U	11 U	10 U	10 U	12 U
1,1-Dichloroethane		16 U	12 U	11 U	10 U	10 U	12 U
1,1-Dichloroethene		16 U	12 U	11 U	10 U	10 U	12 U
1,2-Dichloropropane		16 U	12 U	11 U	10 U	10 U	12 U
2-Butanone		24	12 U	12	10 U	10 U	12 U
1,1,2-Trichloroethane		16 U	12 U	11 U	10 U	10 U	12 U
Trichloroethene		16 U	12 U	11 U	10 U	10 U	12 U
1,1,2,2-Tetrachloroethane		16 U	12 U	11 U	10 U	10 U	12 U
Ethylbenzene		16 U	12 U	6 J	10 U	10 U	12 U
Styrene		16 U	12 U	11 U	10 U	10 U	12 U
1,2-Dichloroethane		16 U	12 U	11 U	10 U	10 U	12 U
4-Methyl-2-pentanone		16 U	12 U	11 U	10 U	10 U	12 U
Toluene		16 U	12 U	17	10 U	10 U	12 U
Chlorobenzene		16 U	12 U	11 U	10 U	10 U	12 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U:Compound not detected at indicated detection limit. J:Estimated concentration B:Compound also detected in blank

Table 2-2

TOWN SHEET METAL SITE
SEDIMENT SAMPLE RESULTS

Date: 08/03/99

CONSTITUENT (Units in ug/kg)	SITE	D-5	D-6	DW-01	DW-02	DW-03	DW-04
	SAMPLE ID	TSM-DRAIN-SD-5	TSM-DRAIN-SD-6	TSM-DW-SD-1 (10	TSM-DW-SD-2 (8.	TSM-DW-SD-3 (7-	TSM-DW-SD-4 (10
	DATE	12/28/98	12/28/98	12/23/98	12/28/98	12/28/98	12/28/98
	DEPTH (m)	0.000	0.000	0.000	0.000	0.000	0.000
Dibromochloromethane		16 U	12 U	11 U	10 U	10 U	12 U
Tetrachloroethene		16 U	12 U	11 U	10 U	10 U	12 U
1,2-Dichloroethene		16 U	12 U	11 U	10 U	10 U	12 U
2-Hexanone		16 U	12 U	11 U	10 U	10 U	12 U
Xylene (total)		29	12 U	32	11	10 U	12 U
cis-1,3-Dichloropropene		16 U	12 U	11 U	10 U	10 U	12 U
trans-1,3-Dichloropropene		16 U	12 U	11 U	10 U	10 U	12 U

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

U:Compound not detected at indicated detection limit. J:Estimated concentration B:Compound also detected in blank

Appendix A

APPENDIX A

PRECISION FABRICATORS SITE PHOTOGRAPHS

View of front of building, from Broadway looking southwest

East side of building, from Broadway looking southwest

East side of building, looking northwest from Armstrong Road

Rear (south side) of building from Armstrong Road looking west

Rear (south side) of building from Armstrong Road looking west

Appendix B

APPENDIX B

PRECISION FABRICATORS SITE DATA VALIDATION SUMMARIES

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Precision Fabricators

New York State Department of Environmental Conservation
Data Validation Summary Form

Group #	Date Received	CLP Year	Sample Number	Lab ID #	Matrix S/W	VOA Compliance	BNA Compliance	TAL Metals Compliance	Cyanide Compliance	Page in CLP	Non-Compliance
E2157	12/31/98	95	PF-TB-1	E2157-01	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-4(43)	E2157-02	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-5(43)	E2157-03	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-6(43)	E2157-04	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-7(43)	E2157-05	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-3(43)	E2157-06	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-2(43)	E2157-07	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-1(43)	E2157-08	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-8(43)	E2157-09	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-9(43)	E2157-10	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-3(43)MS	E2157-11	(water)	Yes - *	NA	NA	NA		
E2157	12/31/98	95	PF-P-GW-3(43)MSD	E2157-11	(water)	Yes - *	NA	NA	NA		
E2157		95	Water Holding Blank			Yes - *	NA	NA	NA		

* - With 1/28 Revisions

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Precision Fabricators

Water Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157
Laboratory Reference Numbers:

PF-TB-1	E2157-01	(water)
PF-P-GW-4(43)	E2157-02	(water)
PF-P-GW-5(43)	E2157-03	(water)
PF-P-GW-6(43)	E2157-04	(water)
PF-P-GW-7(43)	E2157-05	(water)
PF-P-GW-3(43)	E2157-06	(water)
PF-P-GW-2(43)	E2157-07	(water)
PF-P-GW-1(43)	E2157-08	(water)
PF-P-GW-8(43)	E2157-09	(water)
PF-P-GW-9(43)	E2157-10	(water)
PF-P-GW-3(43)MS	E2157-11	(water)
PF-P-GW-3(43)MSD	E2157-11	(water)

Water Holding Blank

Water samples were received for analyses of the volatile organic TCL analyte list by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- Data Completeness
* - GC/MS Tuning
* - Holding Times
* - Calibrations
- Method Blanks
- Field Blanks
* - Trip Blanks
* - Holding Blanks
* - System Monitoring Compound Recoveries
* - Internal Standard Recoveries
* - Matrix Spike / Matrix Spike Duplicate
* - Blank Spike
* - Compound Identification
* - Compound Quantitation
- Method Detection Limit

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

All samples were analyzed within both the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program. All analyses were also performed within the EPA's 7 day technical holding time for unpreserved samples

The instrument detection limits were not included in the copy of the analytical report submitted for validation. These were requested from the laboratory and received in their 1/28 fax.

No other problems were found with the analyses of these samples which would affect the end use of the data.

Nancy J. Potak
April 6, 1999

Holding Times

All samples were analyzed within both the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program. All analyses were also performed within the EPA's 7 day technical holding time for unpreserved samples

Tunes

No problems were found with any of the tunes of this sample delivery group.

System Monitoring Compound Recoveries

All system monitoring compound recoveries were within the NYS DEC's ASP quality assurance limits.

Calibrations

No problems were detected with the initial calibration or continuing calibrations of this sample delivery group.

Matrix Spike / Matrix Spike Duplicate

Sample PF-P-GW-3(43) (Lab. #: E2157-06) of this sample delivery group was used for the matrix spike and matrix spike duplicates. All recoveries and RPDs were within the acceptable quality control limits.

Blank Spike

No problems were found with the recoveries of the blank spike.

Method Blanks

A non-target compound (8J ug/l) eluting at 15.07 minutes was detected in the one method blank associated with the samples of this delivery group. This was negated in all of the samples of this delivery group.

The specific method blanks and their associated samples are noted in both the data validation summary table and in the data validation worksheets.

Trip Blanks

The non-target compound eluting at 15.07 minutes was also detected in the trip blank. This was negated due to its presence in the method blank.

Holding Blank

The non-target compound eluting at 15.07 minutes was also detected in the holding blank. This was negated due to its presence in the method blank.

Field Blank

A field blank was not associated with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard areas and retention times were within the required quality assurance limits

Instrument Detection Limits

Instrument detection limits were not included with this sample delivery group. These were received in the laboratory's 1/28 fax.

Sample Results

No problems were detected with the analyses of any of these samples.

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Holding Blank VHBLK5R					
?					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.06)	8 J	12 JB	12 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Trip Blank PF-TB-1 (Lab. #: E2157-01)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	22 JB	22 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW1 (Lab. #: E2157-08)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	33	33		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	38	38		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	18 JB	18 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW2 (Lab. #: E2157-07)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	5 J	5 J		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	7 J	7 J		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	5 J	5 J		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.08)	8 J	15 JB	15 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW3 (Lab. #: E2157-06)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	11	11		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	16 JB	16 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW4 (Lab. #: E2157-02)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	12	12		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.08)	8 J	21 JB	21 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW5 (Lab. #: E2157-03)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	14	14		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	20 JB	20 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW6 (Lab. #: E2157-04)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	25	25		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.08)	8 J	14 JB	14 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW7 (Lab. #: E2157-05)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	3 J	3 J		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	7 J	7 J		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	19 JB	19 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW8 (Lab. #: E2157-09)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	6 J	6 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10	10		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	6 J	6 J		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	13	13		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	22 JB	22 JB	negate	1

Data Validation Summary Table
For Precision Fabricators

Water TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Sample GW9 (Lab. #: E2157-10)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.06)	8 J	11 JB	11 JB	negate	1
C10H8 Isomer (16.62)	ND	6 J	6 J		

DATA VALIDATION WORKSHEETS
For Precision Fabricators

Water Volatile Organic Analyses - Method 95-1
Samples Received: December 31, 1998
Sample Delivery Group: E2157
Laboratory Reference Numbers:

PF-TB-1	E2157-01	(water)
PF-P-GW-4(43)	E2157-02	(water)
PF-P-GW-5(43)	E2157-03	(water)
PF-P-GW-6(43)	E2157-04	(water)
PF-P-GW-7(43)	E2157-05	(water)
PF-P-GW-3(43)	E2157-06	(water)
PF-P-GW-2(43)	E2157-07	(water)
PF-P-GW-1(43)	E2157-08	(water)
PF-P-GW-8(43)	E2157-09	(water)
PF-P-GW-9(43)	E2157-10	(water)
PF-P-GW-3(43)MS	E2157-11	(water)
PF-P-GW-3(43)MSD	E2157-11	(water)

Water Holding Blank

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V1
Tune File ID: V1B9600
Initial Calibration File ID: V1B9602
Associated Samples: VBLK1L, VHBLK1L

Level: Low - Waters
Acceptable: yes
Date: 12/26/98

Time Requirements Met: yes
Page: 95

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	<100	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes

Footnote:

Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	1,1-Dichloroethene	Tetrachloroethene
10	5986/22701 * 5.000 = 1.318	6981/112162 * 5.000 = 0.311
20	13498/23565 * 2.500 = 1.432	14984/114501 * 2.500 = 0.327
50	33731/23733 * 1.000 = 1.421	38791/115069 * 1.000 = 0.337
100	73560/24394 * 0.500 = 1.508	78424/117997 * 0.500 = 0.332
200	139245/18656 * 0.250 = 1.866	147479/106131 * 0.250 = 0.347
	AV. RRF = 1.509 %RSD = 14.0%	AV. RRF = 0.331 %RSD = 4.0%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V1
Tune File ID: V1B9780
Calibration File ID: V1B9781
Initial Calibration File ID: VIB9602
Associated Samples: VBLK1L, VHBLK1L

Level: Low - Waters
Acceptable: yes
Date: 1/05/99
Date: 12/26/98

Time Requirements Met: yes
Page: 115
Page: 95

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
All Compounds %D < QC Limit: yes

Footnote:
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1-Dichloroethane	Toluene
PPB		
50	85651/27754 * 1.000 = 3.086	201439/134946 * 1.000 = 1.493

%D: (3.141 - 3.086) / 3.141 * 100 = 1.751035 %D : (1.421 - 1.493) / 1.421 * 100 = -5.066854

METHOD BLANK: VBLK1L (Page 125)

Compound	**ppb**	**<CRDL**
Unknown (15.07)	8J	NA

OVERALL ASSESSMENT AND COMMENTS: ok

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Precision Fabricators

New York State Department of Environmental Conservation
Data Validation Summary Form

Group #	Date Received	CLP Year	Sample Number	Lab ID #	Matrix S/W	VOA Compliance	BNA Compliance	TAL Metals Compliance	Cyanide Compliance	Page in CLP	Non-Compliance
60005	1/6/99	95	PF-TB-2	60005-01	(water)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-GW-10(36)	60005-02	(water)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-GW-11(53)	60005-03	(water)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-1(6-8)	60005-04	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-1(6-8)MS	60005-11	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-1(6-8)MSD	60005-12	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-2(6-8)	60005-05	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-3(6-8)	60005-06	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-4(6-8)	60005-07	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-P-S-5(6-8)	60005-08	(soil)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-MW-GW-PF-2	60005-09	(water)	Yes - *	NA	NA	NA		
60005	1/6/99	95	PF-MW-GW-PF-3	60005-10	(water)	Yes - *	NA	NA	NA		
60005	1/6/99		Water Holding Blank			Yes - *	NA	NA	NA		

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Precision Fabricators

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005
Laboratory Reference Numbers:

PF-TB-2	60005-01	(water)
PF-P-GW-10(36)	60005-02	(water)
PF-P-GW-11(53)	60005-03	(water)
PF-P-S-1(6-8)	60005-04	(soil)
PF-P-S-1(6-8)MS	60005-11	(soil)
PF-P-S-1(6-8)MSD	60005-12	(soil)
PF-P-S-2(6-8)	60005-05	(soil)
PF-P-S-3(6-8)	60005-06	(soil)
PF-P-S-4(6-8)	60005-07	(soil)
PF-P-S-5(6-8)	60005-08	(soil)
PF-MW-GW-PF-2	60005-09	(water)
PF-MW-GW-PF-3	60005-10	(water)
Water Holding Blank		

Soil and water samples were received for analyses of the volatile organic TCL analyte list by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

- Data Completeness
* - GC/MS Tuning
* - Holding Times
- Calibrations
- Method Blanks
- Field Blanks
- Trip Blanks
- Holding Blanks
* - System Monitoring Compound Recoveries
* - Internal Standard Recoveries
* - Matrix Spike / Matrix Spike Duplicate
* - Blank Spike
* - Compound Identification
* - Compound Quantitation
- Method Detection Limit

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

All samples were analyzed within both the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program. All analyses were also performed within the EPA's 7 day technical holding time for unpreserved samples

The instrument detection limits were not included in the copy of the analytical report submitted for validation. These were requested from the laboratory and received in their 1/28 fax.

No other problems were found with the analyses of these samples which would affect the end use of the data.

Nancy J. Potak
April 6, 1999

Holding Times

All samples were analyzed within both the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program. All analyses were also performed within the EPA's 7 day technical holding time for unpreserved samples

Tunes

No problems were found with any of the tunes of this sample delivery group.

System Monitoring Compound Recoveries

All soil and water system monitoring compound recoveries were within the NYS DEC's ASP quality assurance limits.

Calibrations

The percent RSD of acetone (48%) was above the EPA's 30% technical quality assurance limit in the 1/10 initial calibration. The data for acetone were flagged with the "J" qualifier and footnoted with #15 in the associated samples. The concentrations of acetone detected in these samples should be considered to be estimated.

No other problems were detected with the initial calibration or continuing calibrations of this sample delivery group.

Matrix Spike / Matrix Spike Duplicate

Soil sample PF-P-S-1(6-8) (Lab. #: 60005-04) of this sample delivery group was used for the matrix spike and matrix spike duplicates. All recoveries and RPDs were within the acceptable quality control limits.

A water matrix spike was not analyzed.

Blank Spike

No problems were found with the recoveries of the soil or water blank spikes.

Method Blanks

Acetone was detected in the method blank associated with the analyses of samples GW10, GW11 and the trip blank at a concentration of 10 ug/l. The acetone was not flagged with the "B" qualifier in the FORM I's of sample GW11 and the trip blank. This was added in the data validation summary table. The acetone in these three samples was negated in these three samples due to its presence in the method blank.

No compounds were detected in any of the other method blanks.

The specific method blanks and their associated samples are noted in both the data validation summary table and in the data validation worksheets.

Trip Blanks

A low concentration of acetone (8J ug/l) was detected in the one trip blank associated with the samples of this delivery group.

This was negated due to its presence in the associated method blank.

Holding Blank

A low concentration of acetone, 8J ug/l was detected in the water holding blank. This was not qualified in any of the samples. The data were not qualified for the acetone in the holding blank.

Field Blank

A field blank was not associated with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard areas and retention times were within the required quality assurance limits

Instrument Detection Limits

Instrument detection limits were not included with this sample delivery group. These were received in the laboratory's 1/28 fax.

Sample Results

No problems were detected with the analyses of any of these samples.

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Holding Blank VHBLK5R					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	8 J	8 J		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Trip Blank PF-TB-2 (Lab. #: 60005-01)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10	8 J	8 JB	negate	1, 15, See Text
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW10 (Lab. #: 60005-02) + A165					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	9 JB	9 JB	negate	1, 15
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	6 J	6 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	14	14		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	36	36		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	5 J	5 J		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW11 (Lab. #: 60005-03)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10	13	13 JB	negate	1, 15, See Text
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	6 J	6 J		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	14	14		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	7 J	7 J		
Tetrachloroethene	10 U	12	12		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Trichloromonofluoromethane (2.69)	ND	14 NJ	14 NJ		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample PF2 (Lab. #: 60005-09)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	8 J	8 J	qualify	15
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	7 J	7 J		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample PF3 (Lab. #: 60005-10)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	6 J	6 J	qualify	15
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	42	42		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Smaple S1(6-8) (Lab. #: 6005-04)					
		Moisture = 3			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	6 J	6 J		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.15)	ND	13 J	13 J		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample S2 (6-8) (Lab. #: 60005-05)					
		% Moisture = 11			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	11 U	11 U		
Bromomethane	10 U	11 U	11 U		
Vinyl Chloride	10 U	11 U	11 U		
Chloroethane	10 U	11 U	11 U		
Methylene Chloride	10 U	11 U	11 U		
Acetone	10 U	8 J	8 J		
Carbon Disulfide	10 U	11 U	11 U		
1,1-Dichloroethene	10 U	11 U	11 U		
1,1-Dichloroethane	10 U	11 U	11 U		
1,2-Dichloroethene (total)	10 U	11 U	11 U		
Chloroform	10 U	11 U	11 U		
1,2-Dichloroethane	10 U	11 U	11 U		
2-Butanone	10 U	11 U	11 U		
1,1,1-Trichloroethane	10 U	11 U	11 U		
Carbon Tetrachloride	10 U	11 U	11 U		
Bromodichloromethane	10 U	11 U	11 U		
1,2-Dichloropropane	10 U	11 U	11 U		
cis-1,3-Dichloropropene	10 U	11 U	11 U		
Trichloroethene	10 U	11 U	11 U		
Dibromochloromethane	10 U	11 U	11 U		
1,1,2-Trichloroethane	10 U	11 U	11 U		
Benzene	10 U	11 U	11 U		
trans-1,3-Dichloropropene	10 U	11 U	11 U		
Bromoform	10 U	11 U	11 U		
4-Methyl-2-Pentanone	10 U	11 U	11 U		
2-Hexanone	10 U	11 U	11 U		
Tetrachloroethene	10 U	11 U	11 U		
1,1,2,2-Tetrachloroethane	10 U	11 U	11 U		
Toluene	10 U	11 U	11 U		
Chlorobenzene	10 U	11 U	11 U		
Ethylbenzene	10 U	11 U	11 U		
Styrene	10 U	11 U	11 U		
Xylene (total)	10 U	11 U	11 U		
Non-Target Volatile Organics					
Unknown (15.15)	ND	11 J	11 J		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample S3(6-8) (Lab. #: 60005-06)					
		% Moisture = 18			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	12 U	12 U		
Bromomethane	10 U	12 U	12 U		
Vinyl Chloride	10 U	12 U	12 U		
Chloroethane	10 U	12 U	12 U		
Methylene Chloride	10 U	12 U	12 U		
Acetone	10 U	12 U	12 U		
Carbon Disulfide	10 U	12 U	12 U		
1,1-Dichloroethene	10 U	12 U	12 U		
1,1-Dichloroethane	10 U	12 U	12 U		
1,2-Dichloroethene (total)	10 U	12 U	12 U		
Chloroform	10 U	12 U	12 U		
1,2-Dichloroethane	10 U	12 U	12 U		
2-Butanone	10 U	12 U	12 U		
1,1,1-Trichloroethane	10 U	12 U	12 U		
Carbon Tetrachloride	10 U	12 U	12 U		
Bromodichloromethane	10 U	12 U	12 U		
1,2-Dichloropropane	10 U	12 U	12 U		
cis-1,3-Dichloropropene	10 U	12 U	12 U		
Trichloroethene	10 U	12 U	12 U		
Dibromochloromethane	10 U	12 U	12 U		
1,1,2-Trichloroethane	10 U	12 U	12 U		
Benzene	10 U	12 U	12 U		
trans-1,3-Dichloropropene	10 U	12 U	12 U		
Bromoform	10 U	12 U	12 U		
4-Methyl-2-Pentanone	10 U	12 U	12 U		
2-Hexanone	10 U	12 U	12 U		
Tetrachloroethene	10 U	12 U	12 U		
1,1,2,2-Tetrachloroethane	10 U	12 U	12 U		
Toluene	10 U	12 U	12 U		
Chlorobenzene	10 U	12 U	12 U		
Ethylbenzene	10 U	12 U	12 U		
Styrene	10 U	12 U	12 U		
Xylene (total)	10 U	12 U	12 U		
Non-Target Volatile Organics					
Unknown (15.15)	ND	16 J	16 J		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Smaple S4 (6-8) (Lab. #: 60005-07)					
		% Moisture = 15			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	12 U	12 U		
Bromomethane	10 U	12 U	12 U		
Vinyl Chloride	10 U	12 U	12 U		
Chloroethane	10 U	12 U	12 U		
Methylene Chloride	10 U	12 U	12 U		
Acetone	10 U	6 J	6 J		
Carbon Disulfide	10 U	12 U	12 U		
1,1-Dichloroethene	10 U	12 U	12 U		
1,1-Dichloroethane	10 U	12 U	12 U		
1,2-Dichloroethene (total)	10 U	12 U	12 U		
Chloroform	10 U	12 U	12 U		
1,2-Dichloroethane	10 U	12 U	12 U		
2-Butanone	10 U	12 U	12 U		
1,1,1-Trichloroethane	10 U	12 U	12 U		
Carbon Tetrachloride	10 U	12 U	12 U		
Bromodichloromethane	10 U	12 U	12 U		
1,2-Dichloropropane	10 U	12 U	12 U		
cis-1,3-Dichloropropene	10 U	12 U	12 U		
Trichloroethene	10 U	12 U	12 U		
Dibromochloromethane	10 U	12 U	12 U		
1,1,2-Trichloroethane	10 U	12 U	12 U		
Benzene	10 U	12 U	12 U		
trans-1,3-Dichloropropene	10 U	12 U	12 U		
Bromoform	10 U	12 U	12 U		
4-Methyl-2-Pentanone	10 U	12 U	12 U		
2-Hexanone	10 U	12 U	12 U		
Tetrachloroethene	10 U	12 U	12 U		
1,1,2,2-Tetrachloroethane	10 U	12 U	12 U		
Toluene	10 U	12 U	12 U		
Chlorobenzene	10 U	12 U	12 U		
Ethylbenzene	10 U	12 U	12 U		
Styrene	10 U	12 U	12 U		
Xylene (total)	10 U	12 U	12 U		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample S4 (6-8) (Lab. #: 60005-07)					
Non-Target Volatile Organics					
Unknown (12.55)	ND	14 J	14 J		
Unknown (12.75)	ND	9 J	9 J		
Unknown (12.80)	ND	8 J	8 J		
C10H20 Isomer (13.10)	ND	11 J	11 J		
Unknown (13.26)	ND	10 J	10 J		
Unknown Alkane (13.37)	ND	50 J	51 J		
Unknown (13.43)	ND	9 J	9 J		
Unknown (13.62)	ND	9 J	9 J		
Unknown (13.67)	ND	8 J	8 J		
Unknown (13.71)	ND	18 J	18 J		
C3-Benzene Isomer (13.81)	ND	15 J	15 J		
Unknown (13.89)	ND	10 J	10 J		
Unknown (13.98)	ND	13 J	13 J		
Unknown Cycloalkane (14.09)	ND	23 J	23 J		
Unknown (14.18)	ND	10 J	10 J		
Unknown (14.22)	ND	8 J	8 J		
Unknown Alkane (14.26)	ND	11 J	11 J		
Unknown Alkane (14.37)	ND	15 J	15 J		
Unknown (14.54)	ND	8 J	8 J		
C4-Benzene Isomer (14.61)	ND	11 J	11 J		
Naphthalene, Decahydro-Isomer (14.67)	ND	15 J	15 J		
Unknown Alkane (14.72)	ND	40 J	40 J		
Unknown (14.83)	ND	15 J	15 J		
Unknown (14.96)	ND	18 J	18 J		
C4-Benzene Isomer (15.03)	ND	10 J	10 J		
Unknown (15.15)	ND	36 J	36 J		
C4-Benzene Isomer (15.28)	ND	10 J	10 J		
Unknown (15.40)	ND	25 J	25 J		
C11H20 Isomer (15.62)	ND	9 J	9 J		
Unknown Alkane (15.92)	ND	8 J	8 J		

Data Validation Summary Table
For Precision Fabricators

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample S5(6-8) (Lab. #: 6005-08)					
		% Moisture = 3			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.15)	ND	18 J	18 J		

DATA VALIDATION WORKSHEETS
For Precision Fabricators

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: January 6, 1999
Sample Delivery Group: 60005
Laboratory Reference Numbers:

PF-TB-2	60005-01	(water)
PF-P-GW-10(36)	60005-02	(water)
PF-P-GW-11(53)	60005-03	(water)
PF-P-S-1(6-8)	60005-04	(soil)
PF-P-S-1(6-8)MS	60005-11	(soil)
PF-P-S-1(6-8)MSD	60005-12	(soil)
PF-P-S-2(6-8)	60005-05	(soil)
PF-P-S-3(6-8)	60005-06	(soil)
PF-P-S-4(6-8)	60005-07	(soil)
PF-P-S-5(6-8)	60005-08	(soil)
PF-MW-GW-PF-2	60005-09	(water)
PF-MW-GW-PF-3	60005-10	(water)

Water Holding Blank

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V2 **Level:** Low - Soils - Heated
Tune File ID: V2B9750 **Acceptable:** yes **Time Requirements Met:** yes
Initial Calibration File ID: V2B9751 **Date:** 12/29/98 **Page:** 137
Associated Samples: VBLK2B, VBLK2BBS, S1(6-8), S2(6-8), S3(6-8), S4(6-8), S5(6-8), S1(6-8)MS, S1(6-8)MSD

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	<100	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes Footnote:
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	Carbon Tetrachloride	Benzene
10	34132/399337* 5.000 = 0.427	119906/399337 * 5.000 = 1.501
20	69084/406506 * 2.500 = 0.425	236552/406506 * 2.500 = 1.455
50	166683/408382 * 1.000 = 0.408	587159/408382 * 1.000 = 1.438
100	302181/384845 * 0.500 = 0.393	1017719/384845 * 0.500 = 1.322
200	725460/421978 * 0.250 = 0.430	2449583/421978 * 0.250 = 1.451
	AV. RRF = 1.433 %RSD = 4.6%	AV. RRF = 1.433 %RSD = 4.6%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V2
Tune File ID: V2C0030
Calibration File ID: V2C0031
Initial Calibration File ID: V2B9751
Level: Low - Soils - Heated
Acceptable: yes
Time Requirements Met: yes
Date: 01/11/98
Page: 169
Date: 12/29/98
Page: 137
Associated Samples: VBLK2B, VBLK2BBS, S1(6-8), S2(6-8), S3(6-8), S4(6-8), S5(6-8), S1(6-8)MS, S1(6-8)MSD

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit:
All Compounds Average RRF > 0.01: Footnote:
All Compounds %D < QC Limit: Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1,1-Trichloroethane	Tetrachloroethene
PPB		
50	186581/442923 * 1.000 = 0.421	119898/388362 * 1.000 = 0.309
	%D: (0.486 - 0.421) / 0.486 * 100 = 13.374486	%D : (0.356 - 0.309) / 0.356 * 100 = 13.202247

METHOD BLANK: VBLK2B (Page 193)

Compound	**ppb**	**<CRDL**
No compounds were detected in this method blank		

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V5 **Level:** Low waters
Tune File ID: V5A9200 **Acceptable:** yes **Time Requirements Met:** yes
Initial Calibration File ID: V5A9201 **Date:** 01/10/99 **Page:** 138
Associated Samples: VBLK5Q, VHBLK5QBS, TB2, GW10, GW11, VBLK5R, PF2, PF3, VHBLK5Q

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	**49%**	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes Footnote:
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	1,1-Dichloroethene	Chlorobenzene
10	45138/191771 * 5.000 = 1.177	259515/1092002 * 5.000 = 1.188
20	91780/188555 * 2.500 = 1.217	544655/1063629 * 2.500 = 1.280
50	185637/196502 * 1.000 = 0.945	1070443/1081742 * 1.000 = 0.990
100	304113/207594 * 0.500 = 0.732	2432307/1165113 * 0.500 = 1.044
200	725855/185969 * 0.250 = 0.976	4725504/1039067 * 0.250 = 1.137
	AV. RRF = 1.009 %RSD =19.4 %	AV. RRF = 1.128 %RSD = 10.2%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V5
Tune File ID: V5A9200
Calibration File ID: V5A9201
Initial Calibration File ID: V5A9201
Associated Samples: VBLK5Q, VHBLK5QBS, TB2, GW10, GW11

Level: Low waters
Acceptable: yes
Date: 01/10/99
Date: 01/10/99

Time Requirements Met: yes
Page: 170
Page: 138

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
All Compounds %D < QC Limit: yes

Footnote:
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1-Dichlorooethene	Benzene
PPB		
50	185637/196502 * 1.000 = 0.945	1687327/1313563 * 1.000 = 1.285

%D: (1.009 - 0.945) / 1.009 * 100 = 6.342914 %D : (1.417 - 1.284) / 1.417 * 100 = 9.386027

METHOD BLANK: VBLK5Q (Page 198)

Compound	ppb	<CRDL
Acetone	10	No

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V5
Level: Low waters
Tune File ID: V5A9230
Acceptable: yes
Time Requirements Met: yes
Calibration File ID: V5A9231
Date: 01/11/99
Page: 171
Initial Calibration File ID: V5A9201
Date: 01/10/99
Page: 138
Associated Samples: VBLK5R, PF2, PF3, VHBLK5Q

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
Footnote:
All Compounds %D < QC Limit: yes
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	Carbon Tetrachloride	Toluene
PPB		
50	589038/1460492 * 1.000 = 0.403	2240894/1194745 * 1.000 = 1.876
	%D: (0.401 - 0.403) / 0.401 * 100 = -0.498753	%D : (1.858 - 1.876) / 1.858 * 100 = -0.968784

METHOD BLANK: VBLK5R (Page 286)

Compound	**ppb**	**<CRDL**
No compounds were detected in this method blank		

OVERALL ASSESSMENT AND COMMENTS: ok

Appendix C

APPENDIX C

TOWN SHEET METAL SITE PHOTOGRAPHS

View of front of building (northwest portion), from Broadway

View of front of building (northeast portion), from Broadway

West side of building, looking north along Armstrong Road

South side of building from Armstrong Road

Conair yard and SKS Industries yard, looking southwest from Broadway

SKS Industries building, looking south from Broadway

View south along Tulip Place. Island Fence is the first white building

Appendix D

APPENDIX D

TOWN SHEET METAL SITE DATA VALIDATION SUMMARIES

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Town Sheet Metal

New York State Department of Environmental Conservation
Data Validation Summary Form

Group #	Date Received	CLP Year	Sample Number	Lab ID #	Matrix S/W	VOA Compliance	BNA Compliance	TAL Metals Compliance	Cyanide Compliance	Page in CLP	Non-Compliance
E2136	12/29/98	95	TSM-TB-2	E2136-01	Water	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-P-GW-9	E2136-02	Water	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-DW-SD-3(7-9)	E2136-03	Water	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-DRAIN-SD-5(2-4)	E2136-04	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-DRAIN-SD-5(2-4)RE	E2136-04	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-DRAIN-SD-6(6-8)	E2136-05	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-SD-2(85-105)	E2136-06	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-SD-2(85-105)MS	E2136-06	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-SD-2(85-105)MSD	E2136-06	Soil	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-P-GW-5(43)	E2136-07	Water	Yes - *	NA	NA	NA		
E2136	12/29/98	95	TSM-DW-SD-4(10-12)	E2136-08	Soil	Yes - *	NA	NA	NA		
E2136		95	Water Holding Blank			Yes - *	NA	NA	NA		

* - With 1/28 Revisions

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Town Sheet Metal

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136
Laboratory Reference Numbers:

TSM-TB-2	E2136-01 (water)
TSM-P-GW-9	E2136-02 (water)
TSM-DW-SD-3(7-9)	E2136-03 (soil)
TSM-DRAIN-SD-5(2-4)	E2136-04 (soil)
TSM-DRAIN-SD-5(2-4)RE	E2136-04 (soil)
TSM-DRAIN-SD-6(6-8)	E2136-05 (soil)
TSM-SD-2(85-105)	E2136-06 (soil)
TSM-SD-2(85-105)MS	E2136-06 (soil)
TSM-SD-2(85-105)MSD	E2136-06 (soil)
TSM-P-GW-5(43)	E2136-07 (water)
TSM-DW-SD-4(10-12)	E2136-08 (soil)
Water Holding Blank	

Soil and water samples were received for analyses of the volatile organic TCL analyte list by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

* - Data Completeness
* - GC/MS Tuning
- Holding Times
* - Calibrations
*- Method Blanks
* - Field Blanks
* - Trip Blanks
* - Holding Blanks
* - System Monitoring Compound Recoveries
- Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
* - Blank Spike
* - Compound Identification
* - Compound Quantitation
- Method Detection Limit

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

All samples were analyzed within the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program.

It should be noted that the water samples were not preserved and were analyzed 8 days from sample collection. This is beyond the EPA's 7 day technical holding time for unpreserved samples. It is possible that low concentrations of some volatile organics were over looked or underestimated.

The data were not flagged in the data validation summary table.

The instrument detection limits were not included in the copy of the analytical report submitted for validation. These were requested from the laboratory and received in their 1/28 fax.

No other problems were found with the analyses of these samples which would affect the end use of the data.

Nancy J. Potak
March 8, 1999

Holding Times

All samples were analyzed within the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program.

It should be noted that the water samples were not preserved and were analyzed between 10 and 11 days from sample collection. This is beyond the EPA's 7 day technical holding time for unpreserved samples. It is possible that low concentrations of some volatile organics were over looked or underestimated.

The data were not flagged in the data validation summary table.

Tunes

No problems were found with any of the tunes of this sample delivery group.

System Monitoring Compound Recoveries

All soil and water system monitoring compound recoveries were within the NYS DEC's ASP quality assurance limits.

Calibrations

The %RSD of 1,1,2,2-tetrachloroetehane (20.9%) was just above the 20.5% contractual quality assurance limit in the initial calibration associated with the analysis of samples GW9, GW5 and the trip blank. This compound was not detected in any of these three samples and the data were not qualified in the data validation summary table since the sample results were not directly affected.

The percent RSD of acetone (48%) was above the EPA's 30% technical quality assurance limit in the 1/10 initial calibration. Only the holding blank was analyzed with this initial calibration and the holding blank data were not qualified in the data validation summary table.

No other problems were detected with the initial calibration or continuing calibrations of this sample delivery group.

Matrix Spike / Matrix Spike Duplicate

Soil sample TSM-SD-2(85-105) (Lab. #: E2136-06) of this sample delivery group was used for the matrix spike and matrix spike duplicates. All recoveries and RPDs were within the acceptable quality control limits.

A water matrix spike was not analyzed.

Blank Spike

No problems were found with the recoveries of the soil or water blank spikes.

Method Blanks

Low concentrations of an unknown non-target compound eluting at approximately 15.10 minutes were detected in all of the method blanks associated with the analyses of all of the samples. Whenever this compound was detected in a sample it was negated, flagged with the "J" qualifier and footnoted with #1 in the data validation summary table.

The specific method blanks and their associated samples are noted in both the data validation summary table and in the data validation worksheets.

Trip Blanks

Only the unknown non-target compound eluting at 15.10 minutes was detected in the trip blank. This was negated due to its presence in the associated method blank.

Holding Blank

A low concentration of acetone was detected in the water holding blank. This was not qualified in any of the samples.

Field Blank

A field blank was not associated with this sample delivery group.

Internal Standard Areas and Retention Times

All internal standard areas and retention times were within the required quality assurance limits with the one exception of the third internal standard in sample SD5 (2-4) which had a recovery of 37%. The compounds which were quantitated against the third internal standard were flagged with the "J" qualifier and footnoted with #82 in the data validation summary table.

This sample was reanalyzed and the recoveries of all three internal standards were less than the 50% quality assurance limit (49.6%, 43% and 28%). It is recommended that the data from the first analysis be used for the final reporting. All of the data for this sample were flagged with the "J" qualifier and footnoted with #72 and #82 in the data validation summary table.

No problems were found with the recoveries or retention times in any of the internal standards associated with the samples of this delivery group.

Instrument Detection Limits

Instrument detection limits were not included with this sample delivery group. These were received in the laboratory's 1/28 fax.

Sample Results

No problems were detected with the analyses of any of these samples.

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Holding Blank VHBLK5R					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	8 J	8 J		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
None Detected					

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Trip Blank TSM-TB-2 (Lab. #: E2136-01)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	21 JB	21 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW5 (Lab. #: E2136-07)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	7 J	7 J		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	14	14		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	20	20		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	20 JB	20 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW9 (Lab. #: E2136-02)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.08)	8 J	20 JB	20 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD2 (Lab. #: E2136-06)					
		% Moisture = 2			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	11	11		
Non-Target Volatile Organics					
C3-Benzene Isomer (13.25)	ND	8 J	8 J		
Benzene, Trimethyl Isomer (13.34)	ND	5 J	5 J		
Trimethylbenzene Isomer (13.79)	ND	9 J	9 J		
Unknown (15.13)	8 J	6 JB	6 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD3 (7-9) (Lab. #: E2136-03)					
		% Moisture = 5			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.13)	8 J	14 JB	14 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD4 (10-12) (Lab. #: E2136-08)					
		% Moisture = 15			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	12 U	12 U		
Bromomethane	10 U	12 U	12 U		
Vinyl Chloride	10 U	12 U	12 U		
Chloroethane	10 U	12 U	12 U		
Methylene Chloride	10 U	12 U	12 U		
Acetone	10 U	12 U	12 U		
Carbon Disulfide	10 U	12 U	12 U		
1,1-Dichloroethene	10 U	12 U	12 U		
1,1-Dichloroethane	10 U	12 U	12 U		
1,2-Dichloroethene (total)	10 U	12 U	12 U		
Chloroform	10 U	12 U	12 U		
1,2-Dichloroethane	10 U	12 U	12 U		
2-Butanone	10 U	12 U	12 U		
1,1,1-Trichloroethane	10 U	12 U	12 U		
Carbon Tetrachloride	10 U	12 U	12 U		
Bromodichloromethane	10 U	12 U	12 U		
1,2-Dichloropropane	10 U	12 U	12 U		
cis-1,3-Dichloropropene	10 U	12 U	12 U		
Trichloroethene	10 U	12 U	12 U		
Dibromochloromethane	10 U	12 U	12 U		
1,1,2-Trichloroethane	10 U	12 U	12 U		
Benzene	10 U	12 U	12 U		
trans-1,3-Dichloropropene	10 U	12 U	12 U		
Bromoform	10 U	12 U	12 U		
4-Methyl-2-Pentanone	10 U	12 U	12 U		
2-Hexanone	10 U	12 U	12 U		
Tetrachloroethene	10 U	12 U	12 U		
1,1,2,2-Tetrachloroethane	10 U	12 U	12 U		
Toluene	10 U	12 U	12 U		
Chlorobenzene	10 U	12 U	12 U		
Ethylbenzene	10 U	12 U	12 U		
Styrene	10 U	12 U	12 U		
Xylene (total)	10 U	12 U	12 U		
Non-Target Volatile Organics					
Unknown (15.12)	8 J	15 JB	15 JB	negate	1
Naphthalene (16.70)	ND	6 JN	6 J	negate	58
Naphthalene, 1,2,3,4-Tetrahy (17.31)	ND	11 J	11 J		
Unknown (17.66)	ND	7 J	7 J		
C12H16 Isomer (17.84)	ND	12 J	12 J		
Naphthalene, Methyl Isomer (17.89)	ND	23 J	23 J		
Naphthalene, Methyl Isomer (18.10)	ND	8 J	8 J		
C12H16 Isomer (18.62)	ND	8 J	8 J		
Unknown (19.50)	ND	8 J	8 J		

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision		Qualifiers	Footnotes
Soil Sample SD5 (2-4) (Lab. #: E2136-04)						
		% Moisture = 38				
TCL Volatile Organics	(Undiluted)					
Chloromethane	10 U	16 U	16 U			
Bromomethane	10 U	16 U	16 U			
Vinyl Chloride	10 U	16 U	16 U			
Chloroethane	10 U	16 U	16 U			
Methylene Chloride	10 U	16 U	16 U			
Acetone	10 U	110	114			
Carbon Disulfide	10 U	16 U	16 U			
1,1-Dichloroethene	10 U	16 U	16 U			
1,1-Dichloroethane	10 U	16 U	16 U			
1,2-Dichloroethene (total)	10 U	16 U	16 U			
Chloroform	10 U	16 U	16 U			
1,2-Dichloroethane	10 U	16 U	16 U			
2-Butanone	10 U	24	24			
1,1,1-Trichloroethane	10 U	32	32			
Carbon Tetrachloride	10 U	16 U	16 U			
Bromodichloromethane	10 U	16 U	16 U			
1,2-Dichloropropane	10 U	16 U	16 U			
cis-1,3-Dichloropropene	10 U	16 U	16 U			
Trichloroethene	10 U	16 U	16 U			
Dibromochloromethane	10 U	16 U	16 U			
1,1,2-Trichloroethane	10 U	16 U	16 U			
Benzene	10 U	16 U	16 U			
trans-1,3-Dichloropropene	10 U	16 U	16 U			
Bromoform	10 U	16 U	16 U			
4-Methyl-2-Pentanone	10 U	16 U	16 U			
2-Hexanone	10 U	16 U	16 U	J	qualify	82
Tetrachloroethene	10 U	16 U	16 U	J	qualify	82
1,1,2,2-Tetrachloroethane	10 U	16 U	16 U	J	qualify	82
Toluene	10 U	16 U	16 U	J	qualify	82
Chlorobenzene	10 U	16 U	16 U	J	qualify	82
Ethylbenzene	10 U	16 U	16 U	J	qualify	82
Styrene	10 U	16 U	16 U	J	qualify	82
Xylene (total)	10 U	29	29	J	qualify	82

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD5 (2-4) (Lab. #: E2136-04)					
Non-Target Volatile Organics					
C10H16 isomer (12.66)	ND	110 J	109 J	qualify	82
Unknown (12.75)	ND	37 J	37 J	qualify	82
C10H16 Isomer (13.00)	ND	30 J	30 J	qualify	82
Unknown (13.29)	ND	310 J	313 J	qualify	82
C10H16 Isomer (13.45)	ND	33 J	33 J	qualify	82
C3-Benzene Isomer (13.79)	ND	73 J	73 J	qualify	82
C10H16 Isomer (13.84)	ND	110 J	111 J	qualify	82
Cyclohexene, methyl- (1-Meth (13.99)	ND	51 J	51 J	qualify	82
Limonene (14.11)	ND	51 JN	51 JN	qualify	82
C4-Benzene Isomer (14.15)	ND	40 J	40 J	qualify	82
Unknown Alkane (14.24)	ND	27 J	27 J	qualify	82
C3-Benzene Isomer (14.28)	ND	43 J	43 J	qualify	82
Unknown (14.52)	ND	47 J	47 J	qualify	82
C4-Benzene Isomer (14.59)	ND	44 J	43 J	qualify	82
Unknown Alkane (14.70)	ND	85 J	85 J	qualify	82
Unknown (14.80)	ND	27 J	27 J	qualify	82
C4-Benzene Isomer (14.93)	ND	68 J	68 J	qualify	82
C4-Benzene Isomer (15.01)	ND	38 J	38 J	qualify	82
Unknown (15.13)	8 J	68 JB	68 JB	negate	1, 82
Unknown (15.38)	ND	64 J	64 J	qualify	82
Unknown Alkane (15.48)	ND	57 J	57 J	qualify	82
Unknown (15.59)	ND	52 J	52 J	qualify	82
Unknown Alkane (15.89)	ND	75 J	75 J	qualify	82
Unknown (15.99)	ND	52 J	52 J	qualify	82
Unknown Alkane (16.06)	ND	53 J	53 J	qualify	82
C5-Benzene Isomer (16.37)	ND	27 J	27 J	qualify	82
C11H14 Isomer (16.50)	ND	36 J	36 J	qualify	82
Unknown (16.59)	ND	30 J	30 J	qualify	82
Unknown Alkane (16.69)	ND	59 J	59 J	qualify	82
Unknown (18.96)	ND	36 J	36 J	qualify	82

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision		Qualifiers	Footnotes
Reanalysis of Soil Sample SD5 (2-4) (Lab. #: E2136-04RE)						
		% Moisture = 38				
TCL Volatile Organics	(Undiluted)					
Chloromethane	10 U	16 U	16 U	J	qualify	72, 82
Bromomethane	10 U	16 U	16 U	J	qualify	72, 82
Vinyl Chloride	10 U	16 U	16 U	J	qualify	72, 82
Chloroethane	10 U	16 U	16 U	J	qualify	72, 82
Methylene Chloride	10 U	16 U	16 U	J	qualify	72, 82
Acetone	10 U	120	121	J	qualify	72, 82
Carbon Disulfide	10 U	16 U	16 U	J	qualify	72, 82
1,1-Dichloroethene	10 U	16 U	16 U	J	qualify	72, 82
1,1-Dichloroethane	10 U	16 U	16 U	J	qualify	72, 82
1,2-Dichloroethene (total)	10 U	16 U	16 U	J	qualify	72, 82
Chloroform	10 U	16 U	16 U	J	qualify	72, 82
1,2-Dichloroethane	10 U	16 U	16 U	J	qualify	72, 82
2-Butanone	10 U	30	30	J	qualify	72, 82
1,1,1-Trichloroethane	10 U	36	36	J	qualify	72, 82
Carbon Tetrachloride	10 U	16 U	16 U	J	qualify	72, 82
Bromodichloromethane	10 U	16 U	16 U	J	qualify	72, 82
1,2-Dichloropropane	10 U	16 U	16 U	J	qualify	72, 82
cis-1,3-Dichloropropene	10 U	16 U	16 U	J	qualify	72, 82
Trichloroethene	10 U	16 U	16 U	J	qualify	72, 82
Dibromochloromethane	10 U	16 U	16 U	J	qualify	72, 82
1,1,2-Trichloroethane	10 U	16 U	16 U	J	qualify	72, 82
Benzene	10 U	16 U	16 U	J	qualify	72, 82
trans-1,3-Dichloropropene	10 U	16 U	16 U	J	qualify	72, 82
Bromoform	10 U	16 U	16 U	J	qualify	72, 82
4-Methyl-2-Pentanone	10 U	16 U	16 U	J	qualify	72, 82
2-Hexanone	10 U	16 U	16 U	J	qualify	72, 82
Tetrachloroethene	10 U	16 U	16 U	J	qualify	72, 82
1,1,2,2-Tetrachloroethane	10 U	16 U	16 U	J	qualify	72, 82
Toluene	10 U	16 U	16 U	J	qualify	72, 82
Chlorobenzene	10 U	16 U	16 U	J	qualify	72, 82
Ethylbenzene	10 U	16 U	16 U	J	qualify	72, 82
Styrene	10 U	16 U	16 U	J	qualify	72, 82
Xylene (total)	10 U	36	35	J	qualify	72, 82

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Reanalysis of Soil Sample SD5 (2-4) (Lab. #: E2136-04RE)					
Non-Target Volatile Organics					
C10H16 isomer (12.65)	ND	100 J	100 J	qualify	72, 82
Unknown (12.74)	ND	34 J	34 J	qualify	72, 82
C10H16 Isomer (12.99)	ND	30 J	30 J	qualify	72, 82
Unknown (13.28)	ND	360 J	356 J	qualify	72, 82
C10H16 Isomer (13.44)	ND	25 J	25 J	qualify	72, 82
C3-Benzene Isomer (13.58)	ND	24 J	25 J	qualify	72, 82
Unknown (13.77)	ND	52 J	52 J	qualify	72, 82
C10H16 Isomer (13.82)	ND	97 J	97 J	qualify	72, 82
C4-Benzene Isomer (14.14)	ND	27 J	27 J	qualify	72, 82
Unknown (14.51)	ND	40 J	47 J	qualify	72, 82
C4-Benzene Isomer (14.57)	ND	37 J	37 J	qualify	72, 82
Unknown Alkane (14.69)	ND	74 J	74 J	qualify	72, 82
C4-Benzene Isomer (14.92)	ND	50 J	50 J	qualify	72, 82
C4-Benzene Isomer (15.00)	ND	29 J	29 J	qualify	72, 82
Unknown (15.12)	6 J	70 JB	70 JB	negate	1, 72, 82
Unknown (15.37)	ND	60 J	60 J	qualify	72, 82
Unknown (15.57)	ND	67 J	67 J	qualify	72, 82
Unknown Alkane (15.89)	ND	83 J	83 J	qualify	72, 82
C4-Benzene Isomer (15.98)	ND	46 J	46 J	qualify	72, 82
Unknown Alkane (16.05)	ND	53 J	53 J	qualify	72, 82
Unknown (16.15)	ND	28 J	28 J	qualify	72, 82
Unknown (16.36)	ND	25 J	25 J	qualify	72, 82
Unknown (16.54)	ND	45 J	45 J	qualify	72, 82
Unknown (16.58)	ND	37 J	37 J	qualify	72, 82
Unknown Alkane (16.69)	ND	84 J	84 J	qualify	72, 82
Unknown Alkane (16.95)	ND	29 J	29 J	qualify	72, 82
Unknown Alkane (17.74)	ND	35 J	35 J	qualify	72, 82
Unknown (18.55)	ND	49 J	49 J	qualify	72, 82
C15H28 Iso,mer (18.95)	ND	56 J	56 J	qualify	72, 82
Unknown (19.39)	ND	31 J	31 J	qualify	72, 82

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD6 (6-8) (Lab. #: E2136-05)					
		% Moisture = 17			
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	12 U	12 U		
Bromomethane	10 U	12 U	12 U		
Vinyl Chloride	10 U	12 U	12 U		
Chloroethane	10 U	12 U	12 U		
Methylene Chloride	10 U	12 U	12 U		
Acetone	10 U	6 J	6 J		
Carbon Disulfide	10 U	12 U	12 U		
1,1-Dichloroethene	10 U	12 U	12 U		
1,1-Dichloroethane	10 U	12 U	12 U		
1,2-Dichloroethene (total)	10 U	12 U	12 U		
Chloroform	10 U	12 U	12 U		
1,2-Dichloroethane	10 U	12 U	12 U		
2-Butanone	10 U	12 U	12 U		
1,1,1-Trichloroethane	10 U	12 U	12 U		
Carbon Tetrachloride	10 U	12 U	12 U		
Bromodichloromethane	10 U	12 U	12 U		
1,2-Dichloropropane	10 U	12 U	12 U		
cis-1,3-Dichloropropene	10 U	12 U	12 U		
Trichloroethene	10 U	12 U	12 U		
Dibromochloromethane	10 U	12 U	12 U		
1,1,2-Trichloroethane	10 U	12 U	12 U		
Benzene	10 U	12 U	12 U		
trans-1,3-Dichloropropene	10 U	12 U	12 U		
Bromoform	10 U	12 U	12 U		
4-Methyl-2-Pentanone	10 U	12 U	12 U		
2-Hexanone	10 U	12 U	12 U		
Tetrachloroethene	10 U	12 U	12 U		
1,1,2,2-Tetrachloroethane	10 U	12 U	12 U		
Toluene	10 U	12 U	12 U		
Chlorobenzene	10 U	12 U	12 U		
Ethylbenzene	10 U	12 U	12 U		
Styrene	10 U	12 U	12 U		
Xylene (total)	10 U	12 U	12 U		
Non-Target Volatile Organics					
Unknown (15.13)	8 J	13 JB	13 JB	negate	1

DATA VALIDATION WORKSHEETS
For Town Sheet Metal

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: December 29, 1998
Sample Delivery Group: E2136
Laboratory Reference Numbers:

TSM-TB-2	E2136-01 (water)
TSM-P-GW-9	E2136-02 (water)
TSM-DW-SD-3(7-9)	E2136-03 (soil)
TSM-DRAIN-SD-5(2-4)	E2136-04 (soil)
TSM-DRAIN-SD-5(2-4)RE	E2136-04 (soil)
TSM-DRAIN-SD-6(6-8)	E2136-05 (soil)
TSM-SD-2(85-105)	E2136-06 (soil)
TSM-SD-2(85-105)MS	E2136-06 (soil)
TSM-SD-2(85-105)MSD	E2136-06 (soil)
TSM-P-GW-5(43)	E2136-07 (water)
TSM-DW-SD-4(10-12)	E2136-08 (soil)

Water Holding Blank

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V2
Tune File ID: V2B0010
Calibration File ID: V2B0011
Initial Calibration File ID: V2B9751
Associated Samples: VBLK2C, SD5(2-4)RE

Level: Low - Soils - Heated
Acceptable: yes
Date: 01/08/99
Date: 12/29/98

Time Requirements Met: yes
Page: 180
Page: 233

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
All Compounds %D < QC Limit: yes

Footnote:
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	Vinyl Chloride	Benzene
PPB		
50	153179/93472 * 1.000 = 1.639	636685/458924 * 1.000 = 1.387
	%D: (1.732 - 1.639) / 1.732 * 100 = 5.369515	%D : (1.433 - 1.387) / 1.433 * 100 = 3.210049

METHOD BLANK: VBLK2C (Page 280)

Compound	**ppb**	**<CRDL**
Unknown (15.12)	6J	NA

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V5
Tune File ID: V5A9200
Initial Calibration File ID: V5A9201
Associated Samples: VBLK5R, VHBLK5Q

Level: Low waters
Acceptable: yes
Date: 01/10/99

Time Requirements Met: yes
Page: 181

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	**49%**	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes
Footnote:
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	1,1-Dichloroethene	Chlorobenzene
10	45138/191771 * 5.000 = 1.177	259515/1092002 * 5.000 = 1.188
20	91780/188555 * 2.500 = 1.217	544655/1063629 * 2.500 = 1.280
50	185637/196502 * 1.000 = 0.945	1070443/1081742 * 1.000 = 0.990
100	304113/207594 * 0.500 = 0.732	2432307/1165113 * 0.500 = 1.044
200	725855/185969 * 0.250 = 0.976	4725504/1039067 * 0.250 = 1.137
	AV. RRF = 1.009 %RSD =19.4 %	AV. RRF = 1.128 %RSD = 10.2%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V5
Tune File ID: V5A9230
Calibration File ID: V5A9231
Initial Calibration File ID: V5A9201
Associated Samples: VBLK5R, VHBLK5Q

Level: Low waters
Acceptable: yes
Date: 01/11/99
Date: 01/10/99

Time Requirements Met: yes
Page: 181
Page: 234

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
All Compounds %D < QC Limit: yes

Footnote:
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	Carbon Tetrachloride	Toluene
PPB		
50	589038/1460492 * 1.000 = 0.403	2240894/1194745 * 1.000 = 1.876
	%D: (0.401 - 0.403) / 0.401 * 100 = -0.498753	%D : (1.858 - 1.876) / 1.858 * 100 = -0.968784

METHOD BLANK: VBLK5R (Page 286)

Compound	**ppb**	**<CRDL**
No compounds were detected in this method blank		

OVERALL ASSESSMENT AND COMMENTS: ok

FOOTNOTES FOR THE ORGANIC TARGET ANALYTE LIST

BLANK QUALIFIERS

1. The reported compound was less than 5 times (10 times for the common EPA contaminants) the value of the method (prep) blank. The presence of this compound in the sample has been negated.

2. The reported compound was less than 5 times (10 times for the common EPA contaminants) the value of the holding blank. The presence of this compound in the sample is highly qualified because the holding blank was analyzed at least five days after the analysis of this sample.

3. The value reported was greater than 5 times (10 times for the common EPA contaminants) the value in the method (prep) blank and is considered "real" (J).

4. This sample was diluted prior to analysis. The value reported prior to the dilution is less than 5 times (10 times for the common EPA contaminants) the value in the method blank. The presence of this compound in the sample is likely due to laboratory contamination unrelated to the actual sample.

5. The value reported was less than 5 times (10 times for the common EPA contaminants) the value in the field or trip blank. The reported value was negated due to probable contamination.

7. The value reported was greater than 5 times (10 times of the common EPA contaminants) the value on the field or trip blank and is considered "real".

8. The results of this sample was qualified due to a problem with the blank which was not included in the above footnotes. Refer to the text for discussion.

9. The result of this sample was rejected due to a severe problem with the blank which was not included in the above footnotes. Refer to the text for discussion.

10. This non-target compound was found in the method blank. The laboratory did not flag it with the "B" qualifier.

11 The laboratory used an incorrectly associated method blank. This compound was not found in the method blank and does not require the "B' qualifier.

12. Blank data was not included by the laboratory. The extent of blank contamination cannot be assessed.

13. This compound was detected in a field or trip blank which as not received at the same time as the contaminated sample. See text for discussion.

CALIBRATION REQUIREMENTS

15. The compound is qualified due to the % RSD or % Difference being greater than the required limit but less than 90%.

16. The value for this compound is qualified because the response factor is less than the quality assurance limit required by the specific method. Low concentrations of this compound may have been overlooked.

17. The value for this compound is qualified because the response factor is less than 0.05.

18. The % RSD or % Difference of the semivolatile CCC compound was greater than 30%. The results of this sample are not rejected according to CLP protocols.

19. The results of this sample are rejected due to one volatile or 3 semivolatile CCC compounds being outside of their acceptable range.

20. The non-detected compound is unusable since the response factor is less than 0.05.

21. The RF of this compound is less than the required limit.

22. The % RSD or percent difference is greater than 90%. All non-detects should be considered to be unusable, compounds that were detected are highly qualified.

23. A continuing calibration standard was not analyzed within the 12 hour time limitation. The data for the samples involved would be technically rejected according to the EPA's HW-8 (Section 13.2, January 1992) data validation guidelines. The significant of this upon the end use of the data is discussed in the text.

24. An instrument tune was not analyzed within the 12 hour time limitation. The data for the samples involved would be technically rejected according to the EPA's HW-8 (Section 13.2, January 1992) data validation guidelines. The significant of this upon the end use of the data is discussed in the text.

25. The instrument tune performance was outside of the required quality assurance limits for the NYS DEC, but satisfied the tune criteria of the EPA. The specific aspects of the tune nonconformance are discussed in detail in the text.

26. The instrument tune performance was outside of the required quality assurance limits, and also outside of the expanded tune criteria. All sample spectra were examined in detail. The specific aspects of the tune nonconformance are discussed in detail in the text. Standard EPA data validation guidelines would require that the data associated with the tune be rejected.

27. An instrument tune was not analyzed within the 8 hour time limitation stated in Method 524.2, but the sample was analyzed within 12 hours of the previous acceptable tune.

28. A continuing calibration was not performed within the 8 hour time limitation stated in Method 524.2, but the sample was analyzed within 12 hours of the previous continuing calibration standard.

29. The EPA data validation guidelines (HW-8, January 1992 Section 13.3) require the rejection of a compound with a percent difference greater than 90% in a continuing calibration.

SPIKE RECOVERIES

30. The CLP required spike concentration was not added to this sample. Refer to the text for discussion of the effect the usability of the data.

31. The data were qualified due to poor recovery of the associated matrix spike or matrix spike duplicate. Only the sample used for the MS/MSD has been qualified.

32. The non-detects for this sample would be considered unusable (R) according to EPA CLP data validation guidelines due to MS and MSD recoveries both less than 10%. Only the sample used for the MS/MSD has been qualified.

33. The data for this sample are qualified as estimated values due to the poor RPD's of the matrix spike and matrix spike duplicate.

SAMPLE ANALYSES

50. The raw data included in the report could not be followed. The results of this analysis should be considered tentative until the discrepancy has been resolved.

51. The value reported on FORM I does not appear to agree with that found in the raw data.

52. This analyte has been analyzed by a method which is not routinely used in this concentration range. Refer to the text for a discussion of any impact this may have on the usability of the data.

53. The copies of the spectra were illegible. The spectral matches could not be verified.

54. The one or more of the surrogate compounds in this sample eluted outside of the required retention time range. The data for this sample should be considered to be highly qualified.

55. The reported concentration is qualified because the concentration is below the CRQL. This is prior to any dilutions which may have been associated with this sample.

56. The presence of this compound was noted on the quant report, but a copy of the spectra was not included. It was not reported on FORM I. It is tentatively added to the TCL list until a corrected report has been received from the laboratory.

57. The spectra of this compound was not included in the report. Its presence should be considered tentative until this is received.

58. This non-target compound is usually detected in another analytical fraction. The presence of this compound should be negated.

59. The mass spectral identification of this sample has not been confirmed and the identification of this compound has been rejected. The compound should be considered an unknown.

60. The laboratory did not quantify the pesticides present in this sample. The pesticide was confirmed on a second column. The value is greater than the CRDL.

61. The concentration of the compound exceeded the calibration range of the instrument. It should have been flagged with the "E" qualifier by the laboratory and reanalyzed at a higher dilution.

62. The compound is a suspected aldol condensation product. It should have been flagged with the "A" qualifier by the laboratory. It is due to a laboratory extraction artifact.

63. The sample holding time to re-extraction and/or re-analysis was exceeded. All positive as well as non-detected compounds are highly qualified.

64. The non-target compound is a suspected laboratory contaminant which was not present in the associated blanks.

65. The area of the non-target compound is less than 10% of the associated internal standard. it has been negated from the TIC list.

66. The non-target compound was not added to the TIC summary on FORM I. All spectra and quant reports were included in the raw data. The compounds have been added to the data summary table during the review.

67. This non-target compound is an aldol condensation product, siloxane or other common artifact. It should not be included in a data summary.

68. This compound is usually considered to be an aldol condensation product. This was not flagged with the "A" qualifier by the laboratory.

69. The quant reports for the non-target compounds were not included in the data summary. The concentrations reported could not be validated.

70. The area of the internal standard used to quantify this compound was outside of the acceptable range.

71. A confirmation analysis was not performed for this sample. The data from the primary column cannot be confirmed.

72. The sample was analyzed with another analysis which provided more accurate data for the concentration of this compound. The data for this analyte should not be used.

73. The surrogate were outside of the acceptable limit. This sample was rerun after the allowable holding time.

74. This result does not agree with the data obtained from the undiluted analysis. The value should be considered to be an estimate.

75. The spectra for this compound was not retrievable due to a computer problem. This compound has been detected in many of the other samples collected at this site.

76. The dilutions reported for this sample are not consistent for all data. See text.

77. Values less than the CRDL were not reported by the laboratory. These have been included in the data summary. Their spectra have not been examined, so their presence cannot be verified.

78. Surrogate recoveries were outside of the acceptable limits. The sample was reextracted and reanalyzed within the required holding time and poor surrogate recoveries were again obtained. The problem appears to be due to the nature of the sample matrix. The laboratory has satisfied all EPA CLP requirements.

79. The non-target compound is a common laboratory artifact such as carbon dioxide or a siloxane. The data should not be used.

80. The sample was diluted excessively prior to analyses. The value reported is less than the quantitation limit and is reported with a "J" qualifier. It should have been reanalyzed at a lower dilution.

81. The sample was extracted and/or analyzed outside of the required holding time.

82. The area, or retention time, of the internal standard was outside of the acceptable range, but the area was greater than 25%.

83. The recovery of the associated surrogate or system monitoring compound was outside of the acceptable quality assurance limits, but greater than 10%.

84. The recovery of the associated surrogate was less than 10%. This compound was detected in the sample, but the value should be considered to be highly estimated.

85. The recovery of the associated surrogate was less than 10%. This compound was not detected in the sample and the data would be considered to be unusable due to the standard EPA data validation guidelines. The sample was flagged with the "R" qualifier.

86. The spectra of this sample indicated a significant amount of interference which would make it difficult to verify the presence of this compound. This is being reported as undetected at a concentration greater than that of the standard detection limit for this analysis.

87. The standard spectra submitted for this compound does not match that of the library reference standard. The presence or absence of this compound should be considered as tentative until the discrepancies between the two spectra are resolved.

88. The spectra for this compound appears to be an acceptable match even though the compound would be present at a concentration less than the required reporting limit. This was included in the data validation summary and flagged with the "J" qualifier.

89. The area of the internal standard was outside of the acceptable range and less than 25%. All of the undetected data would be considered to be unusable (Jan. 1992 data validation guidelines section 14.1.3).

90. The area of the internal standard was outside of the acceptable range but greater than 25%. All of the reported results are highly estimated.

91. The area of the internal standard was less than 25%. The reported concentration is highly estimated.

92. The peak used for quantitation of this pesticide coelutes with an Aroclor peak. The presence of this compound in the sample cannot be verified.

93. Many Aroclor peaks were found in this sample that do not precisely fit a standard Aroclor pattern. This may be due to the low concentration of the Aroclor, weathering, or the presence of a mixture of Aroclors. The concentrations reported should be considered to be estimated values.

94. Many of the peaks reported for this Aroclor coelute with those of another Aroclor. The data reported may be overestimated because the results that were reported were not corrected for the presence of coeluting peaks.

95. The breakdown of this pesticide in the PEM standard was greater than 20%. Some or all of this pesticide may be due to the breakdown of the original pesticide (endrin or DDT).

96. The breakdown of endrin and/or DDT in the associated PEM standard was greater than 20%. The reported concentration of this pesticide (endrin aldehyde, endrin ketone, DDD and/or DDE) may have been underestimated.

97. The breakdown of this pesticide in the PEM standard was greater than 20%. Since the pesticide was not detected in the sample, the quantitation limit should be considered to be unusable.

99. Inconsistencies were found in the way the presence or absence of this compound was reported in a GC analysis. See Text for a detailed discussion.

100. The instrument detection limit did not meet the Contract Required quantitation Limit generally required by the NYS DEC ASP program.

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Town Sheet Metal

New York State Department of Environmental Conservation
Data Validation Summary Form

Group #	Date Received	CLP Year	Sample Number	Lab ID #	Matrix S/W	VOA Compliance	BNA Compliance	TAL Metals Compliance	Cyanide Compliance	Page in CLP	Non-Compliance
E2133	12/24/98	95	TSM-TB-1	E2133-01	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-1(43)	E2133-02	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-4(43)	E2133-03	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-3(43)	E2133-04	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-2(43)	E2133-05	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-6(43)	E2133-06	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-7(42)	E2133-07	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-8(42)	E2133-08	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-10(43)	E2133-09	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-10(43)MS	E2133-09MS	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-P-GW-10(43)MSD	E2133-09MSD	Water	Yes - *	NA	NA	NA		
E2133	12/24/98	95	TSM-DW-SD-1(10-12)	E2133-10	Soil	Yes - *	NA	NA	NA		
E2133		95	Water Holding Blank			Yes - *	NA	NA	NA		

* - With 1/28 Revisions

SUMMARY OF THE ANALYTICAL DATA VALIDATION
For Town Sheet Metal

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133
Laboratory Reference Numbers:

TSM-TB-1	E2133-01 (water)
TSM-P-GW-1(43)	E2133-02 (water)
TSM-P-GW-4(43)	E2133-03 (water)
TSM-P-GW-3(43)	E2133-04 (water)
TSM-P-GW-2(43)	E2133-05 (water)
TSM-P-GW-6(43)	E2133-06 (water)
TSM-P-GW-7(42)	E2133-07 (water)
TSM-P-GW-8(42)	E2133-08 (water)
TSM-P-GW-10(43)	E2133-09 (water)
TSM-P-GW-10(43)MS	E2133-09MS (water)
TSM-P-GW-10(43)MSD	E2133-09MSD (water)
TSM-DW-SD-1(10-12)	E2133-10 (soil)
Water Holding Blank	

Water samples were received for analyses of the volatile organic TCL analyte list by NYS DEC ASP protocols. A complete analytical validation was performed based upon the following parameters:

* - Data Completeness
* - GC/MS Tuning
- Holding Times
- Calibrations
- Method Blanks
- Field Blanks
* - Trip Blanks
* - Holding Blanks
* - System Monitoring Compound Recoveries
* - Internal Standard Recoveries
- Matrix Spike / Matrix Spike Duplicate
* - Blank Spike
* - Compound Identification
* - Compound Quantitation
- Method Detection Limit

* - Indicates that all criteria were met for this parameter.

DATA VALIDATION SUMMARY

All samples were analyzed within the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program.

It should be noted that the water samples were not preserved and were analyzed between 10 and 11 days from sample collection. This is beyond the EPA's 7 day technical holding time for unpreserved samples. It is possible that low concentrations of some volatile organics were over looked or underestimated.

The data were not flagged in the data validation summary table.

The instrument detection limits were not included in the copy of the analytical report submitted for validation. These were requested from the laboratory and received in their 1/28 fax.

The holding blank was analyzed three days after the analyses of the other samples and on a different GC/MS instrument. The holding blank should be analyzed closer to the analyses of the samples themselves.

The problems with the high RPDs in the matrix spike should also be noted.

No other problems were found with the analyses of these samples which would affect the end use of the data.

Nancy J. Potak
March 8, 1999

Holding Times

All samples were analyzed within the 10 day contractual holding time from time of sample receipt required by the NYS DEC's ASP program.

It should be noted that the water samples were not preserved and were analyzed between 10 and 11 days from sample collection. This is beyond the EPA's 7 day technical holding time for unpreserved samples. It is possible that low concentrations of some volatile organics were over looked or underestimated.

The data were not flagged in the data validation summary table.

Tunes

No problems were found with any of the tunes of this sample delivery group.

System Monitoring Compound Recoveries

All soil and water system monitoring compound recoveries were within the NYS DEC's ASP quality assurance limits.

Calibrations

The %RSD of 1,1,2,2-tetrachloroetehane (20.9%) was just above the 20.5% contractual quality assurance limit in the initial calibration associated with the analysis of the holding blank. The data were not qualified in the data validation summary table.

No other problems were detected with the initial calibration or continuing calibrations of this sample delivery group.

Matrix Spike / Matrix Spike Duplicate

Water sample TSM-P-GW-10(43) (Lab. #: E2133-09) of this sample delivery group was used for the soil matrix spike and matrix spike duplicates. All recoveries and RPDs were within the acceptable quality control limits with the following exceptions:

Compound	MS %Rec	MSD %Rec	QC Limits	RPD	Limits
1,1-Dichloroethene			61-145		14%
Trichloroethene			71-120		14%
Benzene			76-127	13%	11%
Toluene			76-125	15%	13%
Chlorobenzene			75-130		13%

The high RPDs were due to the relative low matrix spike duplicate recoveries (84% and 86%) relative to those of the matrix spike (98%). The data were not qualified for the high RPDs.

A soil matrix spike was not analyzed.

Blank Spike

No problems were found with the recoveries of the soil or water blank spikes.

Method Blanks

Low concentrations of an unknown non-target compound eluting at approximately 15.10 minutes were detected in all of the method blanks associated with the analyses of all of the samples. Whenever any of this compound was detected in a sample it was negated, flagged with the "J" qualifier and footnoted with #1 in the data validation summary table.

A low concentration of acetone (6J ug/kg) was also detected in the method blank associated with the one soil sample. The concentration of acetone in this sample (118 ug/kg - prior to correction for percent solids) was too high to be affected by the acetone in the method blank.

The specific method blanks and their associated samples are noted in both the data validation summary table and in the data validation worksheets.

Trip Blanks

Only the unknown non-target compound eluting at 15.10 minutes was detected in the trip blank. This was negated due to its presence in the associated method blank.

Holding Blank

The holding blank was analyzed three days after the analyses of the other samples and on a different GC/MS instrument. The holding blank should be analyzed closer to the analyses of the samples themselves.

A low concentration of the non-target compound eluting at 15.11 minutes was detected in the water holding blank. This was previously negated from all of the samples due to its presence in the method blanks.

Field Blank

A field blank was not associated with this sample delivery group.

Internal Standard Areas and Retention Times

No problems were found with the recoveries or retention times in any of the internal standards associated with the samples of this delivery group.

Instrument Detection Limits

Instrument detection limits were not included with this sample delivery group. These were received in the laboratory's 1/28 fax.

Sample Results

No problems were detected with the analyses of any of these samples.

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Holding Blank VHBLK1L					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.07)	8 J	12 JB	12 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Trip Blank TSM-TB-1 (Lab. #: E2133-02)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	10 U	10 U		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.12)	16 J	14 JB	14 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW1 (Lab. #: E2133-02)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	5 J	5 J		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	18	18		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.12)	16	12 JB	12 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW10 (Lab. #: E2133-09)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	5 J	5 J		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	12	12		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.11)	16 J	8 JB	8 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW2 (Lab. #: E2133-05)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	7 J	7 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	14	14		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	43	43		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.11)	16 J	11 JB	11 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW3 (Lab. #: E2133-04)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	8 J	8 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	18	18		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	6 J	6 J		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	17	17		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.11)	16 J	8 JB	8 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision		Qualifiers	Footnotes
Water Sample FGS-P-GW- 36(25) (Lab. #: E2133-07)						
TCL Volatile Organics	(Undiluted)					
Chloromethane	10 U	10 U	10 U			
Bromomethane	10 U	10 U	10 U			
Vinyl Chloride	10 U	10 U	10 U	J	qualify	15
Chloroethane	10 U	10 U	10 U			
Methylene Chloride	10 U	10 U	10 U			
Acetone	10 U	10 U	10 U			
Carbon Disulfide	10 U	8 J	8 J			
1,1-Dichloroethene	10 U	10 U	10 U			
1,1-Dichloroethane	10 U	10 U	10 U			
1,2-Dichloroethene (total)	10 U	10 U	10 U			
Chloroform	10 U	10 U	10 U			
1,2-Dichloroethane	10 U	10 U	10 U			
2-Butanone	10 U	10 U	10 U			
1,1,1-Trichloroethane	10 U	10 U	10 U			
Carbon Tetrachloride	10 U	10 U	10 U			
Bromodichloromethane	10 U	10 U	10 U			
1,2-Dichloropropane	10 U	10 U	10 U			
cis-1,3-Dichloropropene	10 U	10 U	10 U			
Trichloroethene	10 U	10 U	10 U			
Dibromochloromethane	10 U	10 U	10 U			
1,1,2-Trichloroethane	10 U	10 U	10 U			
Benzene	10 U	10 U	10 U			
trans-1,3-Dichloropropene	10 U	10 U	10 U			
Bromoform	10 U	10 U	10 U			
4-Methyl-2-Pentanone	10 U	10 U	10 U			
2-Hexanone	10 U	10 U	10 U			
Tetrachloroethene	10 U	10 U	10 U			
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U			
Toluene	10 U	10 U	10 U			
Chlorobenzene	10 U	10 U	10 U			
Ethylbenzene	10 U	10 U	10 U			
Styrene	10 U	10 U	10 U			
Xylene (total)	10 U	10 U	10 U			
Non-Target Volatile Organics						
Unknown (15.09)	16 J	7 JB	7 JB		negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW4 (Lab. #: E2133-03)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	6 J	6 J		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	11	11		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	7 J	7 J		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.12)	16 J	8 JB	8 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW6 (Lab. #: E2133-06)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	10 U	10 U		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	24	24		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.11)	16 J	11 JB	11 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW7 (Lab. #: E2133-07)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	9 J	9 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	10 U	10 U		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	50	50		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Propane, 2-methoxy-2-methyl- (5.20)	ND	8 JN	8 JN		
Unknown (15.11)	16 J	12 JB	12 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Water Sample GW8 (Lab. #: E2133-08)					
TCL Volatile Organics	(Undiluted)				
Chloromethane	10 U	10 U	10 U		
Bromomethane	10 U	10 U	10 U		
Vinyl Chloride	10 U	10 U	10 U		
Chloroethane	10 U	10 U	10 U		
Methylene Chloride	10 U	10 U	10 U		
Acetone	10 U	10 U	10 U		
Carbon Disulfide	10 U	10 U	10 U		
1,1-Dichloroethene	10 U	10 U	10 U		
1,1-Dichloroethane	10 U	10 U	10 U		
1,2-Dichloroethene (total)	10 U	8 J	8 J		
Chloroform	10 U	10 U	10 U		
1,2-Dichloroethane	10 U	10 U	10 U		
2-Butanone	10 U	10 U	10 U		
1,1,1-Trichloroethane	10 U	8 J	8 J		
Carbon Tetrachloride	10 U	10 U	10 U		
Bromodichloromethane	10 U	10 U	10 U		
1,2-Dichloropropane	10 U	10 U	10 U		
cis-1,3-Dichloropropene	10 U	10 U	10 U		
Trichloroethene	10 U	10 U	10 U		
Dibromochloromethane	10 U	10 U	10 U		
1,1,2-Trichloroethane	10 U	10 U	10 U		
Benzene	10 U	10 U	10 U		
trans-1,3-Dichloropropene	10 U	10 U	10 U		
Bromoform	10 U	10 U	10 U		
4-Methyl-2-Pentanone	10 U	10 U	10 U		
2-Hexanone	10 U	10 U	10 U		
Tetrachloroethene	10 U	54	54		
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U		
Toluene	10 U	10 U	10 U		
Chlorobenzene	10 U	10 U	10 U		
Ethylbenzene	10 U	10 U	10 U		
Styrene	10 U	10 U	10 U		
Xylene (total)	10 U	10 U	10 U		
Non-Target Volatile Organics					
Unknown (15.12)	16	12 JB	12 JB	negate	1

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision		Qualifiers	Footnotes
Soil Sample SD-1(10-12) (Lab. #: E2133-10)						
		% Moisture = 11				
TCL Volatile Organics	(Undiluted)					
Chloromethane	10 U	11 U	11 U			
Bromomethane	10 U	11 U	11 U			
Vinyl Chloride	10 U	11 U	11 U			
Chloroethane	10 U	11 U	11 U			
Methylene Chloride	10 U	11 U	11 U			
Acetone	6 J	130 B	132 B	J	qualify	3
Carbon Disulfide	10 U	11 U	11 U			
1,1-Dichloroethene	10 U	11 U	11 U			
1,1-Dichloroethane	10 U	11 U	11 U			
1,2-Dichloroethene (total)	10 U	11 U	11 U			
Chloroform	10 U	11 U	11 U			
1,2-Dichloroethane	10 U	11 U	11 U			
2-Butanone	10 U	12	12			
1,1,1-Trichloroethane	10 U	32	32			
Carbon Tetrachloride	10 U	11 U	11 U			
Bromodichloromethane	10 U	11 U	11 U			
1,2-Dichloropropane	10 U	11 U	11 U			
cis-1,3-Dichloropropene	10 U	11 U	11 U			
Trichloroethene	10 U	11 U	11 U			
Dibromochloromethane	10 U	11 U	11 U			
1,1,2-Trichloroethane	10 U	11 U	11 U			
Benzene	10 U	11 U	11 U			
trans-1,3-Dichloropropene	10 U	11 U	11 U			
Bromoform	10 U	11 U	11 U			
4-Methyl-2-Pentanone	10 U	11 U	11 U			
2-Hexanone	10 U	11 U	11 U			
Tetrachloroethene	10 U	11 U	11 U			
1,1,2,2-Tetrachloroethane	10 U	11 U	11 U			
Toluene	10 U	17	17			
Chlorobenzene	10 U	11 U	11 U			
Ethylbenzene	10 U	6 J	6 J			
Styrene	10 U	11 U	11 U			
Xylene (total)	10 U	32	31			

Data Validation Summary Table
For Town Sheet Metal

Water and Soil TCL Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133

Sample / Analyte	Method Blank Conc. (PPB)	Lab. Reported Conc. (PPB)	QA Validation Reported Conc. Decision	Qualifiers	Footnotes
Soil Sample SD-1(10-12) (Lab. #: E2133-10)					
Non-Target Volatile Organics					
C10H16 Isomer (12.76)	ND	120 J	121 J		
C8H12 Isomer (13.06)	ND	7 J	7 J		
Camphene (13.11)	ND	20 J	20 J		
C10H20 Isomer (13.38)	ND	24 J	24 J		
C3-Benzene Isomer (13.44)	ND	21 J	22 J		
C10H16 Isomer (13.56)	ND	95 J	95 J		
C3-Benzene Isomer (13.69)	ND	10 J	10 J		
Unknown (13.78)	ND	23 J	23 J		
Unknown (13.83)	ND	10 J	10 J		
C3-Benzene Isomer (13.89)	ND	32 J	32 J		
C10H16 Isomer (14.05)	ND	7 J	7 J		
Unknown Alkane (14.13)	ND	110 J	108 J		
C4-Benzene Isomer (14.24)	ND	200 J	200 J		
Unknown Alkane (14.40)	ND	55 J	55 J		
Unknown (14.61)	ND	12 J	13 J		
C4-Benzene Isomer (14.67)	ND	8 J	8 J		
C4-Benzene Isomer (14.98)	ND	8 J	8 J		
Unknown (15.21)	22	36 JB	36 JB	negate	1
Bicyclo[2.2.1]heptan-2-one (15.55)	ND	18 J	18 J		
Unknown (15.91)	ND	7 J	7 J		
Unknown Alcohol (16.13)	ND	15 J	15 J		
Unknown (16.40)	ND	6 J	6 J		

DATA VALIDATION WORKSHEETS
For Town Sheet Metal

Soil and Water Volatile Organic Analyses - Method 95-1
Samples Received: December 24, 1998
Sample Delivery Group: E2133
Laboratory Reference Numbers:

TSM-TB-1	E2133-01 (water)
TSM-P-GW-1(43)	E2133-02 (water)
TSM-P-GW-4(43)	E2133-03 (water)
TSM-P-GW-3(43)	E2133-04 (water)
TSM-P-GW-2(43)	E2133-05 (water)
TSM-P-GW-6(43)	E2133-06 (water)
TSM-P-GW-7(42)	E2133-07 (water)
TSM-P-GW-8(42)	E2133-08 (water)
TSM-P-GW-10(43)	E2133-09 (water)
TSM-P-GW-10(43)MS	E2133-09MS (water)
TSM-P-GW-10(43)MSD	E2133-09MSD (water)
TSM-DW-SD-1(10-12)	E2133-10 (soil)

Water Holding Blank

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V1
Tune File ID: V1B9600
Initial Calibration File ID: V1B9602
Associated Samples: VBLK1L, VHBLK1L

Level: Low - Waters
Acceptable: yes
Date: 12/26/98

Time Requirements Met: yes
Page: 141

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	<100	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes

Footnote:

Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	1,1-Dichloroethene	Tetrachloroethene
10	5986/22701 * 5.000 = 1.318	6981/112162 * 5.000 = 0.311
20	13498/23565 * 2.500 = 1.432	14984/114501 * 2.500 = 0.327
50	33731/23733 * 1.000 = 1.421	38791/115069 * 1.000 = 0.337
100	73560/24394 * 0.500 = 1.508	78424/117997 * 0.500 = 0.332
200	139245/18656 * 0.250 = 1.866	147479/106131 * 0.250 = 0.347
	AV. RRF = 1.509 %RSD = 14.0%	AV. RRF = 0.331 %RSD = 4.0%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V1
Tune File ID: V1B9780
Calibration File ID: V1B9781
Initial Calibration File ID: VIB9602
Associated Samples: VBLK1L, VHBLK1L

Level: Low - Waters
Acceptable: yes
Date: 1/05/99
Date: 12/26/98

Time Requirements Met: yes
Page: 194
Page: 141

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.01: yes
All Compounds %D < QC Limit: yes

Footnote:
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1-Dichloroethane	Toluene
PPB		
50	85651/27754 * 1.000 = 3.086	201439/134946 * 1.000 = 1.493
	%D: (3.141 - 3.086) / 3.141 * 100 = 1.751035	%D : (1.421 - 1.493) / 1.421 * 100 = -5.066854

METHOD BLANK: VBLK1L (Page 223)

Compound	**ppb**	**<CRDL**
Unknown (15.07)	12J	NA

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V2 **Level:** Low - Unheated
Tune File ID: V2B9120 **Acceptable:** yes **Time Requirements Met:** yes
Initial Calibration File ID: V2B9121 **Date:** 11/25/98 **Page:** 142
Associated Samples: VBLK2V, VBLK2VBS, TB1, GW1, GW4, GW3, GW2, GW6, GW7, GW8, GW10, GW10MS, GW10MSD

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	<100	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes Footnote:
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1-Dichloroethene	Tetrachloroethene
PPB		
10	20740/54306 * 5.000 = 1.910	15038/244518 * 5.000 = 0.308
20	41772/55888 * 2.500 = 1.869	30017/249930 * 2.500 = 0.300
50	110839/56223 * 1.000 = 1.971	79043/251809 * 1.000 = 0.314
100	190303/53001 * 0.500 = 1.795	139028/237638 * 0.500 = 0.293
200	381583/55092 * 0.250 = 1.732	287120/239335 * 0.250 = 0.300
	AV. RRF = 1.855 %RSD = 5.1%	AV. RRF = 0.303 %RSD = 2.7%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V2 **Level:** Low - Unheated
Tune File ID: V2B9850 **Acceptable:** yes **Time Requirements Met:** yes
Calibration File ID: V2B9851 **Date:** 01/02/98 **Page:** 196
Initial Calibration File ID: V2B9121 **Date:** 11/25/98 **Page:** 156
Associated Samples: VBLK2V, VBLK2VBS, TB1, GW1, GW4, GW3, GW2, GW6, GW7, GW8, GW10, GW10MS, GW10MSD

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit:
All Compounds Average RRF > 0.01: Footnote:
All Compounds %D < QC Limit: Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:	1,1,1-Trichloroethane	Bromoform
PPB		
50	204661/450900 * 1.000 = 0.454	100880/450900 * 1.000 = 0.224
	%D: (0.448 - 0.454) / 0.448 * 100 = -1.339286	%D : (0.219 - 0.224) / 0.219 * 100 = -2.283105

METHOD BLANK: VBLK2V (Page 237)

Compound	**ppb**	**<CRDL**
Unknown (15.12)	16J	NA

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
INITIAL CALIBRATION SUMMARY

Instrument ID: V2
Level: Low - Soils - Heated
Tune File ID: V2B9750
Acceptable: yes
Time Requirements Met: yes
Initial Calibration File ID: V2B9751
Date: 12/29/98
Page: 143
Associated Samples: VBLK2S, VBLK2SBS, SD-1(10-12)

TCL COMPOUND LIST

	%RSD	RRF		%RSD	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<20.5	>0.100	cis-1,3-Dichloropropene *	<20.5	>0.200
Vinyl Chloride *	<20.5	>0.100	Trichloroethene *	<20.5	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<20.5	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<20.5	>0.100
Acetone	<100	>0.010	Benzene *	<20.5	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<20.5	>0.100
1,1-Dichloroethene *	<20.5	>0.100	Bromoform *	<20.5	>0.100
1,1-Dichloroethane *	<20.5	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<20.5	>0.200	Tetrachloroethene *	<20.5	>0.200
1,2-Dichloroethane *	<20.5	>0.100	1,1,2,2-Tetrachloroethane *	<20.5	>0.500
2-Butanone	<100	>0.010	Toluene *	<20.5	>0.400
1,1,1-Trichloroethane *	<20.5	>0.100	Chlorobenzene *	<20.5	>0.500
Carbon Tetrachloride *	<20.5	>0.100	Ethylbenzene *	<20.5	>0.100
Bromodichloromethane *	<20.5	>0.200	Styrene *	<20.5	>0.300
			Xylenes (total)	<20.5	>0.300

Surrogates:		
Toluene-d8	<30.0	>0.01
Bromofluorobenzene *	<20.5	>0.20
1,2-Dichloroethane-d4	<30.0	>0.01

All Compounds Average RRF >QC Limit: yes
All Compounds Average RRF > 0.05: yes
Footnote:
All Compounds %RSD < QC Limit: yes
All Compounds %RSD < 100%: yes
Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND: PPB	Carbon Tetrachloride	Benzene
10	34132/399337* 5.000 = 0.427	119906/399337 * 5.000 = 1.501
20	69084/406506 * 2.500 = 0.425	236552/406506 * 2.500 = 1.455
50	166683/408382 * 1.000 = 0.408	587159/408382 * 1.000 = 1.438
100	302181/384845 * 0.500 = 0.393	1017719/384845 * 0.500 = 1.322
200	725460/421978 * 0.250 = 0.430	2449583/421978 * 0.250 = 1.451
	AV. RRF = 1.433 %RSD = 4.6%	AV. RRF = 1.433 %RSD = 4.6%

OVERALL ASSESSMENT AND COMMENTS: ok

VOLATILE ORGANICS
CONTINUING CALIBRATION SUMMARY

Instrument ID: V2 **Level:** Low - Soils - Heated
Tune File ID: V2B9750 **Acceptable:** yes **Time Requirements Met:** yes
Calibration File ID: V2B9780 **Date:** 12/30/98 **Page:**
Initial Calibration File ID: V2B9851 **Date:** 12/29/98 **Page:**
Associated Samples: VBLK2S, VBLK2SBS, SD-1(10-12)

TCL COMPOUND LIST

	%D	RRF		%D	RRF
Chloromethane	<100	>0.010	1,2-Dichloropropane	<100	>0.010
Bromomethane *	<25.0	>0.100	cis-1,3-Dichloropropene *	<25.0	>0.200
Vinyl Chloride *	<25.0	>0.100	Trichloroethene *	<25.0	>0.300
Chloroethane	<100	>0.010	Dibromochloromethane *	<25.0	>0.100
Methylene Chloride	<100	>0.010	1,1,2-Trichloroethane *	<25.0	>0.100
Acetone	<100	>0.010	Benzene *	<25.0	>0.500
Carbon Disulfide	<100	>0.010	trans-1,3-Dichloropropene *	<25.0	>0.100
1,1-Dichloroethene *	<25.0	>0.100	Bromoform *	<25.0	>0.100
1,1-Dichloroethane *	<25.0	>0.200	4-Methyl-2-Pentanone	<100	>0.010
1,2-Dichloroethene (total)	<100	>0.010	2-Hexanone	<100	>0.010
Chloroform *	<25.0	>0.200	Tetrachloroethene *	<25.0	>0.200
1,2-Dichloroethane *	<25.0	>0.100	1,1,2,2-Tetrachloroethane *	<25.0	>0.500
2-Butanone	<100	>0.010	Toluene *	<25.0	>0.400
1,1,1-Trichloroethane *	<25.0	>0.100	Chlorobenzene *	<25.0	>0.500
Carbon Tetrachloride *	<25.0	>0.100	Ethylbenzene *	<25.0	>0.100
Bromodichloromethane *	<25.0	>0.200	Styrene *	<25.0	>0.300
			Xylenes (total)	<25.0	>0.300

Surrogates:		
Toluene-d8	<100	>0.01
Bromofluorobenzene *	<25.0	>0.20
1,2-Dichloroethane-d4	<100	>0.01

All Compounds Average RRF >QC Limit:
All Compounds Average RRF > 0.01: Footnote:
All Compounds %D < QC Limit: Footnote:

CALCULATION VERIFICATION: (RRF = Ais/Ax*Cis/Cs)

COMPOUND:
PPB
50

%D: (%D : (

METHOD BLANK: VBLK2S (Page 230)

Compound	**ppb**	**<CRDL**
Acetone	6J	10
Unknown (15.21)	22J	NA

OVERALL ASSESSMENT AND COMMENTS: ok