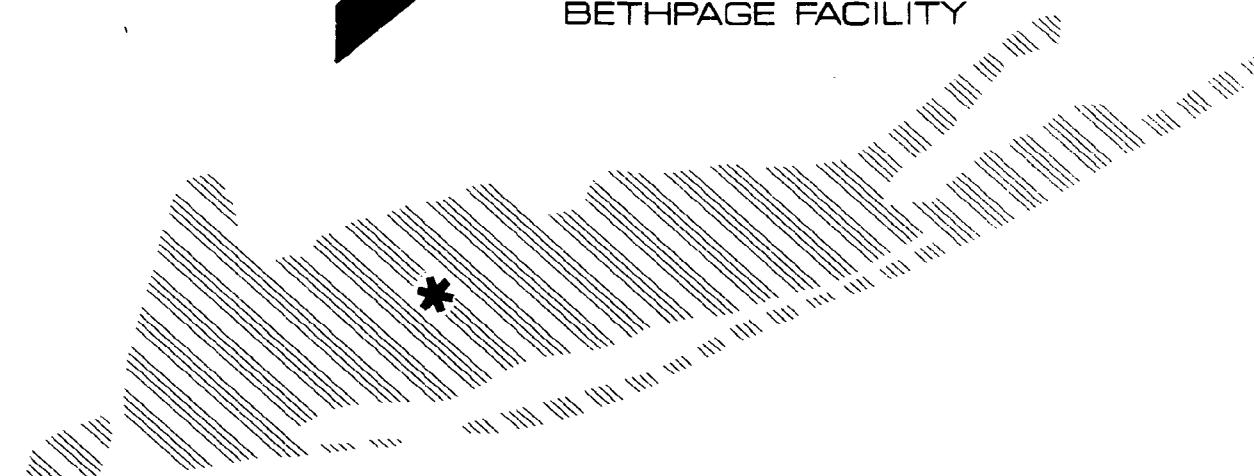


BHNES

5C

8



**NEW YORK STATE
SITE REGISTRY DELISTING PETITION
SITE 8 (PLANT 12/EAST)
HICKSVILLE, NEW YORK**

GRUMMAN AEROSPACE CORPORATION
BETHPAGE, NEW YORK



Dvirka and Bartilucci
Consulting Engineers

FEBRUARY 1993

Grumman Aerospace Corporation

Bethpage, New York 11714-3582

February 26, 1993

Thomas Jorling, Commissioner
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

**Re: New York State Site Registry Delisting Petition – Site 8 Plant 12/East,
Hicksville, New York**

Dear Mr. Jorling:

I am pleased to submit for your review three copies of the enclosed document, entitled "New York State Site Registry Delisting Petition, Site 8 (Plant 12/East), Hicksville, New York," for the Grumman Aerospace Corporation property located off South Oyster Bay Road in Hicksville, New York.

The report, prepared by our consultants, Dvirka and Bartilucci Consulting Engineers, documents the past and present use of the site based on a review of available records, and a narrative review of chronological aerial photographs of the area from 1950 through 1988. In addition, a presentation of soil and groundwater sampling results is provided along with a comparison to appropriate standards.

The information presented in this report will assist the New York State Department of Environmental Conservation (NYSDEC) in determining the nature of the use of the site over the past 40 years and to evaluate the merits of the delisting petition. Based on the review of available information and the environmental data, we believe that the property is eligible for removal from the NYSDEC Site Registry of Inactive Hazardous Waste Disposal Sites, and as such, an appropriate modification to the map depicting the "superfund" site (Site 1-30-003) is warranted.

If you have any comments and/or questions regarding this matter, do not hesitate to contact me at (516) 575-2385.

Very truly yours,



John Ohlmann
Director

JO/RR/mbf
Enclosure
cc/encl.:
Robert Marino (NYSDEC)
0503a/65
1167

GRUMMAN AEROSPACE CORPORATION

**NEW YORK STATE
SITE REGISTRY DELISTING PETITION
SITE 8 (PLANT 12/EAST)
HICKSVILLE, NEW YORK**

**PREPARED BY
DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
SYOSSET, NEW YORK**

FEBRUARY 1993

GRUMMAN AEROSPACE CORPORATION

NEW YORK STATE SITE REGISTRY DELISTING PETITION SITE 8 (PLANT 12/EAST) HICKSVILLE, NEW YORK

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	INTRODUCTION	1-1
2.0	SITE EVALUATION	2-1
	2.1 Site History	2-1
	2.2 General Site Description	2-2
	2.3 Hooker Chemical Site	2-3
3.0	FIELD PROGRAM	3-1
	3.1 Monitoring Well Installation	3-1
	3.2 Monitoring Well Borehole Soil Sampling	3-1
	3.3 Soil Boring Sampling	3-4
	3.4 Groundwater Sampling	3-5
	3.5 Volatile Organics Monitoring	3-5
4.0	FINDINGS AND CONCLUSIONS	4-1
	4.1 Monitoring Well Borehole Soil Sampling	4-1
	4.2 Soil Boring Sampling	4-1
	4.3 Groundwater Sampling	4-4
	4.4 Conclusions	4-11
5.0	REFERENCES	5-1

<u>Appendices</u>	<u>Title</u>
APPENDIX A	Location Map
APPENDIX B	Site Plan
APPENDIX C	Aerial Photographs (1950-1988)
APPENDIX D	Boring Logs
APPENDIX E	Laboratory Data
APPENDIX F	Supplemental Information

LIST OF FIGURES

<u>Number</u>	<u>Title</u>	<u>Page</u>
3-1	Well and Boring Locations	3-2
3-2	Construction Log - Monitoring Well S8MW-1	3-3

LIST OF TABLES

<u>Number</u>	<u>Title</u>	<u>Page</u>
1-1	Delisting Petition Information	1-2
4-1	Soil Sampling - Volatile Organics and Total Petroleum Hydrocarbons	4-2
4-2	Soil Sampling Field Blank - Volatile Organics and Total Petroleum Hydrocarbons	4-3
4-3	Soil Sampling - Inorganic Constituents	4-5
4-4	Soil Sampling Field Blank - Inorganic Constituents	4-6
4-5	Groundwater Sampling - Volatile Organics	4-7
4-6	Groundwater Sampling Field Blank and Trip Blanks - Volatile Organics	4-8
4-7	Groundwater Sampling - Inorganic Constituents	4-9
4-8	Groundwater Sampling Field Blank - Inorganic Constituents	4-10

Section 1

1.0 INTRODUCTION

Grumman Aerospace Corporation has directed the preparation of this report as part of an effort to satisfy the requirements for delisting the property adjacent to Plant 12 (Site 8), hereafter referred to as "the site" from the New York State Registry of Superfund Sites (Site Code 1-30-003). The site is located to the west of the intersection of the LIRR and the South Oyster Bay Road Extension in Hicksville, New York. Information presented in this report has been compiled based upon a site inspection undertaken on May 29, 1992; an evaluation of available aerial photographs (1950-1988); various files and records obtained from the Grumman Aerospace Corporation, Paumanock Development Corporation, Nassau County Department of Health (NCDOH) and the Town of Oyster Bay; along with interviews of various Grumman personnel. The purpose of this report is to determine and document the historical use of the site and the surrounding areas.

Section 2 of this document presents an evaluation of the site's history, present use and existing conditions, and the likelihood of potential adverse impacts from the federal Superfund site known as Hooker Chemical/Ruco Polymer. The procedures followed throughout the course of the field program are described in Section 3. The soil and groundwater sampling results, and the findings and conclusions of the site assessment, are presented in Section 4.

A location map is included in Appendix A, a current "Site Plan" is included in Appendix B, and aerial photographs of the site from 1950 through 1988 have been included in Appendix C. The report presents boring logs and the results of laboratory analyses of soil and groundwater samples in Appendices D and E, respectively. In addition, relevant documentation obtained through file searches at the Grumman Aerospace Corporation, NCDOH and Town of Oyster Bay is included in Appendix F.

Correspondence from the New York State Department of Environmental Conservation (NYSDEC) to the Grumman Aerospace Corporation provided a list of the "Delisting Petition Information" required for the Grumman properties. In order to facilitate the review of this document, the 14 items requested in the NYSDEC correspondence are listed on Table 1-1 with an appropriate response or a cross reference to the location of such response in this document. The information supplied in this document is of sufficient detail to enable the NYSDEC to determine the nature of the site's past and present operations, and assess the potential for any on-site contamination.

Table 1-1
DELISTING PETITION INFORMATION

<u>Requirement</u>	<u>Response</u>
1. Site Name	Grumman, Bethpage
Owner	Grumman Aerospace Corporation
2. Site Number	1-30-003
3. Site Location	West Side of LIRR/ South Oyster Bay Road Extension Intersection Hicksville, Nassau County, NY 11801
4. Size	Approx. 6.8 Acres
5. Boundaries	See Appendices A, B and C
6. Nature of Operation	See Sections 2.1 and 2.2
Hazardous Waste Disposal	See Section 4
7. History of Site	See Section 2.1
8. History of Site Investigations	See Section 2.1 and 3
9. Waste	See Section 2.2
10. Affected Resources	See Sections 2.2 and 4
11. Demographic Information	See Section 2.2
12. Geographic Information	See Section 2.2
13. Cleanup Actions	See Section 4
14. Basis for Delisting	See Section 4

Section 2

2.0 SITE EVALUATION

Location:	West Side of LIRR/South Oyster Bay Road Extension Intersection Hicksville, New York 11801		
Section:	46	Land Use(s):	Ballfield and Parking
Block:	504	Plot Size:	Approx. 6.8 Acres
Lots:	130 and 132	Grumman Building:	Structure in Parking Area 12C
Zoning:	Industrial H	Building Area:	Approx. 2,000 square feet

2.1 Site History

As is apparent from a review of the earliest available aerial photograph of the site taken in 1950 (see Appendix C), the site appears to be undeveloped with a track from the LIRR traversing through the center of the site in an east to west direction. This line appears to have been used solely for access to a maintenance bay which can be seen approximately 100 feet to the west of the site on the 1950 aerial. The track appears to end a short distance further to the west of this structure. The structure appears to have been removed sometime between 1950 and 1955. In addition, it appears that a portion of the operations associated with the adjacent Pittsburgh Plate Glass facility, which was acquired by Grumman Aerospace Corporation in 1959 (Plant 12), extended onto the northwestern portion of the site at this time. On-site activities associated with this facility that are discernable from the aerial photographs and Grumman utility maps include what appears to be a parking area on the 1950 aerial photograph and a cinder stockpile area in the northwestern corner of the site in 1955.

The 1955 and 1957 aerials show a small basin located adjacent to the northwestern corner of the site. A review of Grumman utility maps and interviews with Grumman Aerospace Corporation personnel revealed that this area was utilized as a "resin waste pit" by the Pittsburgh Plate Glass facility prior to Grumman's acquisition of the site in 1959. This area received discharge through drain lines from Plant 12 and associated structures and is no longer evident on the 1962 aerial. From 1957 to 1962 the site remains undeveloped with no apparent on-site activities and the cinder stockpile area becoming revegetated. Between 1962 and 1969, it appears that the southern portion of the site was utilized for parking associated with a structure (not Grumman-owned) to the south of the site. In addition, the 1969 aerial shows the presence of an approximate 1.5 acre paved area containing several structures in the western portion of the site. Interviews with Grumman Aerospace Corporation personnel indicated that this area was utilized

for secondary sanitary wastewater treatment (extended aeration) until the early 1970s.

In addition to the existence of the wastewater treatment facility, the 1972 aerial also shows what appears to be a recharge basin located to the south of this facility. Grumman Aerospace Corporation personnel confirmed that this was a recharge basin that was subsequently filled in. This area is not apparent on the 1988 aerial; however, the development of the existing on-site recharge basin is evident in the southwestern corner of the site. The 1988 aerial also shows the development of a parking lot in the southeastern portion of the site, and a northward extension of the paved area (Parking Area 12C) in the western portion of the site. Parking Area 12C appears to have one remaining structure that was associated with the wastewater treatment facility. As indicated on the 1988 aerial, this parking area was, and continues to be, occupied by several trailers.

2.2 General Site Description

The site is currently owned by Grumman Aerospace Corporation and is utilized for parking. A ballfield is also present on the eastern portion of the site. The entire site is zoned Industrial H and comprises approximately 6.8 acres. The site is surrounded by commercial development with areas of medium to high density residential development existing no closer than approximately 700 feet from the site boundaries. The Site Plan is presented in Appendix B.

A May 29, 1992 site inspection revealed the presence of a "chemical storage area" adjacent to Parking Area 12C; however, there were no apparent chemicals being stored at this location at the time of the site inspection. Grumman Aerospace Corporation personnel indicated that this storage area has been at this location for approximately 2 years (the area is not evident on the aerial dated March 8, 1988) and that it was originally a waste collection station for used oil. It is currently used predominantly for the storage of latex paints and associated products. The only permanent on-site structure, located in Parking Area 12C, was originally associated with the sanitary wastewater treatment facility. Since the early 1970s, it has been utilized by Grumman's environmental department for processing work orders and other clerical activities. The only other on-site structures are trailers located on the northern portion of Parking Area 12C and a Flight Control Systems Test trailer located on the southern portion of the site.

According to interviews with Grumman personnel and a review of agency files and Grumman tank records, there is currently one on-site storage tank located adjacent to the eastern side of the building in Parking Area 12C. This tank is identified by Tank #12-05-1 which is an in-service 1,000 gallon underground fuel oil storage tank utilized for space heating of the structure in Parking Area 12C. There is no apparent evidence of the past or present existence of any other on-site storage tanks. Tank #12-05-1 passed a tightness test on August 13, 1990, the results of which are presented in Appendix F.

Grumman utility maps depict both the on-site and adjacent off-site recharge basins as having drain lines connecting them to Plant 12 and its associated structures (including but not limited to Plant 12A, Plant 12B and the boiler building). The on-site recharge basin contained no ponding and was not receiving any runoff/discharge at the time of the May 29, 1992 site inspection; however, the recharge basin located immediately to the west of this area was receiving a steady flow of discharge. This discharge (outfall 7) is regulated as per SPDES Permit NY0096792. No areas of stressed vegetation were observed during the site inspection of May 29, 1992.

The site is generally level with good drainage. The Soil Conservation Service (2/87) classifies the majority of the site as Udipsaments (nearly level) with outlying areas (Parking Area 12C) of Urban Land. Udipsaments (nearly level) are defined as manmade fills or borrow areas, most of which are grass covered with slopes of 0 to 3 percent, which consist of very deep soils that are excessively drained to well-drained. Urban Land is defined as an area with at least 85 percent asphalt, concrete, or other impervious building material, with most of the remaining small areas of soil being well drained Riverhead, Hempstead, or Enfield soils, or excessively drained Udipsaments. Based on measurements obtained during the installation of groundwater monitoring wells at the site as part of this project, the depth from ground surface to the upper glacial aquifer is approximately 55 feet.

2.3 Hooker Chemical Site

An element related to the delisting of the site is the proximity of the property to the Hooker Chemical/Ruco Polymer NPL site. The site has been on the federal Superfund list since 1984, and remains active. The site has been the subject of monitoring and investigations intended to identify the extent of contamination and hazard resulting from previous waste disposal practices at this site. A Remedial Investigation and Feasibility Study (RI/FS) has been conducted, with the associated field work completed in February 1990. The RI/FS identified two operable units at the Hooker Chemical site requiring remedial action.

Operable Unit 1 has necessitated the remediation of soil and groundwater contaminated by volatile organic compounds (VOCs) used in the various manufacturing processes employed by the facilities on-site. Operable Unit 2 pertains to a relatively small area of soil contaminated by PCBs resulting from releases of the heat transfer fluid Therminol. The migration of PCBs from the on-site structure referred to as the "Pilot Plant" to other portions of the site was enhanced by storm water runoff and on-site truck traffic. However, the extent of contaminated soil is contained entirely on the Hooker Chemical/Ruco Polymer site. No off-site contamination has been identified from Operable Unit 2. Remedial action involving Operable Unit 2 has been completed.

Until the EPA finalizes its review and releases all details concerning Operable Unit 1, it is not possible to fully characterize the extent of off-site impacts. The nearest area of the site proposed for delisting is located approximately 150 feet to the south of this area. According to recent communication with the EPA, the RI report was approved on December 7, 1992. The EPA expects to have a Feasibility Study completed by May 1993. A Record of Decision on a Proposed Remedial Action Plan is targeted for June 30, 1993.

Section 3

3.0 FIELD PROGRAM

The following is a description of the field activities undertaken at the site in support of the delisting petition. Daily Field Activity Reports, which are available in the project file, provide documentation of the field program which included installation of two soil borings, installation of one monitoring well, sampling of groundwater and soil, and air monitoring.

3.1 Monitoring Well Installation

An existing USGS well (NYS well ID #10594), located immediately east of the site, was utilized as a downgradient well and an existing Hooker Chemical/Ruco Polymer well (GM-9S), located to the north of the site, was utilized as an upgradient well. In addition, one shallow monitoring well was installed in the southern portion of the site and utilized as an additional downgradient monitoring well.

Figure 3-1 presents the locations of these wells and Figure 3-2 presents the construction log for the installed monitoring well. The well was installed in a boring advanced using the hollow stem auger method of drilling. Well construction consisted of 2-inch I.D. PVC screen and casing with threaded joints. The bottom of the 15 foot, 0.010 inch slot screen was sealed with a threaded PVC plug. The bottom of the screen for S8MW-1 was set at a depth of 65 feet below ground surface, and the water table was encountered at a depth of 55 feet.

A sandpack was installed around the screen using a tremie pipe. Above the sandpack, a minimum 2-foot thick bentonite seal was installed followed by grouting with a cement/bentonite grout for the remainder of the annulus to ground surface also using a tremie pipe. The well was protected with a locking PVC cap and a steel flush mount vault with a bolted cover. Upon completion of well construction, the well was developed using a submersible pump and/or bailed. The well was considered developed when the discharge water measured 50 nephelometric turbidity units (NTUs) or less.

3.2 Monitoring Well Borehole Soil Sampling

During construction of the monitoring well borehole, split spoon samples were collected continuously for the first 10 feet and every 5 feet from that point on to the well completion depth. Appendix D includes the boring log for the monitoring well borehole installed as part of this project.

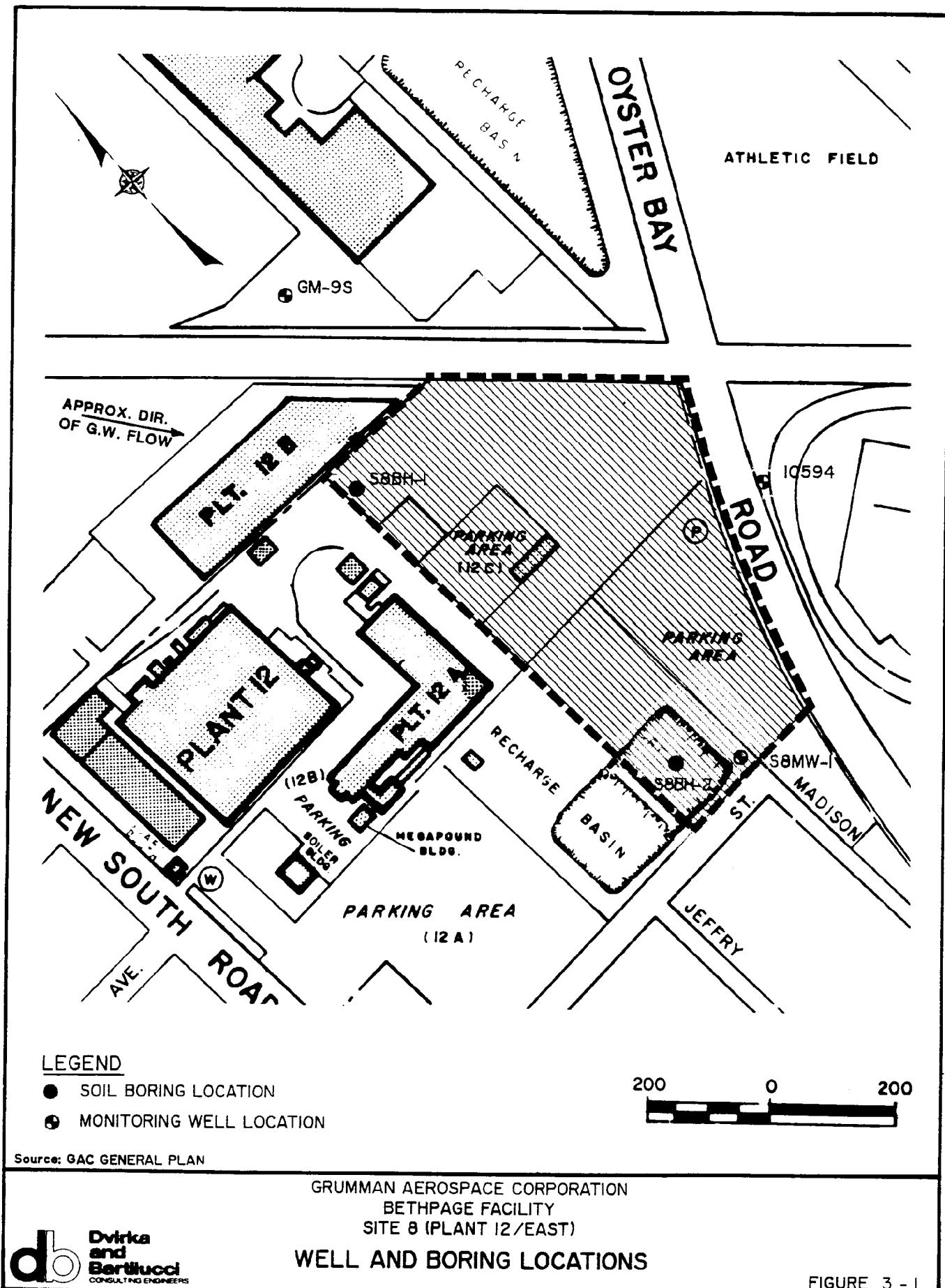


FIGURE 3 - I

WELL CONSTRUCTION LOG

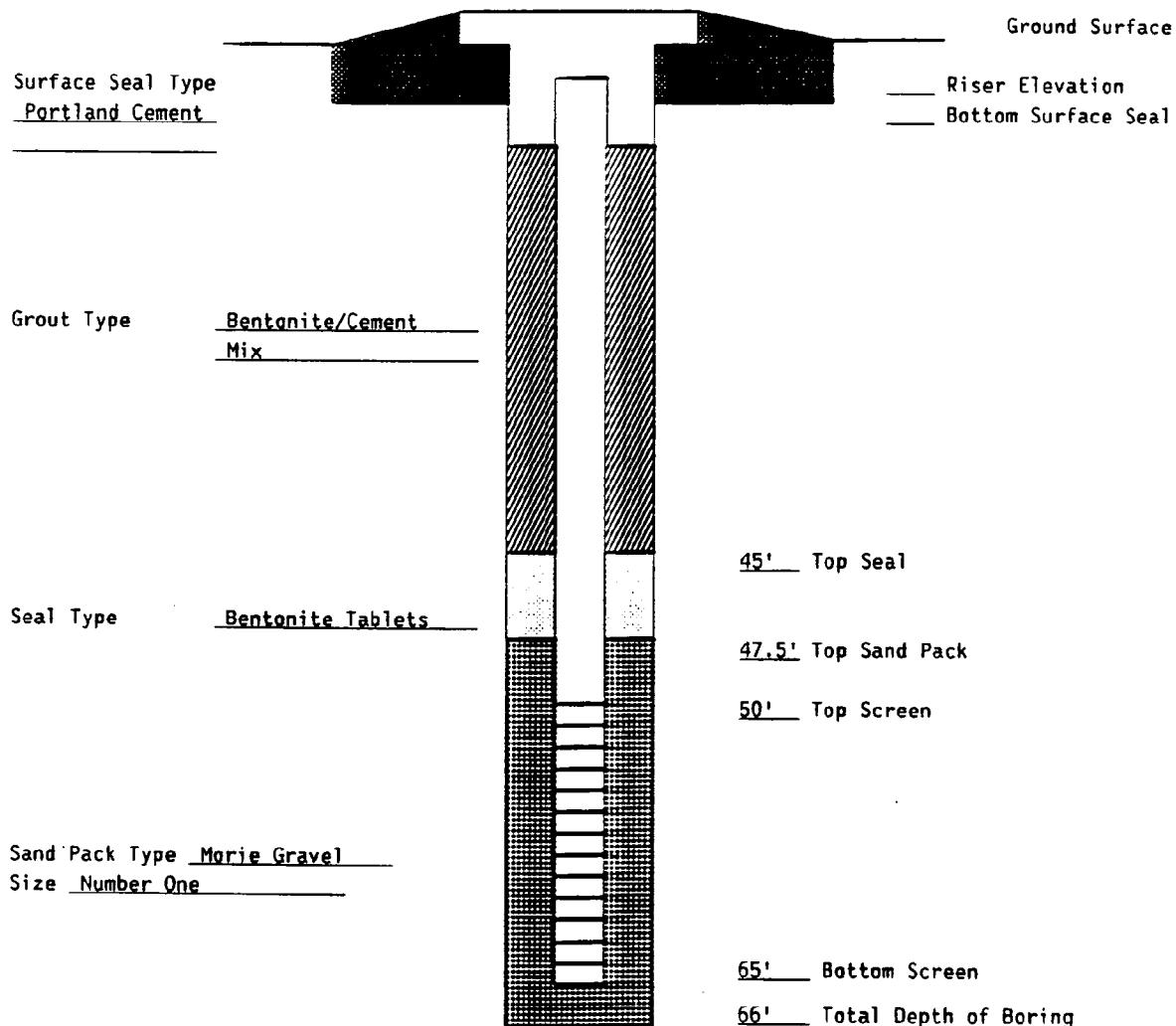
SITE Grumman Aerospace Corporation JOB NO. 1167 WELL NO. S8-MW-1

TOTAL DEPTH 65' SURFACE ELEV. _____ TOP RISER ELEV. _____

WATER LEVELS (DEPTH, DATE, TIME) 55.3' 12:30 pm DATE INSTALLED 8/13/92

RISER	DIA <u>2"</u>	MATERIAL <u>PVC</u>	LENGTH <u>50'</u>
SCREEN	DIA <u>2"</u>	MATERIAL <u>PVC</u>	LENGTH <u>15'</u> SLOT SIZE <u>0.010"</u>

SCHEMATIC



Fifteen split spoon samples were obtained from the S8MW-1 borehole. The split spoon samples indicated that the soil in the area of S8MW-1 was mostly brown/light orange fine to medium to coarse sand with little gravel to a depth of 30 feet, light brown/white/pink clayey sand to a depth of 42 feet and brown/gray silty fine sand to a depth of 65 feet.

Field screening of the split spoon samples and borehole, taken with an organic vapor analyzer during construction, did not indicate readings above ambient conditions, and there was no apparent indication of contamination in the borehole associated with discoloration, odor or soil texture. A soil sample for laboratory analysis was obtained from the split spoon sample collected at the 4 to 6-foot interval. The soil sample was analyzed for volatile organics using USEPA SW-846 Method 8010/8020 and total petroleum hydrocarbons (TPHCs) using USEPA Method 418.1. The analytical results from the monitoring well borehole soil samples are presented in Section 4.

3.3 Soil Boring Sampling

Soil samples were obtained from two soil borings installed within the site. The boring logs are presented in Appendix D. The hollow stem auger method of drilling was utilized for both soil borings.

Borehole S8BH-1 was advanced to a depth of 20 feet in the northwestern portion of the site adjacent to the location of the former "resin basin" associated with the Pittsburgh Plate Glass facility. Continuous split spoon sampling was performed from the 10 to 20-foot interval, and a sample was collected from the 14 to 16-foot interval for laboratory analysis of volatile organics using USEPA SW-846 Method 8010/8020, total petroleum hydrocarbons using USEPA Method 418.1 and metals using Method 6010.

Borehole S8BH-2 was advanced to a depth of 10 feet in the base of the recharge basin located in the southwestern portion of the site. Continuous split spoon sampling was performed from the 0 to 10-foot interval, and a sample was collected from the 4 to 6-foot interval for laboratory analysis of volatile organics using USEPA SW-846 Method 8010/8020, total petroleum hydrocarbons using USEPA Method 418.1 and metals using Method 6010. The analytical results from the soil boring samples are presented in Section 4.

3.4 Groundwater Sampling

Prior to well sampling, a minimum of three times the volume of standing water in the casing and sandpack from each well (GM-9S, 10594 and S8MW-1) was removed with a bailer. One sample was collected from each well for laboratory analysis. The water samples were analyzed for volatile organics using Method 624 and metals using USEPA SW-846 Method 6010. The analytical results from the groundwater samples are presented in Section 4.

3.5 Volatile Organics Monitoring

During the drilling of the monitoring well, no volatile organic vapors were detected in the workers' breathing zone. The air monitoring results were documented on daily Air Monitoring Forms which are available in the project file. Prior to use, the organic vapor analyzer (OVA-128), which is a flame ionization detector, was calibrated with 95 percent methane gas/zero air. The Equipment Calibration Logs are also available in the project file. As described previously, the split spoon samples were also monitored for volatile organics utilizing the OVA-128, and no significant levels of volatile organics were detected.

Section 4

4.0 FINDINGS AND CONCLUSIONS

The volatile organic analytical results from the groundwater samples are compared to the New York State Department of Health (NYSDOH) Drinking Water Standards. Soil sample results are compared to recommended soil cleanup objectives as identified in the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM 4046). The results are discussed in detail by matrix in the following sections.

4.1 Monitoring Well Borehole Soil Sampling

One soil sample was collected from the monitoring well borehole and analyzed for volatile organics and total petroleum hydrocarbons (TPHCs). The results of these analyses are presented on Table 4-1 with the associated soil sampling field blank results presented on Table 4-2. In the soil sample collected from S8MW-1, methylene chloride was detected at 12.0 ug/kg. However, since methylene chloride was also detected in the field blank, and the compound is a common laboratory chemical, its presence in the environmental sample can be attributed to laboratory contamination.

The levels of total petroleum hydrocarbons for S8MW-1 are also presented on Table 4-1. In sample S8MW-1, which was collected at a depth of 4 to 6 feet below ground surface, the level of TPHCs was detected at 99.6 mg/kg utilizing EPA Method 418.1. As is mentioned above, there is no evidence of any prior fuel spills or releases, nor was there any evidence of either discoloration or petroleum odors associated with the geologic or laboratory samples collected. To determine if the TPHCs detected were attributable to fuel-related compounds, the sample was also analyzed utilizing NYSDOH Method 310-13. The analytical results for sample S8MW-1 utilizing Method 310-13 are presented in Table 4-1 and indicate that the fuel-related constituents such as gasoline, lubricating oil, kerosene and fuel oil were not detected above the method detection limit. Therefore, it appears that the TPHCs detected in the environmental sample are not associated with any fuel-related spills.

4.2 Soil Boring Sampling

In addition to presenting the analytical results obtained from the soil samples collected from the monitoring well boreholes, Table 4-1 also presents the volatile organic and TPHC results for the soil samples collected from each of the two installed soil borings. Methylene chloride was detected in samples S8BH-1 and S8BH-2 at concentrations of 14.0 ug/kg and 1.8 ug/kg,

TABLE 4-1
GRUMMAN AEROSPACE CORPORATION
SITE 8 (PLANT 12/EAST)
SOIL SAMPLING
VOLATILE ORGANICS AND TOTAL PETROLEUM HYDROCARBONS

SAMPLE ID	S8MW1S	S8BH1S	S8BH2S	NYSDEC RECOMMENDED SOIL CLEANUP OBJECTIVES
SAMPLE DEPTH	(4'-6')	(14'-16')	(4'-6')	
DATE COLLECTED	08/12/92	08/13/92	07/30/92	
MATRIX	SOIL	SOIL	SOIL	
%MOISTURE	2	2	3	
DILUTION FACTOR	1	1	1	
UNITS	(ug/kg)	(ug/kg)	(ug/kg)	(ug/kg)
PARAMETER				
Chloromethane	U	U	U	----
Bromomethane	U	U	U	----
Vinyl chloride	U	U	U	200
Chloroethane	U	U	U	1900
Methylene chloride	12.0 B	14.0 B	1.8	100
1,1-Dichloroethene	U	U	U	400
1,1-Dichloroethane	U	U	U	200
1,2-Dichloroethene (trans)	U	U	U	300
Chloroform	U	U	U	300
1,2-Dichloroethane	U	U	U	100
1,1,1-Trichloroethane	U	U	U	800
Carbon tetrachloride	U	U	U	600
Bromodichloromethane	U	U	U	----
1,2-Dichloropropane	U	U	U	----
cis-1,3-Dichloropropene	U	U	U	----
Trichloroethene	U	U	U	700
Dibromochloromethane	U	U	U	----
1,1,2-Trichloroethane	U	U	U	----
Benzene	U	U	U	60
trans-1,3-Dichloropropene	U	U	U	----
Bromoform	U	U	U	----
Tetrachloroethene	U	U	U	1400
1,1,2,2-Tetrachloroethane	U	U	U	600
Toluene	1.1	1.6	U	1500
Chlorobenzene	U	U	U	1700
Ethylbenzene	U	U	U	5500
Xylene (total)	U	U	U	1200
2-Chloroethylvinylether	U	U	U	----
Trichlorofluoromethane	U	U	U	----
1,2-Dichlorobenzene	U	U	U	7900
1,3-Dichlorobenzene	U	U	U	1600
1,4-Dichlorobenzene	U	U	U	8500
Total Petroleum Hydrocarbons (mg/kg)	99.6	57.4	143	----
Gasoline	U	U	U	----
Lubricating Oil	U	U	U	----
Kerosene	U	U	U	----
Fuel Oil	U	U	U	----

QUALIFIERS:

U: Analyzed for but not detected

B: Compound found in method blank as well as sample

NOTE:

----: Not Established

TABLE 4-2
GRUMMAN AEROSPACE CORPORATION
SITE 8 (PLANT 12/EAST)
SOIL SAMPLING FIELD BLANK
VOLATILE ORGANICS AND TOTAL PETROLEUM HYDROCARBONS

SAMPLE ID	S9FBS	
SAMPLE DEPTH		
DATE COLLECTED	07/27/92	
MATRIX	WATER	
%MOISTURE	NA	
DILUTION FACTOR	1	
UNITS	(ug/l)	
PARAMETER		
Chloromethane		U
Bromomethane		U
Vinyl chloride		U
Chloroethane		U
Methylene chloride	2.9	B
1,1-Dichloroethene		U
1,1-Dichloroethane		U
1,2-Dichloroethene (trans)		U
Chloroform		U
1,2-Dichloroethane		U
1,1,1-Trichloroethane		U
Carbon tetrachloride		U
Bromodichloromethane		U
1,2-Dichloropropane		U
cis-1,3-Dichloropropene		U
Trichloroethene		U
Dibromochloromethane		U
1,1,2-Trichloroethane		U
Benzene		U
trans-1,3-Dichloropropene		U
Bromoform		U
Tetrachloroethene		U
1,1,2,2-Tetrachloroethane		U
Toluene		U
Chlorobenzene		U
Ethylbenzene		U
Xylene (total)		U
2-Chloroethylvinylether		U
Trichlorofluoromethane		U
1,2-Dichlorobenzene		U
1,3-Dichlorobenzene		U
1,4-Dichlorobenzene		U
Total Petroleum Hydrocarbons	U	

QUALIFIERS:

U: Analyzed for but not detected

B: Compound found in method blank as well as sample

respectively. Since methylene chloride was also detected in the field blank, its presence in the environmental sample can be attributed to laboratory contamination. Toluene was also detected in sample S8BH-1 at a concentration of 1.6 ug/kg. However, all inorganic constituents were detected in concentrations that were well below the referenced cleanup objectives.

The levels of total petroleum hydrocarbons detected in samples S8BH-1 and S8BH-2 were 57.4 mg/kg and 143 mg/kg, respectively. Additional analyses on each of the preceding samples utilizing Method 310-13 indicated that the fuel-related constituents such as gasoline, lubricating oil, kerosene and fuel oil were not detected above the method detection limit. Therefore, it appears that the TPHCs detected in these environmental samples are not associated with any fuel-related spills and may be attributable to asphalt since S8BH-1 was located in a paved parking lot and S8BH-2 was located in a recharge basin which has received storm water runoff from paved areas in the vicinity.

The results of the inorganic analyses of the soil boring samples and the associated field blank are presented on Tables 4-3 and 4-4, respectively. As indicated on Table 4-3, arsenic, chromium, copper, lead and zinc were detected in both soil boring samples. However, all inorganic constituents were detected at concentrations well below the referenced cleanup objectives.

4.3 Groundwater Sampling

One groundwater sample was collected from each monitoring well and analyzed for volatile organic and inorganic constituents. The results of the volatile organic analyses of the groundwater samples and the associated field and trip blanks are presented on Tables 4-5 and 4-6, respectively.

Trichloroethene was detected in USGS-10594 and S8MW-1 at concentrations of 3 ug/l and 1 ug/l, respectively, both of which are well below the NYSDOH drinking water standard of 5 ug/l. Acetone was detected above the NYSDOH drinking water standard in GM-9S at a concentration of 180 ug/l. However, this monitoring well is located directly downgradient of the Hooker/Ruco NPL site and is only representative of groundwater quality upgradient of the site proposed for delisting. Therefore, the elevated level of acetone detected in groundwater sample GM-9S is not attributable to the site.

The results of inorganic analysis of the groundwater samples and the associated field blank are presented on Tables 4-7 and 4-8, respectively. As indicated on Table 4-7, several inorganic constituents were detected in the groundwater samples obtained from the monitoring wells

TABLE 4-3
 GRUMMAN AEROSPACE CORPORATION
 SITE 8 (PLANT 12/EAST)
 SOIL SAMPLING
 INORGANIC CONSTITUENTS

SAMPLE ID	S8BH1S	S8BH2S	NYSDEC RECOMMENDED SOIL CLEANUP OBJECTIVES
SAMPLE DEPTH	(14'-16')	(4'-6')	
DATE COLLECTED	08/13/92	07/30/92	
MATRIX	SOIL	SOIL	
% SOLIDS	97.6	96.8	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)
PARAMETER			
Antimony	U	U	SB
Arsenic	1.3 B	4.3	7.5 or SB
Beryllium	U	U	1.0 or SB
Cadmium	U	U	1 or SB
Chromium	6.5	6.3	10 or SB
Copper	3.2 B	1.9 B	25 or SB
Lead	2.2	2.0	30 or SB
Mercury	U	U	0.1
Nickel	U	U	13 or SB
Selenium	U	U	2 or SB
Silver	U	U	SB
Thallium	U	U	SB
Zinc	5.0	7.0	20 or SB

QUALIFIERS:

U: Analyzed for but not detected
 B: Value less than contract required
 detection limits but greater than
 instrument detection limits.

NOTE:

SB: Site Background

TABLE 4-4
GRUMMAN AEROSPACE CORPORATION
SITE 8 (PLANT 12/EAST)
SOIL SAMPLING FIELD BLANK
INORGANIC CONSTITUENTS

SAMPLE ID	S9FBS
SAMPLE DEPTH	
DATE COLLECTED	07/27/92
MATRIX	WATER
% SOLIDS	0.0
UNITS	(ug/l)
PARAMETER	
Antimony	U
Arsenic	U
Beryllium	U
Cadmium	U
Chromium	U
Copper	U
Lead	U
Mercury	U
Nickel	U
Selenium	U
Silver	U
Thallium	U
Zinc	U

QUALIFIERS:

U: Analyzed for but not detected

TABLE 4-5
 GRUMMAN AEROSPACE CORPORATION
 SITE 8 (PLANT 12/EAST)
 GROUNDWATER SAMPLING
 VOLATILE ORGANICS

SAMPLE ID	GM9S	USGS10594	S8MW1	NYSDOH DRINKING WATER STANDARDS
DATE COLLECTED	09/02/92	09/02/92	09/01/92	
SAMPLE VOLUME	5 ml	5 ml	5 ml	
DILUTION FACTOR	10	1	1	
UNITS	(ug/l)	(ug/l)	(ug/l)	(ug/l)
PARAMETER				
Chloromethane	U	U	U	5
Bromomethane	U	U	U	5
Vinyl chloride	U	U	U	2
Chloroethane	U	U	U	5
Methylene chloride	U	U	U	5
Acetone	180	U	U	50
Carbon disulfide	U	U	U	50
1,1-Dichloroethene	U	U	U	5
1,1-Dichloroethane	U	U	U	5
1,2-Dichloroethene (total)	U	U	U	5
Chloroform	U	U	U	100**
1,2-Dichloroethane	U	U	U	5
2-Butanone	U	U	U	5
1,1,1-Trichloroethane	U	U	U	5
Carbon tetrachloride	U	U	U	5
Bromodichloromethane	U	U	U	5
1,2-Dichloropropane	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	5
Trichloroethene	U	3	J	5
Dibromochloromethane	U	U	U	100**
1,1,2-Trichloroethane	U	U	U	5
Benzene	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	5
Bromoform	U	U	U	100**
4-Methyl-2-Pentanone	U	U	U	5
2-Hexanone	U	U	U	5
Tetrachloroethene	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
Toluene	U	U	U	5
Chlorobenzene	U	U	U	5
Ethylbenzene	U	U	U	5
Styrene	U	U	U	5
Xylene (total)	U	U	U	5

QUALIFIERS:

U: Analyzed for but not detected

J: Compound found below detection limit

NOTES:

**: Applies to the sum of trihalomethanes

: Exceeds standard value

TABLE 4-6
 GRUMMAN AEROSPACE CORPORATION
 SITE 8 (PLANT 12/EAST)
 GROUNDWATER SAMPLING
 FIELD BLANK AND TRIP BLANKS
 VOLATILE ORGANICS

SAMPLE ID	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
DATE COLLECTED	08/27/92	08/27/92	08/31/92	09/02/92
SAMPLE VOLUME	5 ml	5 ml	5 ml	5 ml
DILUTION FACTOR	1	1	1	1
UNITS	(ug/l)	(ug/l)	(ug/l)	(ug/l)
PARAMETER				
Chloromethane	U	U	U	U
Bromomethane	U	U	U	U
Vinyl chloride	U	U	U	U
Chloroethane	U	U	U	U
Methylene chloride	3 J	3 J	7 J	2 J
Acetone	5 BJ	6 BJ	U	U
Carbon disulfide	U	U	U	U
1,1-Dichloroethene	U	U	U	U
1,1-Dichloroethane	U	U	U	U
1,2-Dichloroethene (total)	U	U	U	U
Chloroform	U	U	U	U
1,2-Dichloroethane	U	U	U	U
2-Butanone	U	U	U	U
1,1,1-Trichloroethane	U	U	U	U
Carbon tetrachloride	U	U	U	U
Bromodichloromethane	U	U	U	U
1,2-Dichloropropane	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U
Trichloroethene	U	U	U	U
Dibromochloromethane	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U
Benzene	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U
Bromoform	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U
2-Hexanone	U	U	U	U
Tetrachloroethene	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U
Toluene	U	U	U	U
Chlorobenzene	U	U	U	U
Ethylbenzene	U	U	U	U
Styrene	U	U	U	U
Xylene (total)	U	U	U	U

QUALIFIERS:

U: Analyzed for but not detected

B: Compound found in method blank as well as sample

J: Compound found below detection limit

TABLE 4-7
GRUMMAN AEROSPACE CORPORATION
SITE 8 (PLANT 12/EAST)
GROUNDWATER SAMPLING
INORGANIC CONSTITUENTS

SAMPLE ID	GM9S	GM9SF	USGS10594	USGS10594F	S8MW1	NYSDOH DRINKING WATER STANDARDS
	DATE COLLECTED	09/02/92	09/02/92	09/02/92	09/02/92	
UNITS	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
PARAMETER						
Antimony	80.2	U	U	U	U	---
Arsenic	85.2	U	U	U	U	50
Beryllium	2.4 B	1.2 B	U	U	U	---
Cadmium	U	U	U	U	U	10
Chromium	66.1	14.7	23.5	U	U	50
Copper	69.9	U	114	U	U	1000
Lead	55.4	U	249	U	U	50
Mercury	1.1	0.20	0.54	U	U	2
Nickel	37.4 B	34.8 B	90.9	33.4 B	U	---
Selenium	U	U	U	U	U	10
Silver	U	U	17.3	U	U	50
Thallium	U	U	U	U	U	---
Zinc	82.4	87.2	208	22.0	18.1 B	5000

QUALIFIERS:

U: Analyzed for but not detected
 B: Value less than contract required detection limits but greater than instrument detection limits.
 F: Filtered sample

NOTES:

----: Not established
 : Exceeds standard value

TABLE 4-8
GRUMMAN AEROSPACE CORPORATION
SITE 8 (PLANT 12/EAST)
GROUNDWATER SAMPLING
FIELD BLANK
INORGANIC CONSTITUENTS

SAMPLE ID	FIELD BLANK
DATE COLLECTED	08/27/92
UNITS	(ug/l)
PARAMETER	
Antimony	U
Arsenic	U
Beryllium	U
Cadmium	U
Chromium	U
Copper	U
Lead	U
Mercury	U
Nickel	U
Selenium	U
Silver	U
Thallium	U
Zinc	U

QUALIFIERS:

U: Analyzed for but not detected

associated with the site. Inorganic constituents detected above the NYSDOH drinking water standards included arsenic, chromium and lead from GM-9S and lead from USGS-10594. However, it should be noted that these samples could not be obtained at a turbidity of less than 50 NTUs. As a result, additional groundwater samples from these locations were filtered to remove soil particles prior to laboratory analysis. As indicated on Table 4-7, the preceding constituents were not detected in the filtered samples (GM-9SF and USGS-10594F). Therefore, it appears that the excess levels of inorganic constituents in GM-9S and USGS-10594 are attributable to soil contamination and is not indicative of groundwater quality. As a result, it can be concluded that all inorganic constituents related to groundwater quality were detected in concentrations that were well below the NYSDOH drinking water standards.

Furthermore, the location of USGS-10594 is over 60 feet to the east of the site and is separated from the site by the South Oyster Bay Road Extension. The on-site areas in the vicinity of the USGS well are comprised of grassy areas with no apparent evidence of any stressed vegetation or previous industrial activity. Similarly, GM-9S is located over 200 feet to the north of the site. Therefore, it does not appear that any soil contamination in the immediate vicinity of USGS-10594 or GM-9S would be attributable to on-site locations.

4.4 Conclusions

A review of agency and Grumman files revealed no records pertaining to any chemical and/or fuel spills on-site. The only on-site storage tank (Tank #12-05-1) passed a tightness test on August 13, 1990, the results of which are presented in Appendix F. Based on the site history and visual inspections performed on May 29, 1992, it does not appear that the site was subjected to any chemical and/or fuel spills or releases. With the exception of acetone, which was detected in groundwater sample GM-9S at a concentration of 180 ug/l, none of the compounds were detected above the referenced standards/guidelines other than those which appear to be attributable to off-site soil contamination (through analyses of unfiltered and filtered groundwater samples). Furthermore, the location of monitoring well GM-9S is directly downgradient of the Hooker/Ruco NPL site and is only representative of groundwater quality upgradient of the site proposed for delisting. Therefore, the elevated level of acetone detected in groundwater sample GM-9S is not attributable to the site.

Based on the above findings, we believe that the information presented in this document is sufficient to support the delisting of the site under New York State regulations.

Section 5

5.0 REFERENCES

Dvirka and Bartilucci Consulting Engineers; "Sterling Center - Draft Generic Environmental Impact Statement - Volume 1A;" June 1990.

EBASCO, Final Work Plan RI/FS Hooker Chemical/Ruco Polymer Superfund Site, EPA Contract 68-01-7250, Work Assignment No. 186-2443, September 1988.

Legette, Brashear & Graham, Final Field Operations Plan, August 1989.

Legette, Brashear & Graham, Focused Feasibility Study for Remediation of Soils Containing Arochlor 1248 for Occidental Chemical Corp., June 1990.

LKB Aerial Photographs: April 11, 1950; January 20, 1955; January 24, 1957; March 23, 1962; April 11, 1969; April 18, 1972; March 8, 1988.

United States Department of Agriculture, Soil Conservation Service, Soil Survey of Nassau County, New York, February 1987.

USEPA, Declaration for Record of Decision, Hooker Chemical/Ruco Polymer Site, Hicksville, Nassau County, New York, September 1990.

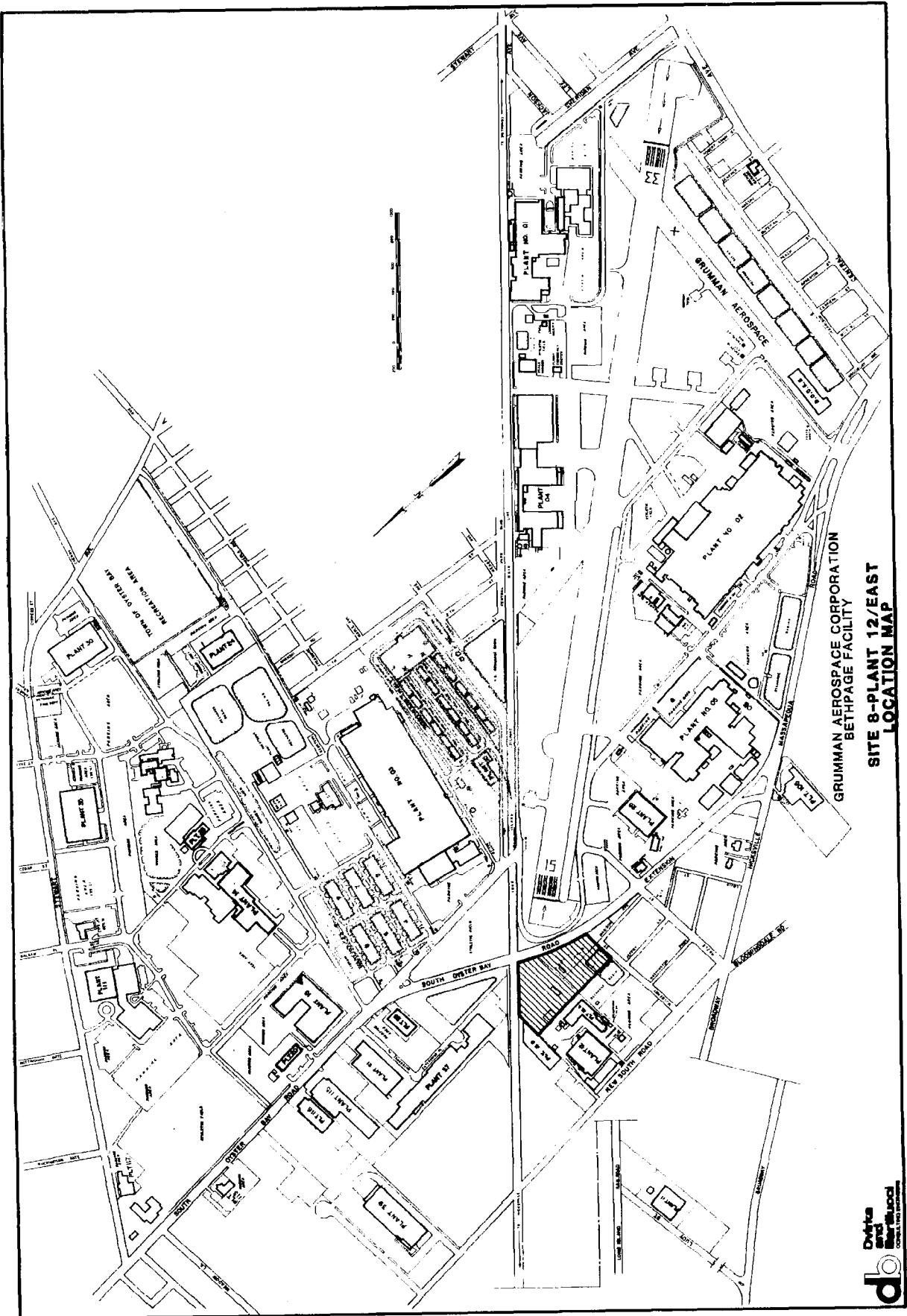
USEPA - Region 2, Proposed Plan Superfund Update Hooker Chemical/Ruco Polymer Site, Hicksville, New York, July 1990.

Appendix A

APPENDIX A

LOCATION MAP

2294G
1167



DRAKE
and
SCHLUETER
GENERAL CONTRACTORS

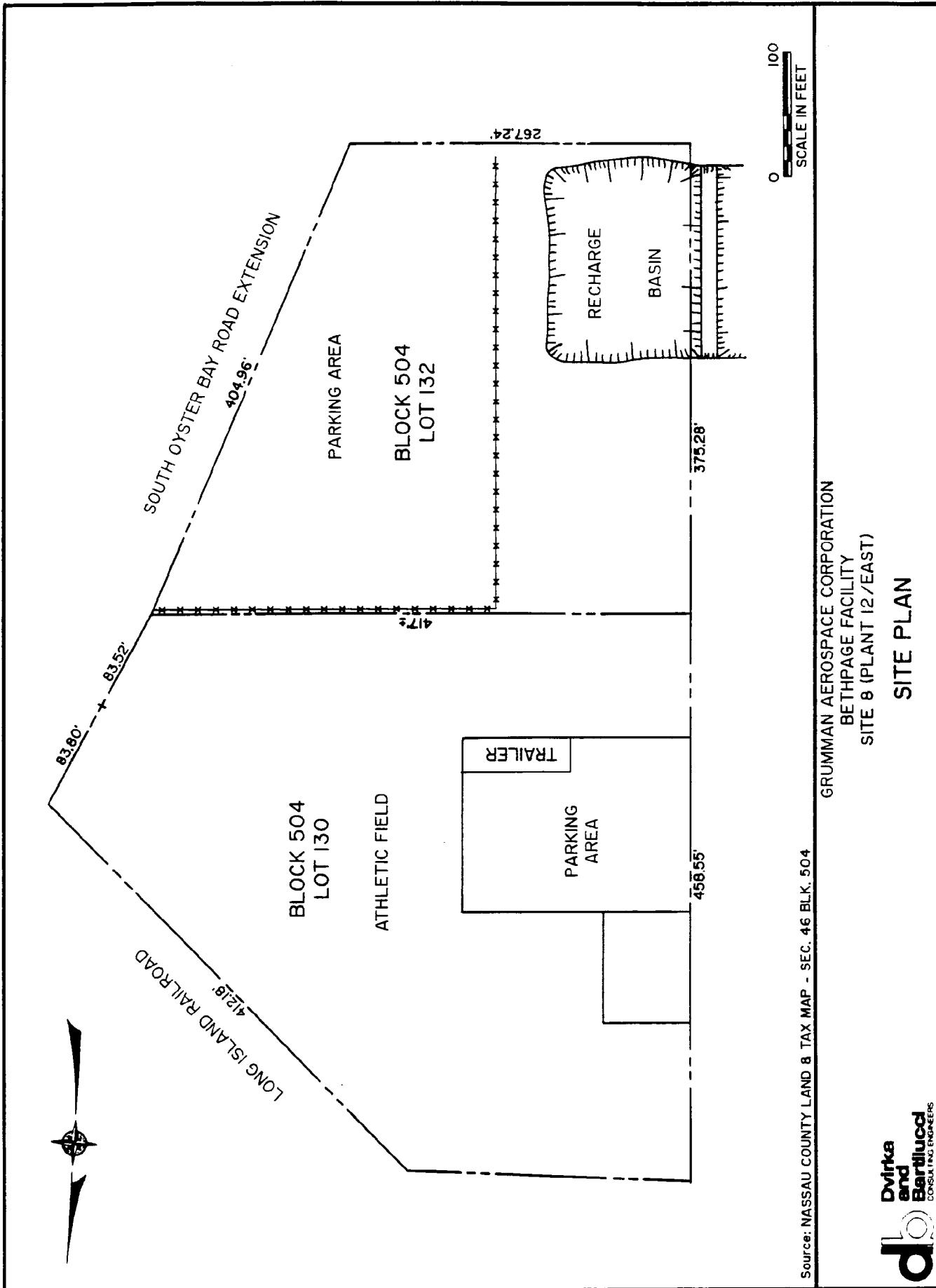
SITE 8-PLANT 12/EAST
LOCATION MAP

NYSDEC 045993

Appendix B

APPENDIX B

SITE PLAN



Source: NASSAU COUNTY LAND & TAX MAP - SEC. 46 BLK. 504

GRUMMAN AEROSPACE CORPORATION
BETHPAGE FACILITY
SITE 8 (PLANT 12/EAST)

SITE PLAN

Dvinka and Bartlucci
CONSULTING ENGINEERS

Appendix C

APPENDIX C

AERIAL PHOTOGRAPHS (1950-1988)

2294G
1167

4/11/50

NYSDEC 045999

20/55

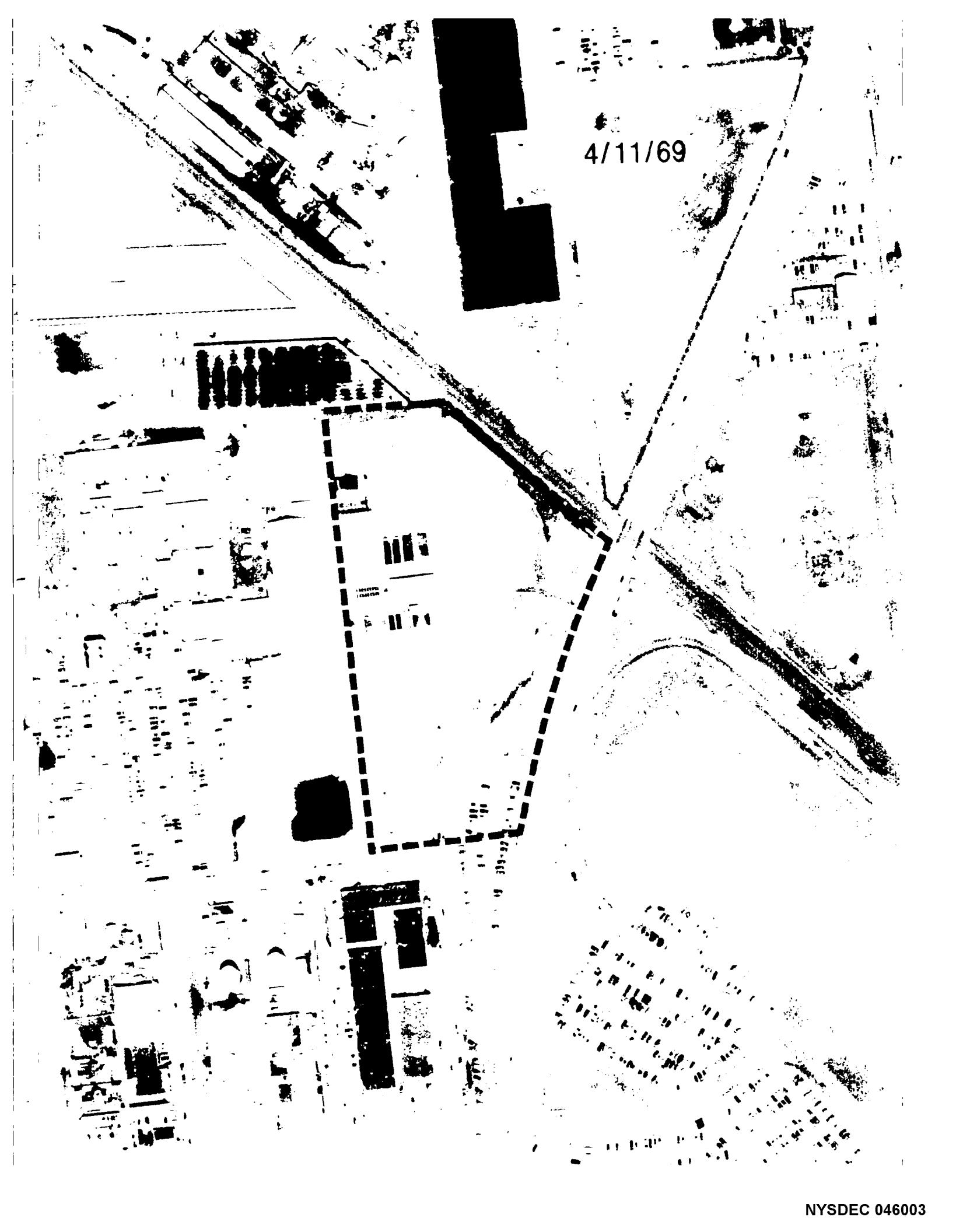


NYSDEC 046000



NYSDEC 046001

3/23/62



4/11/69

4/18/72



3/08/88

Appendix D

APPENDIX D

BORING LOGS

2294G
1167

NYSDEC 046007



BORING LOG

Project No.:	1167	Well/Boring No.:	S8-BH-2
Project Name:	Grumman Aerospace	Sheet 1 of 1	
By:	KSE	Date:	7/30/92
Chk'd:		Date:	

Fenley and Nicol						
DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
-0-	S-1	0-2	20"	13, 6, 12	0	LT brown-tan m-c subrnd Qtg Sand, little silt, Dark Brown soft loamy soil with grass at 0-2" damp.
1-						
2						
3	S-2	2-4	20"	7, 19, 13, 19	0	Tan coarse subrnd Qtg Sand, tr. Silt, some - little fm gravel, tr. cobble, Fe staining, Iron nodules, loose. damp.
4						
5	S-3	4-6	18"	6, 8, 12, 13	0	Tan coarse - medium Qtg Sand, trace silt, trace fm gravel, trdk minerals. damp.
6-						
7	S-4	6-8	18"	6, 8, 11, 15	0	LT tan, Coarse - medium subrnd Qtg Sand, trace fine gravel, trace silt, trdk minerals, well graded. damp.
8-						
9-						
10-	S-5	8-10	20"	6, 10, 11, 11	0	LT tan, m-c subrnd Sand, little-trace fine gravel, trace silt, trdk minerals, damp.
Remarks: Soil sample (4-6'), for laboratory analysis				Water Level Measurement	Date	
					Date	
					Date	
					Date	

BL



DVIRKA
AND
BARTILUCCI

BORING LOG

Project No.:	1167	Well/Boring No.:	S8-MW-1
Project Name:	Grumman Aerospace	Sheet 1 of 1	
		By: KAR	Date: 8/12/92
		Chk'd:	Date:

Drilling Contractor:	Fenley and Nicol	Borehole Completion Depth:	65'
Driller:	Jim Omletz	Geologist:	Keith S. Robins
Drill Rig:	B-47	Drilling Method:	Hollow Stem Auger
Sample Spoon I.D.:	2"	Drive Hammer Wt.:	140 lbs.
Date Started:	8/12/92	Date Completed:	8/12/92
		Ground Surface El.:	

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
-0-						
-1	S-1	0-2	20"	4, 11, 33/12	0	0-3" Grass Rods 3"-15" Brown medium sand, little coarse gravel, trace silt. 15"-20" Asphalt fill material, dense, with loose gravel, damp
-2						
-3	S-2	2-4	20"	9, 23, 55, 50	0	0-7" Brown Clayey Sand, trace fine gravel 7"-20" LT Brown-Tan, medium-coarse sand, trace silt, little fine-coarse gravel. damp
-4						
-5	S-3	4-6	24"	12, 30, 48, 48	0	0-20" LT Tan-brown, medium-coarse subrounded sand, Little fine-med gravel, trace silt, poorly sorted
-6						
-7	S-4	6-8	23"	12, 28	0	20"-24" Brown-LT orange fine sand, well graded. damp
-8						
-9	S-5	8-10	24"	27, 27	0	Brown -LT orange coarse Qtz Sand, some (4) fine-medium subangular gravel, trace s.t., tr dk min, poorly sorted, loose. damp
-10						
						Brown - LT orange f(4) mc(-) subrnd Qtz Sand, little fine gravel (subAngular) tr.s. (4), Fe staining, tr. mica, tr. cobble, damp

Remarks: Soil sample obtained from (4-6) for lab analysis

Water Level Measurement	Date



DVIRKA
AND
BARTILUCCI

BORING LOG

Project No.:	1167	Well/Boring No.:	SS-mw-1
Project Name:	Grumman Aerospace	Sheet 1 of 2	By: KSR Date: 8/12/92
		Chk'd:	Date:

Drilling Contractor:
Driller: Jim Omyletz
Drill Rig: B-47
Sample Spoon I.D.: 2"
Date Started: 8/12/92

Fenley and Nicol

Geologist: Keith S. Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Wt.: 140 lbs.
Date Completed: 8/12/92

Borehole Completion Depth: 65'

Borehole Diameter: 8"

Ground Surface El.:

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY / RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
10						
14	S-6	15-17	24"	8,10, 15,22	0	LT Brown-Tan, medium-fine Qtz Sand, trace fine-medium gravel, trace silt, well graded, damp
16						
18						
20	S-7	20-22	20'	7,17, 20,20	0	LT Brown f ⁽⁺⁾ m c ⁽⁻⁾ Qtz Sand, little fine gravel, trace cobbles, tr silt, tr dk minerals, poorly sorted. damp
22						
24						
26	S-8	25-29	24"	8,18, 20,23	0	LT Brown f ⁽⁺⁾ m c ⁽⁻⁾ Qtz Sand, little fine gravel, trace dk minerals
28						
30	S-9	30-32	20"	6,8, 13,19	0	0-6" LT white - Pink clayey fine sand 6"-14" Brown silty fine sand 14"-20" Brown - gray clayey sand, dense, compacted. damp
32						

Remarks: Vertical scale changed from
(1') to (2')

Water Level Measurement Date
 Date
 Date
 Date
 Date



DVIRKA
AND
BARTILUCCI

BORING LOG

Project No.:	1167	Well/Boring No.:	SB-MW-1
Project Name:	Grumman Aerospace	Sheet 1 of 3	8/12/92
By:	KSR	Date:	8/12/92
Chk'd:		Date:	

Drilling Contractor:	Fenley and Nicol	Borehole Completion Depth:	65'
Driller:	Jim Omuletz	Geologist:	Keith S. Robins
Drill Rig:	B-47	Drilling Method:	Hollow Stem Auger
Sample Spoon I.D.:	2"	Drive Hammer Wt.:	140 lbs.
Date Started:	8/12/92	Date Completed:	8/12/92
Ground Surface El.:			

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
34'						
36-	S-10	35-37	24	3,3, 14,16	0	LT Brown - white - pinkish clayey fine Sand, some silt, slightly plastic, trace muscovite, well graded. damp-moist
38-						
40-						0-10" Gray - Brown - Pink, clayey Sand, dense, slightly plastic, layered, little silt
42	S-11	40-42	24"	3,6, 14,17	0	10"-24" LT Gray silty fine Sand, trace muscovite.
44						damp.
46	S-12	45-49	20"	3,6, 13,18	0	Brown - LT Gray silt, some fine Sand, trace Muscovite, compacted
48						very damp
50						
52	S-13	50-52	24"	4,6, 12,19	0	Brownish - Gray - LT White, silty very fine sand, trace muscovite, well graded, compacted. damp
54						

Remarks:

Water Level Measurement	Date

BORING LOG

DVIRKA
AND
BARTILUCCI

Project No.:	1167	Well/Boring No.:	58-MW-1
Project Name:	Grumman Aerospace	Sheet 1 of 4	By: KSR Date: 8/12/02
		Chk'd:	Date:

Drilling Contractor:	Fenley and Nicol	Borehole Completion Depth:	65'
Driller:	Jim Omyley	Geologist:	Keith S. Robins
Drill Rig:	B-47	Drilling Method:	Follow Stem Auger
Sample Spoon I.D.:	2"	Drive Hammer Wt.:	140 lbs.
Date Started:	8/12/02	Date Completed:	8/12/02
			Ground Surface El.:

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
56	S-14	55-57	24"	3,5, 10,18	0	Grayish-brown silt, trace muscovite, trace dark minerals, trace Fe staining, Compact, Saturated
58						
60-	S-15	60-62	24"	3,3, 17/NA	0	Grayish-brown, fine sand, some-little Silt, trace muscovite, compact. Saturated.
62						
64						
66-						End of bore 65'
68-						
70-						
72-						
74						
76-						

Remarks:

Water Level Measurement

Date

Date

Date

Date

BL



DVIRKA
AND
BARTILUCCI

BORING LOG

Project No.:	1167	Well/Boring No.:	S8-BH1
Project Name:	Grumman Aerospace	Sheet 1 of	1
		By:	KSR Date: 8/13/92
		Chk'd:	Date:

Drilling Contractor:	Fenley and Nicol
Driller:	Jim O'neletz
Drill Rig:	13-47
Sample Spoon I.D.:	2"
Date Started:	8/13/92
Geologist:	Keith S. Robins
Drilling Method:	Hollow Stem Auger
Drive Hammer Wt.:	140 lbs.
Date Completed:	8/13/92
Borehole Completion Depth:	20'
Borehole Diameter:	8"
Ground Surface El.:	

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION	
						0-3"	3'-10' (+)
-0-						Asphalt, pavement	
1-							
2-							
3-							
4-							
5-							
6-							
7-							
8-							
9-							
10-							

Remarks:	No split spoon samples taken from 0-10'; geologic log based on visual inspection of soil cuttings	Water Level Measurement	Date
			Date

BL



DVIRKA
AND
BARTILUCCI

BORING LOG

Project No.:	1167	Well/Boring No.:	S8-BH-1
Project Name:	Grumman Aerospace	Sheet 1 of 2	
By:	KSR	Date:	8/13
Chk'd:		Date:	

Drilling Contractor:	Fenley and Nicol
Driller:	Jim Omyley
Drill Rig:	B-47
Sample Spoon I.D.:	2"
Date Started:	8/13/92
Geologist:	Keith S. Robins
Drilling Method:	Hollow Stem Auger
Drive Hammer Wt.:	140 lbs.
Date Completed:	8/13/92
Borehole Completion Depth:	20'
Borehole Diameter:	5"
Ground Surface El.:	

DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
10-	S-1	10-12	24"	8,13 12,16	0	Brown, medium - fine Qtz Sand, trace fine gravel, trace dk minerals, well graded.
12-						damp.
13-	S-2	12-14	24"	8,12, 14,12,	0	Brown-LT orange fine - medium Qtz Sand, trace silt, trace fine gravel, trace dk minerals, well graded.
14-						damp.
15-	S-3	14-16	24"	6,8, 11,13	0	LT Brown - LT orange fm(+)c Qtz Sand, Little fine subrounded gravel, trace silt, trace dark minerals, well graded.
16-						damp.
17-						damp.
18-	S-4	16-18	24"	6,12, 15,15	0	LT Brown - LT orange, coarse subrnd Qtz Sand, some fm gravel, poorly sorted, trace silt,
19-						damp.
20-	S-5	18-20	24"	7,13, 14,18	0	Brown, coarse Qtz Sand, some(+) fm subrnd gravel, trace silt, poorly sorted loose
21'						damp. END OF Boring 20

Remarks:	Soil sample (14-16') obtained for laboratory analysis	Water Level Measurement	Date
			Date

Appendix E

APPENDIX E

LABORATORY DATA

2294G
1167

1A - NYSDEC
NYTEST ENVIRONMENTAL INC.

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX: WATER
CONC. LEVEL: LOW
ANALYSIS DATE: 7/31/92

SAMPLE ID: S9-FB-S
LAB ID: 1343805
DIL FACTOR: 1.00
% MOISTURE:NA
UG/L

CMPD # CAS Number VOLATILE COMPOUNDS

1	74-87-3	Chloromethane	0.5 U.
2	74-83-9	Bromomethane	1.0 U.
3	75-01-4	Vinyl Chloride	1.0 U.
4	75-00-3	Chloroethane	1.0 U.
5	75-09-2	Methylene Chloride	2.9 B
6	75-35-4	1,1-Dichloroethene	0.1 U.
7	75-34-3	1,1-Dichloroethane	0.5 U.
8	156-60-5	1,2-Dichloroethene (trans)	0.5 U.
9	67-66-3	chloroform	0.5 U.
10	107-06-2	1,2-Dichloroethane	0.1 U.
11	71-55-6	1,1,1-Trichloroethane	0.1 U.
12	56-23-5	Carbon Tetrachloride	0.5 U.
13	75-27-4	Bromodichloromethane	0.5 U.
14	78-87-5	1,2-Dichloropropane	0.5 U.
15	10061-01-5	cis-1,3-Dichloropropene	0.5 U.
16	79-01-6	Trichloroethene	0.5 U.
17	124-48-1	Dibromochloromethane	0.5 U.
18	79-00-5	1,1,2-Trichloroethane	0.1 U.
19	71-43-2	Benzene	1.0 U.
20	10061-02-6	trans-1,3-Dichloropropene	1.0 U.
21	75-25-2	Bromoform	1.0 U.
22	127-18-4	Tetrachloroethene	0.1 U.
23	79-34-5	1,1,2,2-Tetrachloroethane	0.1 U.
24	108-88-3	Toluene	1.0 U.
25	108-90-7	Chlorobenzene	1.0 U.
26	100-41-4	Ethylbenzene	1.0 U.
27	1330-20-7	Xylene (total)	1.0 U.
28	110-75-8	2-Chloroethylvinylether	0.5 U.
29	75-69-4	Trichlorofluoromethane	1.0 U.
30	95-50-1	1,2-Dichlorobenzene	1.0 U.
31	541-73-1	1,3-Dichlorobenzene	1.0 U.
32	106-46-7	1,4-Dichlorobenzene	1.0 U.

0000018

1A - NYSDEC
NYTEST ENVIRONMENTAL INC.

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX: SOIL SAMPLE ID: S8-MW1-S
 CONC. LEVEL: LOW LAB ID: 1363701
 ANALYSIS DATE: 8/19/92 OIL FACTOR: 1.00
 % MOISTURE: 2

CMPD #	CAS Number	VOLATILE COMPOUNDS	UG/KG
			(DRY BASIS)
1	74-87-3	Chloromethane	0.5 U.
2	74-83-9	Bromomethane	1.0 U.
3	75-01-4	Vinyl Chloride	1.0 U.
4	75-00-3	Chloroethane	1.0 U.
5	75-09-2	Methylene Chloride	12.0 B
6	75-35-4	1,1-Dichloroethene	1.0 U.
7	75-34-3	1,1-Dichloroethane	0.5 U.
8	156-60-5	1,2-Dichloroethene (trans)	0.5 U.
9	67-66-3	Chloroform	0.5 U.
10	107-06-2	1,2-Dichloroethane	0.1 U.
11	71-55-6	1,1,1-Trichloroethane	0.1 U.
12	56-23-5	Carbon Tetrachloride	0.5 U.
13	75-27-4	Bromodichloromethane	0.5 U.
14	78-87-5	1,2-Dichloropropene	0.5 U.
15	10061-01-5	cis-1,3-Dichloropropene	0.5 U.
16	79-01-6	Trichloroethene	0.5 U.
17	124-48-1	Dibromochloromethane	0.5 U.
18	79-00-5	1,1,2-Trichloroethane	0.1 U.
19	71-43-2	Benzene	1.0 U.
20	10061-02-6	trans-1,3-Dichloropropene	1.0 U.
21	75-25-2	Bromoform	1.0 U.
22	127-18-4	Tetrachloroethene	0.1 U.
23	79-34-5	1,1,2,2-Tetrachloroethane	0.1 U.
24	108-88-3	Toluene	1.1
25	108-90-7	Chlorobenzene	1.0 U.
26	100-41-4	Ethylbenzene	1.0 U.
27	1330-20-7	Xylene (total)	1.0 U.
28	110-75-8	2-Chloroethylvinylether	0.5 U.
29	75-69-4	Trichlorofluoromethane	1.0 U.
30	95-50-1	1,2-Dichlorobenzene	1.0 U.
31	541-73-1	1,3-Dichlorobenzene	1.0 U.
32	106-46-7	1,4-Dichlorobenzene	1.0 U.

0000022

1A - NYSDEC
NYTEST ENVIRONMENTAL INC.

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX: SOIL
CONC. LEVEL: LOW
ANALYSIS DATE: 8/20/92

SAMPLE ID: SB-BH-1S
LAB ID: 1364401
DIL FACTOR: 1.00
% MOISTURE: 2

CMPO #	CAS Number	VOLATILE COMPOUNDS	UG/KG
			(DRY BASIS)
1	74-87-3	Chloromethane	0.5 U.
2	74-83-9	Bromomethane	1.0 U.
3	75-01-4	Vinyl Chloride	1.0 U.
4	75-00-3	Chloroethane	1.0 U.
5	75-09-2	Methylene Chloride	14.0 B
6	75-35-6	1,1-Dichloroethene	0.1 U.
7	75-34-3	1,1-Dichloroethane	0.5 U.
8	156-60-5	1,2-Dichloroethene (trans)	0.5 U.
9	67-66-3	Chloroform	0.5 U.
10	107-06-2	1,2-Dichloroethane	0.1 U.
11	71-55-6	1,1,1-Trichloroethane	0.1 U.
12	56-23-5	Carbon Tetrachloride	0.5 U.
13	75-27-4	Bromodichloromethane	0.5 U.
14	78-87-5	1,2-Dichloropropane	0.5 U.
15	10061-01-5	cis-1,3-Dichloropropene	0.5 U.
16	79-01-6	Trichloroethene	0.5 U.
17	124-48-1	Dibromochloromethane	0.5 U.
18	79-00-5	1,1,2-Trichloroethane	0.1 U.
19	71-43-2	Benzene	1.0 U.
20	10061-02-6	trans-1,3-Dichloropropene	1.0 U.
21	75-25-2	Bromoform	1.0 U.
22	127-18-4	Tetrachloroethene	0.1 U.
23	79-34-5	1,1,2,2-Tetrachloroethane	0.1 U.
24	108-88-3	Toluene	1.6
25	108-90-7	Chlorobenzene	1.0 U.
26	100-41-4	Ethylbenzene	1.0 U.
27	1330-20-7	Xylene (total)	1.0 U.
28	110-75-8	2-Chloroethylvinylether	0.5 U.
29	75-69-4	Trichlorofluoromethane	1.0 U.
30	95-50-1	1,2-Dichlorobenzene	1.0 U.
31	541-73-1	1,3-Dichlorobenzene	1.0 U.
32	106-46-7	1,4-Dichlorobenzene	1.0 U.

0000008

1A - NYSDEC
NYTEST ENVIRONMENTAL INC.

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX: SOIL	SAMPLE ID:	P12-BH-2
CONC. LEVEL: LOW	LAB ID:	1348402
ANALYSIS DATE: 8/6/92	DIL FACTOR:	1.00
	% MOISTURE:	3
	UG/KG	
CMPD #	CAS Number	VOLATILE COMPOUNDS (DRY BASIS)
1	74-87-3	Chloromethane
2	74-83-9	Bromomethane
3	75-01-4	Vinyl Chloride
4	75-00-3	Chloroethane
5	75-09-2	Methylene Chloride
6	75-35-4	1,1-Dichloroethene
7	75-34-3	1,1-Dichloroethane
8	156-60-5	1,2-Dichloroethene (trans)
9	67-66-3	Chloroform
10	107-06-2	1,2-Dichloroethane
11	71-55-6	1,1,1-Trichloroethane
12	56-23-5	Carbon Tetrachloride
13	75-27-4	Bromodichloromethane
14	78-87-5	1,2-Dichloropropane
15	10061-01-5	cis-1,3-Dichloropropene
16	79-01-6	Trichloroethene
17	124-48-1	Dibromochloromethane
18	79-00-5	1,1,2-Trichloroethane
19	71-43-2	Benzene
20	10061-02-6	trans-1,3-Dichloropropene
21	75-25-2	Bromoform
22	127-18-4	Tetrachloroethene
23	79-34-5	1,1,2,2-Tetrachloroethane
24	108-88-3	Toluene
25	108-90-7	Chlorobenzene
26	100-41-4	Ethylbenzene
27	1330-20-7	Xylene (total)
28	110-75-8	2-Chloroethylvinylether
29	75-69-4	Trichlorofluoromethane
30	95-50-1	1,2-Dichlorobenzene
31	541-73-1	1,3-Dichlorobenzene
32	106-46-7	1,4-Dichlorobenzene

0000011

nytest environmental, inc

REPORT OF ANALYSIS

Log in No.: 13637

We find as follows:

Results in mg/kg (dry wt. basis):

Sample Identification

Parameter(s)

1363701 S8-MW1-S

99.6

Total Petroleum
Hydrocarbons

Soil Method Blank

< 10.0

0000132

nytest environmental, inc

REPORT OF ANALYSIS

Log in No.: 13644

We find as follows:

Results in mg/kg (dry wt. basis):

Sample Identification	Parameter(s)
	Total
	Petroleum
	Hydrocarbons
1364401 SB-BH-1S	57.4
Method Blank	<10
Method Detection Limit	10

0000371

nytest environmental, inc

REPORT OF ANALYSIS

Log in No.: 13484

We find as follows:

Results in mg/kg (dry wt. basis) except where noted:

Sample Identification	Parameter(s)
-----	-----
	Total Petroleum
	Hydrocarbons
-----	-----
1348401 P5-BH-1	173
1348402 P12-BH-2	143
Soil Method Blank	< 10.0

0000333

nytest environmental, inc

REPORT OF ANALYSIS

Log In No.: 14185

We find as follows:

Results in ug/kg (dry wt. basis):

Sample Identification	Parameter(s)
-----	-----
	Total
	Petroleum
	Hydrocarbons
	(310-13)
-----	-----
1418518 S8-MW1-S	ND

ND = None Detected

0000024

nytest environmental inc

REPORT OF ANALYSIS

Log In No.: 14185

We find as follows:

Results in ug/kg (dry wt. basis):

Sample Identification

1418519 SB-BH-1S

Parameter(s)

Total
Petroleum
Hydrocarbons
(310-13)

ND

ND = None Detected

0000025

nytest environmental inc

REPORT OF ANALYSIS

Log In No.: 14185

We find as follows:

Results in ug/kg (dry wt. basis):

Sample Identification	Parameter(s)
1418511 P12-BH-2	Total Petroleum Hydrocarbons (310-13) ----- ND

ND = None Detected

0000017

1
INORGANIC ANALYSIS DATA SHEET

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9218699

FB0727

Lab Code: 10195 Case No.: 13438 SAS No.: SDG No.: SDG694

Matrix (soil/water): WATER Lab Sample ID: 438-05

Level (low/med): LOW Date Received: 07/27/92

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		
7440-36-0	Antimony	55.2	U		P
7440-38-2	Arsenic	5.0	U	W	F
7440-39-3	Barium				
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	4.8	U		P
7440-70-2	Calcium				
7440-47-3	Chromium	6.5	U		P
7440-48-4	Cobalt				
7440-50-8	Copper	6.4	U		P
7439-89-6	Iron				
7439-92-1	Lead	3.0	U		F
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	16.8	U		P
7440-09-7	Potassium				
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	9.3	U		P
7440-23-5	Sodium				
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				
7440-66-6	Zinc	4.3	U		P
	Cyanide				

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:
S9-FB-S

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO:

SBBHIS

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9218699

Lab Code: 10195 Case No.: 13644 SAS No.: SDG No.: SDG734

Matrix (soil/water): SOIL Lab Sample ID: 644-01

Level (low/med): LOW Date Received: 08/13/92

Solids: 97.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	11.3	U		P
7440-38-2	Arsenic	1.3	B		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.5		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron				NR
7439-92-1	Lead	2.2		*	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.5	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	1.0	U		F
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	5.0			P
5955-70-0	Cyanide				NR

Color Before: YELLOW Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

ILMO2:1
0000155

INORGANIC ANALYSIS DATA SHEET

P12BH2

Lab Name: NYTEST ENVIRONMENTAL INC. Contract: 9218699

Lab Code: 10195 Case No.: 13484 SAS No.: SDG No.: SDG702

Matrix (soil/water): SOIL Lab Sample ID: 484-02

Level (low/med): LOW Date Received: 07/30/92

% Solids: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		
7440-36-0	Antimony	11.4	U	P	
7440-38-2	Arsenic	4.3	N	F	
7440-39-3	Barium				
7440-41-7	Beryllium	0.21	U	P	
7440-43-9	Cadmium	0.99	U	P	
7440-70-2	Calcium				
7440-47-3	Chromium	6.3		P	
7440-48-4	Cobalt				
7440-50-8	Copper	1.9	B	P	
7439-89-6	Iron				
7439-92-1	Lead	2.0		F	
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.10	U	CV	
7440-02-0	Nickel	3.5	U	P	
7440-09-7	Potassium				
7782-49-2	Selenium	1.0	U	F	
7440-22-4	Silver	1.9	U	P	
7440-23-5	Sodium				
7440-28-0	Thallium	1.0	U	F	
7440-62-2	Vanadium				
7440-66-6	Zinc	7.0		P	
	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLK

Lab Name: NYTEST ENV INC Contract: 9218699Lab Code: NYTEST Case No.: I3822 SAS No.: _____ SDG No.: _____Matrix: (soil/water) WATER Lab Sample ID: 1382204Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D1758Level: (low/med) LOW Date Received: 08/27/92% Moisture: not dec. _____ Date Analyzed: 09/03/92GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	5	BJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Oibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

0000012

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLK

Lab Name: NYTEST ENV INCContract: 9218699Lab Code: NYTEST Case No.: 13822

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATERLab Sample ID: 1382205Sample wt/vol: 5.0 (g/mL) MLLab File ID: 01757Level: (low/med) LOWDate Received: 08/27/92% Moisture: not dec. _____
GC Column: PACK ID: 2.00 (mm)Date Analyzed: 09/03/92
Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	6	BJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloroproppane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

0000018

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: <u>NYTEST ENV INC</u>	Contract: _____	TRIPBLK
Lab Code: <u>NYTEST</u>	Case No.: <u>11142</u>	SAS No.: _____ SOG No.: _____
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: <u>1387607</u>	
Sample wt/vol: <u>5.0</u> (g/mL) <u>ML</u>	Lab File ID: <u>01784</u>	
Level: (low/med) <u>LOW</u>	Date Received: <u>08/31/92</u>	
% Moisture: not dec. <u> </u>	Date Analyzed: <u>09/04/92</u>	
GC Column: <u>PACK</u> ID: <u>2.00</u> (mm)	Dilution Factor: <u>1.0</u>	
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)	
CONCENTRATION UNITS: (uG/L or ug/Kg) <u>UG/L</u> Q		
74-87-3-----Chloromethane	10	U
74-83-9-----Bromomethane	10	U
75-01-4-----Vinyl Chloride	10	U
75-00-3-----Chloroethane	10	U
75-09-2-----Methylene Chloride	7	J
67-64-1-----Acetone	10	U
75-15-0-----Carbon Disulfide	10	U
75-35-4-----1,1-Dichloroethene	10	U
75-34-3-----1,1-Dichloroethane	10	U
540-59-0-----1,2-Dichloroethene (total)	10	U
67-66-3-----Chloroform	10	U
107-06-2-----1,2-Dichloroethane	10	U
78-93-3-----2-Butanone	10	U
71-55-6-----1,1,1-Trichloroethane	10	U
56-23-5-----Carbon Tetrachloride	10	U
75-27-4-----Bromodichloromethane	10	U
78-87-5-----1,2-Dichloropropane	10	U
10061-01-5-----cis-1,3-Dichloropropene	10	U
79-01-6-----Trichloroethene	10	U
124-48-1-----Dibromochloromethane	10	U
79-00-5-----1,1,2-Trichloroethane	10	U
71-43-2-----Benzene	10	U
10061-02-6-----trans-1,3-Dichloropropene	10	U
75-25-2-----Bromoform	10	U
108-10-1-----4-Methyl-2-Pentanone	10	U
591-78-6-----2-Hexanone	10	U
127-18-4-----Tetrachloroethene	10	U
79-34-5-----1,1,2,2-Tetrachloroethane	10	U
108-28-3-----Toluene	10	U
108-90-7-----Chlorobenzene	10	U
100-41-4-----Ethylbenzene	10	U
100-42-5-----Styrene	10	U
1330-20-7-----Xylene (total)	10	U

0000016

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC Contract: _____TRIPBLKLab Code: NYTEST Case No.: 11187 SAS No.: _____ SDG No.: _____Matrix: (soil/water) WATER Lab Sample ID: 1390504Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C8951Level: (low/med) LOW Date Received: 09/02/92% Moisture: not dec. _____ Date Analyzed: 09/09/92GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10		U
74-83-9	Bromomethane	10		U
75-01-4	Vinyl Chloride	10		U
75-00-3	Chloroethane	10		U
75-09-2	Methylene Chloride	2		J
67-64-1	Acetone	10		U
75-15-0	Carbon Disulfide	10		U
75-35-4	1,1-Dichloroethene	10		U
75-34-3	1,1-Dichloroethane	10		U
540-59-0	1,2-Dichloroethene (total)	10		U
67-66-3	Chloroform	10		U
107-06-2	1,2-Dichloroethane	10		U
78-93-3	2-Butanone	10		U
71-55-6	1,1,1-Trichloroethane	10		U
56-23-5	Carbon Tetrachloride	10		U
75-27-4	Bromodichloromethane	10		U
78-87-5	1,2-Dichloropropane	10		U
10061-01-5	cis-1,3-Dichloropropene	10		U
79-01-6	Trichloroethene	10		U
124-48-1	Dibromochloromethane	10		U
79-00-5	1,1,2-Trichloroethane	10		U
71-43-2	Benzene	10		U
10061-02-6	trans-1,3-Dichloropropene	10		U
75-25-2	Bromoform	10		U
108-10-1	4-Methyl-2-Pentanone	10		U
591-78-6	2-Hexanone	10		U
127-18-4	Tetrachloroethene	10		U
79-34-5	1,1,2,2-Tetrachloroethane	10		U
108-88-3	Toluene	10		U
108-90-7	Chlorobenzene	10		U
100-41-4	Ethylbenzene	10		U
100-42-5	Styrene	10		U
1330-20-7	Xylene (total)	10		U

0000012

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLK

Lab Name: NYTEST ENV INC

Contract: _____

Lab Code: NYTEST Case No.: 11187

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATERLab Sample ID: 1390504Sample wt/vol: 5.0 (g/mL) MLLab File ID: C8951Level: (low/med) LOWDate Received: 09/02/92

% Moisture: not dec. _____

Date Analyzed: 09/09/92GC Column: PACK ID: 2.00 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloroproppane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

0000049

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC

Contract: _____

S8-MW-1Lab Code: NYTEST Case No.: 11187

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATERLab Sample ID: 1389001Sample wt/vol: 5.0 (g/mL) MLLab File ID: D1807Level: (low/med) LOWDate Received: 08/31/92

% Moisture: not dec. _____

Date Analyzed: 09/05/92GC Column: PACK ID: 2.00 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

0000010

3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC

Contract: _____

GM-9S

Lab Code: NYTEST Case No.: 11187

SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATERLab Sample ID: 1390502Sample wt/vol: 5.0 (g/mL) MLLab File ID: C8956Level: (low/med) LOWDate Received: 09/02/92

% Moisture: not dec. _____

Date Analyzed: 09/09/92GC Column: PACK ID: 2.00 (mm)Dilution Factor: 10.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	100	U
74-83-9	Bromomethane	100	U
75-01-4	Vinyl Chloride	100	U
75-00-3	Chloroethane	100	U
75-09-2	Methylene Chloride	100	U
67-64-1	Acetone	180	U
75-15-0	Carbon Disulfide	100	U
75-35-4	1,1-Dichloroethene	100	U
75-34-3	1,1-Dichloroethane	100	U
540-59-0	1,2-Dichloroethene (total)	100	U
67-66-3	Chloroform	100	U
107-06-2	1,2-Dichloroethane	100	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon Tetrachloride	100	U
75-27-4	Bromodichloromethane	100	U
78-87-5	1,2-Dichloropropane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
79-01-6	Trichloroethene	100	U
124-48-1	Dibromochloromethane	100	U
79-00-5	1,1,2-Trichloroethane	100	U
71-43-2	Benzene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
75-25-2	Bromoform	100	U
108-10-1	4-Methyl-2-Pentanone	100	U
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
108-88-3	Toluene	100	U
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	100	U
100-42-5	Styrene	100	U
1330-20-7	Xylene (total)	100	U

0000025

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC Contract: _____USGS10594Lab Code: NYTEST Case No.: 11187 SAS No.: _____ SOG No.: _____Matrix: (soil/water) WATER Lab Sample ID: 1389003Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D1809Level: (low/med) LOW Date Received: 08/31/92% Moisture: not dec. _____ Date Analyzed: 09/05/92GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	Z-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA

3/90

0000012

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

FLDBLK

Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699

Lab Code: 10195 Case No.: 13822 SAS No.: SDG No.: B28MW1

Matrix (soil/water): WATER Lab Sample ID: 822-04

Level (low/med): LOW Date Received: 08/27/92

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony	55.0	U		P
7440-38-2	Arsenic	5.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	3.0	U		F
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	17.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	9.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	4.0	U		P
5955-70-0	Cyanide		-		NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FIELD_BLK

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

S8MW-1

 Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699 Lab Code: 10195 Case No.: 13890 SAS No.: SDG No.: SDG762 Matrix (soil/water): WATER Lab Sample ID: 890-01 Level (low/med): LOW Date Received: 09/01/92 Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	55.0	U		P
7440-38-2	Arsenic	5.0	U		F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron				NR
7439-92-1	Lead	3.0	U		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	17.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U	W	F
7440-22-4	Silver	9.0	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U	W	F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	18.1	B		P
5955-70-0	Cyanide				NR

 Color Before: COLORLESS Clarity Before: CLEAR Texture: _____ Color After: COLORLESS Clarity After: CLEAR Artifacts: _____ Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

USGS10

Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699

Lab Code: 10195 Case No.: 13905 SAS No.: SDG No.: DISS10

Matrix (soil/water): WATER Lab Sample ID: 905-01

Level (low/med): LOW Date Received: 09/02/92

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony	55.0	U		P
7440-38-2	Arsenic	5.0	U	N	F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	23.5	-		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	114	-	N	P
7439-89-6	Iron				NR
7439-92-1	Lead	249	-		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.54			CV
7440-02-0	Nickel	90.9	-		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	17.3	-	*	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	208	-	E	P
5955-70-0	Cyanide				NR

Color Before: BROWN Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USGS10

LEAD_AT_A_5X_DILUTION.

FORM I - IN

ILMO2.1

0000106

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DISS10

Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699

Lab Code: 10195 Case No.: 13905 SAS No.: SDG No.: DISS10

Matrix (soil/water): WATER Lab Sample ID: 905D01

Level (low/med): LOW Date Received: 09/02/92

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony	55.0	U		P
7440-38-2	Arsenic	5.0	U	N	F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	U	N	P
7439-89-6	Iron				NR
7439-92-1	Lead	3.0	U		F
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	33.4	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	9.0	U	*	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	22.0	-	E	P
5955-70-0	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
USGS10594 DISSOLVED

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

GM-9SX

Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699

Lab Code: 10195 Case No.: 13905 SAS No.: SDG No.: DISS10

Matrix (soil/water): WATER Lab Sample ID: 905-02

Level (low/med): LOW Date Received: 09/02/92

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	80.2	-		P
7440-38-2	Arsenic	85.2	-	N	F
7440-39-3	Barium				NR
7440-41-7	Beryllium	2.4	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	66.1	-		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	69.9	-	N	P
7439-89-6	Iron				NR
7439-92-1	Lead	55.4	-		F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	1.1			CV
7440-02-0	Nickel	37.4	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	9.0	U	*	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	82.4	-	E	P
5955-70-0	Cyanide				NR

Color Before: YELLOW Clarity Before: CLEAR Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

GM-9S

ARSENIC_AT_A_2X_DILUTION.

FORM I - IN

TILMO2.1
0000104

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

DISS9S

 Lab Name: NYTEST_ENVIRONMENTAL_INC. Contract: 9218699 Lab Code: 10195 Case No.: 13905 SAS No.: _____ SDG No.: DISS10 Matrix (soil/water): WATER Lab Sample ID: 905D02 Level (low/med): LOW Date Received: 09/02/92 Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	55.0	U		P
7440-38-2	Arsenic	5.0	U	N	F
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.2	B		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.7			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	U	N	P
7439-89-6	Iron				NR
7439-92-1	Lead	3.0	U	W	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20			CV
7440-02-0	Nickel	34.8	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	9.0	U	*	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	5.0	U		F
7440-62-2	Vanadium				NR
7440-66-6	Zinc	87.2		E	P
5955-70-0	Cyanide				NR

 Color Before: COLORLESS Clarity Before: CLEAR Texture: _____ Color After: COLORLESS Clarity After: CLEAR Artifacts: _____ Comments:
GM-9S DISSOLVED

FORM I - IN

ILMO2.1
0000103

Appendix F

APPENDIX F

SUPPLEMENTAL INFORMATION

2294G
1167

Field Investigation
Article XI Facility
Nassau County Department of Health

- Initial System Test Tank Removal
 Tank Only Installation
 System Retest Periodic Yes
 New Installation Test

Date of Job 8-11-90 Time _____
Date Received 7-10-90 Time _____
Contractor Pyre _____
Telephone # _____

Facility ID# 000001
Confirmation# 214490705
Spill# _____

Establishment Name Grumman #12
Address _____
Town Flushing Telephone # _____
Cross Street: _____
No. of Tanks _____ Type of Test Piping

Tank #	1205						
System Test							
Tank Test							
Size	15K						
Product	#4						
Leak Rate							
Pass/Fail							
Fee							
Fee Paid							
Retest Needed							

Tank Removal							
Tank #							
Visible Hole							
# Holes							
Size							
Location							
Photo							

Excavation: Clean Contaminated Soil Free floating oil

Soil Removed (Y/N) _____ Amount _____

Installation: Tank size _____ Approved plans Yes No

Notes:

No record with Grumman and Pyre. For test this day

Inspector G. Dugay Supervisor _____

Employee Number 167 Date 8/7/90

Continued on Reverse Side

1 - Piping
3 - Fitting

2 - Tank
4 - Other

Computer Entry

Data Book Entry

EH907 4/90

TP

Field Investigation
Article XI Facility
Nassau County Department of Health

- Initial System Test Tank Removal
 Tank Only Installation
 System Retest Periodic Yes:
 New Installation Test

Date of Job 8-5-90 Time _____
Date Received 7-10-90 Time _____
Contractor OTYMI
Telephone # _____

Facility ID# 60001
Confirmation# 220H9ATOS
Spill# _____

Establishment Name Hannover - Plant #12
Address _____
Town Truth or Consequence Telephone # _____
Cross Street: _____
No. of Tanks _____ Type of Test _____

Tank #	<u>12ES</u>					
System Test						
Tank Test						
Size	<u>10K</u>					
Product	<u>#2</u>					
Leak Rate						
Pass/Fail						
Fee						
Fee Paid						
Retest Needed						

Tank Removal

Tank #						
Visible Hole						
# Holes						
Size						
Location						
Photo						

Excavation: Clean Contaminated Soil Free floating oil

Soil Removed (Y/N) _____ Amount _____

Installation: Tank size _____ Approved plans Yes No

Notes:

is received off test with GRUMMAN & TYREE
on THIS DATE

Inspector M. Silversky Supervisor _____

Employee Number 162 Date 8/18/90

Continued on Reverse Side

Computer Entry

Data Book Entry

EH907 4/90

Field Investigation
Article XI Facility
Nassau County Department of Health

- Initial System Test Tank Removal
 Tank Only Installation
 System Retest Periodic Test
 New Installation Test

Date of Job 8-13-90 Time _____
Date Received 8-10-90 Time _____
Contractor Mayne
Telephone # _____

Facility ID# 000001
Confirmation# 225490721
Spill# _____

Establishment Name Grumman Plant 12
Address _____
Town Bethpage Telephone # _____
Cross Street: _____
No. of Tanks 1 Type of Test Reho

Tank #	<u>1205</u>						
System Test	<u>✓</u>						
Tank Test	<u>—</u>						
Size	<u>10K</u>						
Product	<u>#2</u>						
Leak Rate	<u>4.007</u>						
Pass/Fail	<u>PASS</u>						
Fee	<u>None (Refund)</u>						
Fee Paid	<u>—</u>						
Retest Needed	<u>No</u>						

Tank Removal

Tank #							
Visible Hole							
# Holes							
Size							
Location							
Photo							

Excavation: Clean Contaminated Soil Free floating oil

Soil Removed (Y/N) _____ Amount _____

Installation: Tank size _____ Approved plans Yes No

Notes:

8/13/90 - NCDH did not attend

Inspector P. Block Supervisor _____

Employee Number 178 Date 10/26/90

continued on Reverse Side

Computer Entry

Data Book Entry

EH907 4/90

Data Chart for Tank System Tightness Test

PLEASE PRINT

1. OWNER	Property <input checked="" type="checkbox"/> Tenant <input type="checkbox"/> <i>Grumman Aerospace</i> Name <i>John Sibley</i> Address <i>575 3176</i> Representative <i>John Sibley</i> Telephone <i>575 3176</i> Name <i>John Sibley</i> Address <i>575 3176</i> Representative <i>John Sibley</i> Telephone <i>575 3176</i>																									
2. OPERATOR	<i>Grumman, Plant 12, Bethpage, N.Y.</i> Name <i>John Sibley</i> Address <i>575 3176</i> Telephone <i>575 3176</i>																									
3. REASON FOR TEST (Explain Fully)	<i>Periodic System Test</i>																									
4. WHO REQUESTED TEST AND WHEN	<i>Town Country Health Dept. Sept. 24, 1980</i> Name <i>John Sibley</i> Title <i>Health Dept.</i> Company or Association <i>Town Country Health Dept.</i> Date <i>Sept. 24, 1980</i> Address <i>575 3176</i> Telephone <i>575 3176</i>																									
5. TANK INVOLVED	Identify by Drawing <i>Tank 1</i>	Capacity <i>10,000</i>	Brand/Supplier <i>E/P</i>	Grade <i>2</i>	Approx. Age <i>—</i>	Owner/Business <i>Sibley</i>																				
6. INSTALLATION DATA	Location <i>Inside of Bldg.</i> <small>North end driveway, rear of station, etc.</small>	Cover <i>Concrete</i> <small>Concrete, Black Top, Earth, etc.</small>	Pipe <i>4"</i> <small>Size, Threaded, Drop tubes, Remote Pipe</small>	Vent <i>2"</i> <small>Size, Manifolds</small>	Siphons <i>No</i> <small>Which tank?</small>	Pump <i>—</i> <small>Station, Remote, Main or Reserve</small>																				
7. UNDERGROUND WATER	Depth to the Water line <i>Below</i> Is the water over the tank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																									
8. FILL-UP ARRANGEMENTS	Tanks to be filled <i>8,000 ft. 31350</i> Arranged by <i>John Sibley 575 3176</i> <small>Name Telephone</small> <small>Extra product to "top off" and run tank tester. How and who to provide? Computer NC Lead.</small>																									
	Terminal or other contact for notice or inquiry <small>Name Company Telephone</small>																									
9. CONTRACTOR, MECHANICS, any other contractor involved	<i>TYREE BROS. ENVIRONMENTAL SERVICES, INC.</i> 208 ROUTE 109 FARMINGDALE, N.Y. 11735 (516) 249-3150																									
10. OTHER INFORMATION OR REMARKS	<small>Addition information on any items above. Officials or others to be advised when testing is in progress or completed. Visitors or observers present during test, etc.</small>																									
11. TEST RESULTS	<small>Tests were made on the above tank systems in accordance with test procedures prescribed for as detailed on attached test charts with results as follows:</small> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Tank Identification</th> <th style="width: 20%;">Tight</th> <th style="width: 20%;">Leakage Indication</th> <th style="width: 20%;">Date Tested</th> </tr> </thead> <tbody> <tr> <td><i>Tank 1</i></td> <td><i>yes</i></td> <td><i>1.007 gph</i></td> <td><i>8/13/80</i></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Tank Identification	Tight	Leakage Indication	Date Tested	<i>Tank 1</i>	<i>yes</i>	<i>1.007 gph</i>	<i>8/13/80</i>												
Tank Identification	Tight	Leakage Indication	Date Tested																							
<i>Tank 1</i>	<i>yes</i>	<i>1.007 gph</i>	<i>8/13/80</i>																							
12. SENSOR CERTIFICATION	<small>This is to certify that these tank systems were tested on the date(s) shown. Those indicated as "Tight" meet the criteria established by National Fire Protection Association Pamphlet 322.</small> <small>Technician</small> <i>John Sibley</i> <small>Testing Contractor or Company, By: Signature</small> <i>TYREE BROS. ENVIRONMENTAL SERVICES, INC.</i> 208 ROUTE 109 FARMINGDALE, N.Y. 11735 (516) 249-3150																									
	<small>Serial No. of Thermal Sensor</small> <i>8/13/80</i> <small>Date</small> <i>725</i>																									

13. This is to certify that these tank systems were tested on the date(s) shown. Those indicated as "Tight" meet the criteria established by National Fire Protection Association Pamphlet 322.

Technician *John Sibley* Testing Contractor or Company, By: Signature *John Sibley*
TYREE BROS. ENVIRONMENTAL SERVICES, INC.
 208 ROUTE 109
 FARMINGDALE, N.Y. 11735
 (516) 249-3150

2 _____
 Certification # _____

22-Aug-90

XXXXXX

PETRO-TITE CALCULATION PROGRAM

** PROTOCOL "A" **

NUMBER	DEG F
THERMAL READING AFTER CIRC. -->	16341 72/73
DIGITS PER DEG F ----->	323
TOTAL QUANTITY IN FULL TANK -->	10010
RECIPROCAL ----->	2210
VOLUME CHANGE PER DEG F ----->	4.529611764
DIGITS PER DEG F ----->	323
VOLUME CHANGE / DIGIT (a) FAC >	0.014

THERMAL CROSSOVER

NUMBER	DEG F
0 0	
0	
10010	NAME & ADDRESS
2210	grumman ,PLANT 12, BETHPAGE, NY
4.529611764	TANK NUMBER
0	TANK 1, 10000, F/O 2, 8/13/90
ERR	

30	HYDRO P/C	31	VOLUME MEAS. (V)	34	TEMP COMP USE (--	0.014	38 VOL CHNG	39 ACCUM
STANDPIPE LEVELS		32	PROD IN GRADUATE	PROD REPL	35	--	36	37	TEMP ADJ
RESOTRED	BEGINING	BEFORE	AFTER	PROD REC	THERM SEN RE	CHANGE +/-	(c)	(c)*(a FACT)=	NET VOL CHNG
12	12.2	0.24	0.255	0.015	16365	1		0.014	0.001
12	12.2	0.255	0.27	0.015	16366	1		0.014	0.001
12	12.2	0.27	0.285	0.015	16367	1		0.014	0.001
12	12.2	0.285	0.3	0.015	16368	1		0.014	0.001
12	12.1	0.3	0.305	0.005	16368	0		0	0.005
12	12.2	0.305	0.32	0.015	16369	1		0.014	0.001
12	12.2	0.32	0.335	0.015	16370	1		0.014	0.001
12	12.3	0.335	0.355	0.02	16372	2		0.028	-0.008
12	12.2	0.355	0.37	0.015	16373	1		0.014	0.001
12	12.2	0.37	0.385	0.015	16374	1		0.014	0.001
12	12.2	0.385	0.4	0.015	16375	1		0.014	0.001
12	12.2	0.4	0.415	0.015	16376	1		0.014	0.001
12	12.2	0.415	0.43	0.015	16377	1		0.014	0.001
12	12.2	0.43	0.445	0.015	16378	1		0.014	0.001
12	12.1	0.445	0.45	0.005	16378	0		0	0.005
12	12.3	0.45	0.47	0.02	16380	2		0.028	-0.008
12	12.2	0.47	0.485	0.015	16381	1		0.014	0.001
12	12.2	0.485	0.5	0.015	16382	1		0.014	0.001
12	12.2	0.5	0.515	0.015	16383	1		0.014	0.001
12	12.2	0.515	0.53	0.015	16384	1		0.014	0.001
12	12.2	0.53	0.545	0.015	16385	1		0.014	0.001
12	12.2	0.545	0.56	0.015	16386	1		0.014	0.001
12	12.2	0.56	0.575	0.015	16387	1		0.014	0.001
12	12.2	0.575	0.59	0.015	16388	1		0.014	0.001
									0.007

Data Chart for Tank System Tightness Test

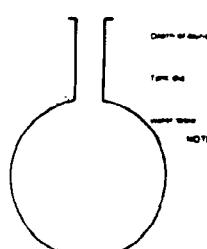
PLEASE PRINT													
1. OWNER	<input type="checkbox"/> Property <input checked="" type="checkbox"/> Tank		Name _____	Address _____	Telephone _____	Comments _____	1. OWNER	<input type="checkbox"/> Property <input checked="" type="checkbox"/> Tank		Name _____	Address _____	Telephone _____	Comments _____
2. OPERATOR	<input type="checkbox"/> Name _____		Address _____	Telephone _____	Comments _____	2. OPERATOR	<input type="checkbox"/> Name _____		Address _____	Telephone _____	Comments _____		
3. REASON FOR TEST (Not Below Fully)													
4. WHO REQUESTED TEST AND WHEN													
5. TANK INVOLVED <small>Line indicated here for manufacturing tanks</small>	Name by Division		Category	Initials/Signature	Grade	Age	Age	Age	Age	Age	Age	Comments or Attention	
6. INSTALLATION DATA	Location		Code	Year	Volume	Capacity	Size	Size	Size	Size	Size	Comments or Attention	
7. UNDERGROUND WATER	Depth in feet below water table _____		At _____	At _____	At _____	At _____	At _____	At _____	At _____	At _____	At _____	Comments or Attention	
8. FILL-UP ARRANGEMENTS	Type product to be tested _____ Line product to be tested _____ Line and valve location _____ Comments or other concerns _____												
9. CONTRACTOR, MECHANICS, etc other responsible person	Name _____ Comments _____												
10. OTHER INFORMATION OR REMARKS													
11. TEST RESULT IS													
12. SENSOR CERTIFICATION	Date _____ Comments _____												
13. Test to verify that these tank systems were tested on "Tight" basis indicated on "Tight" sheet of schedule established by _____ <small>Notified Per Provisions of Specification Paragraph 302</small>	Comments _____												

14. Grumman Aerospace Plant 12 - Both page N.Y. 8-13-90

Name of Supplier, Owner or Dealer		Address and Phone No.		Date	Date of Test
15. TANK TO TEST <u>#1 inside building</u> <u>#2 Fuel Oil</u> <small>Brand and Class</small>		15a. BRIEF DIAGRAM OF TANK FIELD <u>tank cover is concrete</u>		16. CAPACITY Normal Capacity <u>10,000</u> Gallons By tank number <u>10,000</u> Gallons Comments _____	
17. FILL-UP FOR TEST Steel Water Gauge before filling _____ 0		Steel Water Gauge after filling _____ 96 S.W.T.		Gauge _____ 96 Total Gauge _____ 10,000 Temp. _____ 71 °F	
18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK <small>See method section comments. Check boxes and provide procedures in step 21</small>		18a. Gauge reading _____ 18b. Gauge reading _____ 18c. Gauge reading _____		18d. Gauge reading _____ 18e. Gauge reading _____ 18f. Gauge reading _____	
19. TANK MEASUREMENTS FOR TST ASSEMBLY <small>Bottom of tank to ground _____ After 20' to 1' above tank _____ Total height to top of tank _____</small>		19a. Bottom of tank to ground _____ 126 19b. After 20' to 1' above tank _____ 76.8 19c. Total height to top of tank _____ 126		19d. Transfer tank to tank 200 _____ 12,000 19e. Transfer tank to tank 200 _____ 12,000	
20. EXTENSION HOSE SETTING <small>From tank to ground _____ Length hose on bottom tank 0' or more _____ Bottom tank 0' _____ 1' or 2' above ground above ground and top of tank _____</small>		20a. From tank to ground _____ 30 20b. Length hose on bottom tank 0' or more _____ 20c. Bottom tank 0' _____ 20d. 1' or 2' above ground above ground and top of tank _____		20e. Transfer tank to tank 200 _____ 30 20f. Transfer tank to tank 200 _____ 30	
21. VAPOR RECOVERY SYSTEM <small>Step 1 _____ Step 2 _____</small>		21a. Step 1 _____ 21b. Step 2 _____		21c. Transfer tank to tank 200 _____ 12,000 21d. Transfer tank to tank 200 _____ 12,000	
22. THERMOMETER READING AFTER CIRCULATION <small>16.344 72.73 323 Ounces</small>		22a. 16.344 22b. 72.73 22c. 323 22d. Ounces		22e. Transfer tank to tank 200 _____ 12,000 22f. Transfer tank to tank 200 _____ 12,000	
23. DENSITY OF TANK IN TERMS OF EXPANSION COEFFICIENT <small>24a. Corrected A.P.I. Gravity 24b. Observed A.P.I. Gravity 24c. Temperature difference 24d. Observed sample temperature 24e. Corrected A.P.I. Gravity 24f. Coefficient of expansion 24g. Coefficient of expansion 24h. Transfer C.O.E. to tank 200</small>		23a. 24a. Corrected A.P.I. Gravity _____ 23b. Observed A.P.I. Gravity _____ 23c. Temperature difference _____ 23d. Observed sample temperature _____ 23e. Corrected A.P.I. Gravity _____ 23f. Coefficient of expansion _____ 23g. Coefficient of expansion _____ 23h. Transfer C.O.E. to tank 200 _____		23i. Transfer tank to tank 200 _____ 12,000 23j. Transfer tank to tank 200 _____ 12,000	
24c. FOR TESTING WITH WATER <small>See Table C & D</small>		24c. Water Temperature after circulation Table C _____ Coefficient of water Table D _____ Added surface heat? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Transfer C.O.E. to tank 200 _____		24d. Water Temperature after circulation Table C _____ Coefficient of water Table D _____ Added surface heat? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Transfer C.O.E. to tank 200 _____	
25. <u>10</u> Total capacity in all tanks (in cu. ft.) _____		25a. <u>10</u> Coefficient of expansion for all tanks (in cu. ft.) _____		25b. <u>10</u> Volume change in cu. ft. _____	
26. <u>4.5294117</u> Volume measured at end of test		26a. <u>323</u> Volume measured at end of test		26b. <u>0.0140229</u> Volume change per step _____	

The above concentrations are in 30' head for dry and compressible to determine absolute pressure differential, or when using the New method rule to compensate for the presence of submersible water in the tank area.

Refer to NFPA 32, Sections 2-2-24 and 2-7-2 and the tank manufacturer regarding absolute system test procedures.



The above concentrations are in 30' head for dry and compressible to determine absolute pressure differential, or when using the New method rule to compensate for the presence of submersible water in the tank area.

Refer to NFPA 32, Sections 2-2-24 and 2-7-2 and the tank manufacturer regarding absolute system test procedures.

LOG OF TEST PROCEDURES			TESTS AND TESTS		TESTS AND TESTS		TESTS AND TESTS		TESTS AND TESTS		TESTS AND TESTS	
28 DATE	Record details or setting up and running test (like full height of tank if needed)		29 Reading #	30 Beginning of Acetone	31 Level of Acetone	32 Product in Gauge	33 Product Volume	34 Temperature Before Reading	35 After Reading	36 Product Volume	37 Temperature After Reading	38 Change Temp. (-10) Expansion or Contraction (+10) Net low level change Change per min. Temp. change
	Top off tank bleed air	20 min										
	Top off tank bleed air	20 min										
20	1st Sensor Reading	1	-	42	-	-	-	16341	-	-	-	-
45	Start high level	2	40.3	42	815	710	-105	343	+2	+028	-153	
00	Curd	3	40.5	42	710	620	-090	344	+1	+014	-104	
15		4	42.9	42	620	555	-065	347	+3	+042	-107	
30		5	41.0	42	585	495	-060	349	+2	+028	-088	
45		6	41.5	42	495	460	-035	353	+4	+056	-691	
00		7	41.5	42	460	415	-025	352	+3	+042	-067	
15		8	41.5	42	435	410	-025	358	+2	+028	-053	
	Drop to low level	-	-	-	-	-	-	-	-	-	-	-
20	1st Sensor Reading	9	-	12	-	-	-	361	+3	-	-	-
45	Start low level	10	12.8	12	145	240	+045	364	+3	+042	+003	
50	start 5min reading	11	12.2	12	240	255	+015	365	+1	+014	+001	
55		12	12.2	12	255	270	+015	366	+1	+014	+002	
00		13	12.2	12	270	285	+015	367	+1	+014	+003	
05		14	12.2	12	275	300	+025	361	+4	+014	+004	
10		15	12.1	12	300	305	+025	368	+0	+020	+005	
15		16	12.2	12	305	320	+015	369	+1	+011	+012	
20		17	12.2	12	320	335	+015	370	+1	+011	+001	
25		18	12.3	12	335	355	+020	372	+2	+028	+008	
30		19	12.2	12	355	370	+015	373	+1	+014	+004	
35		20	12.2	12	370	385	+015	374	+1	+014	+005	
40		21	12.2	12	385	400	+015	375	+1	+014	+006	
45		22	12.2	12	400	415	+015	376	+1	+014	+007	
50		23	12.2	12	415	420	+015	377	+1	+014	+008	
55		24	12.2	12	430	445	+015	378	+1	+014	+009	

00	25	12.1	12	445	450	+005	378	+0	+000	+005	+014	
05	26	12.3	12	450	470	+020	380	+2	+028	-008	+006	
10	27	12.2	12	470	485	+015	381	+1	+014	+001	+007	
15	28	12.2	12	485	500	+015	382	+1	+014	+001	+007	
20	29	12.2	12	500	515	+015	383	+1	+014	+001	+008	
25	30	12.2	12	515	520	+015	384	+1	+014	+001	+008	
30	31	12.2	12	520	535	+015	385	+1	+014	+001	+008	
35	32	12.2	12	535	545	+010	386	+1	+014	+001	+008	
40	33	12.2	12	545	555	+010	387	+1	+014	+001	+008	
45	34	12.2	12	555	560	+010	388	+1	+014	+001	+008	
50												
55												

NCDH-BLM

AUG 24 1990

RECEIVED

P-T Tank Test Data Chart

Additional Info

1 - Net Volume Change at Conclusion of Precision Test _____ cu ft

Signature of Tester _____

Date _____

2 Statement

1 - Tank and product handling system has been tested tight according to the Precision Test Criteria as established by NFPA publication 329. This is not intended to indicate permission of a leak.

OR

Tank and product handling system has failed the tank tightness test according to the Precision Test Criteria as established by NFPA publication 329.

It is the responsibility of the owner and/or operator of this system to immediately advise state and local authorities of any potential hazard and the possibility of any resultant pollution to the environment as a result of the indicated failure of this system. Henn Consultants Incorporated does not assume any responsibility or liability for any loss of product to the environment.

Tank Owner/Operator _____

Date _____

Larry E. Tyree Company, Inc.

208 Route 109, Farmingdale, NY 11735 • Fax: 516-249-3281 • Phone: 516-249-3150

PER
JMC
DB

AUGUST 22, 1990

NASSAU COUNTY HEALTH DEPARTMENT
240 OLD COUNTRY ROAD
MINEOLA, NY

Gentlemen

Enclosed please find a copy of a Tank System Tightness Report for:

GRUNMAN
PLANT 12
BETHPAGE, NY

Sincerely,

Sheri Miranda

Sheri Miranda

Testing Tec	ARMAND KULPA
License No.	GCF 295
Date of Test:	8/13/90
FACILITY	00001

CC: NYSDEC



Field Investigation
Article XI Facility
Nassau County Department of Health

- 114
- Initial System Test Tank Removal
 - Tank Only Installation
 - System Retest Periodic Year
 - New Installation Test

21

Date of Job 8-2-90 Time _____
Date Received 7-10-90 Time _____
Contractor Tyree
Telephone # _____

Facility ID# 00001
Confirmation# 00001800
Spill# 239490103

Establishment Name Grumman Plant 12
Address _____
Town Bethpage Telephone # _____
Cross Street: _____
No. of Tanks _____ Type of Test _____

Tank #	<u>b02</u>								
System Test									
Tank Test									
Size	<u>15K</u>								
Product	<u>F4</u>								
Leak Rate									
Pass/Fail									
Fee									
Fee Paid									
Retest Needed									

Tank Removal

Tank #									
Visible Hole									
# Holes									
Size									
Location									
Photo									

Excavation: Clean Contaminated Soil Free floating oil

Soil Removed (Y/N) _____ Amount _____

Installation: _____ Tank size _____ Approved plans Yes No

Notes:

NO RECORD OF TEST ON THIS DAY WITH
BOTH GRUMMAN & TYREE

Inspector 14-0808 Supervisor _____

Employee Number 1C7 Date 8/27/80 Continued on Reverse Side

1 - Piping 2 - Tank
3 - Fitting 4 - Other

Computer Entry

Data Book Entry

EH907 4/90

Tom

Field Investigation
Article XI Facility
Nassau County Department of Health

- Initial System Test Tank Removal
 Tank Only Installation
 System Retest Periodic Yes
 New Installation Test

Date of Job 8-28-91 Time _____
Date Received 8-6-91 Time _____
Contractor Brynn
Telephone # _____

Facility ID# 000001
Confirmation# 2401790TCY
Spill# _____

Establishment Name Brummax Plant D
Address _____
Town Bethpage Telephone # _____
Cross Street: _____
No. of Tanks _____ Type of Test Petro

Tank #	<u>1203</u>							
System Test								
Tank Test								
Size	<u>15K</u>							
Product	<u>F4</u>							
Leak Rate								
Pass/Fail								
Fee								
Fee Paid								
Retest Needed								

Tank Removal								
Tank #								
Visible Hole								
# Holes								
Size								
Location								
Photo								

Excavation: Clean Contaminated Soil Free floating oil

Soil Removed (Y/N) _____ Amount _____

Installation: _____ Tank size _____ Approved plans Yes No

Notes:

NO record of PMS test with
Type on Drummer

Inspector M. Livingston Supervisor _____

Employee Number 162 Date 8/26/91

Continued on Reverse Side

1 - Piping
3 - Fitting

2 - Tank
4 - Other

- Computer Entry
 Data Book Entry

EH907 4/90

Dot
Lavel

Grumman Corporation

Bethpage, New York 11714-3580

March 11, 1992
FDP-630

Nassau County Department of Health
240 Old Country Road
Mineola, New York 11501-4250

Attention: Mike Sekreta

Subject: **REVISIONS TO TOXIC AND HAZARDOUS MATERIALS STORAGE
PERMIT NO. 000001. BETHPAGE FACILITY**

Enclosure: Form 2 - Tank Registration

Dear Mr. Sekreta:

Please find the above enclosure necessary to update our permit.

Should you have any questions, please contact me at (516) 575-2385
or J. Selva at (516) 575-8176.

Very truly yours,

GRUMMAN CORPORATION



J. Ollmann, P.E. Director
Corporate Environmental Technology
and Compliance
Mail Stop: D08-GHQ

JO:JS:js
TLA-638

**NASSAU COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
FORM 2 - TANK REGISTRATION
SEE INSTRUCTION SHEETS**

NASSAU COUNTY DEPARTMENT OF HEALTH APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT FORM 2 - TANK REGISTRATION SEE INSTRUCTION SHEETS																				
Facility Name		MAIL STOP D08-GHQ BETHPAGE NY 11714																		
Facility Address																				
Action Number	Location	Design Capacity (Gallons)	Construction Material	Exterior Material	Detector Material	Detector Location	Type	NCDII Number	Name	Status	Installation Date	(Month/Yr)	Product Contamination Sys	Collection Sys	Leak Detection Method	Dispensing Gauge	Product Recovery	Containment Tank	Additional Information for Abandoned Tanks	
																			Reviewed By	Date Application Received
3 2007	4	100	2	2	3	2	2	09671	WASTE OIL	3	12-31-85								8-29-90	
3 2012	4	550	2	2	3	2	1	06361	MOTOR OIL	3	12-31-85								8-29-90	
3 1503	3	275	1	2	2	3	1	64721	NO. 2 FUEL OIL	3	12-31-84								12-31-90	
1 0308	4	4000	4	2	2	2	1	64721	NO. 2 FUEL OIL	1	06-30-85	5	5	1	2	1				
3 1205	4	10000	1	2	2	3	1	06741	NO. 2 FUEL OIL	1	12-31-71	5	5	1	2	1	REMOVED			
1 0102	4	1000	1	2	4	1	1	06741	NO. 2 FUEL OIL	1	12-31-43	5	5	1	2	1				
1 9336	4	10000	4	1	3	1	1	06741	NO. 2 FUEL OIL	1	12-31-82	5	5	1	2	1				

* GRUMMAN HAS TERMINATED ITS LEASE ASSOCIATED WITH THIS TANK AND HAS TURNED THE BLDG. BACK TO OWNER

Date Submitted

EII 858 4/86

Page 1 of 1