



Infrastructure, buildings, environment, communications

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

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

ENVIRONMENTAL

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

Dear Mr. Scharf:

Date:
1 November 2004

On behalf of Northrop Grumman Corporation, ARCADIS is providing the NYSDEC with the results of groundwater monitoring performed in the Second Quarter of 2004 for Operable Unit 2. This round reflects the implementation of our June 3, 2004 petition for reduced monitoring frequency for selected wells that was conditionally approved by the NYSDEC on June 23, 2004. Tables 1 and 2 provide the complete results of monitoring for volatile organic compounds (VOC's) and cadmium and chromium (Cd/Cr), respectively, for this period.

Contact:
David Stern

Phone:
(631) 391-5284

Please contact us if you have any questions or comments.

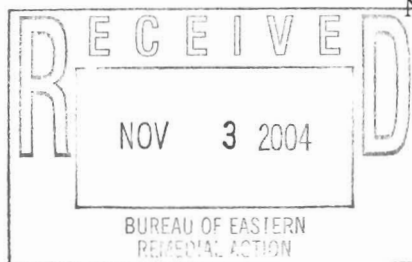
Email:
dstern@arcadis-us.com

Sincerely,

Our ref:
NY001348.0404.00004

ARCADIS G&M, Inc.

David E. Stern
Senior Scientist



Carlo San Giovanni
Project Manager

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See Attached Distribution List

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David Brayack - Tetrattech NUS, Inc.
Arnold Palleschi - Town of Hempstead Water District
James Colter - U.S. Navy Northern Division, Environmental Branch Code 18

Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Second Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE	MW-03R	10631	GM-15S	GM-15I	GM-15D	GM-15D2	GM-17SR
	SAMPLE ID	MW 3R	N-10631	GM-15S	GM15I	GM15D	GM15D-2	GM-17SR
	DATE	07/16/2004	07/16/2004	07/01/2004	07/13/2004	07/13/2004	07/13/2004	07/02/2004
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	3 J	1 J	<5
1,1-Dichloroethane		<5	<5	<5	<5	6	<5	<5
cis-1,2-Dichloroethene		<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethylene		<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	1 J	<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		4J	<5	2 J	7	6	12	<5
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	<5	<5	<5	7	20	<5
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	2 J	<5
Total VOCs		4	0	2	7	23	35	0

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, Second Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE	GM-17I	GM-17D	GM-18S	GM-18I	GM-18D	GM-20I	GM-20D
	SAMPLE ID DATE	GM17I 07/09/2004	GM17D 07/09/2004	GM 18S 07/16/2004	GM 18I 07/27/2004	GM18D 07/09/2004	GM20I 07/14/2004	GM20D 07/14/2004
Chloromethane		<5	<5	<5	<5 J	<5	<5	<5
Bromomethane		<5	<5	<5	<5 J	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2 J	<2	<2	<2
Chloroethane		<5	<5	<5	<5 J	<5	<5	<5
Methylene chloride		<5	<5	<5	<5 J	<5	<5	<5
Acetone		<10	<10	<10	<10 J	<10	<10	<10
Carbon disulfide		<5	<5	<5	<5 J	<5	<5	<5
1,1-Dichloroethene		<5	<5	<5	<5 J	<5	<5	<5
1,1-Dichloroethane		<5	<5	2 J	<5 J	<5	<5	<5
cis-1,2-Dichloroethene		<5	<5	5 J	<5 J	<5	<5	<5
trans-1,2-Dichloroethylene		<5	<5	<5	<5 J	<5	<5	<5
Chloroform		<5	<5	1 J	<5 J	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5 J	<5	<5	<5
2-Butanone		<10	<10	<10	<10 J	<10	<10	<10
1,1,1-Trichloroethane		<5	<5	1 J	<5 J	<5	<5	<5
Carbon tetrachloride		<5	<5	<5	<5 J	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5 J	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5 J	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5 J	<5	<5	<5
Trichloroethene		<5	<5	10	6 J	0.8 J	<5	<5
Dibromochloromethane		<5	<5	<5	<5 J	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5 J	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7 J	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5 J	<5	<5	<5
Bromoform		<5	<5	<5	<5 J	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10 J	<10	<10	<10
2-Hexanone		<10	<10	<10	<10 J	<10	<10	<10
Tetrachloroethene		<5	<5	<5	<5 J	<5	<5	<5
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5 J	<5	<5	<5
Toluene		<5	<5	<5	<5 J	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5 J	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5 J	<5	<5	<5
Styrene		<5	<5	<5	<5 J	<5	<5	<5
Xylene (total)		<5	<5	<5	<5 J	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5 J	<5	<5	<5
Freon 113		<5	<5	<5	<5 J	<5	<5	<5
Total VOCs		0	0	19	6	0.8	0	0

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, Second Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE	GM-21S	GM-211	GM-21D	GM-33D2	GM-34D	GM-34D2	GM-35D2
	SAMPLE ID DATE	GM21S 07/13/2004	GM211 07/13/2004	GM21D 07/08/2004	GM 33D-2 07/16/2004	GM34D 07/14/2004	GM34D-2 07/14/2004	GM 35D2 07/23/2004
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	6	1 J
1,1-Dichloroethane		<5	<5	<5	<5	2 J	<5	<5
cis-1,2-Dichloroethene		<5	<5	<5	<5	8	6	3 J
trans-1,2-Dichloroethylene		<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		<5	<5	1 J	50	450 D	210 D	340 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		<5	<5	<5	7	8	13	7
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	2 J	42	17	10
Total VOCs		0	0	1	59	515	252	361

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

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Table 1. Concentrations of Volatile Organic Compounds Detected in Monitoring Wells, Second Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE	GM-39D	GM-39D2	GM-73D	GM-73D2	GM-74I	GM-74D	GM-74D2
	SAMPLE ID DATE	GM-39D 07/07/2004	GM-39D2 07/07/2004	GM-73D 07/07/2004	GM-73D2 07/07/2004	GM-74I 07/06/2004	GM-74D 07/06/2004	GM-74D2 07/06/2004
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	1 J	<5	<5	<5
1,1-Dichloroethane		<5	<5	<5	2 J	<5	<5	<5
cis-1,2-Dichloroethene		<5	<5	<5	1 J	<5	<5	<5
trans-1,2-Dichloroethylene		<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	0.8 J	<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		25	49	110	610 D J	<5	4 J	9
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	2 J	<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	<5	1 J	2 J	<5	1 J	7
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<5	<5	<5
Toluene		<5	<5	<5	0.9 J B	<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	0.8 J	<5	<5	<5
Total VOCs		25	49	111	620.5	0	5	16

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, Second Quarter 2004, Northrop Grumman Corporation, Bethpage, New York.

CONSTITUENT (ug/L)	SITE	GM-75D2	GM-78S	GM-78I	GM-79I	GM-79D
	SAMPLE ID DATE	GM 75D-2 07/16/2004	GM-78S 07/02/2004	GM-78I 07/02/2004	GM79I 07/08/2004	GM79D 07/08/2004
Chloromethane		<5	<5	<5	<5	<5
Bromomethane		<5	<5	<5	<5	<5
Vinyl chloride		<2	<2	<2	<2	<2
Chloroethane		<5	<5	<5	<5	<5
Methylene chloride		<5	<5	<5	<5	<5
Acetone		<10	<10	<10	<10	<10
Carbon disulfide		<5	<5	<5	<5	<5
1,1-Dichloroethene		<5	<5	<5	<5	0.6 J
1,1-Dichloroethane	2 J		<5	<5	<5	<5
cis-1,2-Dichloroethene	2 J		<5	<5	<5	0.7 J
trans-1,2-Dichloroethylene		<5	<5	<5	<5	<5
Chloroform		<5	<5	<5	<5	<5
1,2-Dichloroethane		<5	<5	<5	<5	<5
2-Butanone		<10	<10	<10	<10	<10
1,1,1-Trichloroethane	5 J		<5	<5	<5	<5
Carbon tetrachloride		<5	<5	<5	<5	<5
Bromodichloromethane		<5	<5	<5	<5	<5
1,2-Dichloropropane		<5	<5	<5	<5	<5
cis-1,3-Dichloropropene		<5	<5	<5	<5	<5
Trichloroethene	730 D		<5	<5	2 J	65
Dibromochloromethane		<5	<5	<5	<5	<5
1,1,2-Trichloroethane		<5	<5	<5	<5	<5
Benzene		<0.7	<0.7	<0.7	<0.7	<0.7
trans-1,3-Dichloropropene		<5	<5	<5	<5	<5
Bromoform		<5	<5	<5	<5	<5
4-Methyl-2-pentanone		<10	<10	<10	<10	<10
2-Hexanone		<10	<10	<10	<10	<10
Tetrachloroethene	8		<5	<5	<5	2 J
1,1,2,2-Tetrachloroethane		<5	<5	<5	<5	<5
Toluene		<5	<5	<5	<5	<5
Chlorobenzene		<5	<5	<5	<5	<5
Ethylbenzene		<5	<5	<5	<5	<5
Styrene		<5	<5	<5	<5	<5
Xylene (total)		<5	<5	<5	<5	<5
Vinyl Acetate		<5	<5	<5	<5	<5
Freon 113	6		<5	<5	<5	2 J
Total VOCs		753	0	0	2	70.3

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

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

CONSTITUENT (ug/L)	SITE	GM-78S	GM-78I
DATE	SAMPLE ID		
		07/02/2004	07/02/2004
Cadmium		<10	<10
Cadmium (Dissolved)		--	--
Chromium		<10	2.3 B
Chromium (Dissolved)		--	--

ug/L Micrograms per liter
 B Detected between the IDL and the CRDL
 IDL Instrument Detection Limit
 CRDL Contract-required detection limit
Bold Constituent detected above IDL
 -- Not analyzed