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Supplement to the Remedial Investigation Report (Site Area)

Operable Unit 3 (Former Grumman Settling Ponds),
Bethpage, New York
NYSDEC Site # 1-30-003A

January 8, 2009; revised December 9, 2009

ARCADIS

David E. Stern
Senior Hydrogeologist

Carlo San Giovanni
Project Manager

Michael F. Wolfert
Project Director

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Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.
NYSDEC Site # 1-30-003A

Prepared for:
Northrop Grumman Systems Corporation

Prepared by:
ARCADIS
Two Huntington Quadrangle
Suite 1S10
Melville
New York 11747
Tel 631.249.7600
Fax 631.249.7610

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On behalf of Northrop Grumman Systems Corporation (Northrop Grumman), ARCADIS is submitting this revised and final Supplement to the Remedial Investigation (RI) Report (Site Area) (revised Supplement) to respond to the New York State Department of Environmental Conservation (NYSDEC) comment letters of May 22, 2008 and July 23, 2009. This revised Supplement reflects discussions with the NYSDEC at a meeting on September 10, 2009 and during a conference call on November 12, 2009. As agreed, the Site Area RI report will not be revised. This revised Supplement is consistent with response letters submitted to the NYSDEC on August 26, 2008 and November 23, 2009. Provided below are updated report text, tables, figures, and appendices that modify the January 8, 2009 RI Supplement. The text of the original RI Supplement is shown in plain text and the information that was added in this revised Supplement is highlighted in ***bold italics.***

Section 1, Introduction, Page 1, 2nd Bullet has been revised as follows:

- Develop and evaluate alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy a release or potential release of constituents of concern (COCs) at or from the Site by conducting a feasibility study (FS).

Section 1.1.2, Site History, Page 3, the first three paragraphs have been revised as follows:

This is a summary of the history for the area comprising what is now known as the Town of Oyster Bay Bethpage Community Park (the "Property" or "Park"). The information regarding the activities that may have taken place at the Property is historical in nature and therefore incomplete and subject to change if and when additional and/or different information becomes available.

The Property is believed to have been primarily farmland until the 1940s. Around that time, the Property was purchased by Grumman Aircraft Engineering Corporation, a predecessor company of Northrop Grumman Systems Corporation. The Property was not used for actual manufacturing operations undertaken at the Bethpage Facility, and no buildings were erected on the property by Grumman Aircraft Engineering Corporation.

The Property was donated by Grumman Aircraft Engineering Corporation to the Town of Oyster Bay in October of 1962. Shortly thereafter, the Park was constructed on the Property by the Town.

It is generally believed that during the period between 1950 and late 1962 that Grumman Aircraft Engineering Corporation owned the Property, wastewater treatment sludge from the Grumman Aircraft Engineering Corporation Plant 2 Industrial Wastewater Treatment Facility may have been transported to an area in the southwestern part of the Property and placed in drying beds. The wastewater treated at the Plant 2 Industrial Wastewater Treatment Facility resulted from metal finishing operations conducted at both Plant 2 and the Naval Weapons Industrial Reserve Plant ("Plant 3"), which was owned by the U.S. Navy and operated by Grumman Aircraft Engineering Corporation. The southwestern portion of the Property was enclosed by a chain-link fence, which was secured by a locked gate. It is also believed that used rags generated during the wipe-down of painting operations located in Plants 2 and 3 may have been transported to the Property.

It is also believed that an area in the southwestern portion of the Property was utilized as a fire training area where waste oil and jet fuel may have been ignited and extinguished, and that the requirement to develop, operate and maintain an on-site fire fighting force ("Crash Crew"), including a fire training program may have been imposed on Grumman Aircraft Engineering Corporation by the U.S. Navy.

Northrop Grumman Systems Corporation does not have any direct information regarding the operations conducted by the Town of Oyster Bay subsequent to the transfer of the Property to the Town in 1962.

Additional Site history information is provided in the following reports:

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2002. Town of Oyster Bay Bethpage Community Park Soil Sampling Program, Bethpage, New York. Report of Findings. June 2002.***

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2003a. Bethpage Community Park, Investigation Sampling Program, Field Report. December 2003.***

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2003b. Bethpage Community Park Investigation Program, Analytical Results of Soil and Groundwater Samples. August 2003.***

Section 4.2.1.1, Presence and Nature of Fill Deposits, Southwest Park Region, Page 36, 3rd paragraph has been revised as follows:

A second major type of fill material encountered at the Park is present in the northern portion of the southwest Park region. This material is predominantly a blue silt and clay like material, which is present from approximately 1 ft bls to a depth of 22 ft bls. The location, depth from land surface, and thickness of this unit are shown on Figure B2-2 (Appendix B). The material is present beneath most of Area "A", Area "B" and Area "C" and the northwest portion of Area "D". The composition of this material along the western boundary of Area "A" (near Borings B-57 and B-58) is slightly different from the material present in other portions of the Park. In this area, the material varied more in color, from black to blue to gray to green, and its density was less with higher moisture content than the blue material discussed above. In the central and western region of Area "A", the top of the blue material varies from 5 to 16 ft bls and its thickness varies from greater than 1 ft to over 6 ft. In Area "A", the material is interbedded with sand. In Area "B", the material was primarily encountered in the western and eastern portions of the area. It should be noted that approximately 75 percent of the eastern portion of Area "B" was excavated to a depth of up to 20 ft bls during the Town of Oyster Bay IRM program. In the western portion of Area "B", the top of the material ranges between 6 and 9 ft bls and is up to 5 ft thick. In the eastern portion of the area, the top of the material was encountered between 1 and 6 ft bls with a thickness of between 0.5 and greater than 8 ft. Samples of this material were collected during the RI, the results of the analyses performed are provided in Section 5.

Section 5.3.3.4, Polychlorinated Biphenyls, Page 56, the following paragraph has been added to the section, as follows:

The extent of PCB exceedances on the former Plant 24 Access Road is fully discussed in the Plant 24 Access Road Site Bethpage Facility, PCB Investigation/ Delineation Program (July 2001), see Appendix B supplement.

Section 6.1, Constituents of Concern, Page 69, the list of constituents of concern in one or more media is as follows:

Volatile Organic Compounds (VOCs)

Chlorinated Ethenes

-Trichloroethene

-cis-1,2-Dichloroethene

- Vinyl chloride

Aromatic Hydrocarbons

-Ethylbenzene

-Toluene

-Xylenes

Polycyclic Aromatic Hydrocarbons

-Benzo(b)fluoranthene

-Benzo(a)anthracene

-Benzo(a)pyrene

-Indeno(1,2,3-cd)pyrene

Metals

-Arsenic

-Cadmium

-Chromium

-***Lead***

-***Mercury***

Other

-Chlorodifluoromethane (attributed to the Town of Oyster Bay)

-Polychlorinated Biphenyls (PCBs)

Section 3.3.3 Other Soil Sampling, has been added, as follows:

During excavation activities in December 2007 in connection with the construction of the OU3 Soil Gas Interim Remedial Measure (IRM), stained soils were noted along a small portion of the western leg of the IRM pipe trench. The visibly-stained soils were removed from the trench, stockpiled, sampled, and analyzed for total and Toxicity Characteristic Leaching Procedure (TCLP) VOCs,

as well as semi-volatile organic compounds (SVOCs), PCBs, and metals. Results of the analyses are provided in Tables 5.29, 5.30, 5.31, 5.32, and 5.33 of this revised Supplement.

Section 5.1 Development of Standards, Criteria, and Guidance Values, page 41, last paragraph has been revised, as follows:

For waste characterization samples, the data were compared to 40 Code of Federal Regulations (CFR), Part 261.24 (Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic).

Section 5.3.4, Western Access Road Stained Soil has been added, as follows:

In summary, TCLP VOCs were not detected and total mass VOCs, SVOCs, PCBs, and metals were not detected above the Industrial Soil Cleanup Standards in New York State Department of Environmental Conservation (NYSDEC) Part 375. However, the total chromium result in a single sample (WLT-ST) (377 mg/kg) exceeded the associated TCLP concentration listed under the 40 CFR Part 261.24 Maximum Concentration of Contaminants for the Toxicity Characteristic of 5 mg/L, using the "twenty-times" rule.

Based on the results of the waste characterization sample analysis, the visibly-stained soil was transported and disposed of as a characteristically hazardous waste at CWM Chemical Services, Inc. Model City Landfill in April 2008 under Waste Profile NY296709.

Section 7.2, Presentation of Conceptual Site Model, Page 82, the 2nd paragraph has been revised as follows:

The Site Area was viewed in this manner because the data suggest that past activities varied among these three regions (refer to Section 1.1.2 for park history). The data indicate that each region contains one or more sources of COCs, exhibits a distinct profile of COCs detected (i.e., type of constituent) as well as distinct physical characteristics (i.e., geology and hydrogeology) that directly affect the location, distribution, and concentration of COCs.

The CSM is provided as Figure 7-1 of this revised Supplement.

Section 7.5, Former Plant 24 Access Road, Page 86, the 4th paragraph has been revised as follows:

PCBs and, secondarily, metals occur in the region in the unsaturated zone, with PCB concentrations above 10 mg/kg from land surface to a maximum depth of 7 ft bls. PCB concentrations are generally higher at the eastern section of the unpaved portion of the Access Road. A full discussion of PCB distribution on the Former Plant 24 Access Road is provided in Dvirka and Bartilucci's (D&B) Plant 24 Access Road Site Bethpage Facility, PCB Investigation/Delineation Program (July 2001), see Appendix B supplement.

Section 9.4, Conceptual Site Model, Page 97, the 2nd bullet has been revised as follows:

- The data suggests that past activities varied among the southwest Park region, east-central Park region and the Former Grumman Plant 24 Access Road. Each region appears to contain one or more sources of COCs, exhibits a distinct profile of COCs detected as well as distinct physical characteristics that directly affect the location, distribution, and concentration of COCs.

Section 11, References, has been revised as follows:

The following references have been added:

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2002. Town of Oyster Bay Bethpage Community Park Soil Sampling Program, Bethpage, New York. Report of Findings. June 2002.***

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2003a. Bethpage Community Park, Investigation Sampling Program, Field Report. December 2003.***

- ***Dvirka and Bartilucci Consulting Engineers (D&B). 2003b. Bethpage Community Park Investigation Program, Analytical Results of Soil and Groundwater Samples. August 2003.***

Tables

The following tables have been added:

- ***Table 5.29. Concentrations of VOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.***

- ***Table 5.30. Concentrations of VOCs (TCLP Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.***

- ***Table 5.31. Concentrations of SVOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.***

- ***Table 5.32. Concentrations of Metals (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.***

- ***Table 5.33. Concentrations of PCBs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.***

Figures

Figures have been revised or added, as follows.

- ***Figure 1-3 (Current and Former Site Features), has been revised to show the 12-inch water line beneath the Access Road and the Park.***

- ***Figure 3-1 (Site Area Cone Penetrometer Boring, Membrane Interface Probe Boring, Soil Boring, Soil Gas Point, Vertical Profile Boring, Piezometer, and Well Locations), Note No. 4 has been revised to reference Appendix B.***

- ***Figure 7-1 (Conceptual Site Model), has been added to the revised Supplement.***

Appendices

Additional data have been provided on the enclosed CD as "Supplement to Appendix B":

> ***Figures and tables from the Dvirka and Bartilucci Plant 24 Access Road Site Bethpage Facility, PCB Investigation/Delineation Program dated July 2001and PCB soil data not previously provided along with figures showing the sample locations.***

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Table 5.29 Concentrations of VOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg		Sample Location: Sample Date:	WLT-ST 12/18/2007	
	NYSDEC Part 375			
VOCs	Industrial	RCRA		
1,1,1-Trichloroethane	1,000,000	NE	< 2800	
1,1,2,2-Tetrachloroethane	NE	NE	< 2800	
1,1,2-Trichloroethane	NE	NE	< 2800	
1,1-Dichloroethane	480,000	NE	< 2800	
1,1-Dichloroethene	1,000,000	700	< 2800	
1,2-Dichloroethane	60,000	500	< 2800	
1,2-Dichloropropane	NE	NE	< 2800	
2-Butanone	1,000,000	NE	< 28000	
2-Hexanone	NE	NE	< 28000	
4-Methyl-2-pentanone	NE	NE	< 28000	
Acetone	1,000,000	NE	< 28000	
Benzene	89,000	500	< 2800	
Bromodichloromethane	NE	NE	< 2800	
Bromoform	NE	NE	< 2800	
Bromomethane	NE	NE	< 2800	
Carbon disulfide	NE	NE	< 28000	
Carbon tetrachloride	44,000	NE	< 2800	
Chlorobenzene	1,000,000	100,000	< 2800	
Chloroethane	NE	NE	< 2800	
Chloroform	700,000	6,000	< 2800	
Chloromethane	NE	NE	< 2800	
cis-1,2-Dichloroethene	1,000,000	NE	< 2800	
cis-1,3-Dichloropropene	NE	NE	< 2800	
Dibromochloromethane	NE	NE	< 2800	
Dichlorodifluoromethane (Freon 12)	NE	NE	< 2800	
Ethylbenzene	780,000	NE	**6,600**	
Freon 113	NE	NE	< 2800	
Methylene chloride	1,000,000	NE	< 2800	
Styrene	NE	NE	< 2800	
Tetrachloroethene	300,000	700	< 2800	
Toluene	1,000,000	NE	**160,000**	**E**
trans-1,2-Dichloroethene	1,000,000	NE	< 2800	
trans-1,3-Dichloropropene	NE	NE	< 2800	
Trichloroethene	400,000	500	**390**	**J**
Vinyl Chloride	27,000	200	< 2800	
Xylene-O	1,000,000	NE	**7,300**	
Xylene-M&P	1,000,000	NE	**23,000**	
TVOC			**197,290**	

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC	New York State Department of Environmental Conservation
ug/kg	milligrams per kilogram
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
NE	Not Established
J	Value is estimated
E	Value exceeds calibration range

Table 5.30 Concentrations of VOCs (TCLP Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg	Sample Location: Sample Date:	WLT-ST 12/18/2007
VOCs	RCRA	
1,1-Dichloroethene	700	< 50
1,2-Dichloroethane	500	< 50
2-Butanone	NE	< 100
Benzene	500	< 50
Carbon tetrachloride	NE	< 50
Chlorobenzene	100,000	< 50
Tetrachloroethene	700	< 50
Trichloroethene	500	< 50
Vinyl Chloride	200	< 50

Notes and Abbreviations:

ug/kg	milligrams per kilogram
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
NE	Not Established

Table 5.31 Concentrations of SVOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg		Sample Location: Sample Date:	WLT-ST 12/18/2007	
	NYSDEC Part 375			
SVOCs	Industrial	RCRA		
2,4,5-Trichlorophenol	NE	400,000	< 370	
2,4,6-Trichlorophenol	NE	2,000	< 370	
2,4-Dichlorophenol	NE	NE	< 370	
2,4-Dimethylphenol	NE	NE	< 370	
2,4-Dinitrophenol	NE	NE	< 370	
2,4-Dinitrotoluene	NE	130	<1900	
2,6-Dinitrotoluene	NE	NE	< 370	
2-Chloronaphthalene	NE	NE	< 370	
2-Chlorophenol	NE	NE	< 370	
2-Methylnaphthalene	NE	NE	**180**	**J**
2-Methylphenol	NE	NE	< 370	
2-Nitroaniline	NE	NE	<1900	
2-Nitrophenol	NE	NE	< 370	
3,3-Dichlorobenzidine	NE	NE	< 370	
3-Nitroaniline	NE	NE	<1900	
4,6-Dinitro-2-methylphenol	NE	NE	<1900	
4-Bromophenyl phenyl ether	NE	NE	< 370	
4-Nitroaniline	NE	NE	<1900	
4-Nitrophenol	NE	NE	<1900	
4-Chlorophenyl phenyl ether	NE	NE	< 370	
4-Chloroaniline	NE	NE	< 370	
4-Chloro-3-methylphenol	NE	NE	< 370	
4-Methylphenol	NE	NE	< 370	
Acenaphthene	1,000,000	NE	**27**	**J**
Acenaphthylene	1,000,000	NE	< 370	
Acetophenone	NE	NE	**930**	
Anthracene	1,000,000	NE	**43**	**J**
Atrazine	NE	NE	< 370	
Benzaldehyde	NE	NE	< 370	
Benzo(a)anthracene	11,000	NE	**180**	**J**
Benzo(a)pyrene	1,100	NE	**180**	**J**
Benzo(b)fluoranthene	11,000	NE	**220**	**J**
Benzo(ghi)perylene	1,000,000	NE	**160**	**J**
Benzo(k)fluoranthene	110,000	NE	**190**	**J**
Biphenyl	NE	NE	< 370	
Bis(2-chloro-1-methylethyl) ether	NE	NE	< 370	
Bis(2-chloroethoxy)methane	NE	NE	< 370	
Bis(2-chloroethyl)ether	NE	NE	< 370	
Bis(2-ethylhexyl)phthalate (BEHP)	NE	NE	< 370	
Butyl benzyl phthalate	NE	NE	< 370	
Caprolactam	NE	NE	< 370	
Carbazole	NE	NE	< 370	
Chrysene	110,000	NE	**250**	**J**
Dibenzo(a,h)anthracene	1,100	NE	**39**	**J**
Dibenzofuran	NE	NE	**37**	**J**
Diethyl phthalate	NE	NE	< 370	
Dimethyl phthalate	NE	NE	< 370	
Di-n-butyl phthalate	NE	NE	**230**	**J**
Di-n-octyl phthalate	NE	NE	< 370	
Fluoranthene	1,000,000	NE	**480**	
Fluorene	1,000,000	NE	**25**	**J**
Hexachlorobenzene	NE	130	< 370	
Hexachlorobutadiene	NE	500	< 370	
Hexachlorocyclopentadiene	NE	NE	< 370	
Hexachloroethane	NE	3,000	< 370	
Indeno(1,2,3-cd)pyrene	11,000	NE	**150**	**J**
Isophorone	NE	NE	< 370	
Naphthalene	1,000,000	NE	**180**	**J**
Nitrobenzene	NE	2,000	< 370	
N-Nitrosodiphenylamine	NE	NE	< 370	

Footnotes on next page.

Table 5.31 Concentrations of SVOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg		Sample Location: Sample Date:	WLT-ST 12/18/2007	
	NYSDEC Part 375			
SVOCs	Industrial	RCRA		
N-Nitrosodipropylamine	NE	NE	< 370	
Pentachlorophenol	55,000	100,000	< 1900	
Phenanthrene	1,000,000	NE	**280**	**J**
Phenol	1,000,000	NE	< 370	
Pyrene	1,000,000	NE	**320**	**J**

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC	New York State Department of Environmental Conservation
ug/kg	milligrams per kilogram
NE	Not Established
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
J	Value is estimated

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Table 5.32 Concentrations of Metals (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT mg/kg		Sample Location: Sample Date:	WLT-ST 12/18/2007
	NYSDEC Part 375		
Metals	Industrial	RCRA	
Arsenic	16	5	**4.09**
Barium	10,000	100	**42.7**
Beryllium	2,700	NE	**< 0.568**
Cadmium	60	1	**1.87**
Chromium	6,800	5	**377**
Chromium (Hexavalent)	800	NE	**75**
Copper	10,000	NE	**15.6**
Cyanide	10,000	NE	< 1.14
Lead	3,900	5	**36.4**
Manganese	10,000	NE	**65.5**
Mercury	5.7	0.2	**0.0797**
Nickel	10,000	NE	**6.8**
Selenium	6,800	1	**1.5**
Silver	6,800	5	< 1.14
Zinc	10,000	NE	**537**

Notes and Abbreviations:

Bold value indicates a detection

	Result exceeds 40 CFR Part 261 Toxicity Characteristics Concentrations
NYSDEC	New York State Department of Environmental Conservation
mg/kg	milligrams per kilogram
NE	Not Established
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)

Table 5.33 Concentrations of PCBs in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT (ug/kg)		Sample Location:	WLT-ST
		Sample Date:	12/18/2007
	NYSDEC Part 375		
Polychlorinated Biphenyls	Industrial	RCRA	
Aroclor-1016	25,000	50,000	< 37
Aroclor-1221	25,000	50,000	< 76
Aroclor-1232	25,000	50,000	< 37
Aroclor-1242	25,000	50,000	< 37
Aroclor-1248	25,000	50,000	**330**
Aroclor-1254	25,000	50,000	**260**
Aroclor-1260	25,000	50,000	< 37

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC New York State D New York State Department of Environmental Conservation
ug/kg micrograms per kilogram
PCB Polychlorinated biphenyl
RCRA Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)

Table 5.29 Concentrations of VOCs (Total Mass Analysis) in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg		Sample Location: WLT-ST Sample Date: 12/18/2007		
	NYSDEC Part 375			
VOCs	Industrial	RCRA		
1,1,1-Trichloroethane	1,000,000	NE	< 2800	
1,1,2,2-Tetrachloroethane	NE	NE	< 2800	
1,1,2-Trichloroethane	NE	NE	< 2800	
1,1-Dichloroethane	480,000	NE	< 2800	
1,1-Dichloroethene	1,000,000	700	< 2800	
1,2-Dichloroethane	60,000	500	< 2800	
1,2-Dichloropropane	NE	NE	< 2800	
2-Butanone	1,000,000	NE	< 28000	
2-Hexanone	NE	NE	< 28000	
4-Methyl-2-pentanone	NE	NE	< 28000	
Acetone	1,000,000	NE	< 28000	
Benzene	89,000	500	< 2800	
Bromodichloromethane	NE	NE	< 2800	
Bromoform	NE	NE	< 2800	
Bromomethane	NE	NE	< 2800	
Carbon disulfide	NE	NE	< 28000	
Carbon tetrachloride	44,000	NE	< 2800	
Chlorobenzene	1,000,000	100,000	< 2800	
Chloroethane	NE	NE	< 2800	
Chloroform	700,000	6,000	< 2800	
Chloromethane	NE	NE	< 2800	
cis-1,2-Dichloroethene	1,000,000	NE	< 2800	
cis-1,3-Dichloropropene	NE	NE	< 2800	
Dibromochloromethane	NE	NE	< 2800	
Dichlorodifluoromethane (Freon 12)	NE	NE	< 2800	
Ethylbenzene	780,000	NE	**6,600**	
Freon 113	NE	NE	< 2800	
Methylene chloride	1,000,000	NE	< 2800	
Styrene	NE	NE	< 2800	
Tetrachloroethene	300,000	700	< 2800	
Toluene	1,000,000	NE	**160,000**	**E**
trans-1,2-Dichloroethene	1,000,000	NE	< 2800	
trans-1,3-Dichloropropene	NE	NE	< 2800	
Trichloroethene	400,000	500	**390**	**J**
Vinyl Chloride	27,000	200	< 2800	
Xylene-O	1,000,000	NE	**7,300**	
Xylene-M&P	1,000,000	NE	**23,000**	
TVOC			**197,290**	

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC	New York State Department of Environmental Conservation
ug/kg	milligrams per kilogram
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
NE	Not Established
J	Value is estimated
E	Value exceeds calibration range

Table 5.30 Concentrations of VOCs (TCLP Analysis) in Soil from Soil Pile Samples,
Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg	Sample Location: Sample Date:	WLT-ST 12/18/2007
VOCs	RCRA	
1,1-Dichloroethene	700	< 50
1,2-Dichloroethane	500	< 50
2-Butanone	NE	< 100
Benzene	500	< 50
Carbon tetrachloride	NE	< 50
Chlorobenzene	100,000	< 50
Tetrachloroethene	700	< 50
Trichloroethene	500	< 50
Vinyl Chloride	200	< 50

Notes and Abbreviations:

ug/kg	milligrams per kilogram
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
NE	Not Established

Table 5.31 Concentrations of SVOCs (Total Mass Analysis) in Soil from Soil Pile Samples,
Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT		Sample Location: WLT-ST Sample Date: 12/18/2007		
ug/kg				
	NYSDEC Part 375			
SVOCs	Industrial	RCRA		
2,4,5-Trichlorophenol	NE	400,000	< 370	
2,4,6-Trichlorophenol	NE	2,000	< 370	
2,4-Dichlorophenol	NE	NE	< 370	
2,4-Dimethylphenol	NE	NE	< 370	
2,4-Dinitrophenol	NE	NE	< 370	
2,4-Dinitrotoluene	NE	130	<1900	
2,6-Dinitrotoluene	NE	NE	< 370	
2-Chloronaphthalene	NE	NE	< 370	
2-Chlorophenol	NE	NE	< 370	
2-Methylnaphthalene	NE	NE	**180**	J
2-Methylphenol	NE	NE	< 370	
2-Nitroaniline	NE	NE	<1900	
2-Nitrophenol	NE	NE	< 370	
3,3-Dichlorobenzidine	NE	NE	< 370	
3-Nitroaniline	NE	NE	<1900	
4,6-Dinitro-2-methylphenol	NE	NE	<1900	
4-Bromophenyl phenyl ether	NE	NE	< 370	
4-Nitroaniline	NE	NE	<1900	
4-Nitrophenol	NE	NE	<1900	
4-Chlorophenyl phenyl ether	NE	NE	< 370	
4-Chloroaniline	NE	NE	< 370	
4-Chloro-3-methylphenol	NE	NE	< 370	
4-Methylphenol	NE	NE	< 370	
Acenaphthene	1,000,000	NE	**27**	J
Acenaphthylene	1,000,000	NE	< 370	
Acetophenone	NE	NE	**930**	
Anthracene	1,000,000	NE	**43**	J
Atrazine	NE	NE	< 370	
Benzaldehyde	NE	NE	< 370	
Benzo(a)anthracene	11,000	NE	**180**	J
Benzo(a)pyrene	1,100	NE	**180**	J
Benzo(b)fluoranthene	11,000	NE	**220**	J
Benzo(ghi)perylene	1,000,000	NE	**160**	J
Benzo(k)fluoranthene	110,000	NE	**190**	J
Biphenyl	NE	NE	< 370	
Bis(2-chloro-1-methylethyl) ether	NE	NE	< 370	
Bis(2-chloroethoxy)methane	NE	NE	< 370	
Bis(2-chloroethyl)ether	NE	NE	< 370	
Bis(2-ethylhexyl)phthalate (BEHP)	NE	NE	< 370	
Butyl benzyl phthalate	NE	NE	< 370	
Caprolactam	NE	NE	< 370	
Carbazole	NE	NE	< 370	
Chrysene	110,000	NE	**250**	J
Dibenzo(a,h)anthracene	1,100	NE	**39**	J
Dibenzofuran	NE	NE	**37**	J
Diethyl phthalate	NE	NE	< 370	
Dimethyl phthalate	NE	NE	< 370	

Footnotes on next page.

Di-n-butyl phthalate	NE	NE	**230**	J

Table 5.31 Concentrations of SVOCs (Total Mass Analysis) in Soil from Soil Pile Samples,
Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT ug/kg		Sample Location: WLT-ST Sample Date: 12/18/2007		
	NYSDEC Part 375			
SVOCs	Industrial	RCRA		
Di-n-octyl phthalate	NE	NE	< 370	
Fluoranthene	1,000,000	NE	**480**	
Fluorene	1,000,000	NE	**25**	J
Hexachlorobenzene	NE	130	< 370	
Hexachlorobutadiene	NE	500	< 370	
Hexachlorocyclopentadiene	NE	NE	< 370	
Hexachloroethane	NE	3,000	< 370	
Indeno(1,2,3-cd)pyrene	11,000	NE	**150**	J
Isophorone	NE	NE	< 370	
Naphthalene	1,000,000	NE	**180**	J
Nitrobenzene	NE	2,000	< 370	
N-Nitrosodiphenylamine	NE	NE	< 370	
N-Nitrosodipropylamine	NE	NE	< 370	
Pentachlorophenol	55,000	100,000	< 1900	
Phenanthrene	1,000,000	NE	**280**	J
Phenol	1,000,000	NE	< 370	
Pyrene	1,000,000	NE	**320**	J

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC	New York State Department of Environmental Conservation
ug/kg	milligrams per kilogram
NE	Not Established
RCRA	Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)
J	Value is estimated

Table 5.32 Concentrations of Metals (Total Mass Analysis) in Soil from Soil Pile Samples,
Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT mg/kg			Sample Location: WLT-ST Sample Date: 12/18/2007
	NYSDEC Part 375		
Metals	Industrial	RCRA	
Arsenic	16	5	**4.09**
Barium	10,000	100	**42.7**
Beryllium	2,700	NE	**< 0.568**
Cadmium	60	1	**1.87**
Chromium	6,800	5	**377**
Chromium (Hexavalent)	800	NE	**75**
Copper	10,000	NE	**15.6**
Cyanide	10,000	NE	< 1.14
Lead	3,900	5	**36.4**
Manganese	10,000	NE	**65.5**
Mercury	5.7	0.2	**0.0797**
Nickel	10,000	NE	**6.8**
Selenium	6,800	1	**1.5**
Silver	6,800	5	< 1.14
Zinc	10,000	NE	**537**

Notes and Abbreviations:

Bold value indicates a detection

Result exceeds 40 CFR Part 261 Toxicity Characteristics Concentrations

NYSDEC New York State Department of Environmental Conservation

mg/kg milligrams per kilogram

NE Not Established

RCRA Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)

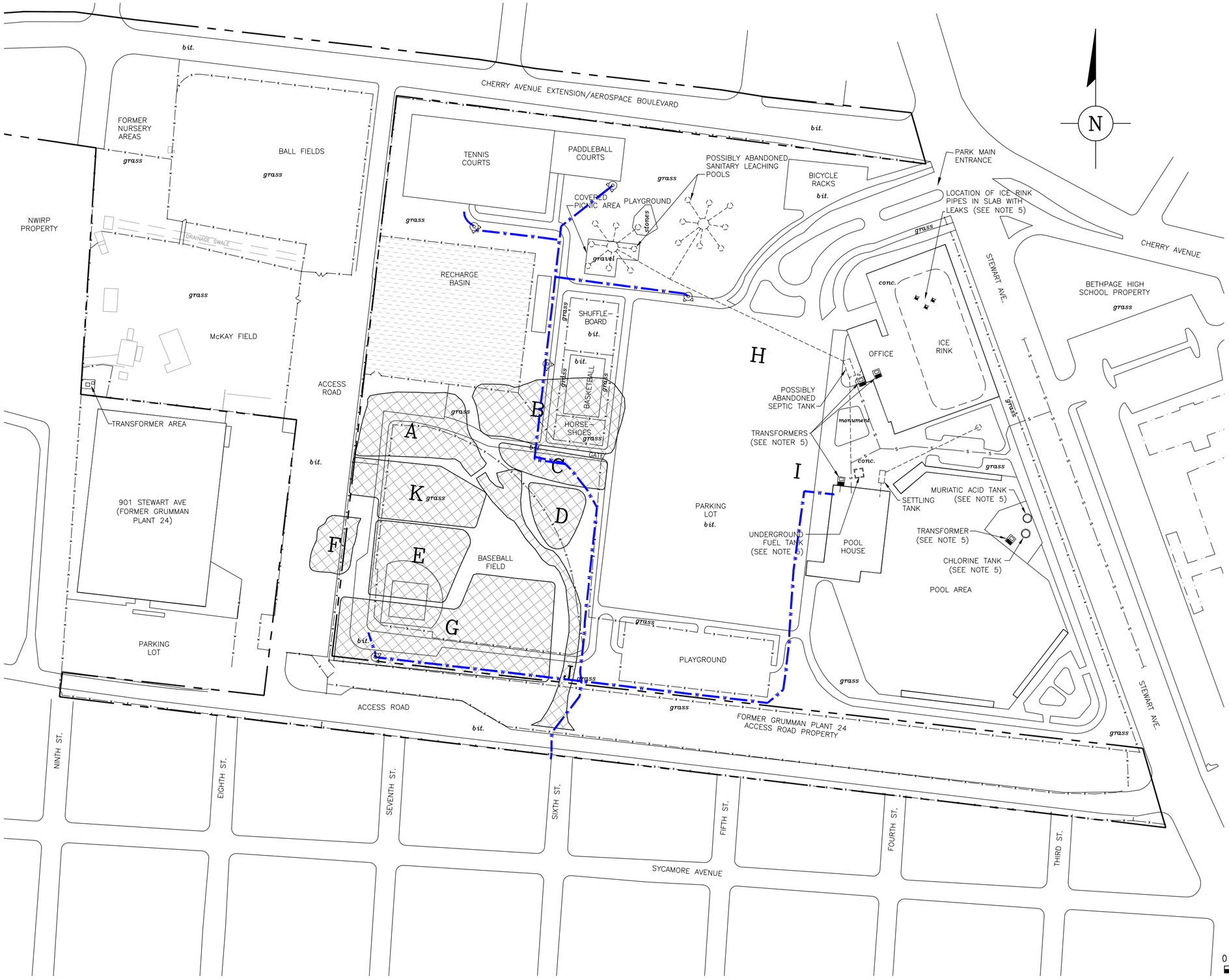
Table 5.33 Concentrations of PCBs in Soil from Soil Pile Samples, Northrop Grumman Systems Corporation, Operable Unit 3, Former Grumman Settling Ponds, Bethpage, New York.

CONSTITUENT (ug/kg)		Sample Location:	WLT-ST
		Sample Date:	12/18/2007
	NYSDEC Part 375		
Polychlorinated Biphenyls	Industrial	RCRA	
Aroclor-1016	25,000	50,000	< 37
Aroclor-1221	25,000	50,000	< 76
Aroclor-1232	25,000	50,000	< 37
Aroclor-1242	25,000	50,000	< 37
Aroclor-1248	25,000	50,000	**330**
Aroclor-1254	25,000	50,000	**260**
Aroclor-1260	25,000	50,000	< 37

Notes and Abbreviations:

Bold value indicates a detection

NYSDEC New York State D New York State Department of Environmental Conservation
ug/kg micrograms per kilogram
PCB Polychlorinated biphenyl
RCRA Resource Conservation and Recovery Act (represents Toxicity Characteristic Leaching Procedure standards)



EXPLANATION

- NORTHROP GRUMMAN PROPERTY LINE
- FENCE
- LIMITS OF BETHPAGE HIGH SCHOOL MAIN BUILDING
- BASIN
- *bit.* — BITUMINOUS PAVEMENT
- APPROXIMATE LIMITS OF AREA OF APPARENT HISTORICAL SOIL DISTURBANCE
- NWIRP — NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
- POSSIBLY ABANDONED SANITARY SEWER LINE
- POSSIBLY ABANDONED SANITARY LEACHING POOL
- EXISTING SEWER LINE
- TRANSFORMER
- ABOVEGROUND TANK
- UNDERGROUND TANK
- WATER LINE (BASED ON GEOPHYSICAL INVESTIGATION BY NAEVA GEOPHYSICS, INC. APRIL 2006)
- FIRE HYDRANT

NOTES:

1. PARK FEATURES SHOWN WERE PRESENT PRIOR TO TOWN OF OYSTER BAY REDEVELOPMENT IN 2005.
2. LOCATIONS AND EXTENTS OF SOIL DISTURBANCE, SANITARY SYSTEMS, AND TRANSFORMER ARE APPROXIMATE.
3. THE LIMITS OF AREAS "H" AND "I" ARE UNKNOWN.
4. SUBSEQUENT TO TOWN ACQUISITION OF THE PARK, THE TOWN CONDUCTED RE-WORKING AND DISTURBANCE OF SOIL THROUGHOUT THE PARK, THE DETAILS OF THESE ACTIVITIES ARE NOT KNOWN.
5. FEATURES SHOWN BASED ON THE DEPOSITION OF THEODORE ZERVOS (ZERVOS 2007).
6. THERE MAY HAVE BEEN OTHER HISTORICAL FEATURES IN THE PARK THAT ARE NOT KNOWN FROM THE PROJECT RECORD.

NO.	ISSUED DATE	REVISION DESCRIPTION	BY/CKD
0	01/2008	REMEDIAL INVESTIGATION REPORT	MR

SEAL

ARCADIS OF NEW YORK, INC.
Two Huntington Quadrangle
Suite 1S10
Melville, NY 11747
Tel: 631-249-7600 Fax: 631-249-7610
www.arcadis-us.com

PROJECT TITLE

NORTHROP GRUMMAN SYSTEMS CORPORATION
OPERABLE UNIT 3
(FORMER GRUMMAN SETTLING PONDS)
BETHPAGE, NEW YORK

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
C. SAN GIOVANNI	M. WOLFERT		M. REINDL

SHEET TITLE

CURRENT AND FORMER SITE FEATURES

TASK/PHASE NUMBER	DRAWN BY
00007	A. SANCHEZ
PROJECT NUMBER	DRAWING NUMBER
NY001464.0807	**1-3**

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User Name : alsanchez

EXPLANATION

- NORTHROP GRUMMAN PROPERTY LINE
- FENCE
- LIMITS OF BETHPAGE HIGH SCHOOL MAIN BUILDING
- BASIN
- *bit.* BITUMINOUS PAVEMENT
- BCPMW-3 MONITORING WELL
- VP-1 VERTICAL PROFILE BORING
- SGP-1 SOIL GAS POINT
- F-8-PZ PIEZOMETER
- O-97-PZ ABANDONED PIEZOMETER
- CAMW-4 ABANDONED MONITORING WELL
- F-94 CPT BORING
- J-3 CPT\MIP BORING
- I-3-SB/GB SOIL BORING/GEOTECHNICAL BORING
- SV-06 NYSDEC SOIL GAS POINT
- NWIRP NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
- CPT CONE PENETROMETER
- MIP MEMBRANE INTERFACE PROBE
- OU3 OPERABLE UNIT 3
- RI REMEDIAL INVESTIGATION
- IRM INTERIM REMEDIAL MEASURE
- NYSDEC NEW YORK STATE DEPARTMENT OF ENVIORNMENTAL CONSERVATION
- D&B DVIRKA AND BARTILUCCI CONSULTING ENGINEERS

NOTES:

1. MONITORING WELLS AND VPBs VP-1 TO VP-20 SURVEYED TO NORTH AMERICAN DATUM (NAD) 83. ALL OTHER LOCATIONS ARE APPROXIMATE BASED ON FIELD MEASUREMENTS.
2. PARK FEATURES SHOWN WERE PRESENT PRIOR TO TOWN OF OYSTER BAY REDEVELOPMENT IN 2005.
3. GRID DOES NOT CORRELATE TO TOWN OF OYSTER BAY 2005 IRM PREDESIGN SAMPLING GRID OR TO D&B SAMPLING GRID SHOWN IN APPENDIX B.
4. APPENDIX B PROVIDES LOCATIONS OF SAMPLES COLLECTED BY D&B FOR THE PCB INVESTIGATION/DELINEATION PROGRAM AS WELL AS THE OU3 RI.

0 100' 200'

SCALE IN FEET

NO.	ISSUED DATE	REVISION DESCRIPTION	BY/CKD
1	12/2008	SUPPLEMENT TO RI REPORT	MR
0	01/2008	REMEDIAL INVESTIGATION REPORT	MR

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ARCADIS OF NEW YORK, INC.
Two Huntington Quadrangle
Suite 1S10
Melville, NY 11747
Tel: 631-249-7600 Fax: 631-249-7610
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PROJECT TITLE

NORTHROP GRUMMAN SYSTEMS CORPORATION
OPERABLE UNIT 3
(FORMER GRUMMAN SETTLING PONDS)
BETHPAGE, NEW YORK

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
C. SAN GIOVANNI	M. WOLFERT		M. REINDL

SHEET TITLE

SITE AREA CONE PENETROMETER BORING, MEMBRANE INTERFACE PROBE BORING, SOIL BORING, SOIL GAS POINT, VERTICAL PROFILE BORING, PIEZOMETER, AND WELL LOCATIONS

TASK/PHASE NUMBER	DRAWN BY
00007	A. SANCHEZ
PROJECT NUMBER	DRAWING NUMBER
NY001464.0807	3-1

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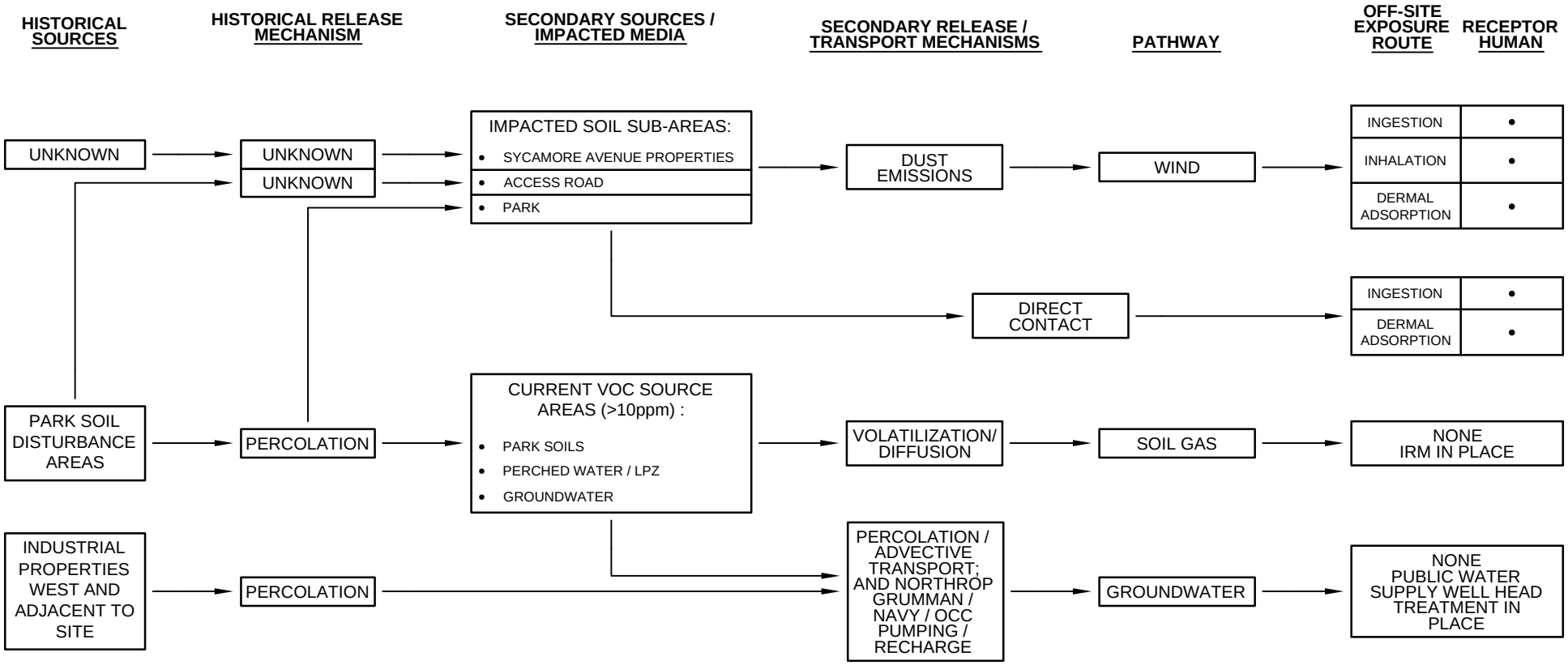


NOTES:

1. OFF-SITE MIGRATION OF VOC-IMPACTED GROUNDWATER FROM OU-2 PREVENTED BY OU-2 GROUNDWATER REMEDY SINCE 1998.
2. OFF-SITE MIGRATION OF VOC-IMPACTED GROUNDWATER FROM PARK (OU-3) PREVENTED BY GROUNDWATER IRM SINCE JULY 2009.
3. OFF- SITE MIGRATION OF VOC-IMPACTED SOIL GAS FROM PARK (OU-3) PREVENTED BY SOIL GAS IRM SINCE FEBRUARY 2008.

ABBREVIATIONS:

VOC - VOLATILE ORGANIC COMPOUND
LPZ - LOW PERMEABILITY ZONE
IRM - INTERIM REMEDIAL MEASURE
OCC - OCCIDENTAL CHEMICAL COMPANY
NWIRP - NAVAL WEAPONS INDUSTRIAL RESERVE PLANT

NORTHROP GRUMMAN SYSTEMS CORPORATION
OPERABLE UNIT 3
(FORMER GRUMMAN SETTLING PONDS)
BETHPAGE, NEW YORK

CONCEPTUAL SITE MODEL

ARCADIS

FIGURE
7-1

NORTHROP GRUMMAN

BETHPAGE FACILITY

JULY 2001

PLANT 24 ACCESS ROAD SITE BETHPAGE FACILITY

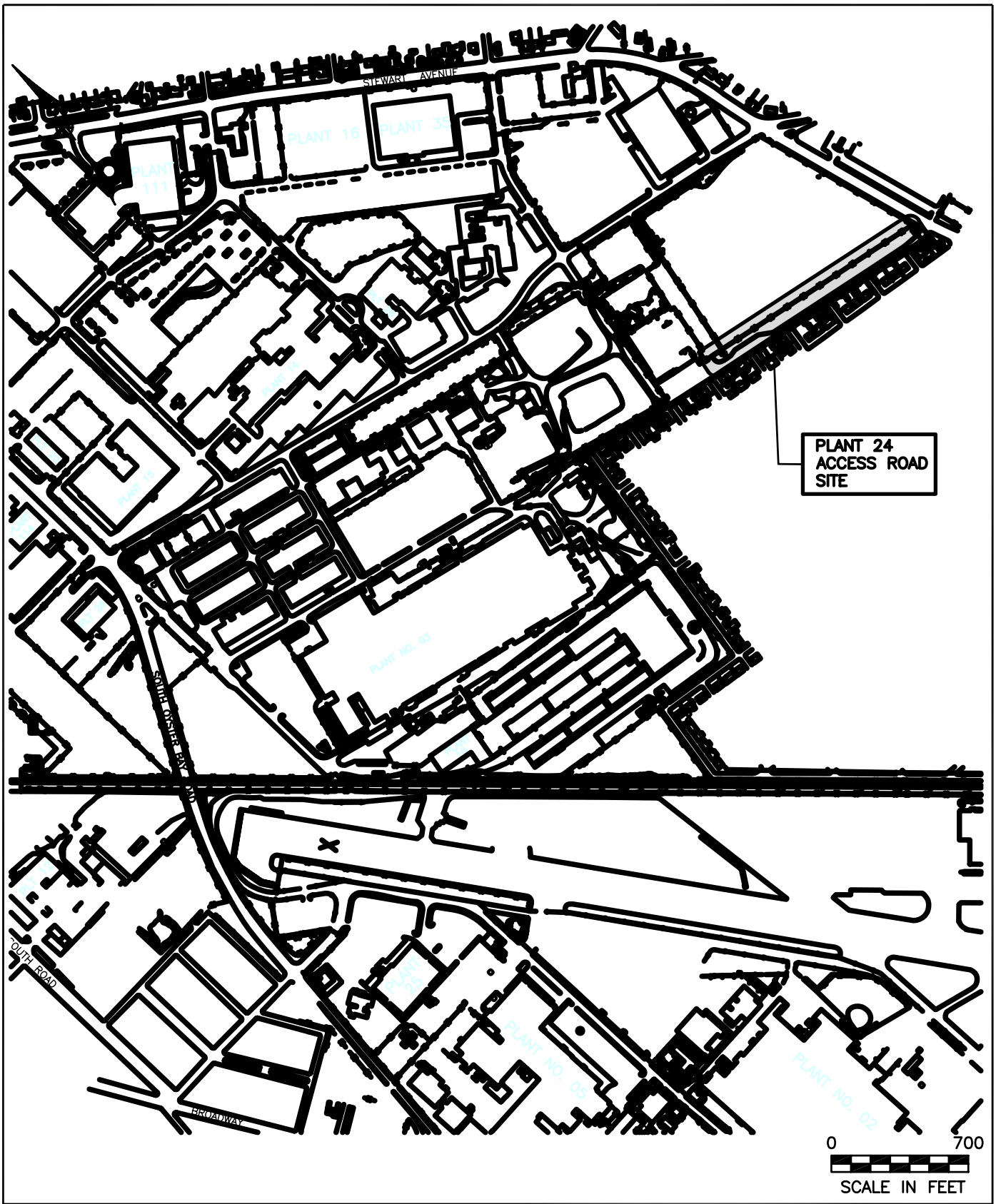
PCB Investigation/Delineation Program

Report of Findings

NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK

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

RLA/NORTHROP/PLANT24(1/23/01)

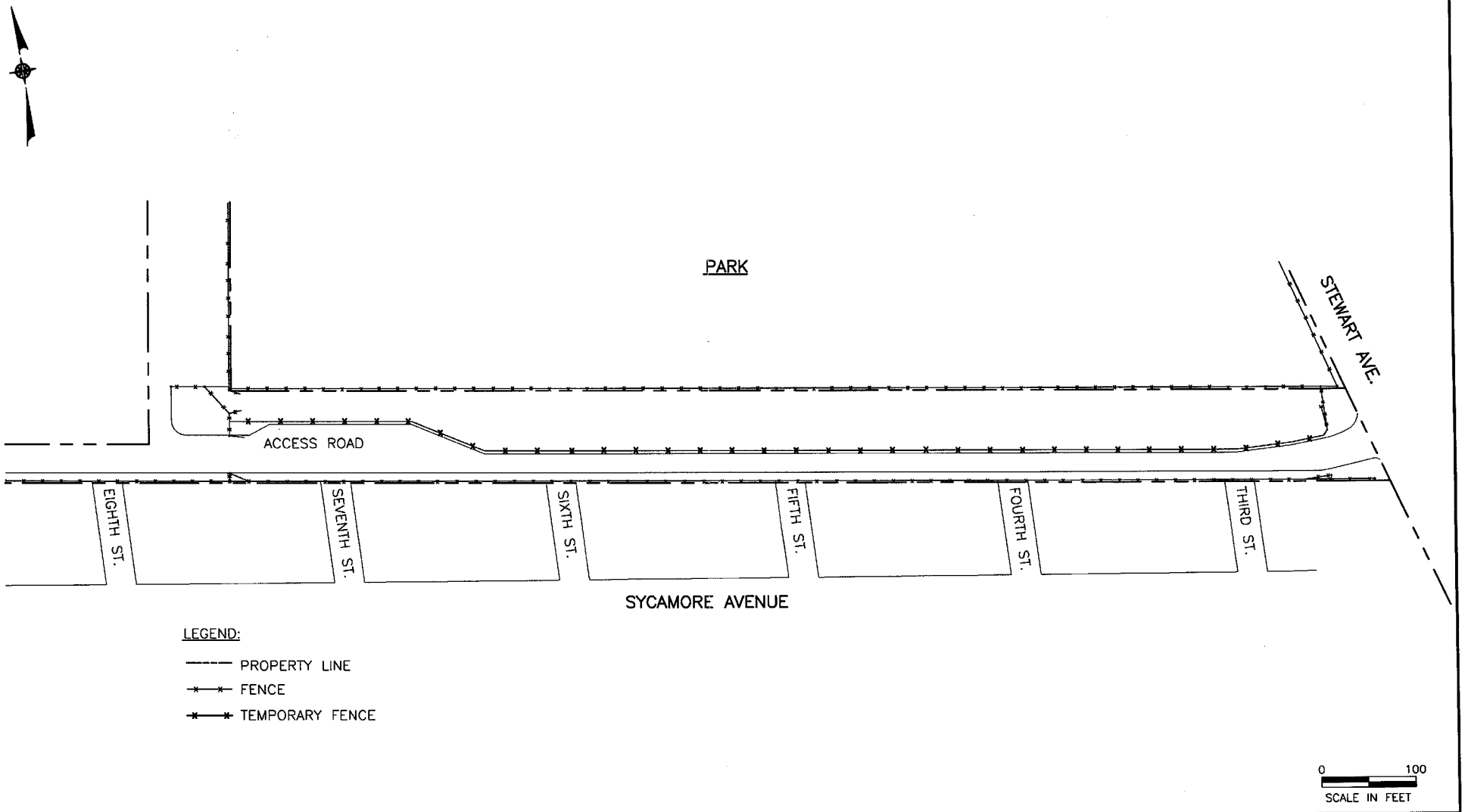


NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK

PLANT 24 ACCESS ROAD SITE
SITE LOCATION MAP

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

FIGURE 1–1



NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SITE PLAN

FIGURE 2-2

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

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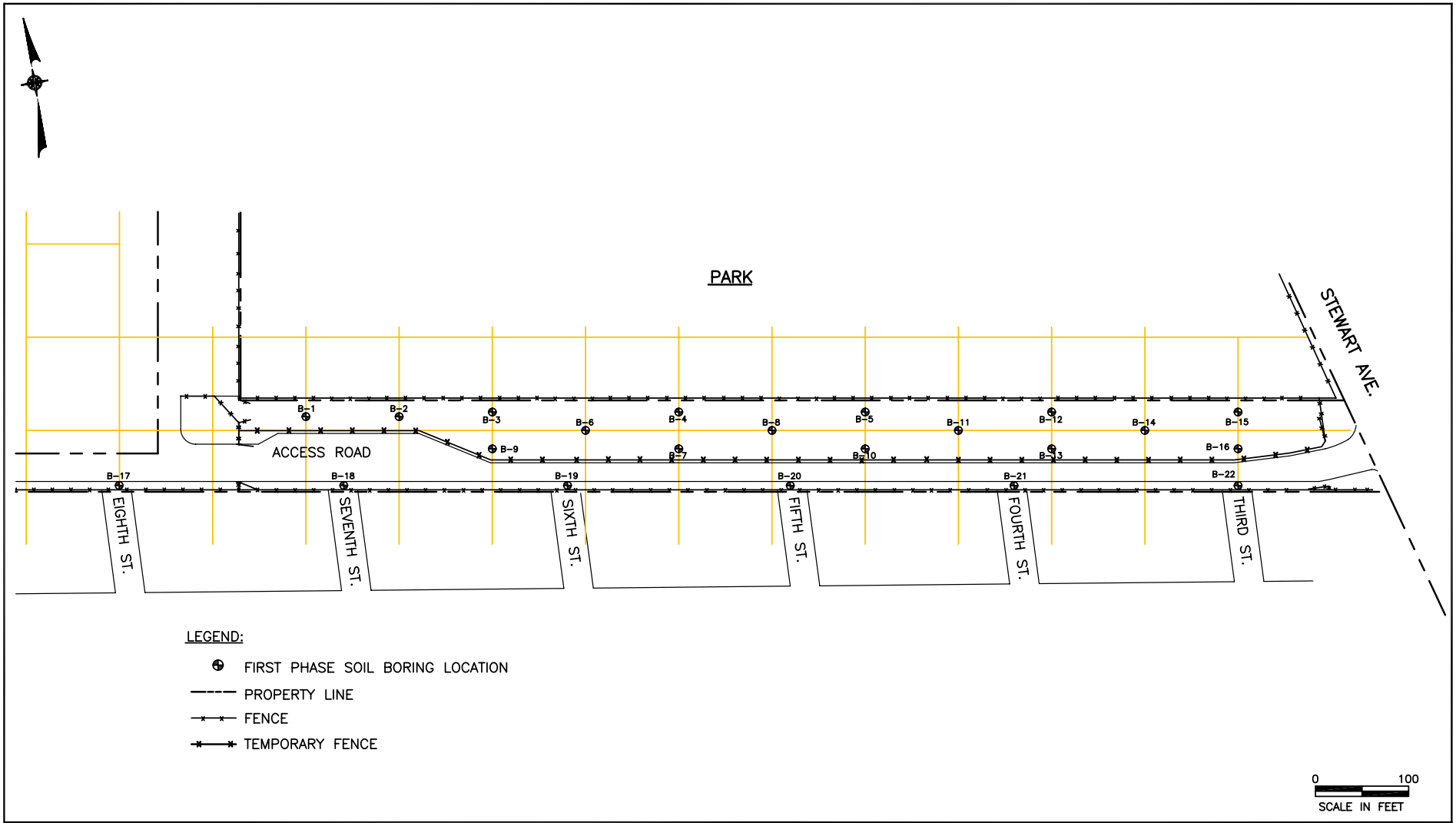
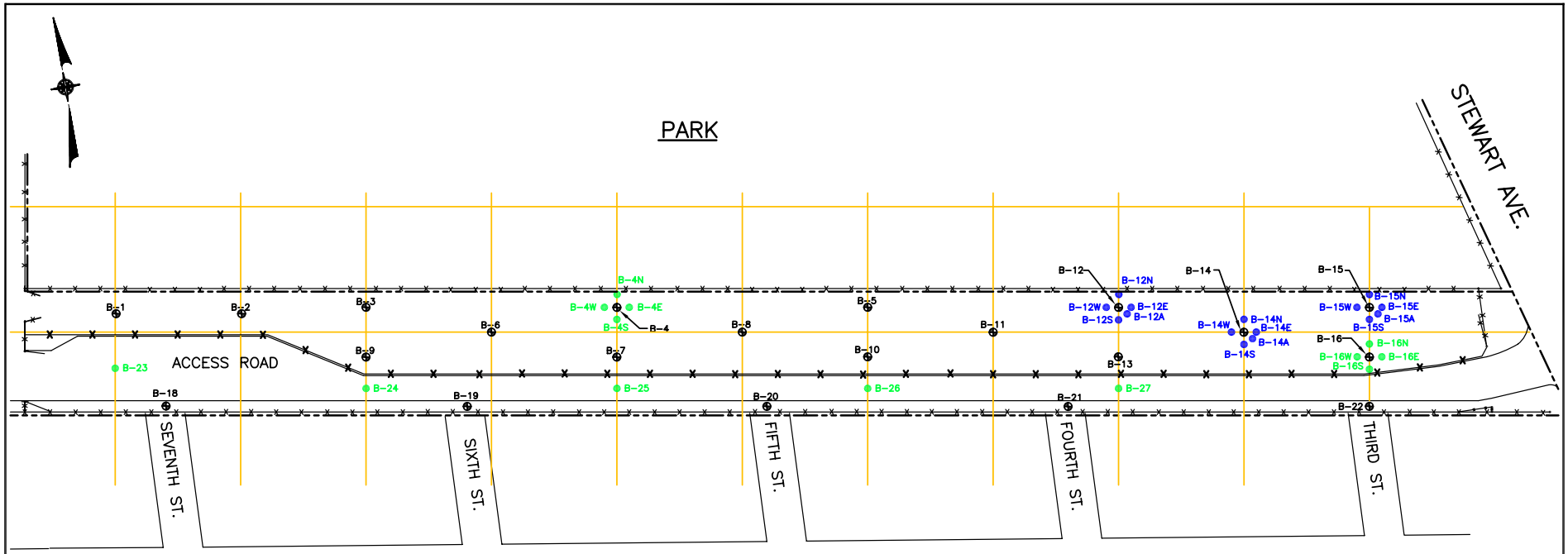


Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

FIRST PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN

FIGURE 3-1



LEGEND:

- FIRST PHASE SOIL BORING LOCATION
- SECOND PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 3.5 FT. BGS)
- SECOND PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 7.5 FT. BGS)
- FENCE
- PROPERTY LINE
- TEMPORARY FENCE

0 80
SCALE IN FEET

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SECOND PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN

FIGURE 3-2

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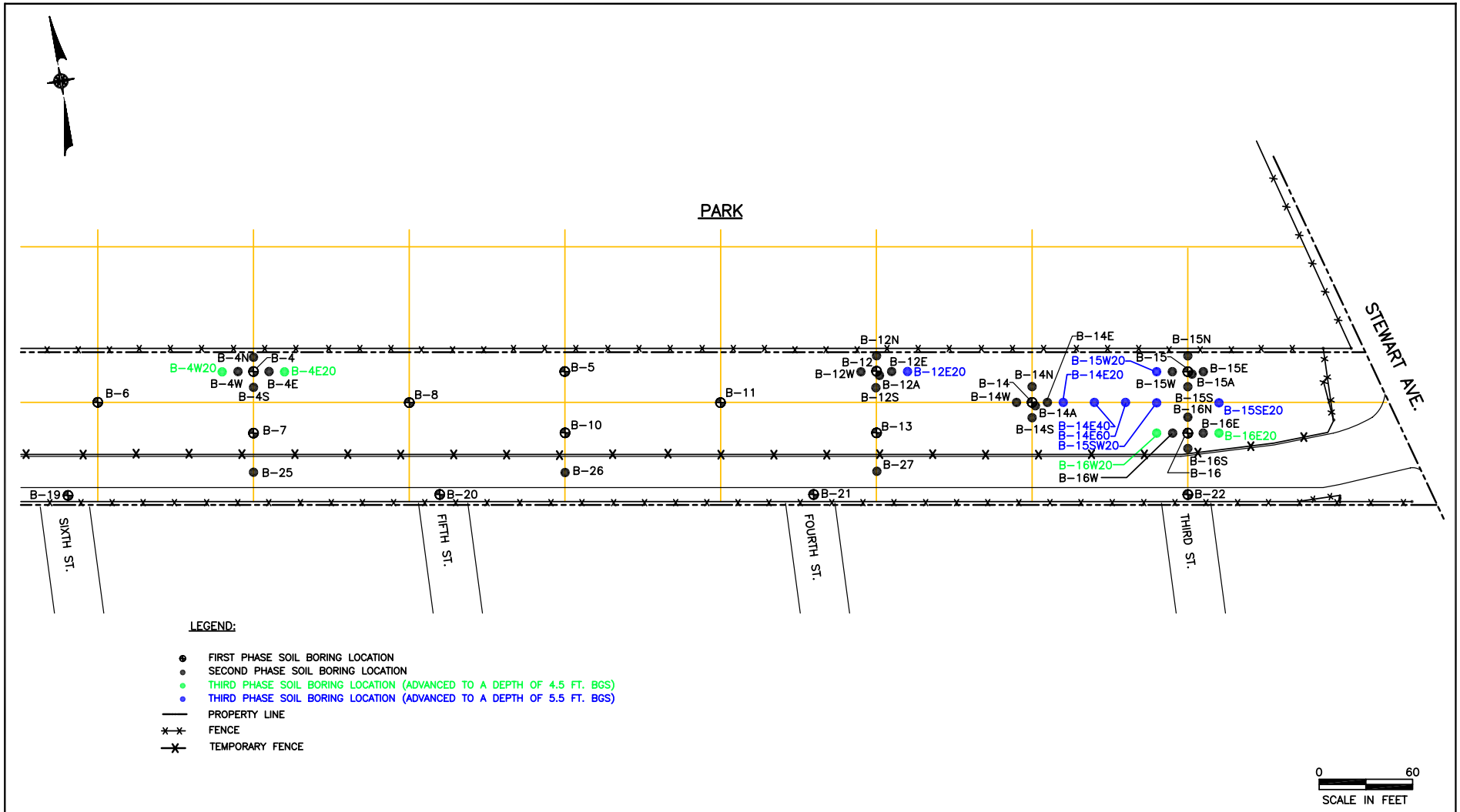

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

THIRD PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN

FIGURE 3-3

Dvirka and Bartilucci
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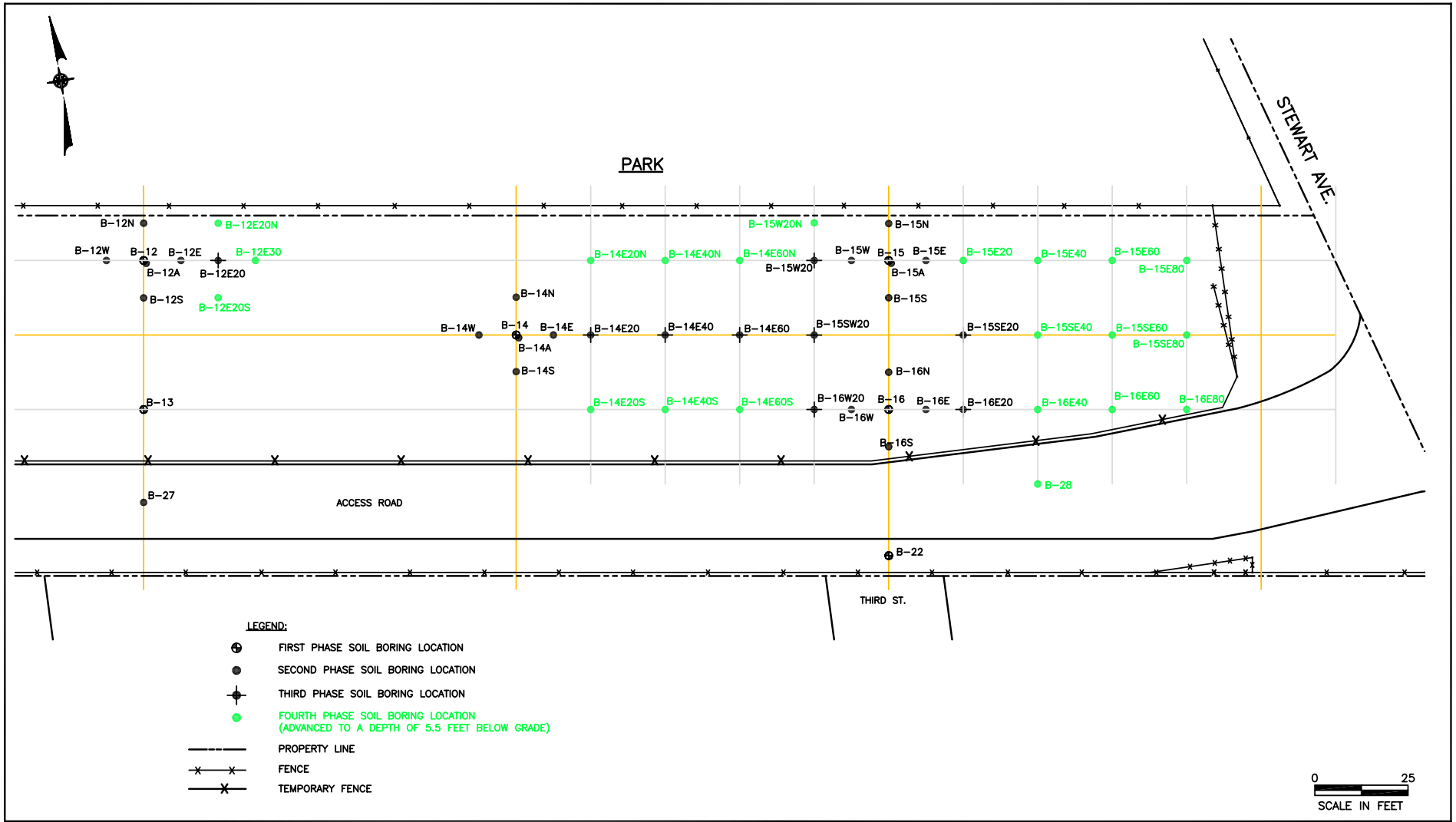

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

FOURTH PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN

FIGURE 3-4

Dvirka and Bartilucci
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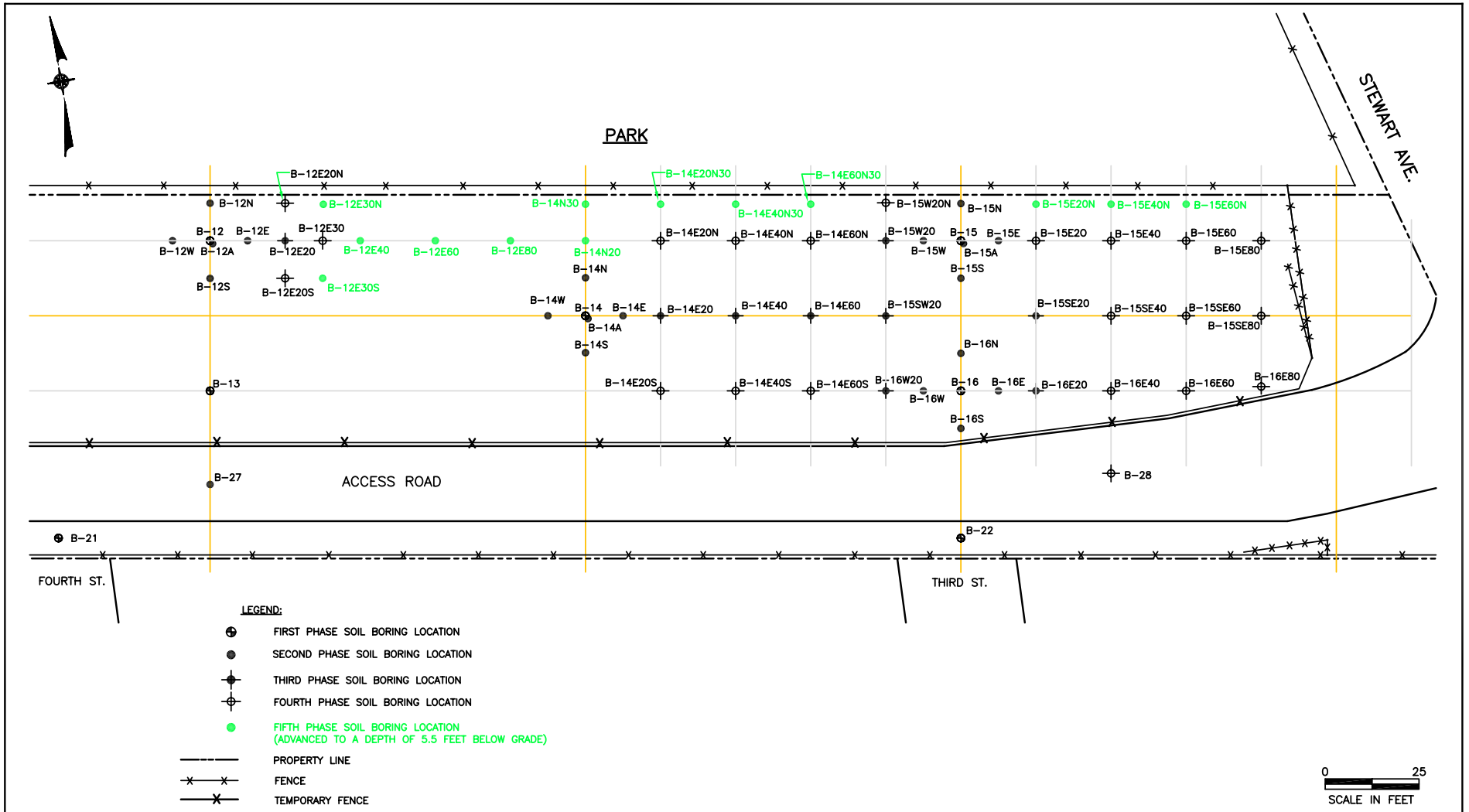

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NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

FIFTH PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN

FIGURE 3-5

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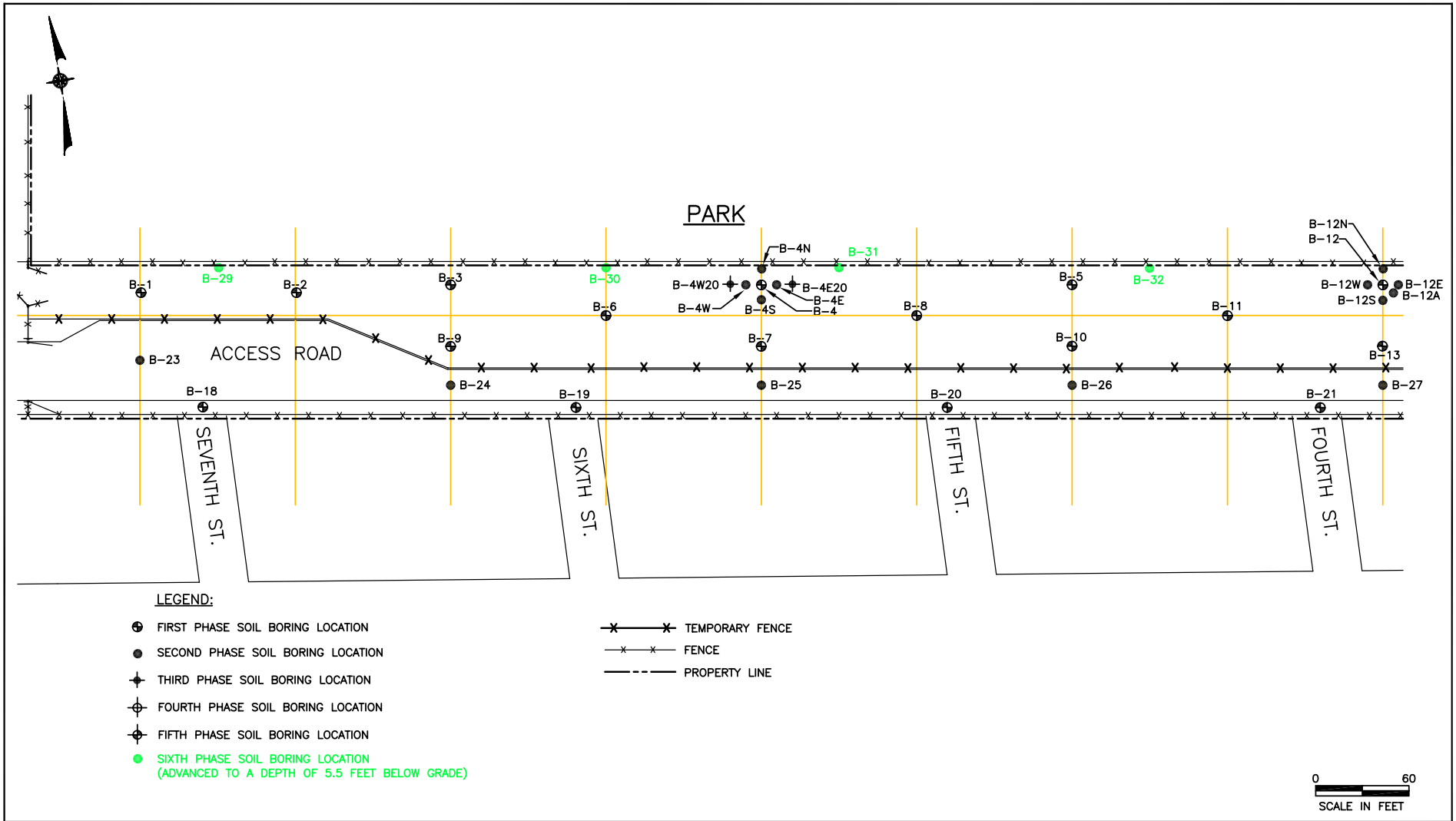
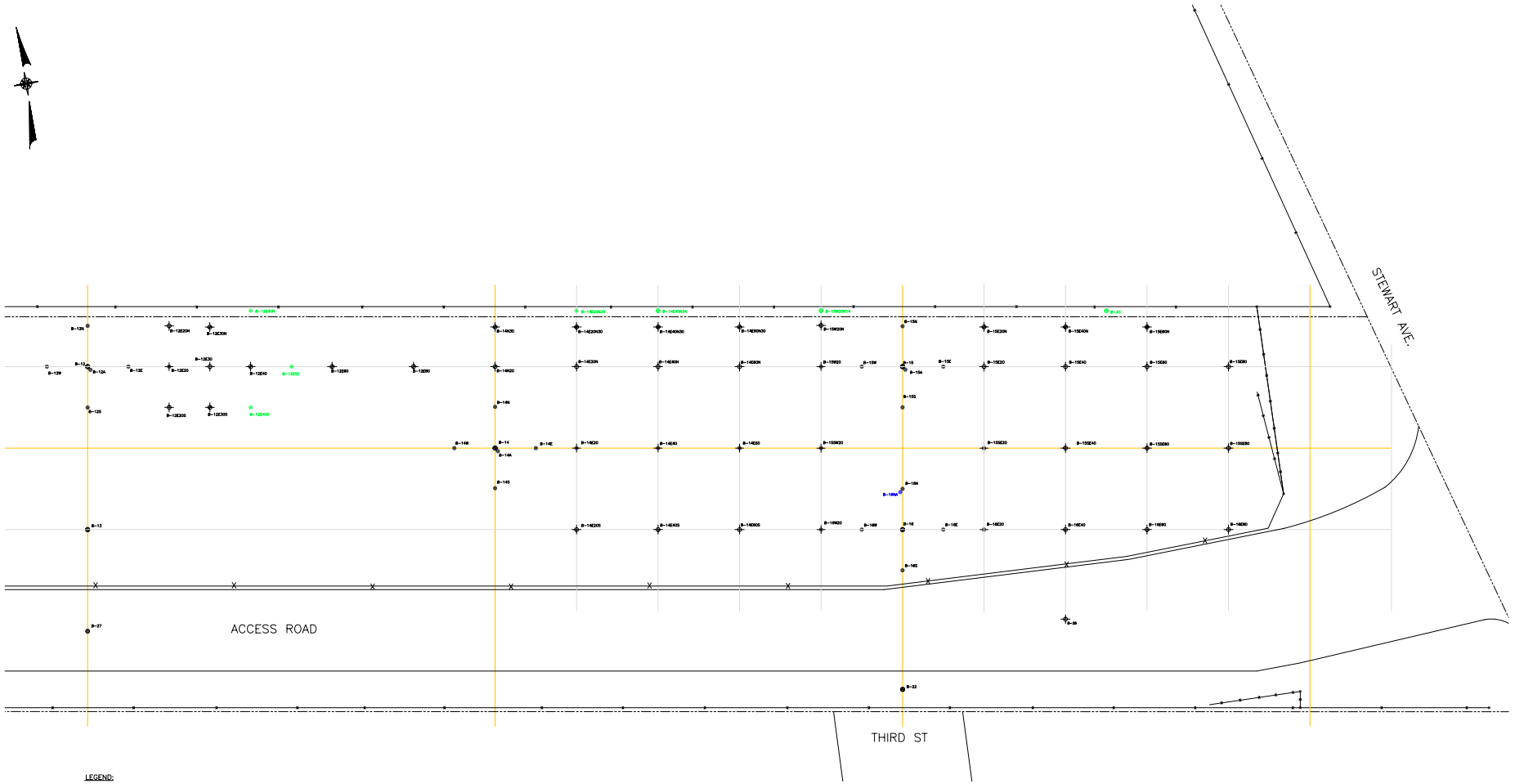


Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SIXTH PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN – WEST

FIGURE 3-6



LEGEND:

- FIRST PHASE SOIL BORING LOCATION
- SECOND PHASE SOIL BORING LOCATION
- THIRD PHASE SOIL BORING LOCATION
- FOURTH PHASE SOIL BORING LOCATION
- FIFTH PHASE SOIL BORING LOCATION
- SIXTH PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 5.5 FEET BELOW GRADE)
- SIXTH PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 7.5 FEET BELOW GRADE)
- PROPERTY LINE
- FENCE
- TEMPORARY FENCE

10 5 0 10
SCALE IN FEET

NO.	DATE	REVISION	INT.

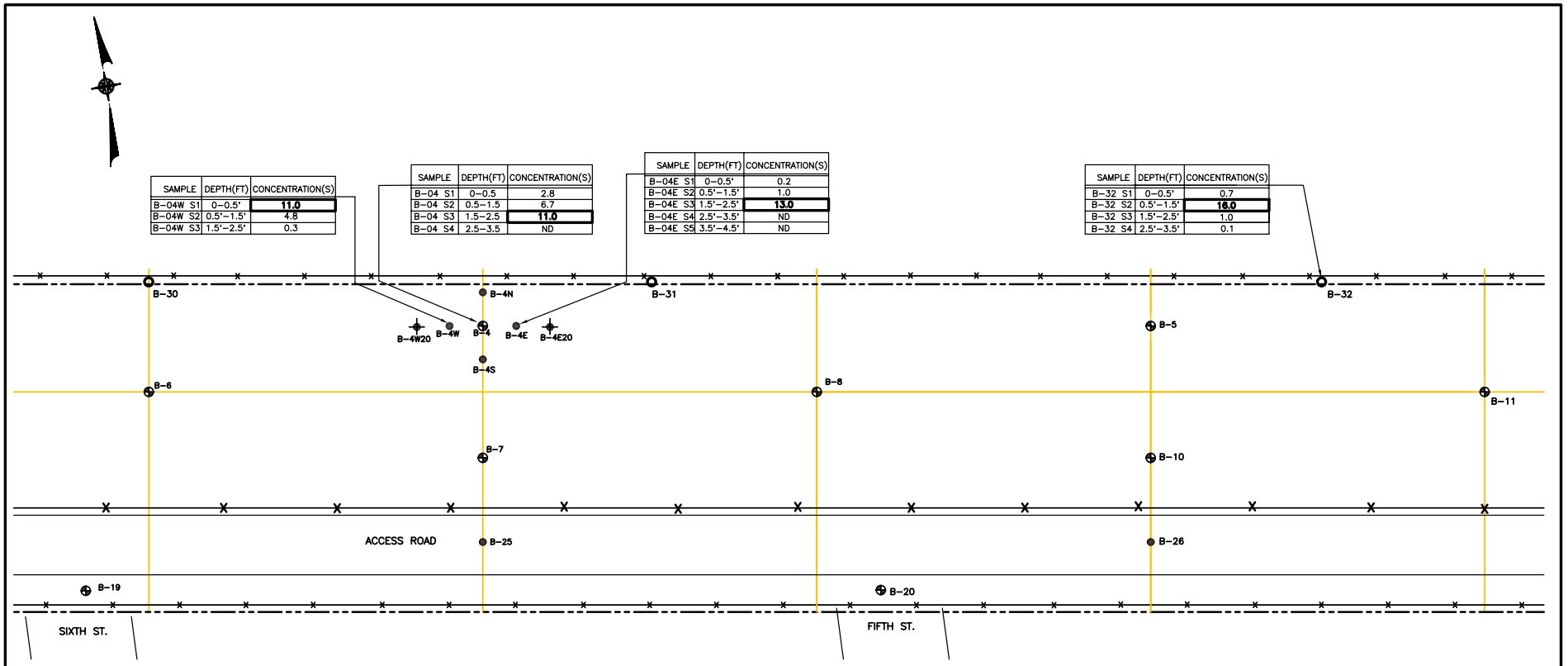
PROJECT ENGINEER: B.M.V. | DRAWN BY: A.K.
DESIGNED BY: M.R.H. | CHECKED BY: B.M.V.

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SIXTH PHASE FIELD PROGRAM
SOIL BORING LOCATION PLAN – EAST

PROJECT NO. 1572-06
DATE: MARCH 2001
SCALE: AS NOTED
DRAWING NO. 3-7



LEGEND:

- FIRST PHASE SOIL BORING LOCATION
- SECOND PHASE SOIL BORING LOCATION
- THIRD PHASE SOIL BORING LOCATION
- FOURTH PHASE SOIL BORING LOCATION
- FIFTH PHASE SOIL BORING LOCATION
- SIXTH PHASE SOIL BORING LOCATION
- PROPERTY LINE
- FENCE
- TEMPORARY FENCE

NOTES:

1. ALL REPORTED CONCENTRATIONS ARE FOR TOTAL PCBs.
2. ALL CONCENTRATIONS ARE REPORTED IN UNITS OF PARTS PER MILLON (PPM).
3. BOXED AND BOLDED CONCENTRATIONS EXCEED 10 PPM.
4. ANALYTICAL RESULTS NOT PROVIDED ARE BELOW 10 PPM.
5. ND – NOT DETECTED.

0 30'

SCALE IN FEET

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SUMMARY OF PCB CONCENTRATIONS NORTH CENTRAL PORTION

FIGURE 4-1

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

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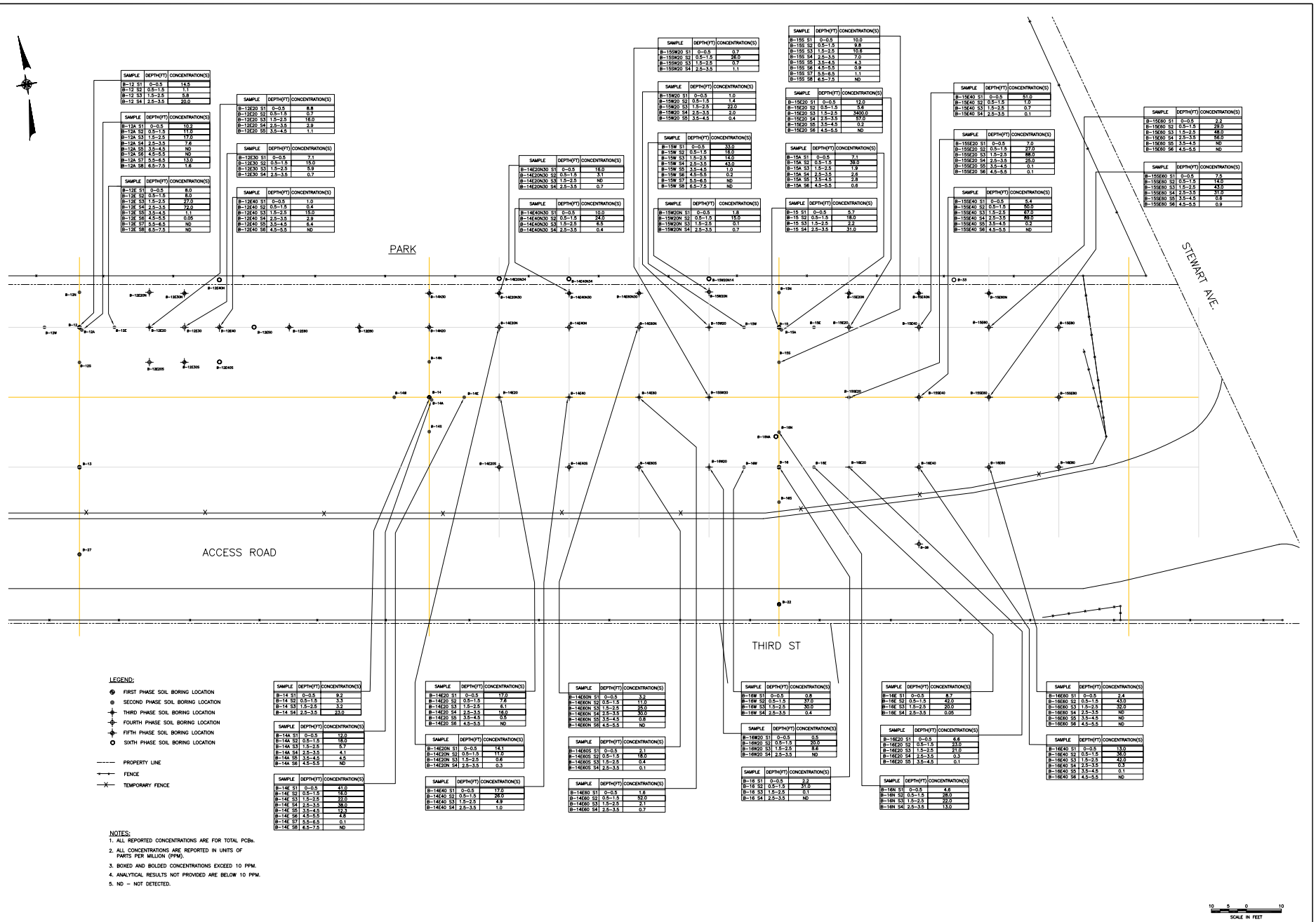

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12 S1	0-0.5	14.5
B-12 S2	0.5-1.5	1.1
B-12 S3	1.5-2.5	5.8
B-12 S4	2.5-3.5	20.0

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12A S1	0-0.5	10.2
B-12A S2	0.5-1.5	11.0
B-12A S3	1.5-2.5	17.0
B-12A S4	2.5-3.5	7.6
B-12A S5	3.5-4.5	ND
B-12A S6	4.5-5.5	ND
B-12A S7	5.5-6.5	13.0
B-12A S8	6.5-7.5	1.6

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12E S1	0-0.5	8.0
B-12E S2	0.5-1.5	8.0
B-12E S3	1.5-2.5	27.0
B-12E S4	2.5-3.5	72.0
B-12E S5	3.5-4.5	1.1
B-12E S6	4.5-5.5	0.05
B-12E S7	5.5-6.5	ND
B-12E S8	6.5-7.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12E2O S1	0-0.5	8.8
B-12E2O S2	0.5-1.5	0.7
B-12E2O S3	1.5-2.5	16.0
B-12E2O S4	2.5-3.5	2.9
B-12E2O S5	3.5-4.5	1.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12E3O S1	0-0.5	7.1
B-12E3O S2	0.5-1.5	15.0
B-12E3O S3	1.5-2.5	5.9
B-12E3O S4	2.5-3.5	0.7

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-12E4O S1	0-0.5	1.0
B-12E4O S2	0.5-1.5	0.4
B-12E4O S3	1.5-2.5	15.0
B-12E4O S4	2.5-3.5	2.9
B-12E4O S5	3.5-4.5	6.4
B-12E4O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E2ON3O S1	0-0.5	16.0
B-14E2ON3O S2	0.5-1.5	3.1
B-14E3ON3O S3	1.5-2.5	ND
B-14E2ON3O S4	2.5-3.5	0.7

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E4ON3O S1	0-0.5	10.0
B-14E4ON3O S2	0.5-1.5	24.0
B-14E4ON3O S3	1.5-2.5	6.5
B-14E4ON3O S4	2.5-3.5	0.4

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15W2O S1	0-0.5	0.7
B-15W2O S2	0.5-1.5	26.0
B-15W2O S3	1.5-2.5	0.7
B-15W2O S4	2.5-3.5	1.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15W2O S1	0-0.5	1.0
B-15W2O S2	0.5-1.5	1.4
B-15W2O S3	1.5-2.5	22.0
B-15W2O S4	2.5-3.5	2.0
B-15W2O S5	3.5-4.5	0.4

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15W S1	0-0.5	33.0
B-15W S2	0.5-1.5	18.0
B-15W S3	1.5-2.5	14.0
B-15W S4	2.5-3.5	43.0
B-15W S5	3.5-4.5	1.0
B-15W S6	4.5-5.5	0.2
B-15W S7	5.5-6.5	ND
B-15W S8	6.5-7.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15W2ON S1	0-0.5	1.8
B-15W2ON S2	0.5-1.5	15.0
B-15W2ON S3	1.5-2.5	0.1
B-15W2ON S4	2.5-3.5	0.7

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15S S1	0-0.5	10.0
B-15S S2	0.5-1.5	9.8
B-15S S3	1.5-2.5	10.6
B-15S S4	2.5-3.5	7.0
B-15S S5	3.5-4.5	4.3
B-15S S6	4.5-5.5	0.9
B-15S S7	5.5-6.5	1.1
B-15S S8	6.5-7.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E2O S1	0-0.5	12.0
B-15E2O S2	0.5-1.5	5.6
B-15E2O S3	1.5-2.5	3400.0
B-15E2O S4	2.5-3.5	57.0
B-15E2O S5	3.5-4.5	0.2
B-15E2O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15A S1	0-0.5	7.1
B-15A S2	0.5-1.5	39.0
B-15A S3	1.5-2.5	1.9
B-15A S4	2.5-3.5	2.6
B-15A S5	3.5-4.5	2.8
B-15A S6	4.5-5.5	0.6

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15 S1	0-0.5	5.7
B-15 S2	0.5-1.5	18.0
B-15 S3	1.5-2.5	2.2
B-15 S4	2.5-3.5	31.0

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E4O S1	0-0.5	51.0
B-15E4O S2	0.5-1.5	1.0
B-15E4O S3	1.5-2.5	0.7
B-15E4O S4	2.5-3.5	0.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E2O S1	0-0.5	7.0
B-15E2O S2	0.5-1.5	27.0
B-15E2O S3	1.5-2.5	88.0
B-15E2O S4	2.5-3.5	25.0
B-15E2O S5	3.5-4.5	0.1
B-15E2O S6	4.5-5.5	0.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E4O S1	0-0.5	5.4
B-15E4O S2	0.5-1.5	50.0
B-15E4O S3	1.5-2.5	67.0
B-15E4O S4	2.5-3.5	89.0
B-15E4O S5	3.5-4.5	0.3
B-15E4O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E6O S1	0-0.5	2.2
B-15E6O S2	0.5-1.5	29.0
B-15E6O S3	1.5-2.5	48.0
B-15E6O S4	2.5-3.5	56.0
B-15E6O S5	3.5-4.5	ND
B-15E6O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-15E8O S1	0-0.5	7.5
B-15E8O S2	0.5-1.5	14.0
B-15E8O S3	1.5-2.5	43.0
B-15E8O S4	2.5-3.5	31.0
B-15E8O S5	3.5-4.5	0.6
B-15E8O S6	4.5-5.5	0.9

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14 S1	0-0.5	9.2
B-14 S2	0.5-1.5	3.3
B-14 S3	1.5-2.5	3.2
B-14 S4	2.5-3.5	23.0

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14A S1	0-0.5	12.0
B-14A S2	0.5-1.5	18.0
B-14A S3	1.5-2.5	5.7
B-14A S4	2.5-3.5	4.1
B-14A S5	3.5-4.5	4.5
B-14A S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E S1	0-0.5	41.0
B-14E S2	0.5-1.5	16.0
B-14E S3	1.5-2.5	22.0
B-14E S4	2.5-3.5	38.0
B-14E S5	3.5-4.5	12.3
B-14E S6	4.5-5.5	4.8
B-14E S7	5.5-6.5	0.1
B-14E S8	6.5-7.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E2O S1	0-0.5	17.0
B-14E2O S2	0.5-1.5	7.6
B-14E2O S3	1.5-2.5	6.1
B-14E2O S4	2.5-3.5	16.0
B-14E2O S5	3.5-4.5	0.5
B-14E2O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E2ON S1	0-0.5	14.1
B-14E2ON S2	0.5-1.5	11.0
B-14E2ON S3	1.5-2.5	0.6
B-14E2ON S4	2.5-3.5	0.3

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E4O S1	0-0.5	17.0
B-14E4O S2	0.5-1.5	26.0
B-14E4O S3	1.5-2.5	4.9
B-14E4O S4	2.5-3.5	1.0

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E6O S1	0-0.5	3.2
B-14E6O S2	0.5-1.5	11.0
B-14E6O S3	1.5-2.5	25.0
B-14E6O S4	2.5-3.5	30.0
B-14E6O S5	3.5-4.5	0.8
B-14E6O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E6OS S1	0-0.5	2.1
B-14E6OS S2	0.5-1.5	18.0
B-14E6OS S3	1.5-2.5	0.4
B-14E6OS S4	2.5-3.5	0.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-14E6O S1	0-0.5	1.6
B-14E6O S2	0.5-1.5	52.0
B-14E6O S3	1.5-2.5	2.1
B-14E6O S4	2.5-3.5	0.7

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16W S1	0-0.5	0.8
B-16W S2	0.5-1.5	37.0
B-16W S3	1.5-2.5	30.0
B-16W S4	2.5-3.5	0.4

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16W2O S1	0-0.5	1.2
B-16W2O S2	0.5-1.5	20.0
B-16W2O S3	1.5-2.5	8.6
B-16W2O S4	2.5-3.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16 S1	0-0.5	2.2
B-16 S2	0.5-1.5	31.0
B-16 S3	1.5-2.5	0.1
B-16 S4	2.5-3.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16E S1	0-0.5	8.7
B-16E S2	0.5-1.5	42.0
B-16E S3	1.5-2.5	20.0
B-16E S4	2.5-3.5	0.05

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16E2O S1	0-0.5	4.6
B-16E2O S2	0.5-1.5	23.0
B-16E2O S3	1.5-2.5	21.0
B-16E2O S4	2.5-3.5	0.3
B-16E2O S5	3.5-4.5	0.1

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16N S1	0-0.5	4.6
B-16N S2	0.5-1.5	26.0
B-16N S3	1.5-2.5	22.0
B-16N S4	2.5-3.5	13.0

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16E6O S1	0-0.5	2.4
B-16E6O S2	0.5-1.5	43.0
B-16E6O S3	1.5-2.5	32.0
B-16E6O S4	2.5-3.5	ND
B-16E6O S5	3.5-4.5	ND
B-16E6O S6	4.5-5.5	ND

SAMPLE	DEPTH(FT)	CONCENTRATION(S)
B-16E4O S1	0-0.5	13.0
B-16E4O S2	0.5-1.5	38.0
B-16E4O S3	1.5-2.5	42.0
B-16E4O S4	2.5-3.5	0.3
B-16E4O S5	3.5-4.5	0.1
B-16E4O S6	4.5-5.5	ND

LEGEND:

- FIRST PHASE SOIL BORING LOCATION
- SECOND PHASE SOIL BORING LOCATION
- THIRD PHASE SOIL BORING LOCATION
- FOURTH PHASE SOIL BORING LOCATION
- FIFTH PHASE SOIL BORING LOCATION
- SIXTH PHASE SOIL BORING LOCATION
- PROPERTY LINE
- FENCE
- TEMPORARY FENCE

NOTES:

1. ALL REPORTED CONCENTRATIONS ARE FOR TOTAL PCBs.
2. ALL CONCENTRATIONS ARE REPORTED IN UNITS OF PARTS PER MILLION (PPM).
3. BOXED AND BOLDED CONCENTRATIONS EXCEED 10 PPM.
4. ANALYTICAL RESULTS NOT PROVIDED ARE BELOW 10 PPM.
5. ND = NOT DETECTED.

SCALE IN FEET: 10 5 0 10

NO.	DATE	REVISION	INT.

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PROJECT ENGINEER: B.M.V. | DRAWN BY: L.V.G. | DESIGNED BY: M.R.H. | CHECKED BY: B.M.V.

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SUMMARY OF PCB CONCENTRATIONS EASTERN PORTION

PROJECT NO. 1572-06
DATE: JANUARY 2001
SCALE: AS NOTED
DRAWING NO. 4-2

WED, JUL 25, 2001 10:09 A JMH P:\1572\1572-17.DWG

APPENDIX B

PCB INVESTIGATION/DELINEATION PROGRAM
SOIL SAMPLE ANALYTICAL RESULTS

FIRST PHASE SOIL SAMPLING RESULTS

TABLE B-1
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-01 S1	B-01 S2	B-02 S1	B-02 S2	B-03 S1	B-03 S2	B-03 S3	B-03 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	
DILUTION FACTOR	1	1	1	1	1	10	1	1	
PERCENT SOLIDS	93	97	96	95	95	94	96	90	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	0.160 P	0.055	0.067	U	0.092 P	0.280 P	0.033
Aroclor-1254	U	U	U	U	U	7.200	U	U	0.033
Aroclor-1260	0.140 P	U	0.140	0.150 P	0.160 P	U	U	0.410	0.033
TOTAL PCBs	0.140	0	0.300	0.205	0.227	7.200	0.092	0.690	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-04 S1	B-04 S2	B-04 S3	B-04 S4	B-05 S1	B-05 S2	B-05 S3	B-05 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	
DILUTION FACTOR	5	10	20	1	1	1	1	1	
PERCENT SOLIDS	75	86	83	83	95	93	87	99	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.800	6.700	11.000	U	1.000	1.200	1.000 P	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	0.210	0.150	U	U	0.033
TOTAL PCBs	2.800	6.700	**11.000**	0	1.210	1.350	1.000	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-06 S1	B-06 S2	B-07 S1	B-07 S2	B-08 S1	B-08 S2	B-09 S1	B-09 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	
DILUTION FACTOR	1	1	1	1	1	1	1	1	
PERCENT SOLIDS	97	90	89	85	89	98	89	85	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	0.150	U	U	0.500 P	1.000	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	0.130	0.130		0.033
TOTAL PCBs	0	0	0.150	0	0	0.630	1.130	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-10 S1	B-10 S2	B-11 S1	B-11 S2	B-12 S1	B-12 S2	B-12 S3	B-12 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	
DILUTION FACTOR	1	1	1	1	20	1	10	50	
PERCENT SOLIDS	88	90	91	88	98	93	88	91	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.067	U	U	U	13.000	0.900 P	5.800	20.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	1.500	0.200	U	U	0.033
TOTAL PCBs	0.067	0	0	0	**14.500**	1.100	5.800	**20.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-13 S1	B-13 S2	B-14 S1	B-14 S2	B-14 S3	B-14 S4	B-15 S1	B-15 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	
DILUTION FACTOR	1	1	10	5	1	50	10	30	
PERCENT SOLIDS	93	89	93	86	96	69	77	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.000 P	0.230	7.600	2.400	2.500	U	5.700	18.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	0.087	1.600	0.870	0.680	23.000 P	U	U	0.033
TOTAL PCBs	2.000	0.317	9.200	3.270	3.180	**23.000**	5.700	**18.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15 S3	B-15 S4	B-16 S1	B-16 S2	B-16 S3	B-16 S4	B-17 S1	B-17 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5 - 1.5'	
DATE OF COLLECTION	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/02/99	6/03/99	6/03/99	
DILUTION FACTOR	1	50	5	50	1	1	1	1	
PERCENT SOLIDS	87	93	94	93	85	82	95	84	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.200	31.000	2.000	31.000	0.061 P	U	0.370	1.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.180	U	U	U	U	U	0.033
TOTAL PCBs	2.200	**31.000**	2.180	**31.000**	0.061	0	0.370	1.000	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-17 S3	B-17 S4	B-18 S1	B-18 S2	B-19 S1	B-19 S2	B-20 S1	B-20 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5 - 1.5'	
DATE OF COLLECTION	6/03/99	6/03/99	6/03/99	6/03/99	6/03/99	6/03/99	6/03/99	6/03/99	
DILUTION FACTOR	1	1	1	1	1	1	1	1	
PERCENT SOLIDS	89	90	93	86	94	87	95	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.140 P	U	0.042	0.520	1.700	0.410	0.120	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0.140	0	0.042	0.520	1.700	0.410	0.120	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-1 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIRST PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-21 S1	B-21 S2	B-22 S1	B-22 S2					CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5 - 1.5'					
DATE OF COLLECTION	6/03/99	6/03/99	6/03/99	6/03/99					
DILUTION FACTOR	1	1	1	1					
PERCENT SOLIDS	91	94	90	89					
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)					(mg/kg)
Aroclor-1016	U	U	U	U					0.033
Aroclor-1221	U	U	U	U					0.067
Aroclor-1232	U	U	U	U					0.033
Aroclor-1242	U	U	U	U					0.033
Aroclor-1248	1.600	U	0.079 P	U					0.033
Aroclor-1254	U	U	U	U					0.033
Aroclor-1260	U	U	U	U					0.033
TOTAL PCBs	1.600	0	0.079	0					

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

SECOND PHASE SOIL SAMPLING RESULTS

TABLE B-2
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-04N S1	B-04N S2	B-04N S3	B-04S S1	B-04S S2	B-04S S3	B-04E S1	B-04E S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	10	1	1	10	1	10	1	10	
PERCENT SOLIDS	95	88	88	91	84	91	96	86	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.100	U	U	8.700	0.560 P	1.300	0.190	1.000 P	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	0.045	U	0.033
TOTAL PCBs	1.100	0	0	8.700	0.560	1.300	0.235	1.000	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-04E S3	B-04E S4	B-04E S5	B-04W S1	B-04W S2	B-04W S3	B-12A S1	B-12A S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	10	1	1	10	10	1	10	10	
PERCENT SOLIDS	90	91	81	96	94	86	95	82	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	13.000	U	U	11.000	4.200	0.190	9.700	11.000 P	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	0.560	0.069	0.480 P	U	0.033
TOTAL PCBs	**13.000**	0	0	**11.000**	4.760	0.259	**10.180**	**11.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12A S3	B-12A S4	B-12A S5	B-12A S6	B-12A S7	B-12A S8	B-12N S1	B-12N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	5.5' - 6.5'	6.5' - 7.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	10	10	1	1	10	1	10	10	
PERCENT SOLIDS	96	90	90	92	94	97	96	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	17.000 P	7.600 P	U	U	13.000	1.600	2.200	7.400	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**17.000**	7.600	0	0	**13.000**	1.600	2.200	7.400	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12N S3	B-12N S4	B-12S S1	B-12S S2	B-12S S3	B-12S S4	B-12E S1	B-12E S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	10	10	10	10	10	10	10	10	
PERCENT SOLIDS	95	91	90	88	90	84	83	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.700	2.800	7.000	7.800	5.400	2.600	7.500	8.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.840	U	U	U	0.540	U	0.033
TOTAL PCBs	2.700	2.800	7.840	7.800	5.400	2.600	8.040	8.000	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E S3	B-12E S4	B-12E S5	B-12E S6	B-12E S7	B-12E S8	B-12W S1	B-12W S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	5.5' - 6.5'	6.5' - 7.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	50	100	1	1	1	1	10	10	
PERCENT SOLIDS	91	87	81	82	86	98	90	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	27.000	72.000	1.100	0.047 P	U	U	8.600	8.400	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	0.530	0.550	0.033
TOTAL PCBs	**27.000**	**72.000**	1.100	0.047	0	0	9.130	8.950	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12W S3	B-12W S4	B-14A S1	B-14A S2	B-14A S3	B-14A S4	B-14N S1	B-14N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/22/99	10/22/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	10	10	10	10	10	10	10	10	
PERCENT SOLIDS	92	95	94	87	93	86	92	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	7.800	3.200	12.000	18.000	5.700	0.730	6.600	0.460	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	0.360	U	U	U	U	3.400 P	U	U	0.033
TOTAL PCBs	8.160	3.200	**12.000**	**18.000**	5.700	4.130	6.600	0.460	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14N S3	B-14N S4	B-14S S1	B-14S S2	B-14S S3	B-14S S4	B-14E S1	B-14E S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	10	10	10	1	10	10	100	10	
PERCENT SOLIDS	92	86	93	93	91	85	87	86	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.200	U	7.300	U	0.860	U	41.000	16.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	2.600 P	U	0.140 P	1.100 P	1.200 P	U	U	0.033
TOTAL PCBs	2.200	2.600	7.300	0.140	1.960	1.200	**41.000**	**16.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E S3	B-14E S4	B-14E S5	B-14E S6	B-14E S7	B-14E S8	B-14W S1	B-14W S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	5.5' - 6.5'	6.5' - 7.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	100	100	10	10	1	1	10	10	
PERCENT SOLIDS	90	89	68	83	90	97	82	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	22.000	38.000	1.300	U	0.130	U	9.200	1.100	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	11.000 P	4.800 P	U	U	0.520 P	U	0.033
TOTAL PCBs	**22.000**	**38.000**	**12.300**	4.800	0.130	0	9.720	1.100	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14W S3	B-14W S4	B-15A S1	B-15A S2	B-15A S3	B-15A S4	B-15N S1	B-15N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	10	1	100	100	10	10	10	1	
PERCENT SOLIDS	88	87	85	92	90	90	87	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.740	0.420	7.100	39.000	0.980 P	2.600	4.600	0.620	0.033
Aroclor-1254	U	U	U	U	0.930	U	1.500 P	U	0.033
Aroclor-1260	2.500 P	1.500 P	U	U	U	U	U	U	0.033
TOTAL PCBs	3.240	1.920	7.100	**39.000**	1.910	2.600	6.100	0.620	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15N S3	B-15N S4	B-15S S1	B-15S S2	B-15S S3	B-15S S4	B-15S S5	B-15S S6	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	10	1	20	20	10	10	10	1	
PERCENT SOLIDS	91	81	92	99	95	94	91	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.200 P	0.420	10.000	9.800	10.000	5.700	4.300	0.850	0.033
Aroclor-1254	U	0.140	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	0.570 P	1.300	U	U	0.033
TOTAL PCBs	1.200	0.560	10.000	9.800	**10.570**	7.000	4.300	0.850	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15S S7	B-15S S8	B-15E S1	B-15E S2	B-15E S3	B-15E S4	B-15W S1	B-15W S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	5.5' - 6.5'	6.5' - 7.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	1	1	10	10	10	1	100	10	
PERCENT SOLIDS	96	99	95	89	79	79	78	26	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.100	U	6.300	U	7.500	0.110 P	33.000	16.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.840	6.800 P	U	0.140 P	U	U	0.033
TOTAL PCBs	1.100	0	7.140	6.800	7.500	0.250	**33.000**	**16.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15W S3	B-15W S4	B-15W S5	B-15W S6	B-15W S7	B-15W S8	B-16N S1	B-16N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	5.5' - 6.5'	6.5' - 7.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	10	100	1	1	1	1	10	100	
PERCENT SOLIDS	86	81	89	94	82	97	83	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	14.000	43.000	0.950	0.190 P	U	U	4.600	28.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**14.000**	**43.000**	0.950	0.190	0	0	4.600	**28.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16N S3	B-16N S4	B-16S S1	B-16S S2	B-16E S1	B-16E S2	B-16E S3	B-16E S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	10/21/99	
DILUTION FACTOR	20	10	10	1	10	100	20	1	
PERCENT SOLIDS	94	88	88	90	89	86	95	83	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	2.900	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	22.000	13.000	2.600 P	U	5.800	42.000	20.000	0.048 P	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**22.000**	**13.000**	2.600	0	8.700	**42.000**	**20.000**	0.048	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16W S1	B-16W S2	B-16W S3	B-16W S4	B-23 S1	B-23 S2	B-24 S1	B-24 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	10/21/99	10/21/99	10/21/99	10/21/99	10/22/99	10/22/99	10/22/99	10/22/99	
DILUTION FACTOR	1	100	50	1	10	1	1	1	
PERCENT SOLIDS	89	92	95	96	93	92	93	90	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.680	37.000	30.000	0.170 P	4.900	U	U	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	0.160 P	U	U	0.250	U	U	U	U	0.033
TOTAL PCBs	0.840	**37.000**	**30.000**	0.420	4.900	0	0	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-2 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SECOND PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-25 S1	B-25 S2	B-26 S1	B-26 S2	B-27 S1	B-27 S2			CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'	0 - 0.5'	0.5' - 1.5'			
DATE OF COLLECTION	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99	10/22/99			
DILUTION FACTOR	1	1	1	1	1	1			
PERCENT SOLIDS	93	97	95	94	100	93			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			(mg/kg)
Aroclor-1016	U	U	U	U	U	U			0.033
Aroclor-1221	U	U	U	U	U	U			0.067
Aroclor-1232	U	U	U	U	U	U			0.033
Aroclor-1242	U	U	U	U	U	U			0.033
Aroclor-1248	U	U	U	U	U	U			0.033
Aroclor-1254	U	U	U	U	U	U			0.033
Aroclor-1260	U	U	U	U	U	U			0.033
TOTAL PCBs	0	0	0	0	0	0			

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

THIRD PHASE SOIL SAMPLING RESULTS

TABLE B-3
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-04E20 S1	B-04E20 S2	B-04E20 S3	B-04W20 S1	B-04W20 S2	B-04W20 S3	B-04W20 S4	B-12E20 S1	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	10	10	1	10	10	1	1	10	
PERCENT SOLIDS	81	91	93	86	89	93	88	80	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	3.200 P	9.800	0.140	3.200 P	10.000	1.300 P	U	7.200	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.150	U	U	0.280 P	U	1.600	0.033
TOTAL PCBs	3.200	9.800	0.290	3.200	10.000	1.580	0	8.800	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E20 S2	B-12E20 S3	B-12E20 S4	B-12E20 S5	B-14E20 S1	B-14E20 S2	B-14E20 S3	B-14E20 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	1	10	10	1	10	10	10	10	
PERCENT SOLIDS	95	92	85	86	88	90	89	66	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.480	15.000	2.900	1.100	17.000 P	6.800	5.200	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	0.180 P	0.970	U	U	U	0.840	0.890	16.000	0.033
TOTAL PCBs	0.660	**15.970**	2.900	1.100	**17.000**	7.640	6.090	**16.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E20 S5	B-14E20 S6	B-14E40 S1	B-14E40 S2	B-14E40 S3	B-14E40 S4	B-14E60 S1	B-14E60 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	1	1	10	20	10	1	1	20	
PERCENT SOLIDS	84	97	87	90	92	94	84	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	17.000	26.000	4.900	0.250 P	1.600	52.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	0.530	U	U	U	U	0.720 P	U	U	0.033
TOTAL PCBs	0.530	0	**17.000**	**26.000**	4.900	0.970	1.600	**52.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E60 S3	B-14E60 S4	B-15W20 S1	B-15W20 S2	B-15W20 S3	B-15W20 S4	B-15W20 S5	B-15SE20 S1	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	0 - 0.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	1	1	1	1	20	1	1	10	
PERCENT SOLIDS	90	82	75	90	97	82	85	66	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.100	0.740 P	0.960 P	1.300	22.000	2.000	0.420	7.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	0.094	U	U	U	U	0.033
TOTAL PCBs	2.100	0.740	0.960	1.394	**22.000**	2.000	0.420	7.000	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15SE20 S2	B-15SE20 S3	B-15SE20 S4	B-15SE20 S5	B-15SE20 S6	B-15SW20 S1	B-15SW20 S2	B-15SW20 S3	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	100	100	100	1	1	1	100	1	
PERCENT SOLIDS	87	89	90	84	89	85	94	90	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	27.000	88.000	25.000	U	0.070	0.670	26.000	0.680	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	0.057 P	U	U	U	U	0.033
TOTAL PCBs	**27.000**	**88.000**	**25.000**	0.057	0.070	0.670	**26.000**	0.680	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15SW20 S4	B-16E20 S1	B-16E20 S2	B-16E20 S3	B-16E20 S4	B-16E20 S5	B-16W20 S1	B-16W20 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	02/08/00	
DILUTION FACTOR	1	10	20	20	1	1	1	20	
PERCENT SOLIDS	81	82	86	86	80	95	90	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.590	6.600 P	23.000	21.000	U	0.054	0.470 P	20.000	0.033
Aroclor-1254	U	U	U	U	0.270	U	U	U	0.033
Aroclor-1260	0.460 P	U	U	U	U	U	U	U	0.033
TOTAL PCBs	1.050	6.600	**23.000**	**21.000**	0.270	0.054	0.470	**20.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-3 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - THIRD PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16W20 S3	B-16W20 S4							CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'							
DATE OF COLLECTION	02/08/00	02/08/00							
DILUTION FACTOR	10	1							
PERCENT SOLIDS	96	90							
UNITS	(mg/kg)	(mg/kg)							(mg/kg)
Aroclor-1016	U	U							0.033
Aroclor-1221	U	U							0.067
Aroclor-1232	U	U							0.033
Aroclor-1242	U	U							0.033
Aroclor-1248	8.600	U							0.033
Aroclor-1254	U	U							0.033
Aroclor-1260	U	U							0.033
TOTAL PCBs	8.600	0							

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

FOURTH PHASE SOIL SAMPLING RESULTS

TABLE B-4
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E20N S1	B-12E20N S2	B-12E20N S3	B-12E20N S4	B-12E20S S1	B-12E20S S2	B-12E20S S3	B-12E20S S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	20	1	10	5	10	1	1	1	
PERCENT SOLIDS	92	97	91	89	87	90	92	85	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	8.000	0.260 P	4.400	2.300 P	3.600 P	1.600 P	0.380 P	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	8.000	0.260	4.400	2.300	3.600	1.600	0.380	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E30 S1	B-12E30 S2	B-12E30 S3	B-12E30 S4	B-14E20N S1	B-14E20N S2	B-14E20N S3	B-14E20N S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	20	20	10	1	20	10	1	1	
PERCENT SOLIDS	91	94	95	85	93	88	90	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	7.100 P	15.000 P	5.900 P	0.680	13.000	8.900	0.600	0.320	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	1.100	2.100	U	U	0.033
TOTAL PCBs	7.100	**15.000**	5.900	0.680	**14.100**	**11.000**	0.600	0.320	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
□: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E20S S1	B-14E20S S2	B-14E20S S3	B-14E20S S4	B-14E40N S1	B-14E40N S2	B-14E40N S3	B-14E40N S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	5	1	1	1	10	10	1	5	
PERCENT SOLIDS	92	92	91	76	89	91	91	87	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	2.700	U	U	U	4.300	3.100	0.360	2.100	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	1.300	0.810 P	0.200	U	0.650	0.190	0.380	0.033
TOTAL PCBs	2.700	1.300	0.810	0.200	4.300	3.750	0.550	2.480	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E40S S1	B-14E40S S2	B-14E40S S3	B-14E40S S4	B-14E60N S1	B-14E60N S2	B-14E60N S3	B-14E60N S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	10	1	1	1	10	100	100	100	
PERCENT SOLIDS	90	94	86	82	90	94	96	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.990 P	U	U	U	3.200	11.000	25.000	30.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	0.440 P	U	U	U	U	U	U	0.033
TOTAL PCBs	0.990	0.440	0	0	3.200	**11.000**	**25.000**	**30.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E60N S5	B-14E60N S6	B-14E60S S1	B-14E60S S2	B-14E60S S3	B-14E60S S4	B-15W20N S1	B-15W20N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	1	1	5	50	1	1	1	50	
PERCENT SOLIDS	88	97	92	92	93	88	85	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.840	U	2.100	18.000	0.170 P	U	1.400	15.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	0.180	0.059	0.440	U	0.033
TOTAL PCBs	0.840	0	2.100	**18.000**	0.350	0.059	1.840	**15.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15W20N S3	B-15W20N S4	B-15E20 S1	B-15E20 S2	B-15E20 S3	B-15E20 S4	B-15E20 S5	B-15E20 S6	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	1	1	20	10	5000	100	1	1	
PERCENT SOLIDS	93	96	86	89	86	82	95	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.076	0.650	12.000	5.600 P	3,400.000	57.000	0.210	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	0.080	U	U	U	U	U	U	0.033
TOTAL PCBs	0.076	0.730	**12.000**	5.600	**3,400.000**	**57.000**	0.210	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15E40 S1	B-15E40 S2	B-15E40 S3	B-15E40 S4	B-15E60 S1	B-15E60 S2	B-15E60 S3	B-15E60 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	100	1	1	1	10	50	100	100	
PERCENT SOLIDS	86	88	92	85	94	88	91	86	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	51.000	1.000	0.690	0.140	2.200 P	29.000	48.000	56.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**51.000**	1.000	0.690	0.140	2.200	**29.000**	**48.000**	**56.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15E60 S5	B-15E60 S6	B-15E80 S1	B-15E80 S2	B-15E80 S3	B-15E80 S4	B-15SE40 S1	B-15SE40 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	1	1	1	1	10	1	10	100	
PERCENT SOLIDS	84	96	86	98	87	89	85	88	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	U	0.560	2.700	U	5.400 P	50.000	0.033
Aroclor-1254	U	U	0.350	U	U	0.960	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0	0	0.350	0.560	2.700	0.960	5.400	**50.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15SE40 S3	B-15SE40 S4	B-15SE40 S5	B-15SE40 S6	B-15SE60 S1	B-15SE60 S2	B-15SE60 S3	B-15SE60 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	100	100	1	1	10	10	50	50	
PERCENT SOLIDS	88	84	90	97	86	90	89	87	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	67.000	89.000	U	U	7.500	14.000	43.000	31.000	0.033
Aroclor-1254	U	U	0.220	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**67.000**	**89.000**	0.220	0	7.500	**14.000**	**43.000**	**31.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15SE60 S5	B-15SE60 S6	B-15SE80 S1	B-15SE80 S2	B-15SE80 S3	B-15SE80 S4	B-16E40 S1	B-16E40 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	1	1	1	1	1	10	10	50	
PERCENT SOLIDS	93	95	90	91	94	93	89	90	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.570	0.850	0.700	0.760	0.880	5.600	13.000	36.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.170	0.200	0.300	1.400	U	U	0.033
TOTAL PCBs	0.570	0.850	0.870	0.960	1.180	7.000	**13.000**	**36.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16E40 S3	B-16E40 S4	B-16E40 S5	B-16E40 S6	B-16E60 S1	B-16E60 S2	B-16E60 S3	B-16E60 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	50	1	1	1	10	50	50	1	
PERCENT SOLIDS	84	92	94	93	95	88	86	79	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	42.000	0.250	0.059	U	2.400	43.000	32.000	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	**42.000**	0.250	0.059	0	2.400	**43.000**	**32.000**	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16E60 S5	B-16E60 S6	B-16E80 S1	B-16E80 S2	B-16E80 S3	B-16E80 S4	B-28 S1	B-28 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	11/16/00	
DILUTION FACTOR	1	1	1	1	1	1	1	1	
PERCENT SOLIDS	94	98	95	90	90	88	91	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	0.500	0.160	0.300	U	U	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	0.180	0.076	0.092	0.052	U	U	0.033
TOTAL PCBs	0	0	0.680	0.236	0.392	0.052	0	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-4 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FOURTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-28 S3	B-28 S4							CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'							
DATE OF COLLECTION	11/16/00	11/16/00							
DILUTION FACTOR	1	1							
PERCENT SOLIDS	93	91							
UNITS	(mg/kg)	(mg/kg)							(mg/kg)
Aroclor-1016	U	U							0.033
Aroclor-1221	U	U							0.067
Aroclor-1232	U	U							0.033
Aroclor-1242	U	U							0.033
Aroclor-1248	U	U							0.033
Aroclor-1254	U	U							0.033
Aroclor-1260	U	U							0.033
TOTAL PCBs	0	0							

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

FIFTH PHASE SOIL SAMPLING RESULTS

TABLE B-5
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E30N S1	B-12E30N S2	B-12E30N S3	B-12E30N S4	B-12E30S S1	B-12E30S S2	B-12E30S S3	B-12E30S S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	10	10	10	10	10	10	
PERCENT SOLIDS	91	93	94	91	86	91	88	91	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	7.200	0.900	1.400	8.600	6.600	1.300	0.370 J	0.790	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	1.700	U	U	U	0.033
TOTAL PCBs	7.200	0.900	1.400	8.600	8.300	1.300	0.370	0.790	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E40 S1	B-12E40 S2	B-12E40 S3	B-12E40 S4	B-12E40 S5	B-12E40 S6	B-12E60 S1	B-12E60 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	10	10	10	10	5	5	
PERCENT SOLIDS	95	94	92	95	91	98	89	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.000	0.440	15.000	2.900	6.400	U	0.580	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	1.000	0.440	**15.000**	2.900	6.400	0	0.580	0	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E60 S3	B-12E60 S4	B-12E80 S1	B-12E80 S2	B-12E80 S3	B-12E80 S4	B-14N20 S1	B-14N20 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	5	5	5	5	5	5	
PERCENT SOLIDS	94	90	92	93	94	95	89	93	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.300	U	0.770 P	0.220	U	U	0.880	2.000	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	1.300	0	0.770	0.220	0	0	0.880	2.000	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14N20 S3	B-14N20 S4	B-14N30 S1	B-14N30 S2	B-14N30 S3	B-14N30 S4	B-14E20N30 S1	B-14E20N30 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	5	5	10	10	10	10	100	10	
PERCENT SOLIDS	90	94	90	96	96	97	94	96	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.660	U	3.900	U	U	U	16.000	3.100	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0.660	0	3.900	0	0	0	**16.000**	3.100	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
16.000: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E20N30 S3	B-14E20N30 S4	B-14E40N30 S1	B-14E40N30 S2	B-14E40N30 S3	B-14E40N30 S4	B-14E60N30 S1	B-14E60N30 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	10	50	10	10	10	10	
PERCENT SOLIDS	96	94	65	97	96	96	85	86	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	0.730	10.000	24.000	6.500	0.400	4.600	4.600	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0	0.730	10.000	**24.000**	6.500	0.400	4.600	4.600	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E60N30 S3	B-14E60N30 S4	B-15E20N S1	B-15E20N S2	B-15E20N S3	B-15E20N S4	B-15E40N S1	B-15E40N S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	10	10	10	10	10	10	
PERCENT SOLIDS	96	93	85	92	97	97	82	82	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	1.700	0.790	0.640	U	U	0.920	1.900	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0	1.700	0.790	0.640	0	0	0.920	1.900	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15E40N S3	B-15E40N S4	B-15E60N S1	B-15E60N S2	B-15E60N S3	B-15E60N S4	B-14A S5	B-14A S6	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	3.5' - 4.5'	4.5' - 5.5'	
DATE OF COLLECTION	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
DILUTION FACTOR	10	10	10	10	10	10	5	5	
PERCENT SOLIDS	94	96	86	89	92	83	82	87	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	0.740	0.370	U	U	U	U	U	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	4.500	U	0.033
TOTAL PCBs	0.740	0.370	0	0	0	0	4.500	0	

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-5 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - FIFTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-15A S5	B-15A S6							CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'							
DATE OF COLLECTION	12/18/00	12/18/00							
DILUTION FACTOR	10	10							
PERCENT SOLIDS	92	94							
UNITS	(mg/kg)	(mg/kg)							(mg/kg)
Aroclor-1016	U	U							0.033
Aroclor-1221	U	U							0.067
Aroclor-1232	U	U							0.033
Aroclor-1242	U	U							0.033
Aroclor-1248	2.800	0.600							0.033
Aroclor-1254	U	U							0.033
Aroclor-1260	U	U							0.033
TOTAL PCBs	2.800	0.600							

Qualifiers:
U: Compound analyzed for but not detected.
J: Concentration is less than the CRDL, value estimated.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

SIXTH PHASE SOIL SAMPLING RESULTS

TABLE B-6
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E40N S1	B-12E40N S2	B-12E40N S3	B-12E40N S4	B-12E40S S1	B-12E40S S2	B-12E40S S3	B-12E40S S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	
DILUTION FACTOR	1	1	1	1	1	1	1	1	
PERCENT SOLIDS	94	95	87	86	96	93	92	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	1.100	0.430	0.100	0.090	0.770	0.280	0.490	0.250	0.033
Aroclor-1254	U	U	U	U	0.590	0.260	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	1.100	0.430	0.100	0.090	1.360	0.540	0.490	0.250	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-6 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-12E50 S1	B-12E50 S2	B-12E50 S3	B-12E50 S4	B-14E20N34 S1	B-14E20N34 S2	B-14E20N34 S3	B-14E20N34 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	
DILUTION FACTOR	10	1	10	1	1	1	1	1	
PERCENT SOLIDS	94	95	96	89	90	98	96	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	5.300	0.420	5.900	1.400	1.200	0.100	U	U	0.033
Aroclor-1254	U	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	5.300	0.420	5.900	1.400	1.200	0.100	0	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-6 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-14E40N34 S1	B-14E40N34 S2	B-14E40N34 S3	B-14E40N34 S4	B-15W20N14 S1	B-15W20N14 S2	B-15W20N14 S3	B-15W20N14 S4	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	
DILUTION FACTOR	1	1	1	1	5	1	1	1	
PERCENT SOLIDS	92	97	98	97	95	94	97	94	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	U	U	U	2.500	0.140	U	U	0.033
Aroclor-1254	0.860	U	U	U	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0.860	0	0	0	2.500	0.140	0	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-6 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-16NA S5	B-16NA S6	B-29 S1	B-29 S2	B-29 S3	B-29 S4	B-30 S1	B-30 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	3.5' - 4.5'	4.5' - 5.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	
DILUTION FACTOR	5	1	1	1	1	1	1	1	
PERCENT SOLIDS	86	87	92	94	97	91	96	92	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	U	0.033
Aroclor-1248	U	0.240 P	0.190	U	U	U	0.530	U	0.033
Aroclor-1254	U	U	U	U	U	U	0.340	U	0.033
Aroclor-1260	2.500	U	0.110	0.140	U	U	U	U	0.033
TOTAL PCBs	2.500	0.240	0.300	0.140	0	0	0.870	0	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
☐: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-6 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-30 S3	B-30 S4	B-31 S1	B-31 S2	B-31 S3	B-31 S4	B-32 S1	B-32 S2	CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	
DILUTION FACTOR	1	1	1	1	1	1	1	10	
PERCENT SOLIDS	83	93	98	88	91	90	93	91	
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Aroclor-1016	U	U	U	U	U	U	U	U	0.033
Aroclor-1221	U	U	U	U	U	U	U	U	0.067
Aroclor-1232	U	U	U	U	U	U	U	U	0.033
Aroclor-1242	U	U	U	U	U	U	U	16.000	0.033
Aroclor-1248	U	U	0.560	U	U	U	0.660	U	0.033
Aroclor-1254	U	U	U	0.052	U	U	U	U	0.033
Aroclor-1260	U	U	U	U	U	U	U	U	0.033
TOTAL PCBs	0	0	0.560	0.052	0	0	0.660	**16.000**	

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

TABLE B-6 (continued)
NORTHROP GRUMMAN CORPORATION
PLANT 24 ACCESS ROAD SITE
PCB INVESTIGATION/DELINEATION PROGRAM - SIXTH PHASE
SOIL SAMPLING RESULTS
POLYCHLORINATED BIPHENYLS

SAMPLE IDENTIFICATION	B-32 S3	B-32 S4	B-33 S1	B-33 S2	B-33 S3	B-33 S4			CONTRACT REQUIRED DETECTION LIMIT
SAMPLE DEPTH	1.5' - 2.5'	2.5' - 3.5'	0 - 0.5'	0.5' - 1.5'	1.5' - 2.5'	2.5' - 3.5'			
DATE OF COLLECTION	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01	4/24/01			
DILUTION FACTOR	1	1	1	1	1	1			
PERCENT SOLIDS	90	94	92	94	87	91			
UNITS	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)			(mg/kg)
Aroclor-1016	U	U	U	U	U	U			0.033
Aroclor-1221	U	U	U	U	U	U			0.067
Aroclor-1232	U	U	U	U	U	U			0.033
Aroclor-1242	0.900	U	U	U	U	U			0.033
Aroclor-1248	U	0.110 P	0.100	0.036	U	U			0.033
Aroclor-1254	0.130	U	0.240	0.060	U	U			0.033
Aroclor-1260	U	U	U	U	U	U			0.033
TOTAL PCBs	1.030	0.110	0.340	0.096	0	0			

Qualifiers:
U: Compound analyzed for but not detected.
P: Concentration estimated, possibly biased low since primary and confirmation column concentrations had a percent difference >25%; lower value reported.

Notes:
[ ]: Value for Total PCBs exceeds 10 parts per million (ppm).

NO.	DATE	REVISION	INT.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT ENGINEER: B.M.V.	DRAWN BY: D.G.C.
DESIGNED BY: M.R.H.	CHECKED BY: B.M.V.

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
BETHPAGE, NEW YORK

PLANT 24 ACCESS ROAD SITE

PROJECT NO. 1572-06
DATE: JULY 2002
SCALE: 1"=20'-0"
DRAWING NO. 1A
DRAWING 1 OF 2

LEGEND:

- FIRST PHASE SOIL PROBE LOCATION
- SECOND PHASE SOIL PROBE LOCATION
- THIRD PHASE SOIL PROBE LOCATION
- FOURTH PHASE SOIL PROBE LOCATION
- FIFTH PHASE SOIL PROBE LOCATION
- SIXTH PHASE SOIL PROBE LOCATION
- SEVENTH PHASE SOIL PROBE LOCATION
- PROPERTY LINE
- FENCE
- TEMPORARY FENCE

0 20' 40'
SCALE: 1"=20'

NO.	DATE	REVISION	INT.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

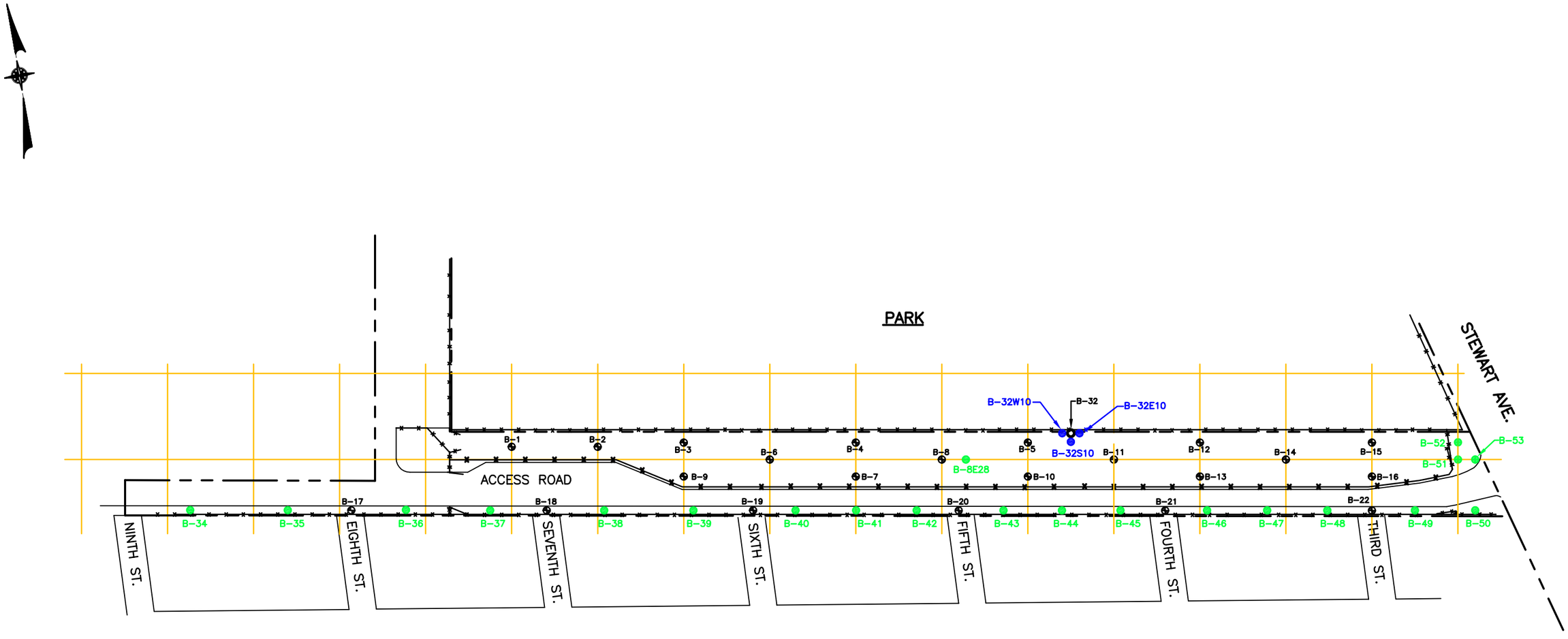
PROJECT ENGINEER: B.M.V.	DRAWN BY: L.V.G.
DESIGNED BY: M.R.H.	CHECKED BY: B.M.V.

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
BETHPAGE, NEW YORK

PLANT 24 ACCESS ROAD SITE

PROJECT NO.: 1572-06
DATE: JULY 2002
SCALE: 1"=20'-0"
DRAWING NO.: 1B
DRAWING 2 OF 2



LEGEND:

- FIRST PHASE SOIL BORING LOCATION
- SIXTH PHASE SOIL BORING LOCATION
- COMPLETED SEVENTH PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 4 FEET BELOW GRADE)
- COMPLETED SEVENTH PHASE SOIL BORING LOCATION (ADVANCED TO A DEPTH OF 5.5 FEET BELOW GRADE)
- PROPERTY LINE
- FENCE
- TEMPORARY FENCE

0 120

SCALE : 1"=120'

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

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY
PLANT 24 ACCESS ROAD SITE

SEVENTH PHASE FIELD PROGRAM
PROPOSED SOIL BORING LOCATION PLAN

FIGURE 1

Table 1. Concentrations of Polychlorinated Biphenyls in Additional Dvirka and Bartilucci Soil Samples, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

CONSTITUENT (mg/kg)	Sample Location:	B-34	B-34	B-34	B-35	B-35	B-35	B-36	B-36
	Depth Interval (ft)	0 - 0.167	0.167 - 2	2 - 4	0 - 0.167	0.167 - 2	2 - 4	0 - 0.167	0.167 - 2
	Sample Date:	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002
Polychlorinated Biphenyls									
Aroclor-1016		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1221		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1232		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1242		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1248		**7.8**	**1.5**	< U	**4.6 P**	**1.2**	< U	**2**	**1.5**
Aroclor-1254		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1260		< U	< U	< U	< U	< U	< U	< U	< U

See last page for Notes and Abbreviations.

Table 1. Concentrations of Polychlorinated Biphenyls in Additional Dvirka and Bartilucci Soil Samples, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

CONSTITUENT (mg/kg)	Sample Location: / Depth Interval (ft) / Sample Date:	B-36 2 - 4 5/13/2002	B-37 0 - 0.167 5/13/2002	B-37 0.167 - 2 5/13/2002	B-38 0 - 0.167 5/13/2002	B-38 0.167 - 2 5/13/2002	B-39 0 - 0.167 5/13/2002	B-39 0.167 - 2 5/13/2002	B-39 2 - 4 5/13/2002
Polychlorinated Biphenyls									
Aroclor-1016		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1221		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1232		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1242		< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1248		< U	**4.9 P**	**0.14 P**	**4.1 P**	**0.08 P**	2.4	**0.87 P**	< U
Aroclor-1254		< U	< U	< U	< U	**0.14 P**	< U	**1.7 P**	< U
Aroclor-1260		< U	< U	< U	< U	< U	< U	< U	< U

See last page for Notes and Abbreviations.

Table 1. Concentrations of Polychlorinated Biphenyls in Additional Dvirka and Bartilucci Soil Samples, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

CONSTITUENT (mg/kg)	Sample Location: / Depth Interval (ft) / Sample Date:	B-40 0 - 0.167 5/13/2002	B-40 0.167 - 2 5/13/2002	B-40 2 - 4 5/13/2002	B-41 0 - 0.167 5/13/2002	B-41 0.167 - 2 5/13/2002	B-42 0 - 0.167 5/13/2002	B-42 0.167 - 2 5/13/2002	B-43 0 - 0.167 5/13/2002	B-43 0.167 - 2 5/13/2002	B-44 0 - 0.167 5/13/2002
Polychlorinated Biphenyls											
Aroclor-1016		< U	< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1221		< U	< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1232		< U	< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1242		< U	< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1248		**2.3**	**1.8**	< U	**5.6**	< U	**2.4**	**0.2**	**2 P**	**0.41 P**	**2.5**
Aroclor-1254		< U	< U	< U	**4.3**	**0.06 P**	< U	< U	< U	**0.54 P**	< U
Aroclor-1260		< U	< U	< U	< U	< U	< U	< U	< U	< U	< U

See last page for Notes and Abbreviations.

Table 1. Concentrations of Polychlorinated Biphenyls in Additional Dvirka and Bartilucci Soil Samples,
Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

CONSTITUENT (mg/kg)	Sample Location: / Depth Interval (ft) / Sample Date:	B-44 0.167 - 2 5/13/2002	B-44 2 - 4 5/13/2002	B-45 0 - 0.167 5/13/2002	B-45 0.167 - 2 5/13/2002	B-46 0 - 0.167 5/13/2002	B-46 0.167 - 2 5/13/2002	B-47 0 - 0.167 5/13/2002	B-47 0.167 - 2 5/13/2002	B-48 0 - 0.167 5/13/2002
Polychlorinated Biphenyls										
Aroclor-1016		< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1221		< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1232		< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1242		< U	< U	< U	< U	< U	< U	< U	< U	< U
Aroclor-1248		**1.3**	< U	**0.77**	**0.14**	**2**	**0.22**	**3**	< U	**2.1**
Aroclor-1254		**0.9**	< U	< U	< U	**1.1**	**0.13**	**1.6**	**0.56**	**0.86**
Aroclor-1260		< U	< U	< U	< U	< U	< U	< U	< U	< U

See last page for Notes and Abbreviations.

Table 1. Concentrations of Polychlorinated Biphenyls in Additional Dvirka and Bartilucci Soil Samples, Northrop Grumman Systems Corporation, Operable Unit 3 (Former Grumman Settling Ponds), Bethpage, New York.

CONSTITUENT (mg/kg)	Sample Location:	B-48	B-48	B-49	B-49	B-50	B-50
	Depth Interval (ft)	0.167 - 2	2 - 4	0.167 - 2	0.167 - 2	0 - 0.167	0.167 - 2
	Sample Date:	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002	5/13/2002
Polychlorinated Biphenyls							
Aroclor-1016		< U	< U	< U	< U	< U	< U
Aroclor-1221		< U	< U	< U	< U	< U	< U
Aroclor-1232		< U	< U	< U	< U	< U	< U
Aroclor-1242		< U	< U	< U	< U	< U	< U
Aroclor-1248		**1.3**	< U	**2.7 P**	< U	< U	< U
Aroclor-1254		< U	< U	< U	**0.14**	**1.2**	**0.7**
Aroclor-1260		< U	< U	< U	< U	< U	< U

Notes and Abbreviations:

Bold value indicates a detection

< U Not detected

P Concentration estimated, possibly biased low since primary and confirmation column concentrations has a percent difference >25%; the lower value is reported.