1-30-003A-002

ARCADIS

Infrastructure, buildings, environment, communications

Mr. Steven Scharf, P.E.
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

ARCADIS G&M, Inc.
88 Duryea Road
Melville
New York 11747
Tel 631 249 7600
Fax 631 249 7610
www.arcadis-us.com

Subject:
First Quarter 2004 Groundwater Monitoring Data, Operable Unit 2, Northrop Grumman Corporation, Bethpage, New York.

ENVIRONMENTAL

Dear Mr. Scharf:

On behalf of Northrop Grumman Corporation, ARCADIS is providing the NYSDEC with the results of groundwater monitoring performed in the First Quarter of 2004 for Operable Unit 2. Tables 1 to 3 provide the complete results of monitoring for volatile organic compounds (VOC's), cadmium and chromium (Cd/Cr), and semi-volatile organic compounds (SVOC's), respectively, for this period.

Please contact us if you have any questions or comments.

Sincerely,

Date:
18 October 2004

Contact:
David Stern

Phone:
(631) 391-5284

Email:
dstern@arcadis-us.com

Our ref:
NY001348.0404.00004

ARCADIS G&M, Inc.

David E. Stern
Senior Scientist

Carlo SanGiovanni

Carlo San Giovanni
Project Manager

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Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	MW-03R MW-3R 03/19/2004	MW-52S 52S 03/25/2004	MW-52I 52I 03/25/2004	MW-52D 52D 03/25/2004	10624 N10624 03/31/2004	10627 N10627 03/31/2004	10631 N10631 03/30/2004
Chloromethane		<5	<10	<5	<5	<5	<5	<5
Bromomethane		<5	<10	<5	<5	<5	<5	<5
Vinyl chloride		<2	**370**	<2	**0.5 J**	<2	<2	<2
Chloroethane		<5	**4 J**	<5	<5	<5	<5	<5
Methylene chloride		<5	<10	<5	<5	<5	<5	<5
Acetone		<10	<20	<10	<10	<10	**4 J**	<10
Carbon disulfide		<5	<10	<5	<5	<5	**0.7 J**	<5
1,1-Dichloroethene		<5	<10	**0.6 J**	<5	<5	<5	<5
1,1-Dichloroethane		<5	<10	**1 J**	<5	<5	<5	<5
Chloroform		<5	<10	<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<10	<5	<5	<5	<5	<5
2-Butanone		<10	<20	<10	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	<10	**0.8 J**	<5	<5	<5	<5
Carbon tetrachloride		<5	<10	<5	<5	<5	<5	<5
Bromodichloromethane		<5	<10	<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<10	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<10	<5	<5	<5	<5	<5
Trichloroethene		**5 J**	<10	**42**	**18**	**2 J**	**1 J**	**1 J**
Dibromochloromethane		<5	<10	<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<10	<5	<5	<5	<5	<5
Benzene		<0.7	<1	<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<10	<5	<5	<5	<5	<5
Bromoform		<5	<10	<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<20	<10	<10	<10	<10	<10
2-Hexanone		<10	<20	<10	<10	<10	<10	<10
Tetrachloroethene		<5	**7 J**	**16**	**17**	<5	<5	<5
1,1,2,2-Tetrachloroethane		<5	<10	<5	<5	<5	<5	<5
Toluene		<5	<10	<5	**0.4 J**	**1 J**	<5	<5
Chlorobenzene		<5	<10	<5	<5	<5	<5	<5
Ethylbenzene		<5	<10	<5	<5	<5	<5	<5
Styrene		<5	<10	<5	<5	<5	<5	<5
Xylene (total)		<5	<10	<5	<5	<5	<5	<5
Vinyl Acetate		<5	<10	<5	<5	<5	<5	<5
Freon 113		<5	**0.9 J**	**0.5 J**	<5	<5	<5	<5
cis-1,2-Dichloroethene		<5	**2 J**	**5**	**4 J**	<5	<5	<5
trans-1,2-Dichloroethylene		<5	<10	<5	<5	<5	<5	<5
Total VOCs		**5**	**383.9**	**65.9**	**39.9**	**3**	**5.7**	**1**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	10634 N-10634 03/19/2004	FW-01 FW-01 03/18/2004	GM-13D GM-13D 04/05/2004	GM-14 GM-14 03/17/2004	GM-15S GM-15S 03/17/2004	GM-15I GM-15I 04/05/2004	GM-15D GM-15D 03/17/2004
Chloromethane		<5	<5	<25	<10	<5	<5	<5
Bromomethane		<5	<5	<25	<10	<5	<5	<5
Vinyl chloride		<2	<2	<10	<10	<2	<2	<2
Chloroethane		<5	<5	<25	<10	<5	<5	<5
Methylene chloride		<5	<5	<25	<5	<5	<5	<5
Acetone		<10	<10	<50	<10	<10	**6 J**	<10
Carbon disulfide		<5	<5	<25	<10	<5	<5	<5
1,1-Dichloroethene		<5	<5	**93**	<5	<5	<5	**4 J**
1,1-Dichloroethane		<5	<5	**50**	<5	<5	<5	**6**
Chloroform		<5	<5	<25	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<25	<5	<5	<5	<5
2-Butanone		<10	<10	<50	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	<5	**86**	<5	<5	<5	<5
Carbon tetrachloride		<5	<5	<25	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<25	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<25	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<25	<5	<5	<5	<5
Trichloroethene		<5	**1 J**	**230**	<5	**5**	**12**	**8**
Dibromochloromethane		<5	<5	<25	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<25	<5	<5	<5	<5
Benzene		<0.7	<0.7	<4	<5	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<25	<5	<5	<5	<5
Bromoform		<5	<5	<25	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<50	<10	<10	<10	<10
2-Hexanone		<10	<10	<50	<10	<10	<10	<10
Tetrachloroethene		<5	**4 J**	**640**	<5	<5	<5	**8**
1,1,2,2-Tetrachloroethane		<5	<5	<25	<5	<5	<5	<5
Toluene		<5	<5	<25	<5	<5	<5	<5
Chlorobenzene		<5	<5	<25	<5	<5	<5	<5
Ethylbenzene		<5	<5	<25	**1 J**	<5	<5	<5
Styrene		<5	<5	<25	<5	<5	<5	<5
Xylene (total)		<5	<5	<25	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<25	<10	<5	<5	<5
Freon 113		<5	<5	**17 J**	--	<5	<5	<5
cis-1,2-Dichloroethene		<5	<5	**170**	<5	<5	**1 J**	<5
trans-1,2-Dichloroethylene		<5	<5	<25	<5	<5	<5	<5
Total VOCs		**0**	**5**	**1,286**	**1**	**5**	**19**	**26**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-15D2 / GM-15D2 / 03/17/2004	GM-16SR / GM 16SR / 03/29/2004	GM-16I / GM-16I / 04/02/2004	GM-17SR / GM 17SR / 03/29/2004	GM-17I / GM-17I / 04/06/2004	GM-17D / GM-17D / 03/31/2004	GM-18S / GM 18S / 03/30/2004
Chloromethane		<5	<5	<5	<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2	<2	<2	<2
Chloroethane		<5	<5	<5	<5	<5	<5	<5
Methylene chloride		<5	<5	<5	<5	<5	<5	<5
Acetone		<10	<10	<10	**4 J**	<10	<10	**3 J**
Carbon disulfide		<5	<5	<5	**1 J**	<5	<5	<5
1,1-Dichloroethene		<5	<5	**2 J**	<5	<5	<5	<5
1,1-Dichloroethane		<5	<5	**0.9 J**	<5	<5	<5	**0.8 J**
Chloroform		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	<5	**1 J**	<5	<5	<5	<5
Carbon tetrachloride		<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Trichloroethene		**6**	**2 J**	**26**	<5	<5	<5	**5 J**
Dibromochloromethane		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Bromoform		<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene		**5 J**	<5	**7**	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane		<5	<5	<5	**0.5 J**	<5	<5	<5
Toluene		<5	<5	<5	<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5	<5	<5	<5
Styrene		<5	<5	<5	<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5	<5	<5	<5
Freon 113		<5	<5	**0.7 J**	<5	<5	<5	<5
cis-1,2-Dichloroethene		<5	<5	**4 J**	<5	<5	<5	**3 J**
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<5	<5	<5
Total VOCs		**11**	**2**	**41.6**	**5.5**	0	0	**11.8**

ug/L	Micrograms per liter
J	Estimated value
D	Constituent Identified at a Secondary Dilution
Bold	Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-18I / GM 18I / 03/30/2004	GM-18D / GM-18D / 03/23/2004	GM-20I / GM 20I / 03/24/2004	GM-20D / GM 20D / 03/24/2004	GM-21S / GM-21S / 03/23/2004	GM-21I / GM 21I / 03/24/2004	GM-21D / GM 21D / 03/24/2004
Chloromethane		<5	<5	<5	<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2	<2	<2	<2
Chloroethane		<5	<5	<5	<5	<5	<5	<5
Methylene chloride		<5	<5	<5	<5	<5	<5	<5
Acetone		<10	<10	<10	<10	<10	<10	<10
Carbon disulfide		**0.4 J**	**2 J**	**0.6 J**	**4 J**	<5	**2 J**	<5
1,1-Dichloroethene		<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane		<5	<5	<5	<5	<5	<5	<5
Chloroform		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	<5	<5	<5	<5	<5	<5
Carbon tetrachloride		<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Trichloroethene		**4 J**	**3 J**	**0.6 J**	**0.4 J**	<5	<5	**2 J**
Dibromochloromethane		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Bromoform		<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene		**0.8 J**	<5	<5	<5	<5	<5	**0.3 J**
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<5	<5	<5
Toluene		<5	<5	<5	<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5	<5	<5	<5
Styrene		<5	<5	<5	<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5	<5	<5	<5
Freon 113		<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene		<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<5	<5	<5
Total VOCs		**5.1**	**5**	**1.2**	**4.4**	0	**2**	**2.3**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-23S / GM-23S / 04/06/2004	GM-23I / GM-23I / 04/06/2004	GM-32S / GM-32S / 04/07/2004	GM-33D2 / GM 33D2 / 03/30/2004	GM-34D / GM-34D / 04/07/2004	GM-34D2 / GM-34D2 / 04/07/2004	GM-35D2 / GM-35D2 / 04/02/2004
Chloromethane		<5	<5	<5	<5	<20	<5	<20
Bromomethane		<5	<5	<5	<5	<20	<5	<20
Vinyl chloride		<2	<2	<2	<2	<8	<2	<8
Chloroethane		<5	<5	<5	<5	<20	<5	<20
Methylene chloride		<5	<5	<5	<5	<20	<5	<20
Acetone		<10	<10	<10	<10	<40	**4 J**	<40
Carbon disulfide		<5	<5	<5	<5	<20	<5	**5 J**
1,1-Dichloroethene		<5	<5	<5	<5	**5 J**	**4 J**	<20
1,1-Dichloroethane		<5	<5	<5	<5	<20	<5	<20
Chloroform		<5	<5	<5	<5	<20	<5	<20
1,2-Dichloroethane		<5	<5	<5	<5	<20	<5	<20
2-Butanone		<10	<10	<10	<10	<40	<10	<40
1,1,1-Trichloroethane		<5	<5	<5	<5	<20	**0.5 J**	<20
Carbon tetrachloride		<5	<5	<5	<5	<20	<5	<20
Bromodichloromethane		<5	<5	<5	<5	<20	<5	<20
1,2-Dichloropropane		<5	<5	<5	<5	<20	<5	<20
cis-1,3-Dichloropropene		<5	<5	<5	<5	<20	<5	<20
Trichloroethene		<5	**0.6 J**	**63**	**84**	**440**	**150**	**360**
Dibromochloromethane		<5	<5	<5	<5	<20	<5	<20
1,1,2-Trichloroethane		<5	<5	<5	<5	<20	<5	<20
Benzene		<0.7	<0.7	<0.7	<0.7	<3	<0.7	<3
trans-1,3-Dichloropropene		<5	<5	<5	<5	<20	<5	<20
Bromoform		<5	<5	<5	<5	<20	<5	<20
4-Methyl-2-pentanone		<10	<10	<10	<10	<40	<10	<40
2-Hexanone		<10	<10	<10	<10	<40	<10	<40
Tetrachloroethene		<5	**1 J**	**0.6 J**	**8**	**8 J**	**10**	**6 J**
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<20	<5	<20
Toluene		<5	<5	<5	<5	<20	<5	<20
Chlorobenzene		<5	<5	<5	<5	<20	<5	<20
Ethylbenzene		<5	<5	<5	<5	<20	<5	<20
Styrene		<5	<5	<5	<5	<20	<5	<20
Xylene (total)		<5	<5	<5	<5	<20	<5	<20
Vinyl Acetate		<5	<5	<5	<5	<20	<5	<20
Freon 113		<5	<5	<5	**6**	**37**	**9**	**10 J**
cis-1,2-Dichloroethene		<5	<5	2 J	**1 J**	**8 J**	**6**	**3 J**
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<20	<5	<20
Total VOCs		0	**1.6**	**65.6**	**99**	**498**	**183.5**	**384**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-36D GM 36D 03/30/2004	GM-36D2 GM 36D2 03/30/2004	GM-37D GM-37D 03/31/2004	GM-37D2 GM-37D2 04/01/2004	GM-38D GM-38D 03/31/2004	GM-38D2 GM-38D2 04/01/2004	GM-39D GM-39D 03/23/2004
Chloromethane		<5	<5	<5	<5	<25	<50	<5
Bromomethane		<5	<5	<5	<5	<25	<50	<5
Vinyl chloride		<2	<2	<2	<2	<10	<20	<2
Chloroethane		<5	<5	<5	<5	<25	<50	<5
Methylene chloride		<5	<5	<5	<5	<25	<50	<5
Acetone		<10	<10	<10	<10	<50	<100	<10
Carbon disulfide		**0.7 J**	<5	<5	<5	<25	<50	**7**
1,1-Dichloroethene		<5	<5	**1 J**	**2 J**	**5 J**	<50	<5
1,1-Dichloroethane		<5	<5	**2 J**	**7**	<25	<50	<5
Chloroform		<5	<5	**0.9 J**	**0.6 J**	<25	<50	<5
1,2-Dichloroethane		<5	<5	<5	<5	<25	<50	<5
2-Butanone		<10	<10	<10	<10	<50	<100	<10
1,1,1-Trichloroethane		<5	<5	**2 J**	**3 J**	**4 J**	<50	<5
Carbon tetrachloride		<5	<5	<5	<5	<25	<50	<5
Bromodichloromethane		<5	<5	<5	<5	<25	<50	<5
1,2-Dichloropropane		<5	<5	<5	<5	<25	<50	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<25	<50	<5
Trichloroethene		**14**	<5	<5	**2 J**	**810**	**1,100**	**42**
Dibromochloromethane		<5	<5	<5	<5	<25	<50	<5
1,1,2-Trichloroethane		<5	<5	<5	<5	<25	<50	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<4	<7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<25	<50	<5
Bromoform		<5	<5	<5	<5	<25	<50	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<50	<100	<10
2-Hexanone		<10	<10	<10	<10	<50	<100	<10
Tetrachloroethene		**0.8 J**	<5	**0.8 J**	<5	<25	<50	<5
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<25	<50	<5
Toluene		<5	<5	<5	<5	<25	<50	<5
Chlorobenzene		<5	<5	<5	<5	<25	<50	<5
Ethylbenzene		<5	<5	<5	<5	<25	<50	<5
Styrene		<5	<5	<5	<5	<25	<50	<5
Xylene (total)		<5	<5	<5	<5	<25	<50	<5
Vinyl Acetate		<5	<5	<5	<5	<25	<50	<5
Freon 113		**0.6 J**	<5	<5	<5	<25	<50	<5
cis-1,2-Dichloroethene		<5	<5	<5	<5	<25	**6 J**	<5
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<25	<50	<5
Total VOCs		**16.1**	0	**6.7**	**14.6**	**819**	**1,106**	**49**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-39D2 / GM-39D2 / 03/23/2004	GM-70D2 / GM 70D2 / 03/29/2004	GM-71D2 / GM -71D2 / 5/7/2004	GM-73D / GM-73D / 03/22/2004	GM-73D2 / GM-73D2 / 03/22/2004	GM-74I / GM-74I / 03/22/2004	GM-74D / GM-74D / 03/22/2004
Chloromethane		<5	<5	<5	<10	<50	<5	<5
Bromomethane		<5	<5	<5	<10	<50	<5	<5
Vinyl chloride		<2	<2	<2	<4	<20	<2	<2
Chloroethane		<5	<5	<5	<10	<50	<5	<5
Methylene chloride		<5	<5	<5	<10	<50	<5	<5
Acetone		<10	**6 J**	<10	<20	<100	<10	<10
Carbon disulfide		**0.7 J**	**0.8 J**	<5	<10	**17 J**	<5	<5
1,1-Dichloroethene		<5	**0.7 J**	**2**	<10	<50	<5	<5
1,1-Dichloroethane		<5	<5	**5**	<10	<50	<5	<5
Chloroform		<5	<5	**1**	<10	<50	<5	<5
1,2-Dichloroethane		<5	<5	<5	<10	<50	<5	<5
2-Butanone		<10	<10	<10	<20	<100	<10	<10
1,1,1-Trichloroethane		<5	<5	<5	<10	<50	<5	<5
Carbon tetrachloride		<5	<5	<5	<10	<50	<5	<5
Bromodichloromethane		<5	<5	<5	<10	<50	<5	<5
1,2-Dichloropropane		<5	<5	<5	<10	<50	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<10	<50	<5	<5
Trichloroethene		**75**	**140**	**4**	**250**	**720**	<5	**4 J**
Dibromochloromethane		<5	<5	<5	<10	<50	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<10	<50	<5	<5
Benzene		<0.7	<0.7	<0.7	<1	<7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<10	<50	<5	<5
Bromoform		<5	<5	<5	<10	<50	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<20	<100	<10	<10
2-Hexanone		<10	<10	<10	<20	<100	<10	<10
Tetrachloroethene		<5	**9**	<5	<10	<50	<5	<5
1,1,2,2-Tetrachloroethane		<5	<5	<5	<10	<50	<5	<5
Toluene		<5	<5	<5	<10	<50	<5	<5
Chlorobenzene		<5	<5	<5	<10	<50	<5	<5
Ethylbenzene		<5	<5	<5	<10	**<50**	**1 J**	<5
Styrene		<5	<5	<5	<10	<50	<5	<5
Xylene (total)		<5	<5	<5	<10	**10 J**	<5	<5
Vinyl Acetate		<5	<5	<5	<10	<50	<5	<5
Freon 113		<5	**3 J**	<5	<10	<50	<5	<5
cis-1,2-Dichloroethene		<5	**2 J**	<5	<10	<50	<5	<5
trans-1,2-Dichloroethylene		<5	<5	<5	<10	<50	<5	<5
Total VOCs		**75.7**	**161.5**	**12**	**250**	**747**	**1**	**4**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-74D2 GM-74D2 03/22/2004	GM-75D2 GM 75D2 03/30/2004	GM-78S GM-78S 03/19/2004	GM-78I GM-78I 03/19/2004	GM-79I GM-79I 04/06/2004	GM-79D GM-79D 04/06/2004	HN-24I HN-24I 03/18/2004
Chloromethane		<5	<5	<5	<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2	<2	<2	<2
Chloroethane		<5	<5	<5	<5	<5	<5	<5
Methylene chloride		<5	<5	<5	<5	<5	<5	<5
Acetone		**9 J**	<10	<10	<10	<10	<10	<10
Carbon disulfide		**2 J**	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene		<5	**20**	<5	<5	<5	**0.9 J**	**4 J**
1,1-Dichloroethane		<5	**3 J**	<5	<5	<5	<5	<5
Chloroform		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	**6**	<5	<5	<5	**0.7 J**	<5
Carbon tetrachloride		<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Trichloroethene		**8**	**890 D**	<5	<5	<5	**76**	**62**
Dibromochloromethane		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	**1 J**	<5	<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Bromoform		<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene		**7**	**8**	<5	<5	<5	**1 J**	**3**
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<5	<5	<5
Toluene		<5	<5	<5	<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5	<5	<5	<5
Styrene		<5	<5	<5	<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5	<5	<5	<5
Freon 113		**0.8 J**	**5**	<5	<5	<5	**2 J**	**33**
cis-1,2-Dichloroethene		<5	**2 J**	<5	<5	<5	**0.7 J**	<5
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<5	<5	<5
Total VOCs		**26.8**	**935**	0	0	0	**81.3**	**102**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	HN-29I HN-29I 03/18/2004	HN-29D HN-29D 03/18/2004	HN-40S HN-40S 03/16/2004	HN-40I HN-40I 03/16/2004	HN-42S HN-42S 03/16/2004	HN-42I HN-42I 03/16/2004	GP-1 GP-1 04/07/2004
Chloromethane		<5	<5	<5	<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2	<2	<2	<2
Chloroethane		<5	<5	<5	<5	<5	<5	<5
Methylene chloride		<5	<5	<5	<5	<5	<5	<5
Acetone		<10	<10	<10	<10	<10	<10	<10
Carbon disulfide		<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene		<5	<5	<5	<5	<5	<5	**6**
1,1-Dichloroethane		<5	<5	<5	<5	<5	<5	**2 J**
Chloroform		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane		<5	<5	<5	**4 J**	<5	<5	**2 J**
Carbon tetrachloride		<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Trichloroethene		**1 J**	**0.6 J**	<5	**34**	<5	<5	**500 D**
Dibromochloromethane		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<5	<5	<5
Bromoform		<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene		**0.8 J**	<5	<5	**9**	<5	<5	**120**
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<5	<5	<5
Toluene		<5	<5	<5	<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5	<5	<5	<5
Styrene		<5	<5	<5	<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5	<5	<5	<5
Freon 113		<5	<5	<5	<5	<5	<5	**10**
cis-1,2-Dichloroethene		<5	<5	<5	**0.9 J**	<5	<5	**9**
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<5	<5	<5
Total VOCs		**1.8**	**0.6**	0	**47.9**	0	0	**649**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Remedial Wells and Treatment Systems, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GP-3 GP-3 04/07/2004	ONCT-1 ONCT-1 04/07/2004	ONCT-2 ONCT-2 04/07/2004	ONCT-3 ONCT-3 04/07/2004
Chloromethane		<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5
Vinyl chloride		**110**	<2	<2	<2
Chloroethane		**2 J**	<5	<5	<5
Methylene chloride		<5	<5	<5	<5
Acetone		<10	**4 J**	<10	<10
Carbon disulfide		<5	**0.8 J**	<5	<5
1,1-Dichloroethene		**21**	**3 J**	**4 J**	**0.9 J**
1,1-Dichloroethane		**4 J**	**0.7 J**	**2 J**	**1 J**
Chloroform		**0.6 J**	<5	<5	**1 J**
1,2-Dichloroethane		<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10
1,1,1-Trichloroethane		**5 J**	**0.6 J**	**2 J**	<5
Carbon tetrachloride		**0.5 J**	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5
Trichloroethene		**4,200 D**	**760 D**	**170**	**52**
Dibromochloromethane		<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5
Bromoform		<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10
Tetrachloroethene		**61**	**14**	**8**	**9**
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5
Toluene		<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5
Styrene		<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5
Freon 113		**25**	**8**	**1 J**	**0.7 J**
cis-1,2-Dichloroethene		**11**	**3 J**	**1 J**	**15**
trans-1,2-Dichloroethylene		<5	<5	<5	<5
Total VOCs		**4,440.1**	**794.1**	**188**	**79.6**

ug/L Micrograms per liter
J Estimated value
D Constituent Identified at a Secondary Dilution
Bold Constituent detected above Method Detection Limit

ARCADIS

Table 2. Concentrations of Total and Dissolved Cadmium and Chromium Detected in Groundwater Samples, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	10631 N10631 03/30/2004	GM-15S GM-15S 3/17/2004	GM-16SR GM 16SR 03/29/2004	GM-17SR GM 17SR 03/29/2004	GM-18S GM 18S 03/30/2004	GM-32S GM-32S 04/07/2004	GM-78S GM-78S 03/19/2004	GM-78I GM-78I 03/19/2004	MW-01GF MW-1GF 04/05/2004
Cadmium		**3.7 B**	--	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cadmium (Dissolved)		**2.4 B**	--	<1.1	<1.1	<1.1	<1.1	--	--	<1.1
Chromium		**38.9**	**366**	<1.3	<1.3	**4 B**	**48.8**	**2.9 B**	**2.3 B**	**2.4 B**
Chromium (Dissolved)		**20.8**	--	<1.3	<1.3	<1.3	**47.2**	--	--	<1.3

ug/L	Micrograms per liter
B	Detected between the IDL and CRDL
IDL	Instrument detection limit
CRDL	Contract-required detection limit
NYSDEC	New York State Department of Environmental Conservation
Bold	Constituent detected above IDL.
--	Not analyzed.

Table 2. Concentrations of Total and Dissolved Cadmium and Chromium Detected in Groundwater Samples, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	MW-02GF / MW-2GF / 04/05/2004	MW-03R / MW-3R / 03/19/2004	MW-04 / PT1MW-04 / 3/17/2004	MW-06 / PT1MW-06 / 3/17/2004
Cadmium		<1.1	**38.5**	--	--
Cadmium (Dissolved)		<1.1	**36.7**	--	--
Chromium		**249**	**70.1**	<1.3	**247**
Chromium (Dissolved)		**245**	**68.7**	--	--

ug/L	Micrograms per liter
B	Detected between the IDL and CRDL
IDL	Instrument detection limit
CRDL	Contract-required detection limit
NYSDEC	New York State Department of Environmental Conservation
Bold	Constituent detected above IDL.
--	Not analyzed.

Table 3. Concentrations of Semi-Volatile Organic Compounds in Monitoring Well GM-14, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: GM-14 SAMPLE ID: GM-14 DATE: 03/17/2004
1,3-Dichlorobenzene	<10
1,4-Dichlorobenzene	<10
1,2-Dichlorobenzene	<10
1,2,4-Trichlorobenzene	<10
Hexachlorobutadiene	<10
Phenol	<10
Bis(2-chloroethyl)ether	<10
2-Chlorophenol	<10
2-Methylphenol	<10
Bis(2-chloro-1-methylethyl) ether	<10
4-Methylphenol	<10
N-Nitroso-di-n-propylamine	<10
Hexachloroethane	<10
Nitrobenzene	<10
Isophorone	<10
2-Nitrophenol	<10
2,4-Dimethylphenol	<10
Bis(2-chloroethoxy)methane	<10
2,4-Dichlorophenol	<10
Naphthalene	<10
4-Chloroaniline	<10
4-Chloro-3-methylphenol	<10
2-Methylnaphthalene	<10
Hexachlorocyclopentadiene	<10
2,4,6-Trichlorophenol	<10
2,4,5-Trichlorophenol	<50
2-Chloronaphthalene	<10
2-Nitroaniline	<50
Dimethylphthalate	<10
Acenaphthylene	<10
2,6-Dinitrotoluene	<10
3-Nitroaniline	<50
Acenaphthene	<10
2,4-Dinitrophenol	<50
4-Nitrophenol	<50
Dibenzofuran	<10
2,4-Dinitrotoluene	<10
Diethylphthalate	<10
4-Chlorophenyl phenylether	<10
Fluorene	<10
4-Nitroaniline	<50
4,6-Dinitro-2-methylphenol	<50
N-Nitrosodiphenylamine	<10
4-Bromophenyl phenylether	<10
Hexachlorobenzene	<10

Footnotes on last page.

Table 3. Concentrations of Semi-Volatile Organic Compounds in Monitoring Well GM-14, First Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE: / SAMPLE ID: / DATE:	GM-14 / GM-14 / 03/17/2004
Pentachlorophenol		<50
Phenanthrene		<10
Anthracene		<10
Carbazole		<10
Di-n-butylphthalate		<10
Fluoranthene		<10
Pyrene		<10
Butylbenzylphthalate		<10
3,3'-Dichlorobenzidine		<20
Benzo(a)anthracene		<10
Chrysene		<10
Bis(2-ethylhexyl)phthalate (BEHP)		<10
Di-n-octylphthalate		<10
Benzo(b)fluoranthene		<10
Benzo(k)fluoranthene		<10
Benzo(a)pyrene		<10
Indeno(1,2,3-cd)pyrene		<10
Dibenz(a,h)anthracene		<10
Benzo(g,h,i)perylene		<10
Benzoic acid		<50
Benzyl alcohol		<10
Sum of Constituents		0

ug/L Micrograms per liter