

US EPA ARCHIVE DOCUMENT

Superfund Records Center
SITE: Wells G 9, A
BREAK: 11.9
OTHER: 282312



SDMS DocID 282312

Olin Corporation

Wilmington, Massachusetts Facility

Supplemental Phase II Report

Attachment A

Laboratory Analytical Data

Volume II: 10/18/95 to 5/20/96 Data

June 1997

Prepared by:

ABB
Environmental Services, Inc.


Geomega


PTI
ENVIRONMENTAL SERVICES

SMITH
TECHNOLOGY CORPORATION

US EPA ARCHIVE DOCUMENT



Volume II - Laboratory Analytical Data

10/18/95 to 05/20/96

<u>Work Order No.</u>	<u>Media</u>
WL-1644	GW
WM-0205	GW
WM-0593	MLT
WM-0450	GW
WM-0625	MLT
WM-0607	MLT
WM-0640	MLT
WM-0891	MLT
WM-0728	GW
WM-0734	GW
WM-0794	GW
WM-0747	MLT
WM-0820	GW
WM-0838	GW
WM-1313	GW
WM-1013	GW
WM-0966	GW
WM-0976	GW

GW = Groundwater
SW = Surface Water
MLT = Multiple Media
SED = Sediment



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 CLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-1
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 1 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80S (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								1,2,3,4
Phenol	82.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2-Dichlorobenzene	J2	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylphenol	26.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Methylphenol	190.	µg/L	2.0	10	EPA 8270	10/24/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
 - (4) "\$" flag denotes surrogate compound recovery is out of criteria. Re-extraction or re-analysis confirmed matrix interference.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
 LJ24W1
 CC: CLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-1
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 2 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80S (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	J2	µg/L	2.0	10	EPA 8270	10/24/95	AC	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	25.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	J4	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
LJ24W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-1
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 3 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80S (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbjbp (dw) /jfg/nen/sra

LJ24W1

CC: OLIN-TN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
 Westbrook, ME 04098
 TEL: 207-874-2400

An Equal Opportunity Employer

0000460

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-1
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 4 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80S (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95 AC	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95 AC	
n-Nitrosodiphenylamine	J2	µg/L	1.0	10	EPA 8270	10/24/95 AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95 AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Di-n-butylphthalate	J1	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dwr) /jfg/nen/sra
LJ24W1

CC: OLIN-IN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-1
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 5 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80S (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	J3	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis (2-Ethylhexyl) phthalate	B16	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
 LJ24W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-1
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 6 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-80S (UNFILT)	Aqueous	R. MEHALICK	10/19/95	10/19/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Fluorophenol (Surr.)	70.	µ	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	86.	µ	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	\$14	µ	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	83.	µ	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	88.	µ	1.0		EPA 8270	10/24/95	AC	
Terphenyl-d14 (Surr.)	41.	µ	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
LJ24W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 7 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (DNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								1, 2, 3, 4
Phenol	J7	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethyl)ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,3-Dichlorobenzene	J2	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,4-Dichlorobenzene	18.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2-Dichlorobenzene	290.	µg/L	2.0	10	EPA 8270	10/24/95	AC	
2-Methylphenol	17.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Methylphenol	63.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
- (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
- (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
- (4) "\$" flag denotes surrogate compound recovery is out of criteria. Re-extraction or re-analysis confirmed matrix interference.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra

LJ20W1

CC: OLIN-IN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 8 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	12.	µg/L	5.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	J8	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	27.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	21.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 9 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgdp (dw) /jfg/nen/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 10 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 CLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 11 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis (2-Ethylhexyl) phthalate	JB2	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/nen/sra
 LJ20W1

CC: CLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 12 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Fluorophenol (Surr.)	90.	µ	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	84.	µ	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	\$29	µ	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	95.	µ	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	121.	µ	1.0		EPA 8270	10/24/95	AC	
Terphenyl-d14 (Surr.)	88.	µ	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgjp (dw) /jfg/nen/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 13 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								1,2,3,4
Phenol	J5	µg/L	1.0		10 EPA 8270	10/23/95	AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
2-Chlorophenol	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
1,3-Dichlorobenzene	J4	µg/L	1.0		10 EPA 8270	10/23/95	AC	
1,4-Dichlorobenzene	38.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
1,2-Dichlorobenzene	770.	µg/L	5.0		10 EPA 8270	10/23/95	AC	
2-Methylphenol	18.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
4-Methylphenol	70.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
Hexachloroethane	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	
Nitrobenzene	<10.	µg/L	1.0		10 EPA 8270	10/23/95	AC	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
 - (4) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra

LJ20W1

CC: OLIN-TN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SKELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 14 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dimethylphenol	J9.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
1,2,4-Trichlorobenzene	20.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Naphthalene	13.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Chloro-3-methylphenol	J4	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 15 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 16 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 17 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
bis (2-Ethylhexyl) phthalate	JB7	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-3
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 18 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Fluorophenol (Surr.)	37.	%	1.0		EPA 8270	10/23/95	AC	
Phenol-d5 (Surr.)	41.	%	1.0		EPA 8270	10/23/95	AC	
Nitrobenzene-d5 (Surr.)	76.	%	1.0		EPA 8270	10/23/95	AC	
2-Fluorobiphenyl (Surr.)	85.	%	1.0		EPA 8270	10/23/95	AC	
2,4,6-Tribromophenol (Surr.)	35.	%	1.0		EPA 8270	10/23/95	AC	
Terphenyl-d14 (Surr.)	91.	%	1.0		EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sza
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 19 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-80BR (UNFILTR/DUP)	Aqueous	R. MEHALICK			10/19/95	10/19/95	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270							1,2,3,4
Phenol	J41	µg/L	5.0	10	EPA 8270	10/31/95 AC	
bis(2-Chloroethyl) ether	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
2-Chlorophenol	J38	µg/L	5.0	10	EPA 8270	10/31/95 AC	
1,3-Dichlorobenzene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
1,4-Dichlorobenzene	70.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
1,2-Dichlorobenzene	E910	µg/L	5.0	10	EPA 8270	10/31/95 AC	
2-Methylphenol	J28	µg/L	5.0	10	EPA 8270	10/31/95 AC	
bis(2-Chloroisopropyl) ether	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
4-Methylphenol	120.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
n-Nitroso-dipropylamine	J45	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Hexachloroethane	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Nitrobenzene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 10/26/95 by RAL using EPA 3520
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (3) "E" flag indicates an estimated value. The analyte was detected in the sample at a concentration greater than the standard calibration range.
 - (4) Sample dilution required for quantitation of one or more target analytes; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/nen/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PIT/CHRIS SELLSTONE

MSD

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 20 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT/DUP)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Isophorone	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2-Nitrophenol	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,4-Dimethylphenol	J11	µg/L	5.0	10	EPA 8270	10/31/95	AC	
bis(2-Chloroethoxy)methane	J39	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,4-Dichlorophenol	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
1,2,4-Trichlorobenzene	57.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Naphthalene	J12	µg/L	5.0	10	EPA 8270	10/31/95	AC	
4-Chloroaniline	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Hexachlorobutadiene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
4-Chloro-3-methylphenol	J60	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2-Methylnaphthalene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Hexachlorocyclopentadiene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,4,6-Trichlorophenol	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jctajc/gbp(dw)/jfg/nen/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-4
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 21 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT/DOP)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,5-Trichlorophenol	<130.	µg/L	5.0	25	EPA 8270	10/31/95	AC	
2-Chloronaphthalene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2-Nitroaniline	<130.	µg/L	5.0	25	EPA 8270	10/31/95	AC	
Dimethylphthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Acenaphthylene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,6-Dinitrotoluene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
3-Nitroaniline	<130.	µg/L	5.0	25	EPA 8270	10/31/95	AC	
Acenaphthene	J41	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,4-Dinitrophenol	<130.	µg/L	5.0	25	EPA 8270	10/31/95	AC	
4-Nitrophenol	J36	µg/L	5.0	25	EPA 8270	10/31/95	AC	
Dibenzofuran	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
2,4-Dinitrotoluene	J27	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Diethylphthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/nen/sra
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
Westbrook, ME 04098
TEL: 207-874-2400

An Equal Opportunity Employer

0000574

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 22 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILT/DUP)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4-Chlorophenyl phenyl ether	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Fluorene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
4-Nitroaniline	<130.	µg/L	5.0	25	EPA 8270	10/31/95 AC	
4,6-Dinitro-2-methylphenol	<130.	µg/L	5.0	25	EPA 8270	10/31/95 AC	
n-Nitrosodiphenylamine	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
4-Bromophenyl phenyl ether	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Hexachlorobenzene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Pentachlorophenol	J52	µg/L	5.0	25	EPA 8270	10/31/95 AC	
Phenanthrene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Anthracene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Carbazole	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Di-n-butylphthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	
Fluoranthene	<50.	µg/L	5.0	10	EPA 8270	10/31/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/nen/sra

LJ20W1

CC: OLIN-IN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 23 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR/DUP)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Pyrene	J39	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Butyl benzylphthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
3,3'-Dichlorobenzidine	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Benzo (a) anthracene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Chrysene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
bis (2-Ethylhexyl) phthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Di-n-octylphthalate	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Benzo (b) fluoranthene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Benzo (k) fluoranthene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Benzo (a) pyrene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Indeno (1,2,3-cd) pyrene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Dibenzo (a,h) anthracene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	
Benzo (g,h,i) perylene	<50.	µg/L	5.0	10	EPA 8270	10/31/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/nen/sra

LJ20W1

CC: OLIN-TN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-4
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 24 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
GW-80BR (UNFILT/DUP)	Aqueous	R. MEHALICK	10/19/95	10/19/95				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Fluorophenol (Surr.)	36.	µ	5.0		EPA 8270	10/31/95	AC	
Phenol-d5 (Surr.)	50.	µ	5.0		EPA 8270	10/31/95	AC	
Nitrobenzene-d5 (Surr.)	65.	µ	5.0		EPA 8270	10/31/95	AC	
2-Fluorobiphenyl (Surr.)	78.	µ	5.0		EPA 8270	10/31/95	AC	
2,4,6-Tribromophenol (Surr.)	42.	µ	5.0		EPA 8270	10/31/95	AC	
Terphenyl-d14 (Surr.)	58.	µ	5.0		EPA 8270	10/31/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/nen/sra

LJ20W1

CC: OLIN-IN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 25 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILT/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270							1,2,3
Phenol	J8	µg/L	1.0		10 EPA 8270	10/23/95 AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
2-Chlorophenol	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
1,3-Dichlorobenzene	J4	µg/L	1.0		10 EPA 8270	10/23/95 AC	
1,4-Dichlorobenzene	40.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
1,2-Dichlorobenzene	840.	µg/L	5.0		10 EPA 8270	10/23/95 AC	
2-Methylphenol	31.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
4-Methylphenol	130.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
Hexachloroethane	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
Nitrobenzene	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	
Isophorone	<10.	µg/L	1.0		10 EPA 8270	10/23/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
- (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
- (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PFI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SB-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 26 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dimethylphenol	J13	µg/L	5.0	10	EPA 8270	10/23/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
1,2,4-Trichlorobenzene	21.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Naphthalene	13.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Chloro-3-methylphenol	J5	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gtp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-5
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 27 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gtp (dw) /jfg/sra
LJ20W1
CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 28 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILT/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/23/95	AC
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Di-n-butylphthalate	J1	µg/L	1.0	10	EPA 8270	10/23/95	AC
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1

CC: OLIN-TN/STEVIE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 29 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILT/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
bis (2-Ethylhexyl) phthalate	B10	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/23/95	AC	
2-Fluorophenol (Surr.)	40.	µg/L	1.0		EPA 8270	10/23/95	AC	
Phenol-d5 (Surr.)	65.	µg/L	1.0		EPA 8270	10/23/95	AC	
Nitrobenzene-d5 (Surr.)	84.	µg/L	1.0		EPA 8270	10/23/95	AC	
2-Fluorobiphenyl (Surr.)	88.	µg/L	1.0		EPA 8270	10/23/95	AC	
2,4,6-Tribromophenol (Surr.)	67.	µg/L	1.0		EPA 8270	10/23/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-5
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 30 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILTR/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Terphenyl-d14 (Surr.)	55.	µ	1.0		EPA 8270	10/23/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 31 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81D (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								1,2,3
Phenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
- (2) *J* flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
- (3) *B* flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbgbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 32 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81D (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgjp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 FIT/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 33 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81D (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	J2	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS KELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 34 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-butylphthalate	J1	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo(a)anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 35 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-81D (UNFILT)	Aqueous	R. MEHALICK	10/19/95	10/19/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis (2-Ethylhexyl) phthalate	B5000	µg/L	300.	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	18.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Fluorophenol (Surr.)	75.	†	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	44.	†	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	107.	†	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	93.	†	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	111.	†	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-6
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 36 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
GW-81D (UNFILTR)	Aqueous	R. MEHALICK	10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Terphenyl-d14 (Surr.)	86.	µ	1.0		EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgbp (dw) /jfg/sra
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 37 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK	10/19/95	10/19/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								
Phenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	1,2,3
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
- (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
- (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra

LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 38 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis (2-Chloroethoxy) methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 39 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK	10/19/95	10/19/95				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	JI	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1
 CC: OLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 40 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-butylphthalate	J1	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PFI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 41 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Ethylhexyl)phthalate	JB6	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1, 2, 3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Fluorophenol (Surr.)	68.	µg/L	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	79.	µg/L	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	73.	µg/L	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	74.	µg/L	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	114.	µg/L	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sza

LJ20W1

CC: OLIN-TN/STEVE MORROW

SMITH/RICK SACKS

PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-7
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 42 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Terphenyl-d14 (Surr.)	86.	†	1.0		EPA 8270	10/24/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 43 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270							1,2,3
Phenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
- (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
- (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 44 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Naphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
CLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-8
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 45 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gtp (dw) /jfg/sra
LJ20W1

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 46 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo(a)anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20WI
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 47 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis (2-Ethylhexyl) phthalate	JB6	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1, 2, 3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Fluorophenol (Surr.)	58.	µg/L	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	67.	µg/L	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	59.	µg/L	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	82.	µg/L	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	54.	µg/L	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-8
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 48 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Terphenyl-d14 (Surr.)	93.	%	1.0		EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
LJ20WL

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
FIT/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 49 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
FIELD REP (UNFILT)	Aqueous	R. MEHALICK	10/19/95	10/19/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270								1,2,3
Phenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 10/20/95 by RAL using EPA 3520
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTL/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EMMS STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
FIELD REP (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 51 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
FIELD REP (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 52 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
FIELD REP (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 53 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
FIELD REP (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Ethylhexyl)phthalate	JB1	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Indeno (1, 2, 3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Fluorophenol (Surr.)	64.	µg/L	1.0		EPA 8270	10/24/95	AC	
Phenol-d5 (Surr.)	72.	µg/L	1.0		EPA 8270	10/24/95	AC	
Nitrobenzene-d5 (Surr.)	70.	µg/L	1.0		EPA 8270	10/24/95	AC	
2-Fluorobiphenyl (Surr.)	68.	µg/L	1.0		EPA 8270	10/24/95	AC	
2,4,6-Tribromophenol (Surr.)	109.	µg/L	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gtp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-9
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 54 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
FIELD REP (UNFILT)	Aqueous	R. MEHALICK	10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Terphenyl-d14 (Surr.)	83.	µ	1.0		EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dm) /jfg/sra
LJ20W1
CC: CLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 55 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270							
Phenol	19.	µg/L	1.0	10	EPA 8270	10/24/95 AC	1,2,3
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270	10/24/95 AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 10/20/95 by RAL using EPA 3520

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

(3) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 CLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 56 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 57 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 58 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270	10/24/95	AC	
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sra
 LJ20W1
 CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
 Westbrook, ME 04098
 TEL: 207-874-2400

An Equal Opportunity Employer

0000687

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 59 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chrysene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
bis (2-Ethylhexyl) phthalate	JB3	µg/L	1.0	10	EPA 8270	10/24/95	AC
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270	10/24/95	AC
2-Fluorophenol (Surr.)	74.	%	1.0		EPA 8270	10/24/95	AC
Phenol-d5 (Surr.)	83.	%	1.0		EPA 8270	10/24/95	AC
Nitrobenzene-d5 (Surr.)	80.	%	1.0		EPA 8270	10/24/95	AC
2-Fluorobiphenyl (Surr.)	75.	%	1.0		EPA 8270	10/24/95	AC
2,4,6-Tribromophenol (Surr.)	109.	%	1.0		EPA 8270	10/24/95	AC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp(dw)/jfg/sza
 LJ20W1

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
CLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-10
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 60 of 60

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
GW-300 (UNFILTR)	Aqueous	R. MEHALICK	10/19/95	10/19/95				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Terphenyl-d14 (Surr.)	78.	µ	1.0		EPA 8270	10/24/95	AC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbajc/gbp (dw) /jfg/sra
LJ20W1
CC: CLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-1
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 1 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80S (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcdgtp (dw) /kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTL/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
CLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-1
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 2 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80S (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95 LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95 LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	70.	%	1.0		EPA 8080	10/23/95 LB	
Decachlorobiphenyl (% Recovery)	51.	%	1.0		EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /kwh/lab

CC: CLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-2
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 3 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp (dw) /ksh/Lab

CC: OLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-2
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 4 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80D (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	84.	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	47.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /kwh/lab

CC: OLIN-TN/STEVIE MORROW
SMITH/RICK SACKS
FTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
Westbrook, ME 04098
TEL: 207-874-2400

An Equal Opportunity Employer

0000915

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-3
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 5 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-80BR (UNFILT)	Aqueous	R. MEHALICK	10/19/95	10/19/95

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor	0.050	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
beta-BHC	0.063	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp (dw) /ksh/Lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-3
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 6 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
GW-80BR (UNFILTR)	Aqueous	R. MEHALICK	10/19/95	10/19/95				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	134.	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	54.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dwr) /kwh/lab

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
Westbrook, ME 04098
TEL: 207-874-2400

An Equal Opportunity Employer

0000926

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 7 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTRATED) <i>RA 11/17/95</i>	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								1,2
alpha-BHC	0.21	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-BHC (Lindane)	0.19	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor	0.14	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Aldrin	0.080	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
beta-BHC	0.17	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
delta-BHC	0.22	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor epoxide	0.27	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Endosulfan I	0.22	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
4,4'-DDE	0.18	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin	0.30	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDD	0.16	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 10/20/95 by RAL using EPA 3510

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

11/07/95

LJO/jcbgtp(dw)/kwh/lab/sra

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE

M/S

938

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-4
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 8 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR/DGP) ^{SPK} 11.17.95	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	0.19	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDT	0.25	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	70.06	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	0.20	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	70.28	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	0.21	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	73.	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	55.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /kwh/lab/sra

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTT/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
 Westbrook, ME 04098
 TEL: 207-874-2400
 FAX: 207-775-4029

An Equal Opportunity Employer

939

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 9 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILT/MS) <i>DSP 10/17/95</i>	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor	0.058	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
beta-BHC	0.063	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
delta-BHC	0.068	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3510
- (2) "#" flag denotes surrogate compound recovery is out of criteria.

11/07/95

LJO/jcbjtp (dw) /kwh/Lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

MSD

48

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 10 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTRMS) <i>630</i> <i>11/17/95</i>	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	178#	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	51.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgbb (dw) /kwh/lab

CC: OLIN-TN/STIEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 9 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-80BR (UNFILT/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor	0.058	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
beta-BHC	0.063	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
delta-BHC	0.068	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 10/20/95 by RAL using EPA 3510
 - (2) "*" flag denotes surrogate compound recovery is out of criteria.

11/07/95

LJO/jcbgtp (dw) /kwh/Lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PFI/CHRIS SKILLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-5
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-80BR (UNFILTR/MS)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	178#	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	51.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbjtp (dir) /kath/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-6
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 11 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
GW-81D (UNFILT)	Aqueous	R. MEHALICK			10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95	LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp(dw)/kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
CLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-6
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 12 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81D (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	67.	%	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (% Recovery)	64.	%	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dir) /rwh/lab

CC: CLIN-IN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
Westbrook, ME 04098
TEL: 207-874-2400

An Equal Opportunity Employer

0000962

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-7
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 13 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 10/20/95 by RAL using EPA 3510
- (2) "*" flag denotes surrogate compound recovery is out of criteria.

11/07/95

LJO/jcbgtp (dwr) /kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WL-1644-7
Report Date: 11/07/95
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 14 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-81BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95	LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (‡)	63.	‡	1.0		EPA 8080	10/23/95	LB	
Decachlorobiphenyl (‡ Recovery)	21#	‡	1.0		EPA 8080	10/23/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp(dw)/kwh/lab

CC: OLIN-TN/STEVE MORROW
SMITH/RICK SACKS
PTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
Westbrook, ME 04098
TEL: 207-874-2400

An Equal Opportunity Employer

0000972

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 15 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/23/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp (dw) /kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTL/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 KAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-8
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 16 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-65BR (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/23/95 LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/23/95 LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/23/95 LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	55.	%	1.0		EPA 8080	10/23/95 LB	
Decachlorobiphenyl (% Recovery)	52.	%	1.0		EPA 8080	10/23/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dw) /kwh/Lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTL/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
 Westbrook, ME 04098
 TEL: 207-874-2400

An Equal Opportunity Employer

0000982

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 17 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
FIELD REP (UNFILT)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp (dw) /kwh/lab

CC: CLIN-IN/STEVE MORROW
 SMITH/RICK SACKS
 PFI/CHRIS SELLSTONE



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-9
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 18 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
FIELD REP (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/24/95 LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	10/24/95 LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	64.	%	1.0		EPA 8080	10/24/95 LB	
Decachlorobiphenyl (% Recovery)	58.	%	1.0		EPA 8080	10/24/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgjp (dw) /kwh/Lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 19 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	10/24/95 LB	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95 LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 10/20/95 by RAL using EPA 3510

11/07/95

LJO/jcbgtp (dw) /kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 PTI/CHRIS SELLSTONE

US EPA ARCHIVE DOCUMENT



REPORT OF LABORATORY ANALYSIS

CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WL-1644-10
 Report Date: 11/07/95
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 20 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-300 (UNFILTR)	Aqueous	R. MEHALICK		10/19/95	10/19/95			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95	LB	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95	LB	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95	LB	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	10/24/95	LB	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	10/24/95	LB	
Toxaphene	<1	µg/L	1.0	1	EPA 8080	10/24/95	LB	
2,4,5,6-Tetrachloro-meta-xylene (%)	97.	%	1.0		EPA 8080	10/24/95	LB	
Decachlorobiphenyl (% Recovery)	67.	%	1.0		EPA 8080	10/24/95	LB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

11/07/95

LJO/jcbgtp (dm) /kwh/lab

CC: OLIN-TN/STEVE MORROW
 SMITH/RICK SACKS
 FTI/CHRIS SELLSTONE

P.O. Box 720 - 340 County Road #5
 Westbrook, ME 04098
 TEL: 207-874-2400

An Equal Opportunity Employer

0001002

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-1
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-42S	Aqueous	S. BUSH	02/01/96	02/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.26	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngtp (dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-1
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-42S	Aqueous	S. BUSH		02/01/96	02/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	45.	mg/L	1.0	2.0	325.2	02/06/96	CM
Nitrogen-Ammonia as N	3.5	mg/L	1.0	0.10	350.1	02/08/96	CM
Sulfate	27.	mg/L	2.0	1.0	375.4	02/06/96	LT
pH (Laboratory)	5.4	pH Units	1.0	0.1	150.1	02/02/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-2
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 3 of 22

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
GW-11	Aqueous			S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.11	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngbp(dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0205-2
Report Date: 02/20/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 4 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-11	Aqueous	S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	22.	mg/L	1.0	2.0	325.2	02/06/96	CM
Nitrogen-Ammonia as N	13.	mg/L	2.0	0.10	350.1	02/08/96	CM
Sulfate	420.	mg/L	40	1.0	375.4	02/06/96	LT
pH (Laboratory)	6.2	pH Units	1.0	0.1	150.1	02/02/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-3
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW-19S	Aqueous		S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	<0.20	mg/L	2.0	0.10	200.7/6010	02/14/96 CD	1,2
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 02/08/96 by JAF using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

02/20/96

LJO/ejngtp(dw)
 MB08ICWL

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-3
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-19S	Aqueous	S. BUSH	02/01/96	02/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	9.2	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	2.3	mg/L	1.0	0.10	350.1	02/08/96	CM	
Sulfate	1300.	mg/L	100	1.0	375.4	02/06/96	LT	
pH (Laboratory)	6.7	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-4
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-24	Aqueous	S. BUSH		02/01/96	02/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngbp(dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-4
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-24	Aqueous	S. BUSH		02/01/96	02/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	91.	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	110.	mg/L	50	0.10	350.1	02/08/96	CM	
Sulfate	320.	mg/L	20	1.0	375.4	02/06/96	LT	
pH (Laboratory)	7.1	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-5
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-25	Aqueous	S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	02/13/96 CD	1
Chromium, Dissolved	0.016	mg/L	1.0	0.015	200.7/6010	02/13/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngtp(dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-5
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 10 of 22

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
GW-25	Aqueous		S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	42.	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	28.	mg/L	5.0	0.10	350.1	02/08/96	CM	
Sulfate	77.	mg/L	10	1.0	375.4	02/06/96	LT	
pH (Laboratory)	6.6	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-6
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW-26	Aqueous	S. BUSH	02/01/96	02/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	0.019	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngbp (dw)
 MB08ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-6
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW-26	Aqueous		S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	100.	mg/L	1.0	2.0	325.2	02/06/96 CM	
Nitrogen-Ammonia as N	71.	mg/L	50	0.10	350.1	02/08/96 CM	
Sulfate	440.	mg/L	40	1.0	375.4	02/09/96 LT	
pH (Laboratory)	6.1	pH Units	1.0	0.1	150.1	02/02/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-7
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-35S	Aqueous	S. BUSH		02/01/96	02/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	0.020	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngtp(dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-7
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-35S	Aqueous	S. BUSH		02/01/96	02/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	37.	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	46.	mg/L	50	0.10	350.1	02/08/96	CM	
Sulfate	760.	mg/L	50	1.0	375.4	02/09/96	LT	
pH (Laboratory)	6.4	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-8
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 15 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-39	Aqueous	S. BUSH		02/01/96	02/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	0.45	mg/L	1.0	0.10	200.7/6010	02/13/96 CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngtp (dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0205-8
Report Date: 02/20/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 16 of 22

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW-39	Aqueous		S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	33.	mg/L	1.0	2.0	325.2	02/06/96 CM	
Nitrogen-Ammonia as N	0.51	mg/L	1.0	0.10	350.1	02/08/96 CM	
Sulfate	220.	mg/L	20	1.0	375.4	02/09/96 LT	
pH (Laboratory)	6.0	pH Units	1.0	0.1	150.1	02/02/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-9
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-10S	Aqueous	S. BUSH		02/01/96	02/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	2.5	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngbp(dw)
 MB08ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0205-9
Report Date: 02/20/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 18 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-10S	Aqueous	S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	9.0	mg/L	1.0	2.0	325.2	02/06/96	CM
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	02/08/96	CM
Sulfate	17.	mg/L	1.0	1.0	375.4	02/09/96	LT
pH (Laboratory)	4.6	pH Units	1.0	0.1	150.1	02/02/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-10
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 19 of 22

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
GW-43S	Aqueous			S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	02/13/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngbp (dw)
 MB08ICWL

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-10
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
GW-43S	Aqueous		S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	210.	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	79.	mg/L	50	0.10	350.1	02/08/96	CM	
Sulfate	280.	mg/L	50	1.0	375.4	02/09/96	LT	
pH (Laboratory)	6.1	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-11
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 21 of 22

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW-42SD	Aqueous		S. BUSH		02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	0.29	mg/L	1.0	0.10	200.7/6010	02/13/96 CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	02/13/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 02/08/96 by JAF using 3010

02/20/96

LJO/ejngtp (dw)
 MB08ICWL
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0205-11
 Report Date: 02/20/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
GW-42SD	Aqueous		S. BUSH			02/01/96	02/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	46.	mg/L	1.0	2.0	325.2	02/06/96	CM	
Nitrogen-Ammonia as N	3.5	mg/L	1.0	0.10	350.1	02/08/96	CM	
Sulfate	31.	mg/L	4.0	1.0	375.4	02/09/96	LT	
pH (Laboratory)	5.4	pH Units	1.0	0.1	150.1	02/02/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

02/20/96

LJO/ejngbp (dw) /gfb

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW001XXBXX	Aqueous		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96 CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96 CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96 CD	1
Barium, Total	0.034	mg/L	1.0	0.005	200.7/6010	04/08/96 CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96 CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96 CD	1
Calcium, Total	28.	mg/L	1.0	0.050	200.7/6010	04/08/96 CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96 CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96 CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96 CD	1
Iron, Total	1.8	mg/L	1.0	0.025	200.7/6010	04/08/96 CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96 CD	1
Magnesium, Total	3.4	mg/L	1.0	0.050	200.7/6010	04/08/96 CD	1
Manganese, Total	0.099	mg/L	1.0	0.005	200.7/6010	04/08/96 CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/05/96 GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/08/96 by DJE using 3010
- (2) Sample Preparation on 04/05/96 by GFB using 245.1

04/23/96

LJO/kdwkq (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	3.3	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	58.	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	279.2/7841	04/11/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	0.048	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/23/96

LJO/kdwkcp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBXX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	110.	mg/L	1.0	2.0	325.2	04/19/96	BC	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/02/96	MB	
Hardness, Total as CaCO3	87.	mg/L	1.0	5.0	130.2	04/09/96	LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/05/96	CM	
Solids - Filterable Residue (TDS)	280	mg/L	1.0	10	160.1	04/06/96	PH	1
Sulfate	24.	mg/L	2.0	1.0	375.4	04/11/96	LT	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by PPH

04/23/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW001XXBKX	Aqueous		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
gamma-BHC (Lindane)	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
Heptachlor	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
Aldrin	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
beta-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
delta-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
Heptachlor epoxide	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
Endosulfan I	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
gamma-Chlordane	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
alpha-Chlordane	<0.05	µg/L	1	0.05	EPA 8080	04/09/96 PL	
4,4'-DDE	<0.1	µg/L	1	0.1	EPA 8080	04/09/96 PL	
Dieldrin	<0.1	µg/L	1	0.1	EPA 8080	04/09/96 PL	
Endrin	<0.1	µg/L	1	0.1	EPA 8080	04/09/96 PL	
4,4'-DDD	<0.1	µg/L	1	0.1	EPA 8080	04/09/96 PL	
Endosulfan II	<0.1	µg/L	1	0.1	EPA 8080	04/09/96 PL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/03/96 by BWG using EPA 3510

04/23/96
 LJO/jcbkφ(dw)/pdl

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Endrin aldehyde	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Endosulfan sulfate	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Methoxychlor	<0.5	µg/L	1	0.5	EPA 8080	04/09/96	PL	
Endrin ketone	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Toxaphene	<1.	µg/L	1	1	EPA 8080	04/09/96	PL	
2,4,5,6-Tetrachloro-meta-xylene (%)	91.	%	1		EPA 8080	04/09/96	PL	
Decachlorobiphenyl (% Recovery)	107.	%	1		EPA 8080	04/09/96	PL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkq(dw)/pdl

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED	
SW001XXBKC	Aqueous			CLIENT		04/01/96	04/02/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							1
8270B							
Phenol	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
bis(2-Chloroethyl) ether	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
2-Chlorophenol	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
1,3-Dichlorobenzene	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
1,4-Dichlorobenzene	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
1,2-Dichlorobenzene	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
2-Methylphenol	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
4-Methylphenol	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
n-Nitroso-dipropylamine	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
Hexachloroethane	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
Nitrobenzene	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
Isophorone	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC
2-Nitrophenol	<10.	µg/L	1.0		10 EPA 8270B	04/09/96	JC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/03/96 by BWG using EPA 3520

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW001XXBKX	Aqueous			CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
SW001XXBKX	Aqueous	CLIENT	04/01/96	04/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis(2-Ethylhexyl) phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW001XXBXX	Aqueous			CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Fluorophenol (% Recovery)	69.	%	1.0		EPA 8270B	04/09/96	JC	
Phenol-d5 (% Recovery)	88.	%	1.0		EPA 8270B	04/09/96	JC	
Nitrobenzene-d5 (% Recovery)	70.	%	1.0		EPA 8270B	04/09/96	JC	
2-Fluorobiphenyl (% Recovery)	79.	%	1.0		EPA 8270B	04/09/96	JC	
2,4,6-Tribromophenol (% Recovery)	105.	%	1.0		EPA 8270B	04/09/96	JC	
Terphenyl-d14 (% Recovery)	83.	%	1.0		EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Volatile Organics +								
Trimethylpentenes by USEPA 8240								
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBXX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Toluene	13.	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbjfg/kp(dw)/kwh/tjg

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-1
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 13 of 53

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Ethylbenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Styrene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total Xylenes	19.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	99.	%	1.0		EPA 8240	04/12/96	DW	
Toluene-d8 (% Recovery)	88.	%	1.0		EPA 8240	04/12/96	DW	
p-Bromofluorobenzene (% Recovery)	107.	%	1.0		EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbjfg/lkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 14 of 53

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD001XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	4300	mg/kgdrywt	1.0	10	6010	04/15/96 CD	1
Antimony, Total	<1.6	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Arsenic, Total	9.7	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Barium, Total	16	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Beryllium, Total	<0.97	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Cadmium, Total	<1.9	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	1
Calcium, Total	1300	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Chromium, Hexavalent	<0.50	mg/kgwetwt	1.0	0.50	6010	04/04/96 EM	2
Chromium, Total	12	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	1
Cobalt, Total	<5.8	mg/kgdrywt	1.0	3.0	6010	04/15/96 CD	1
Copper, Total	33	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Iron, Total	5900	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Lead, Total	20	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Magnesium, Total	1200	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Manganese, Total	55	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/12/96 by DJE using 3050
- (2) Sample Preparation on 04/02/96 by GFB using 3060/7195

04/23/96

LJO/kdwkdw
 MD12ICS1



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
SD001XXBKX	Solid		CLIENT		04/01/96	04/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Mercury, Total	0.54	µg/gdrywt	1.0	0.10	7471	04/16/96	JF	1
Nickel, Total	<7.8	mg/kgdrywt	1.0	4.0	6010	04/15/96	CD	2
Potassium, Total	510	mg/kgdrywt	1.0	100	6010	04/15/96	EM	2
Selenium, Total	<1.9	mg/kgdrywt	1.0	1.0	6010	04/15/96	CD	2
Silver, Total	<2.8	mg/kgdrywt	1.0	1.5	6010	04/18/96	CD	3
Sodium, Total	110	mg/kgdrywt	1.0	10	6010	04/15/96	EM	2
Thallium, Total	<2.9	mg/kgdrywt	1.0	1.5	6010	04/15/96	CD	2
Vanadium, Total	16	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2
Zinc, Total	66	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/15/96 by DJE using 7471
 (2) Sample Preparation on 04/12/96 by DJE using 3050
 (3) Sample Preparation on 04/17/96 by DJE using 3050

04/23/96

LJO/kdkw
 MD15HGS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD001XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	44.	wt %	1.0	0.10	CLP/CIP SOW	04/05/96 JF	1
Total Organic Carbon	34000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96 MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/04/96 by JF

04/23/96

LJO/ejnbac/kp (dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 17 of 53

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD001XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270B							1,2
Phenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
bis(2-Chloroethyl) ether	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
2-Chlorophenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
1,3-Dichlorobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
1,4-Dichlorobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
1,2-Dichlorobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
2-Methylphenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
bis(2-Chloroisopropyl) ether	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
4-Methylphenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
n-Nitroso-dipropylamine	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
Hexachloroethane	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
Nitrobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	
Isophorone	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96 JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/05/96 by MSK using EPA 3550A

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)



CLIENT: DENNIS TUFLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD001XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4-Dimethylphenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
bis(2-Chloroethoxy)methane	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4-Dichlorophenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
1,2,4-Trichlorobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Naphthalene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
4-Chloroaniline	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Hexachlorobutadiene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
4-Chloro-3-methylphenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2-Methylnaphthalene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Hexachlorocyclopentadiene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4,6-Trichlorophenol	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4,5-Trichlorophenol	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
2-Chloronaphthalene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2-Nitroaniline	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/lp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD001XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dimethylphthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Acenaphthylene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,6-Dinitrotoluene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
3-Nitroaniline	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
Acenaphthene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4-Dinitrophenol	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
4-Nitrophenol	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
Dibenzofuran	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2,4-Dinitrotoluene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Diethylphthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
4-Chlorophenyl phenyl ether	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Fluorene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
4-Nitroaniline	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
4,6-Dinitro-2-methylphenol	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
n-Nitrosodiphenylamine	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD001XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Hexachlorobenzene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Pentachlorophenol	<1900.	µg/kgdrywt	2.3	820	EPA 8270B	04/10/96	JC	
Phenanthrene	1600.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Anthracene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Carbazole	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Di-n-butylphthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Fluoranthene	4800.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Pyrene	3600.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Butyl benzylphthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
3,3'-Dichlorobenzidine	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Benzo(a)anthracene	1500.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Chrysene	2900.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
bis(2-Ethylhexyl)phthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Di-n-octylphthalate	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SD001XXBKX	Solid	CLIENT	04/01/96	04/02/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo (b) fluoranthene	4100.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Benzo (k) fluoranthene	<760.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Benzo (a) pyrene	1800.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Indeno (1, 2, 3- cd) pyrene	1300.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Dibenzo (a, h) anthracene	J520	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
Benzo (g, h, i) perylene	1300.	µg/kgdrywt	2.3	330	EPA 8270B	04/10/96	JC	
2-Fluorophenol (% Recovery)	83.	%	2.3		EPA 8270B	04/10/96	JC	
Phenol-d5 (% Recovery)	107.	%	2.3		EPA 8270B	04/10/96	JC	
Nitrobenzene-d5 (% Recovery)	84.	%	2.3		EPA 8270B	04/10/96	JC	
2-Fluorobiphenyl (% Recovery)	99.	%	2.3		EPA 8270B	04/10/96	JC	
2,4,6-Tribromophenol (% Recovery)	104.	%	2.3		EPA 8270B	04/10/96	JC	
Terphenyl-d14 (% Recovery)	73.	%	2.3		EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD001XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240							1,2,3
Chloromethane	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
Bromomethane	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
Vinyl chloride	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
Chloroethane	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
Methylene chloride	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
Acetone	JB11	µg/kgdrywt	2.3	15	EPA 8240	04/09/96 TG	
Carbon disulfide	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96 TG	
1,1-Dichloroethene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96 TG	
1,1-Dichloroethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96 TG	
Total 1,2-Dichloroethene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96 TG	
Chloroform	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96 TG	
1,2-Dichloroethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96 TG	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
 - (3) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

04/23/96

LJO/jcbkp(dw)/kwh/tjg



CLIENT: DENNIS TUFILE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD001XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Butanone	<35.	µg/kgdrywt	2.3	15	EPA 8240	04/09/96	TG	
1,1,1-Trichloroethane	19.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Carbon tetrachloride	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Vinyl acetate	<35.	µg/kgdrywt	2.3	15	EPA 8240	04/09/96	TG	
Bromodichloromethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
1,2-Dichloropropane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
cis-1,3-Dichloropropene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Trichloroethene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Dibromochloromethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
1,1,2-Trichloroethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Benzene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
trans-1,3-Dichloropropene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Bromoform	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
2,4,4-Trimethyl-2-pentene	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkp(dw)/kwh/tjg



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-2
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD001XXBKK	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4,4-Trimethyl-1-pentene	<23.	µg/kgdrywt	2.3	10	EPA 8240	04/09/96	TG	
4-Methyl-2-pentanone	<35.	µg/kgdrywt	2.3	15	EPA 8240	04/09/96	TG	
2-Hexanone	<35.	µg/kgdrywt	2.3	15	EPA 8240	04/09/96	TG	
Tetrachloroethene	25.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
1,1,2,2-Tetrachloroethane	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Toluene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Chlorobenzene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Ethylbenzene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Styrene	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
Total Xylenes	<12.	µg/kgdrywt	2.3	5	EPA 8240	04/09/96	TG	
1,2-Dichloroethane-d4 (% Recovery)	100.	%	2.3		EPA 8240	04/09/96	TG	
Toluene-d8 (% Recovery)	104.	%	2.3		EPA 8240	04/09/96	TG	
p-Bromofluorobenzene (% Recovery)	100.	%	2.3		EPA 8240	04/09/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-3
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
QT001X0BKX	Aqueous		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240							1
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Acetone	J13	µg/L	1.0	15	EPA 8240	04/15/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/23/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-3
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QT001XXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-3
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
QT001XXBFX	Aqueous	CLIENT	04/01/96	04/02/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Toluene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Chlorobenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Ethylbenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Styrene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Total Xylenes	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	98.	%	1.0		EPA 8240	04/15/96	DW	
Toluene-d8 (% Recovery)	103.	%	1.0		EPA 8240	04/15/96	DW	
p-Bromofluorobenzene (% Recovery)	105.	%	1.0		EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002CCKBFX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	0.37	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	0.023	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	18.	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.56	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	3.0	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.10	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/05/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010
 (2) Sample Preparation on 04/05/96 by GFB using 245.1

04/23/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	2.4	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	32.	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/23/96

LJO/kdwkq (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SW002XXXXBKX	Aqueous	CLIENT	04/01/96	04/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	68.	mg/L	1.0	2.0	325.2	04/19/96	BC	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/02/96	MB	
Hardness, Total as CaCO3	62.	mg/L	1.0	5.0	130.2	04/09/96	LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/05/96	CM	
Solids - Filterable Residue (TDS)	190	mg/L	1.0	10	160.1	04/06/96	PH	1
Sulfate	22.	mg/L	2.0	1.0	375.4	04/11/96	LT	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by PPH

04/23/96

LJO/ejnkp (dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXXKCK	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	1
gamma-BHC (Lindane)	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
Heptachlor	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
Aldrin	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
beta-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
delta-BHC	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
Heptachlor epoxide	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
Endosulfan I	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
gamma-Chlordane	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
alpha-Chlordane	<0.05	µg/L	1	0.05	EPA 8080	04/09/96	PL	
4,4'-DDE	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Dieldrin	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Endrin	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
4,4'-DDD	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	
Endosulfan II	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/03/96 by BWG using EPA 3510

04/23/96

LJO/jcbkp(dw)/pdl

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 32 of 53

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL
Endrin aldehyde	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL
Endosulfan sulfate	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL
Methoxychlor	<0.5	µg/L	1	0.5	EPA 8080	04/09/96	PL
Endrin ketone	<0.1	µg/L	1	0.1	EPA 8080	04/09/96	PL
Toxaphene	<1.	µg/L	1	1	EPA 8080	04/09/96	PL
2,4,5,6-Tetrachloro-meta-xylene (%)	76.	%	1		EPA 8080	04/09/96	PL
Decachlorobiphenyl (% Recovery)	98.	%	1		EPA 8080	04/09/96	PL

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkq(dw)/pdl



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXXBFX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA								1
8270B								
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis(2-Chloroethyl)ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/03/96 by BWG using EPA 3520

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SW002XXXXBKX	Aqueous	CLIENT			04/01/96	04/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis (2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
bis (2-Ethylhexyl) phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 37 of 53

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a,h) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
Benzo (g,h,i) perylene	<10.	µg/L	1.0	10	EPA 8270B	04/09/96	JC	
2-Fluorophenol (% Recovery)	70.	%	1.0		EPA 8270B	04/09/96	JC	
Phenol-d5 (% Recovery)	93.	%	1.0		EPA 8270B	04/09/96	JC	
Nitrobenzene-d5 (% Recovery)	70.	%	1.0		EPA 8270B	04/09/96	JC	
2-Fluorobiphenyl (% Recovery)	78.	%	1.0		EPA 8270B	04/09/96	JC	
2,4,6-Tribromophenol (% Recovery)	106.	%	1.0		EPA 8270B	04/09/96	JC	
Terphenyl-d14 (% Recovery)	66.	%	1.0		EPA 8270B	04/09/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkp(dw)/kwh/tjg



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-4
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 40 of 53

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW002XXXBKX	Aqueous	CLIENT		04/01/96	04/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Ethylbenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Styrene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Total Xylenes	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloroethane-d4 (% Recovery)	98.	‡	1.0		EPA 8240	04/12/96 DW	
Toluene-d8 (% Recovery)	93.	‡	1.0		EPA 8240	04/12/96 DW	
p-Bromofluorobenzene (% Recovery)	108.	‡	1.0		EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkq (dw) /kwh/tjg



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD002XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	12000	mg/kgdrywt	1.0	10	6010	04/15/96 CD	1
Antimony, Total	<1.9	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Arsenic, Total	8.5	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Barium, Total	39	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Beryllium, Total	<1.2	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Cadmium, Total	<2.4	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	1
Calcium, Total	2100	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Chromium, Hexavalent	0.53	mg/kgwetwt	1.0	0.50	6010	04/04/96 EM	2
Chromium, Total	16	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	1
Cobalt, Total	<7.2	mg/kgdrywt	1.0	3.0	6010	04/15/96 CD	1
Copper, Total	21	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Iron, Total	14000	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Lead, Total	58	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Magnesium, Total	1000	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Manganese, Total	680	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/12/96 by DJE using 3050
 (2) Sample Preparation on 04/02/96 by GFB using 3060/7195

04/23/96

LJO/kdwkdw
 MD12ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD002XXBXX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Mercury, Total	0.33	µg/gdrywt	1.0	0.10	7471	04/16/96 JF	1
Nickel, Total	<9.6	mg/kgdrywt	1.0	4.0	6010	04/15/96 CD	2
Potassium, Total	270	mg/kgdrywt	1.0	100	6010	04/15/96 EM	2
Selenium, Total	<2.4	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	2
Silver, Total	<4.0	mg/kgdrywt	1.0	1.5	6010	04/18/96 CD	3
Sodium, Total	180	mg/kgdrywt	1.0	10	6010	04/15/96 EM	2
Thallium, Total	3.6	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	2
Vanadium, Total	15	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2
Zinc, Total	130	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/15/96 by DJE using 7471
 (2) Sample Preparation on 04/12/96 by DJE using 3050
 (3) Sample Preparation on 04/17/96 by DJE using 3050

04/23/96

LJO/kdwkdw
 MD15HGS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 43 of 53

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD002XXBKX	Solid			CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	35.	wt %	1.0	0.10	CLP/CIP SOW	04/05/96	JF	1
Total Organic Carbon	59000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by JF

04/23/96

LJO/ejnbac/kp (dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD002XXBKX	Solid		CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
gamma-BHC (Lindane)	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
Heptachlor	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
Aldrin	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
beta-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
delta-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
Heptachlor epoxide	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
Endosulfan I	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
gamma-Chlordane	5.30	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
alpha-Chlordane	5.60	µg/kgdrywt	2.9	1.7	EPA 8080	04/16/96 SW	
4,4'-DDE	15.0	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96 SW	
Dieldrin	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96 SW	
Endrin	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96 SW	
4,4'-DDD	17.0	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/05/96 by MSK using EPA 3550A

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/23/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SD002XXBKX	Solid	CLIENT	04/01/96	04/02/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96	SW	
4,4'-DDT	78.10	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96	SW	
Endrin aldehyde	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96	SW	
Endosulfan sulfate	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96	SW	
Methoxychlor	<49.	µg/kgdrywt	2.9	17	EPA 8080	04/16/96	SW	
Endrin ketone	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/16/96	SW	
Toxaphene	<96.	µg/kgdrywt	2.9	33	EPA 8080	04/16/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	87.	%	2.9		EPA 8080	04/16/96	SW	
Decachlorobiphenyl (% Recovery)	104.	%	2.9		EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkcp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Semivolatile Organics by USEPA 8270B								1,2
Phenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
bis(2-Chloroethyl) ether	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2-Chlorophenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
1,3-Dichlorobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
1,4-Dichlorobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
1,2-Dichlorobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2-Methylphenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
bis(2-Chloroisopropyl) ether	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
4-Methylphenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
n-Nitroso-dipropylamine	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Hexachloroethane	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Nitrobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Isophorone	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 04/05/96 by MSK using EPA 3550A
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 47 of 53

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4-Dimethylphenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
bis(2-Chloroethoxy)methane	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4-Dichlorophenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
1,2,4-Trichlorobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Naphthalene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
4-Chloroaniline	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Hexachlorobutadiene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
4-Chloro-3-methylphenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2-Methylnaphthalene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Hexachlorocyclopentadiene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4,6-Trichlorophenol	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4,5-Trichlorophenol	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
2-Chloronaphthalene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2-Nitroaniline	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKC	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dimethylphthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Acenaphthylene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,6-Dinitrotoluene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
3-Nitroaniline	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
Acenaphthene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4-Dinitrophenol	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
4-Nitrophenol	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
Dibenzofuran	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2,4-Dinitrotoluene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Diethylphthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
4-Chlorophenyl phenyl ether	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Fluorene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
4-Nitroaniline	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
4,6-Dinitro-2-methylphenol	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
n-Nitrosodiphenylamine	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Hexachlorobenzene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Pentachlorophenol	<2400.	µg/kgdrywt	2.9	820	EPA 8270B	04/10/96	JC	
Phenanthrene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Anthracene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Carbazole	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Di-n-butylphthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Fluoranthene	J860	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Pyrene	J750	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Butyl benzylphthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
3,3'-Dichlorobenzidine	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Benzo(a)anthracene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Chrysene	J510	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
bis(2-Ethylhexyl)phthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Di-n-octylphthalate	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo (b) fluoranthene	J750	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Benzo (k) fluoranthene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Benzo (a) pyrene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Indeno (1, 2, 3-cd) pyrene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Dibenzo (a, h) anthracene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
Benzo (g, h, i) perylene	<960.	µg/kgdrywt	2.9	330	EPA 8270B	04/10/96	JC	
2-Fluorophenol (% Recovery)	77.	%	2.9		EPA 8270B	04/10/96	JC	
Phenol-d5 (% Recovery)	96.	%	2.9		EPA 8270B	04/10/96	JC	
Nitrobenzene-d5 (% Recovery)	77.	%	2.9		EPA 8270B	04/10/96	JC	
2-Fluorobiphenyl (% Recovery)	88.	%	2.9		EPA 8270B	04/10/96	JC	
2,4,6-Tribromophenol (% Recovery)	91.	%	2.9		EPA 8270B	04/10/96	JC	
Terphenyl-d14 (% Recovery)	70.	%	2.9		EPA 8270B	04/10/96	JC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbejn/drt/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240								1
Chloromethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
Bromomethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
Vinyl chloride	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
Chloroethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
Methylene chloride	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
Acetone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG	
Carbon disulfide	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
1,1-Dichloroethene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
1,1-Dichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Total 1,2-Dichloroethene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Chloroform	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
1,2-Dichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
2-Butanone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG	
1,1,1-Trichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/23/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD002XXBKX	Solid	CLIENT		04/01/96	04/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Vinyl acetate	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG	
Bromodichloromethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
1,2-Dichloropropane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
cis-1,3-Dichloropropene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Trichloroethene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Dibromochloromethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
1,1,2-Trichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Benzene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
trans-1,3-Dichloropropene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Bromoform	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
2,4,4-Trimethyl-2-pentene	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
2,4,4-Trimethyl-1-pentene	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG	
4-Methyl-2-pentanone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG	
2-Hexanone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG	
Tetrachloroethene	JL2	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkφ(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0593-5
 Report Date: 04/23/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD002XXBKX	Solid			CLIENT		04/01/96	04/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Toluene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Chlorobenzene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Ethylbenzene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Styrene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
Total Xylenes	J9	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG	
1,2-Dichloroethane-d4 (% Recovery)	114.	%	2.9		EPA 8240	04/10/96	TG	
Toluene-d8 (% Recovery)	112.	%	2.9		EPA 8240	04/10/96	TG	
p-Bromofluorobenzene (% Recovery)	90.	%	2.9		EPA 8240	04/10/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/23/96

LJO/jcbkq (dw) /kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0450-1
Report Date: 04/05/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 1 of 4

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW-22S	Aqueous		J. MICHAUD		03/13/96	03/14/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<20.	mg/L	10	2.0	HPLC	03/16/96 FR	1
OPEX	<0.3	mg/L	3.6	0.083	HPLC	03/14/96 TL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample dilution required for quantitation of one or more target analytes; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

04/05/96

LJO/jcbejn/gbp (dw) /tl

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0450-2
 Report Date: 04/05/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-22D	Aqueous	J. MICHAUD		03/13/96	03/14/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<20.	mg/L	10	2.0	HPLC	03/16/96 PR	1
OPEX	<0.3	mg/L	3.6	0.083	HPLC	03/14/96 TL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required for quantitation of one or more target analytes; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

04/05/96

LJO/jcbejn/gbp(dw)/tl

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0450-3
 Report Date: 04/05/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 3 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-35S	Aqueous	J. MICHAUD		03/13/96	03/14/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<20.	mg/L	10	2.0	HPLC	03/16/96 PR	1
OPEX	<0.3	mg/L	3.6	0.083	HPLC	03/14/96 TL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required for quantitation of one or more target analytes; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

04/05/96

LJO/jcbejn/gbp(dw)/tl

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0450-4
Report Date: 04/05/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 4 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-35D	Aqueous	J. MICHAUD		03/13/96	03/14/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<20.	mg/L	10	2.0	HPLC	03/16/96 PR	1
OPEX	<0.3	mg/L	3.6	0.083	HPLC	03/14/96 TL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample dilution required for quantitation of one or more target analytes; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

04/05/96

LJO/jcbejn/gbp(dw)/tl

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-1
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW008X06KX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-1
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SW008XXBKX	Aqueous	D.TUTTLE			04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	74.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	89.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-2
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW009XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-2
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW009XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (‡)	78.	‡	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (‡ Recovery)	91.	‡	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-3
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD008XXBXX	Solid			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	69.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96	JF	1
Total Organic Carbon	15000	µg/g	1.0	100	Lloyd Kahn	04/10/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-3
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD008XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	1,2
gamma-BHC (Lindane)	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
Heptachlor	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
Aldrin	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
beta-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
delta-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
Heptachlor epoxide	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
Endosulfan I	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
gamma-Chlordane	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
alpha-Chlordane	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/13/96	SW	
4,4'-DDE	J2.80	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Dieldrin	27.0	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Endrin	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
4,4'-DDD	J2.80	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-3
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD008XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
4,4'-DDT	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<26.	µg/kgdrywt	1.5	17	EPA 8080	04/13/96	SW	
Endrin ketone	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<50.	µg/kgdrywt	1.5	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (‡)	88.	‡	1.5		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (‡ Recovery)	105.	‡	1.5		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96
 LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD009XKBKX	Solid			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	37.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96	JF	1
Total Organic Carbon	140000	µg/g	1.0	100	Lloyd Kahn	04/10/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp (dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD009XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
Aldrin	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<4.6	µg/kgdrywt	2.7	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	21.0	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96 SW	
Dieldrin	17.0	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96 SW	
Endrin	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	14.0	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96 SW	
Endosulfan II	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

04/24/96

LJO/jcbkp (dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD009XCBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96	SW
Endrin aldehyde	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96	SW
Endosulfan sulfate	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96	SW
Methoxychlor	<46.	µg/kgdrywt	2.7	17	EPA 8080	04/13/96	SW
Endrin ketone	<8.9	µg/kgdrywt	2.7	3.3	EPA 8080	04/13/96	SW
Toxaphene	<89.	µg/kgdrywt	2.7	33	EPA 8080	04/13/96	SW
2,4,5,6-Tetrachloro-meta-xylene (%	84.	%	2.7		EPA 8080	04/13/96	SW
Decachlorobiphenyl (% Recovery)	101.	%	2.7		EPA 8080	04/13/96	SW

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	0.010	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	9.9	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.18	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	2.1	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.010	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/16/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/08/96 by DJE using 3010
- (2) Sample Preparation on 04/15/96 by DJE using 245.1

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 12 of 65

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBFX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	1.2	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	37.	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/24/96

LJO/kdwkcp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBKK	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	74.	mg/L	1.0	2.0	325.2	04/19/96	BC	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/04/96	MB	
Hardness, Total as CaCO3	35.	mg/L	1.0	5.0	130.2	04/09/96	LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/11/96	CM	
Solids - Filterable Residue (TDS)	150.	mg/L	1.0	10	160.1	04/10/96	PH	1
Sulfate	19.	mg/L	1.0	1.0	375.4	04/11/96	LT	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by PPH

04/24/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBXX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	70.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	86.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq (dw) /sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW003XXBKK	Aqueous		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							1
8270B							
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
bis(2-Chloroethyl)ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Hexachloroethane .	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by MSK using EPA 3520

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBKK	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Benzo(a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
bis(2-Ethylhexyl)phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Benzo(b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Benzo(k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Benzo(a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Indeno(1,2,3-cd)pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 20 of 65

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW003XXBKX	Aqueous			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2-Fluorophenol (% Recovery)	58.	%	1.0		EPA 8270B	04/17/96	LM	
Phenol-d5 (% Recovery)	66.	%	1.0		EPA 8270B	04/17/96	LM	
Nitrobenzene-d5 (% Recovery)	46.	%	1.0		EPA 8270B	04/17/96	LM	
2-Fluorobiphenyl (% Recovery)	51.	%	1.0		EPA 8270B	04/17/96	LM	
2,4,6-Tribromophenol (% Recovery)	99.	%	1.0		EPA 8270B	04/17/96	LM	
Terphenyl-d14 (% Recovery)	84.	%	1.0		EPA 8270B	04/17/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW003XXBKX	Aqueous		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW003XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Ethylbenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Styrene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total Xylenes	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	100.	%	1.0		EPA 8240	04/12/96	DW	
Toluene-d8 (% Recovery)	95.	%	1.0		EPA 8240	04/12/96	DW	
p-Bromofluorobenzene (% Recovery)	114.	%	1.0		EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW004XXBKX	Aqueous			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	0.018	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	15.	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.16	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	2.7	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.010	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/16/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/08/96 by DJE using 3010
- (2) Sample Preparation on 04/15/96 by DJE using 245.1

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW004XXBKX	Aqueous		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96 CD	1
Potassium, Total	2.6	mg/L	1.0	1.0	200.7/6010	04/08/96 EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96 CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96 CD	1
Sodium, Total	44.	mg/L	1.0	0.10	200.7/6010	04/08/96 EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96 CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96 CD	1
Zinc, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW004XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	81.	mg/L	1.0	2.0	325.2	04/19/96 BC	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/04/96 MB	
Hardness, Total as CaCO3	50.	mg/L	1.0	5.0	130.2	04/09/96 LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/11/96 CM	
Solids - Filterable Residue (TDS)	170.	mg/L	1.0	10	160.1	04/10/96 PH	1
Sulfate	20.	mg/L	1.0	1.0	375.4	04/11/96 LT	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by PPH

04/24/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW00420XBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW004XXBXX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	79.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	91.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW004XXBXX	Aqueous		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							1
8270B							
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Hexachloroethane .	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by MSK using EPA 3520

04/24/96

LJO/jcbert/jfg/kp(dw)/mam



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SW004XXBKX	Aqueous	D.TUTTLE	04/03/96	04/04/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED	
SW004XXXXKX	Aqueous			D.TUTTLE		04/03/96	04/04/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SW004XXBKX	Aqueous		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Ethylhexyl)phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW004XXBKX	Aqueous			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Fluorophenol (% Recovery)	66.	%	1.0		EPA 8270B	04/16/96	LM	
Phenol-d5 (% Recovery)	74.	%	1.0		EPA 8270B	04/16/96	LM	
Nitrobenzene-d5 (% Recovery)	55.	%	1.0		EPA 8270B	04/16/96	LM	
2-Fluorobiphenyl (% Recovery)	60.	%	1.0		EPA 8270B	04/16/96	LM	
2,4,6-Tribromophenol (% Recovery)	78.	%	1.0		EPA 8270B	04/16/96	LM	
Terphenyl-d14 (% Recovery)	76.	%	1.0		EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW004X06KX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240								1
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
1,1,1-Trichloroethane	J4	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW004XXBKX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Tetrachloroethene	J4	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW004XXBXX	Aqueous	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Toluene	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Chlorobenzene	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Ethylbenzene	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Styrene	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total Xylenes	<S.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	100.	‡	1.0		EPA 8240	04/12/96	DW	
Toluene-d8 (% Recovery)	96.	‡	1.0		EPA 8240	04/12/96	DW	
p-Bromofluorobenzene (% Recovery)	111.	‡	1.0		EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD003XXBKX	Solid		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	6300	mg/kgdrywt	1.0	10	6010	04/15/96 CD	1
Antimony, Total	<2.0	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Arsenic, Total	6.9	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Barium, Total	45	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Beryllium, Total	<1.3	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Cadmium, Total	<2.5	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	1
Calcium, Total	4100	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Chromium, Hexavalent	0.53	mg/kgwetwt	1.0	0.50	6010	04/16/96 EM	2
Chromium, Total	13	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	1
Cobalt, Total	6.7	mg/kgdrywt	1.0	3.0	6010	04/15/96 CD	1
Copper, Total	15	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Iron, Total	6400	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Lead, Total	89	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Magnesium, Total	1700	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Manganese, Total	630	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/12/96 by DJE using 3050
- (2) Sample Preparation on 04/15/96 by GFB using 3060/7195

04/24/96

LJO/kdwkdw
 MD12ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Mercury, Total	0.27	µg/gdrywt	1.0	0.10	7471	04/16/96	JF	1
Nickel, Total	11	mg/kgdrywt	1.0	4.0	6010	04/15/96	CD	2
Potassium, Total	490	mg/kgdrywt	1.0	100	6010	04/15/96	EM	2
Selenium, Total	<2.5	mg/kgdrywt	1.0	1.0	6010	04/15/96	CD	2
Silver, Total	<4.0	mg/kgdrywt	1.0	1.5	6010	04/18/96	CD	3
Sodium, Total	290	mg/kgdrywt	1.0	10	6010	04/15/96	EM	2
Thallium, Total	<3.8	mg/kgdrywt	1.0	1.5	6010	04/15/96	CD	2
Vanadium, Total	21	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2
Zinc, Total	59	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 04/15/96 by DJE using 7471
 - (2) Sample Preparation on 04/12/96 by DJE using 3050
 - (3) Sample Preparation on 04/17/96 by DJE using 3050

04/24/96

LJO/kdwkdw
 MD15HGS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	36.	wt %	1.0	0.10	CLE/CIP SOW	04/08/96 JF	1
Total Organic Carbon	130000	µg/g	1.0	100	Lloyd Kahn	04/10/96 MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp(dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD003XXBKX	Solid		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Aldrin	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	17.0	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
Endrin	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	22.0	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
Endosulfan II	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<48.	µg/kgdrywt	2.8	17	EPA 8080	04/13/96	SW	
Endrin ketone	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<92.	µg/kgdrywt	2.8	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (‡)	81.	‡	2.8		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (‡ Recovery)	89.	‡	2.8		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD003XXBXX	Solid	D.TUTTLE	04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270B							1
Phenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
bis(2-Chloroethyl) ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Chlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,3-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,4-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,2-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
bis(2-Chloroisopropyl) ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
4-Methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
n-Nitroso-dipropylamine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Hexachloroethane	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Nitrobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Isophorone	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Nitrophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by MSK using EPA 3550A

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
bis(2-Chloroethoxy)methane	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dichlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
1,2,4-Trichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Naphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chloroaniline	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorobutadiene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chloro-3-methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2-Methylnaphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorocyclopentadiene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4,6-Trichlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4,5-Trichlorophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
2-Chloronaphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Dimethylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Acenaphthylene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD003XXBKK	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,6-Dinitrotoluene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
3-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Acenaphthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
4-Nitrophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Dibenzofuran	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrotoluene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Diethylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chlorophenyl phenyl ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Fluorene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
4,6-Dinitro-2-methylphenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
n-Nitrosodiphenylamine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Bromophenyl phenyl ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Pentachlorophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD00300BKK	Solid		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Phenanthrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Carbazole	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Di-n-butylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Pyrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Butyl benzylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
3,3'-Dichlorobenzidine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Benzo (a) anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Chrysene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
bis (2-Ethylhexyl) phthalate	1600.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Di-n-octylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Benzo (b) fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Benzo (k) fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Benzo (a) pyrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Indeno (1, 2, 3-cd) pyrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 46 of 65

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Dibenzo (a, h) anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Benzo (g, h, i) perylene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Fluorophenol (% Recovery)	67.	%	2.4		EPA 8270B	04/11/96	LM
Phenol-d5 (% Recovery)	78.	%	2.4		EPA 8270B	04/11/96	LM
Nitrobenzene-d5 (% Recovery)	67.	%	2.4		EPA 8270B	04/11/96	LM
2-Fluorobiphenyl (% Recovery)	81.	%	2.4		EPA 8270B	04/11/96	LM
2,4,6-Tribromophenol (% Recovery)	86.	%	2.4		EPA 8270B	04/11/96	LM
Terphenyl-d14 (% Recovery)	65.	%	2.4		EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD003XXBXX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240							1
Chloromethane	<28.	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
Bromomethane	<28.	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
Vinyl chloride	<28.	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
Chloroethane	<28.	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
Methylene chloride	J13	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
Acetone	<42.	µg/kgdrywt	2.8	15	EPA 8240	04/11/96 DW	
Carbon disulfide	<28.	µg/kgdrywt	2.8	10	EPA 8240	04/11/96 DW	
1,1-Dichloroethene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	
1,1-Dichloroethane	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	
Total 1,2-Dichloroethene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	
Chloroform	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	
1,2-Dichloroethane	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	
2-Butanone	<42.	µg/kgdrywt	2.8	15	EPA 8240	04/11/96 DW	
1,1,1-Trichloroethane	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
Vinyl acetate	<42.	µg/kgdrywt	2.8		15 EPA 8240	04/11/96	DW	
Bromodichloromethane	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
1,2-Dichloropropane	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
cis-1,3-Dichloropropene	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
Trichloroethene	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
Dibromochloromethane	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
1,1,2-Trichloroethane	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
Benzene	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
trans-1,3-Dichloropropene	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
Bromoform	<14.	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	
2,4,4-Trimethyl-2-pentene	<28.	µg/kgdrywt	2.8		10 EPA 8240	04/11/96	DW	
2,4,4-Trimethyl-1-pentene	<28.	µg/kgdrywt	2.8		10 EPA 8240	04/11/96	DW	
4-Methyl-2-pentanone	<42.	µg/kgdrywt	2.8		15 EPA 8240	04/11/96	DW	
2-Hexanone	<42.	µg/kgdrywt	2.8		15 EPA 8240	04/11/96	DW	
Tetrachloroethene	J6	µg/kgdrywt	2.8		5 EPA 8240	04/11/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD003XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
1,1,2,2-Tetrachloroethane	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
Toluene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
Chlorobenzene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
Ethylbenzene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
Styrene	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
Total Xylenes	<14.	µg/kgdrywt	2.8	5	EPA 8240	04/11/96	DW
1,2-Dichloroethane-d4 (% Recovery)	104.	%	2.8		EPA 8240	04/11/96	DW
Toluene-d8 (% Recovery)	114.	%	2.8		EPA 8240	04/11/96	DW
p-Bromofluorobenzene (% Recovery)	91.	%	2.8		EPA 8240	04/11/96	DW

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 50 of 65

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	1100	mg/kgdrywt	1.0	10	6010	04/15/96 CD	1
Antimony, Total	<1.8	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Arsenic, Total	44	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Barium, Total	8.2	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Beryllium, Total	<1.1	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Cadmium, Total	<2.3	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	1
Calcium, Total	2400	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Chromium, Hexavalent	1.2	mg/kgwetwt	1.0	0.50	6010	04/16/96 EM	2
Chromium, Total	11	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	1
Cobalt, Total	<6.8	mg/kgdrywt	1.0	3.0	6010	04/15/96 CD	1
Copper, Total	<5.7	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Iron, Total	4000	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Lead, Total	11	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Magnesium, Total	220	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Manganese, Total	77	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/12/96 by DJE using 3050
- (2) Sample Preparation on 04/15/96 by GFB using 3060/7195

04/24/96

LJO/kdwkdw
 MD12ICS1



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Mercury, Total	<0.20	µg/gdrywt	1.0	0.10	7471	04/16/96 JF	1
Nickel, Total	<9.1	mg/kgdrywt	1.0	4.0	6010	04/15/96 CD	2
Potassium, Total	<100	mg/kgdrywt	1.0	100	6010	04/15/96 EM	2
Selenium, Total	<2.3	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	2
Silver, Total	<3.4	mg/kgdrywt	1.0	1.5	6010	04/18/96 CD	3
Sodium, Total	70	mg/kgdrywt	1.0	10	6010	04/15/96 EM	2
Thallium, Total	<3.4	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	2
Vanadium, Total	8.9	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2
Zinc, Total	18	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/15/96 by DJE using 7471
- (2) Sample Preparation on 04/12/96 by DJE using 3050
- (3) Sample Preparation on 04/17/96 by DJE using 3050

04/24/96

LJO/kdwkdw
 MD15HGS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD004XXBKX	Solid			D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	41.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96	JF	1
Total Organic Carbon	380000	µg/g	1.0	100	Lloyd Kahn	04/10/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SD004XXBKX	Solid	D.TUTTLE			04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
Aldrin	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<4.1	µg/kgdrywt	2.4	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Endrin	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	J4.60	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 54 of 65

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD004XXBKX	Solid		D.TUTTLE		04/03/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Endosulfan II	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
4,4'-DDT	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Endrin aldehyde	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Endosulfan sulfate	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Methoxychlor	<41.	µg/kgdrywt	2.4	17	EPA 8080	04/13/96 SW	
Endrin ketone	<7.9	µg/kgdrywt	2.4	3.3	EPA 8080	04/13/96 SW	
Toxaphene	<79.	µg/kgdrywt	2.4	33	EPA 8080	04/13/96 SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	87.	%	2.4		EPA 8080	04/13/96 SW	
Decachlorobiphenyl (% Recovery)	99.	%	2.4		EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/sw

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 55 of 65

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by							1,2
USEPA 8270B							
Phenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
bis(2-Chloroethyl) ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Chlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,3-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,4-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
1,2-Dichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
2-Methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
bis(2-Chloroisopropyl) ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
4-Methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
n-Nitroso-dipropylamine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Hexachloroethane	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Nitrobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM
Isophorone	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/06/96 by MSK using EPA 3550A

(2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD004XXBIX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Nitrophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dimethylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
bis(2-Chloroethoxy)methane	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dichlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
1,2,4-Trichlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Naphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chloroaniline	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorobutadiene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chloro-3-methylphenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2-Methylnaphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorocyclopentadiene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4,6-Trichlorophenol	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4,5-Trichlorophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
2-Chloronaphthalene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dimethylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Acenaphthylene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,6-Dinitrotoluene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
3-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Acenaphthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
4-Nitrophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Dibenzofuran	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrotoluene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Diethylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Chlorophenyl phenyl ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Fluorene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
4-Nitroaniline	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
4,6-Dinitro-2-methylphenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
n-Nitrosodiphenylamine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SD004XXBXX	Solid	D.TUTTLE	04/03/96	04/04/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Hexachlorobenzene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Pentachlorophenol	<2000.	µg/kgdrywt	2.4	820	EPA 8270B	04/11/96	LM	
Phenanthrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Carbazole	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Di-n-butylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Pyrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Butyl benzylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
3,3'-Dichlorobenzidine	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Benzo(a)anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Chrysene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
bis(2-Ethylhexyl)phthalate	2000.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Di-n-octylphthalate	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo (b) fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Benzo (k) fluoranthene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Benzo (a) pyrene	J420	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Indeno (1, 2, 3-cd) pyrene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Dibenzo (a, h) anthracene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
Benzo (g, h, i) perylene	<790.	µg/kgdrywt	2.4	330	EPA 8270B	04/11/96	LM	
2-Fluorophenol (% Recovery)	73.	%	2.4		EPA 8270B	04/11/96	LM	
Phenol-d5 (% Recovery)	77.	%	2.4		EPA 8270B	04/11/96	LM	
Nitrobenzene-d5 (% Recovery)	71.	%	2.4		EPA 8270B	04/11/96	LM	
2-Fluorobiphenyl (% Recovery)	78.	%	2.4		EPA 8270B	04/11/96	LM	
2,4,6-Tribromophenol (% Recovery)	93.	%	2.4		EPA 8270B	04/11/96	LM	
Terphenyl-d14 (% Recovery)	66.	%	2.4		EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)/mam

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD004XXBXX	Solid	D.TUTTLE		04/03/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240								1,2
Chloromethane	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
Bromomethane	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
Vinyl chloride	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
Chloroethane	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
Methylene chloride	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
Acetone	B190	µg/kgdrywt	2.4	15	EPA 8240	04/10/96	DW	
Carbon disulfide	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW	
1,1-Dichloroethene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW	
1,1-Dichloroethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW	
Total 1,2-Dichloroethene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW	
Chloroform	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW	
1,2-Dichloroethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW	
2-Butanone	130.	µg/kgdrywt	2.4	15	EPA 8240	04/10/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) "\$" flag denotes surrogate compound recovery is out of criteria. Re-extraction or re-analysis confirmed matrix interference.
- (2) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD004XXBKX	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
1,1,1-Trichloroethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Carbon tetrachloride	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Vinyl acetate	<36.	µg/kgdrywt	2.4	15	EPA 8240	04/10/96	DW
Bromodichloromethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
1,2-Dichloropropane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
cis-1,3-Dichloropropene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Trichloroethene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Dibromochloromethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
1,1,2-Trichloroethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Benzene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
trans-1,3-Dichloropropene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Bromoform	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
2,4,4-Trimethyl-2-pentene	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW
2,4,4-Trimethyl-1-pentene	<24.	µg/kgdrywt	2.4	10	EPA 8240	04/10/96	DW
4-Methyl-2-pentanone	<36.	µg/kgdrywt	2.4	15	EPA 8240	04/10/96	DW

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw) /kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD004XXBKK	Solid	D.TUTTLE		04/03/96	04/04/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Hexanone	<36.	µg/kgdrywt	2.4	15	EPA 8240	04/10/96	DW
Tetrachloroethene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
1,1,2,2-Tetrachloroethane	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Toluene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Chlorobenzene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Ethylbenzene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Styrene	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
Total Xylenes	<12.	µg/kgdrywt	2.4	5	EPA 8240	04/10/96	DW
1,2-Dichloroethane-d4 (% Recovery)	95.	%	2.4		EPA 8240	04/10/96	DW
Toluene-d8 (% Recovery)	\$142	%	2.4		EPA 8240	04/10/96	DW
p-Bromofluorobenzene (% Recovery)	\$70	%	2.4		EPA 8240	04/10/96	DW

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
QT002XXBKX	Aqueous		D.TUTTLE		03/28/96	04/04/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240							1
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Analyzed one day past holding time.

04/24/96

LJO/jcbkp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QT002XXBKX	Aqueous	D.TUTTLE		03/28/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq (dw) /kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0625-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QT002XXBKX	Aqueous	D.TUTTLE		03/28/96	04/04/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Chlorobenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Ethylbenzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Styrene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Total Xylenes	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	100.	%	1.0		EPA 8240	04/12/96	DW	
Toluene-d8 (% Recovery)	91.	%	1.0		EPA 8240	04/12/96	DW	
p-Bromofluorobenzene (% Recovery)	109.	%	1.0		EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-1
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 1 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD01300BKY	Solid	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	18.	wt %	1.0	0.10	CLP/CIP SOW	04/05/96 JF	1
Total Organic Carbon	260000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96 MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by JF

04/22/96

LJO/ejnbac/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-1
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 2 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD013XXBKX	Solid	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	1
gamma-BHC (Lindane)	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
Heptachlor	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
Aldrin	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
beta-BHC	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
delta-BHC	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
Heptachlor epoxide	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
Endosulfan I	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
gamma-Chlordane	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
alpha-Chlordane	<9.5	µg/kgdrywt	5.6	1.7	EPA 8080	04/16/96	SW	
4,4'-DDE	460.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96	SW	
Dieldrin	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96	SW	
Endrin	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96	SW	
4,4'-DDD	260.0	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96	SW	
Endosulfan II	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by MSK using EPA 3550A

04/22/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-1
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WICH# : >

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD013XXBXX	Solid	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	31.0	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96 SW	
Endrin aldehyde	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96 SW	
Endosulfan sulfate	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96 SW	
Methoxychlor	<95.	µg/kgdrywt	5.6	17	EPA 8080	04/16/96 SW	
Endrin ketone	<18.	µg/kgdrywt	5.6	3.3	EPA 8080	04/16/96 SW	
Toxaphene	<180.	µg/kgdrywt	5.6	33	EPA 8080	04/16/96 SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	86.	%	5.6		EPA 8080	04/16/96 SW	
Decachlorobiphenyl (% Recovery)	89.	%	5.6		EPA 8080	04/16/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-2
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD005XCBKX	Solid	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	68.	wt %	1.0	0.10	CIP/CIP SOW	04/05/96	JF	1
Total Organic Carbon	21000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by JF

04/22/96

LJO/ejnbac/kp (dir)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-2
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 5 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD005XXBXX	Solid	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							
alpha-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	1
gamma-BHC (Lindane)	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
Heptachlor	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
Aldrin	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
beta-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
delta-BHC	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
Heptachlor epoxide	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
Endosulfan I	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
gamma-Chlordane	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
alpha-Chlordane	<2.6	µg/kgdrywt	1.5	1.7	EPA 8080	04/16/96 SW	
4,4'-DDE	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96 SW	
Dieldrin	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96 SW	
Endrin	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96 SW	
4,4'-DDD	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96 SW	
Endosulfan II	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by MSK using EPA 3550A

04/22/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-2
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 6 of 20

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
SD005XXBKX	Solid		CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96	SW	
Endrin aldehyde	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96	SW	
Endosulfan sulfate	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96	SW	
Methoxychlor	<26.	µg/kgdrywt	1.5	17	EPA 8080	04/16/96	SW	
Endrin ketone	<5.	µg/kgdrywt	1.5	3.3	EPA 8080	04/16/96	SW	
Toxaphene	<50.	µg/kgdrywt	1.5	33	EPA 8080	04/16/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (‡)	93.	‡	1.5		EPA 8080	04/16/96	SW	
Decachlorobiphenyl (‡ Recovery)	93.	‡	1.5		EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-3
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 7 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
SD006XXBXX	Solid	CLIENT	04/02/96	04/03/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Solids-Total Residue (TS)	28.	wt %	1.0	0.10	CLP/CIP SOW	04/05/96	JF	1
Total Organic Carbon	110000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96	MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by JF

04/22/96

LJO/ejnbac/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-3
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WICH#: ▶

REPORT OF ANALYTICAL RESULTS

Page 8 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD006XXBKX	Solid	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	1
gamma-BHC (Lindane)	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
Heptachlor	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
Aldrin	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
beta-BHC	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
delta-BHC	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
Heptachlor epoxide	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
Endosulfan I	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
gamma-Chlordane	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
alpha-Chlordane	<6.1	µg/kgdrywt	3.6	1.7	EPA 8080	04/16/96	SW	
4,4'-DDE	47.0	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Dieldrin	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Endrin	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
4,4'-DDD	150.0	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Endosulfan II	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by MSK using EPA 3550A

04/22/96

LJO/jcbkp(dw)/sw

CLIENT: DENNIS TUTTLE
AEB-WAKEFIELD
CORPORATE PLACE 128, BUILDING 3, SUITE 25
WAKEFIELD, MA 01880

Lab Number : WM-0607-3
Report Date: 04/22/96
PO No. : MSA-95-01
Project : 07331.08

WICH# : >

REPORT OF ANALYTICAL RESULTS

Page 9 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD006XXBKK	Solid	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Endrin aldehyde	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Endosulfan sulfate	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Methoxychlor	<61.	µg/kgdrywt	3.6	17	EPA 8080	04/16/96	SW	
Endrin ketone	<12.	µg/kgdrywt	3.6	3.3	EPA 8080	04/16/96	SW	
Toxaphene	<120.	µg/kgdrywt	3.6	33	EPA 8080	04/16/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	80.	%	3.6		EPA 8080	04/16/96	SW	
Decachlorobiphenyl (% Recovery)	90.	%	3.6		EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkp(dw)/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-4
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 10 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD0070XBKX	Solid	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	55.	wt %	1.0	0.10	CLP/CIP SOW	04/05/96 JF	1
Total Organic Carbon	66000.	µg/g	1.0	100.	Lloyd Kahn	04/09/96 MB	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/04/96 by JF

04/22/96

LJO/ejnbac/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-4
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: >

REPORT OF ANALYTICAL RESULTS

Page 11 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD00700BKX	Solid	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
gamma-BHC (Lindane)	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
Heptachlor	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
Aldrin	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
beta-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
delta-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
Heptachlor epoxide	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
Endosulfan I	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
gamma-Chlordane	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
alpha-Chlordane	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/16/96 SW	
4,4'-DDE	74.40	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96 SW	
Dieldrin	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96 SW	
Endrin	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96 SW	
4,4'-DDD	7.40	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by MSK using EPA 3550A
 (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/22/96

LJO/jcbkcp(dw)/sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-4
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 12 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD007XXBKX	Solid	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96	SW	
4,4'-DDT	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96	SW	
Endrin aldehyde	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96	SW	
Endosulfan sulfate	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96	SW	
Methoxychlor	<31.	µg/kgdrywt	1.8	17	EPA 8080	04/16/96	SW	
Endrin ketone	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/16/96	SW	
Toxaphene	<59.	µg/kgdrywt	1.8	33	EPA 8080	04/16/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	89.	%	1.8		EPA 8080	04/16/96	SW	
Decachlorobiphenyl (% Recovery)	94.	%	1.8		EPA 8080	04/16/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkp(dw)/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-5
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ► REPORT OF ANALYTICAL RESULTS Page 13 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW013XXBKX	Aqueous	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by BWG using EPA 3510

04/22/96

LJO/jcbkq (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-5
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WICH# : ▶

REPORT OF ANALYTICAL RESULTS

Page 14 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SW013XXBKX	Aqueous	CLIENT	04/02/96	04/03/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	51.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	69.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-6
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: >

REPORT OF ANALYTICAL RESULTS

Page 15 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW005XXBKX	Aqueous	CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by BWG using EPA 3510

04/22/96

LJO/jcbkq(dw)/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-6
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: >

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW005XXBKX	Aqueous	CLIENT		04/02/96	04/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	82.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	97.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-7
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 17 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SW006XXBKX	Aqueous	CLIENT			04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by BWG using EPA 3510

04/22/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-7
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: >

REPORT OF ANALYTICAL RESULTS

Page 18 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SW006CKBKX	Aqueous	CLIENT			04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	84.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	93.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-8
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: >

REPORT OF ANALYTICAL RESULTS

Page 19 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SW0070XBKX	Aqueous	CLIENT			04/02/96	04/03/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96 SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/05/96 by BWG using EPA 3510

04/22/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0607-8
 Report Date: 04/22/96
 PO No. : MSA-95-01
 Project : 07331.08

WIC#: ▶

REPORT OF ANALYTICAL RESULTS

Page 20 of 20

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
SW007XXBKX	Aqueous		CLIENT		04/02/96	04/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	85.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	97.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/22/96

LJO/jcbkq (dwr) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-1
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW010XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-1
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SW010XXBKX	Aqueous	CLIENT			04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	80.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	90.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-2
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW011XXBXX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-2
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SW011XXBKX	Aqueous	CLIENT			04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96 SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96 SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	78.	%	1.0		EPA 8080	04/11/96 SW	
Decachlorobiphenyl (% Recovery)	92.	%	1.0		EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-3
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW012XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-3
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY	SAMPLED DATE RECEIVED			
SW012XXBKX	Aqueous			CLIENT	04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	32.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	38.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD01QXXBKK	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	36.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96 JF	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUFTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 8 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD010XXBXX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Aldrin	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<4.8	µg/kgdrywt	2.8	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
Endrin	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	J5.40	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A
 (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkq (dw) /nen/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-4
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD010XXBKX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
4,4'-DDT	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<48.	µg/kgdrywt	2.8	17	EPA 8080	04/13/96	SW	
Endrin ketone	<9.2	µg/kgdrywt	2.8	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<92.	µg/kgdrywt	2.8	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	85.	%	2.8		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (% Recovery)	95.	%	2.8		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/nen/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD011XXBKX	Solid	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	51.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96 JF	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD011XXBKX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	1
gamma-BHC (Lindane)	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
Heptachlor	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
Aldrin	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
beta-BHC	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
delta-BHC	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
Heptachlor epoxide	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
Endosulfan I	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
gamma-Chlordane	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
alpha-Chlordane	<3.4	µg/kgdrywt	2.0	1.7	EPA 8080	04/13/96	SW	
4,4'-DDE	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96	SW	
Dieldrin	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96	SW	
Endrin	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96	SW	
4,4'-DDD	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96	SW	
Endosulfan II	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

04/24/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-5
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD011XXBKX	Solid		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96 SW	
Endrin aldehyde	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96 SW	
Endosulfan sulfate	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96 SW	
Methoxychlor	<34.	µg/kgdrywt	2.0	17	EPA 8080	04/13/96 SW	
Endrin ketone	<6.6	µg/kgdrywt	2.0	3.3	EPA 8080	04/13/96 SW	
Toxaphene	<66.	µg/kgdrywt	2.0	33	EPA 8080	04/13/96 SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	82.	%	2.0		EPA 8080	04/13/96 SW	
Decachlorobiphenyl (% Recovery)	101.	%	2.0		EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD012XXBKX	Solid	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	31.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96 JF.	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp (dwr)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 14 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD012XXBKX	Solid	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1,2
alpha-BHC	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
Aldrin	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<5.6	µg/kgdrywt	3.3	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	J6.10	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96 SW	
Endrin	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	21.0	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A
 (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbkcp(dw)/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-6
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD012XXBKX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Endosulfan II	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96	SW	
4,4'-DDT	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<56.	µg/kgdrywt	3.3	17	EPA 8080	04/13/96	SW	
Endrin ketone	<11.	µg/kgdrywt	3.3	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<110.	µg/kgdrywt	3.3	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	83.	%	3.3		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (% Recovery)	92.	%	3.3		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	0.018	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	18.	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.22	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	2.6	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.041	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/16/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010
 (2) Sample Preparation on 04/15/96 by DJE using 245.1

04/24/96

LJO/kdwkdw
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SW014XXBKX	Aqueous	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	2.0	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	45.	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	0.030	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/24/96

LJO/kdwkdw
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW014XXBKX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/05/96 MB	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/11/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/ejnkp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SW014XXBKX	Aqueous	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LTO/jcbkp (dw) /sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW014XXBKX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96 SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96 SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96 SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	28.	%	1.0		EPA 8080	04/11/96 SW	
Decachlorobiphenyl (% Recovery)	34.	%	1.0		EPA 8080	04/11/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SW014XXBXX	Aqueous	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							1
8270B							
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
bis(2-Chloroethyl)ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by MSK using EPA 3520

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SW014XXBKX	Aqueous	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/tp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKK	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/17/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 24 of 83

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED	
SW014XXBKX	Aqueous			CLIENT		04/04/96	04/05/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
bis (2-Ethylhexyl) phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/lq (dw)



CLIENT: DENNIS TUFILE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SW014XXBKX	Aqueous	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Dibenzo(a,h)anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
Benzo(g,h,i)perylene	<10.	µg/L	1.0	10	EPA 8270B	04/17/96	LM
2-Fluorophenol (% Recovery)	46.	%	1.0		EPA 8270B	04/17/96	LM
Phenol-d5 (% Recovery)	54.	%	1.0		EPA 8270B	04/17/96	LM
Nitrobenzene-d5 (% Recovery)	37.	%	1.0		EPA 8270B	04/17/96	LM
2-Fluorobiphenyl (% Recovery)	44.	%	1.0		EPA 8270B	04/17/96	LM
2,4,6-Tribromophenol (% Recovery)	90.	%	1.0		EPA 8270B	04/17/96	LM
Terphenyl-d14 (% Recovery)	73.	%	1.0		EPA 8270B	04/17/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SW014XXBKX	Aqueous	CLIENT			04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-7
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SW014XXBKX	Aqueous	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Ethylbenzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Styrene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Total Xylenes	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	97.	%	1.0		EPA 8240	04/15/96	DW	
Toluene-d8 (% Recovery)	99.	%	1.0		EPA 8240	04/15/96	DW	
p-Bromofluorobenzene (% Recovery)	111.	%	1.0		EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	0.019	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	19.	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.25	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	2.7	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.042	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/16/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010
 (2) Sample Preparation on 04/15/96 by DJE using 245.1

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	2.1	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	47.	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	0.032	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/05/96 MB	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/11/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96
 LJO/ejnkp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	76.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	89.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 34 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							
8270B							1
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Chloroethyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by MSK using EPA 3520

04/24/96

LJO/jcbert/jfg/kp (dw)

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 35 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SW014XXBKD	Aqueous	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SW014XXBKD	Aqueous			CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/lkp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED
SW014XXBKD	Aqueous	CLIENT	04/04/96 04/05/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
bis(2-Ethylhexyl) phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a,h)anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (g,h,i)perylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Fluorophenol (% Recovery)	63.	%	1.0		EPA 8270B	04/16/96	LM	
Phenol-d5 (% Recovery)	71.	%	1.0		EPA 8270B	04/16/96	LM	
Nitrobenzene-d5 (% Recovery)	63.	%	1.0		EPA 8270B	04/16/96	LM	
2-Fluorobiphenyl (% Recovery)	69.	%	1.0		EPA 8270B	04/16/96	LM	
2,4,6-Tribromophenol (% Recovery)	81.	%	1.0		EPA 8270B	04/16/96	LM	
Terphenyl-d14 (% Recovery)	85.	%	1.0		EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SW014XQBKD	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Acetone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SW014XXBKD	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Bromofom	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-8
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
SW014XXBKD	Aqueous		CLIENT			04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chlorobenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Ethylbenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Styrene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
Total Xylenes	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	95.	%	1.0		EPA 8240	04/15/96	DW	
Toluene-d8 (% Recovery)	101.	%	1.0		EPA 8240	04/15/96	DW	
p-Bromofluorobenzene (% Recovery)	113.	%	1.0		EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
QS001XXBKX	Aqueous			CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/08/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/08/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	206.2/7060	04/08/96	CD	1
Barium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Calcium, Total	4.0	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Chromium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/08/96	CD	1
Copper, Total	0.20	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Iron, Total	0.050	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Lead, Total	0.009	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Magnesium, Total	0.56	mg/L	1.0	0.050	200.7/6010	04/08/96	CD	1
Manganese, Total	0.005	mg/L	1.0	0.005	200.7/6010	04/08/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/16/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/08/96 by DJE using 3010
- (2) Sample Preparation on 04/15/96 by DJE using 245.1

04/24/96

LJO/kdwkp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUFLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
QS00LXXBKX	Aqueous			CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/08/96	CD	1
Potassium, Total	<1.0	mg/L	1.0	1.0	200.7/6010	04/08/96	EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/08/96	CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/08/96	CD	1
Sodium, Total	2.0	mg/L	1.0	0.10	200.7/6010	04/08/96	EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/10/96	CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1
Zinc, Total	0.37	mg/L	1.0	0.025	200.7/6010	04/08/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by DJE using 3010

04/24/96

LJO/kdwkcp (dw)
 MD08ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 44 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
QS001XXBXX	Aqueous	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/05/96 MB	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/11/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/ejnkp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED
QS001XXBXX	Aqueous	CLIENT	04/04/96 04/05/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
TCL Pesticides by USEPA 8080								
alpha-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	1
gamma-BHC (Lindane)	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Aldrin	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
beta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
delta-BHC	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Heptachlor epoxide	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
Endosulfan I	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
gamma-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
alpha-Chlordane	<0.05	µg/L	1.0	0.05	EPA 8080	04/11/96	SW	
4,4'-DDE	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Dieldrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
4,4'-DDD	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan II	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/08/96 by RAL using EPA 3510

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
QS001XXBKX	Aqueous	CLIENT	04/04/96	04/05/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endrin aldehyde	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Endosulfan sulfate	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Methoxychlor	<0.5	µg/L	1.0	0.5	EPA 8080	04/11/96	SW	
Endrin ketone	<0.1	µg/L	1.0	0.1	EPA 8080	04/11/96	SW	
Toxaphene	<1.	µg/L	1.0	1	EPA 8080	04/11/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	41.	%	1.0		EPA 8080	04/11/96	SW	
Decachlorobiphenyl (% Recovery)	45.	%	1.0		EPA 8080	04/11/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkq(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
QS001XXBKX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA							
8270B							1
Phenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Chloroethyl)ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Chlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,3-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,4-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,2-Dichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Chloroisopropyl) ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
n-Nitroso-dipropylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Hexachloroethane	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Nitrobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Isophorone	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Nitrophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by MSK using EPA 3520

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
QS001XXBXX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,4-Dimethylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
bis(2-Chloroethoxy)methane	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2,4-Dichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
1,2,4-Trichlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Naphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Chloroaniline	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Hexachlorobutadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
4-Chloro-3-methylphenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Methylnaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Hexachlorocyclopentadiene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2,4,6-Trichlorophenol	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2,4,5-Trichlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
2-Chloronaphthalene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
2-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96	LM
Dimethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM
Acenaphthylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
QS00LXXBKX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,6-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
3-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	
Acenaphthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
2,4-Dinitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	
4-Nitrophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	
Dibenzofuran	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
2,4-Dinitrotoluene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Diethylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
4-Chlorophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Fluorene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
4-Nitroaniline	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	
4,6-Dinitro-2-methylphenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	
n-Nitrosodiphenylamine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
4-Bromophenyl phenyl ether	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Hexachlorobenzene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96 LM	
Pentachlorophenol	<25.	µg/L	1.0	25	EPA 8270B	04/16/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 50 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QS001LXXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Phenanthrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Carbazole	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Di-n-butylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Butyl benzylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
3,3'-Dichlorobenzidine	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (a) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Chrysene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
bis (2-Ethylhexyl) phthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Di-n-octylphthalate	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (b) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (k) fluoranthene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (a) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Indeno (1,2,3-cd) pyrene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
QS001XXBKX	Aqueous			CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a, h) anthracene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
Benzo (g, h, i) perylene	<10.	µg/L	1.0	10	EPA 8270B	04/16/96	LM	
2-Fluorophenol (% Recovery)	52.	%	1.0		EPA 8270B	04/16/96	LM	
Phenol-d5 (% Recovery)	70.	%	1.0		EPA 8270B	04/16/96	LM	
Nitrobenzene-d5 (% Recovery)	52.	%	1.0		EPA 8270B	04/16/96	LM	
2-Fluorobiphenyl (% Recovery)	58.	%	1.0		EPA 8270B	04/16/96	LM	
2,4,6-Tribromophenol (% Recovery)	72.	%	1.0		EPA 8270B	04/16/96	LM	
Terphenyl-d14 (% Recovery)	70.	%	1.0		EPA 8270B	04/16/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/lp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
QS001XXBKX	Aqueous	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							1
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
Acetone	J8	µg/L	1.0	15	EPA 8240	04/12/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/12/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 53 of 83

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
QS001XXBKX	Aqueous		CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/12/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/12/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-9
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 54 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QS001XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
Toluene	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
Chlorobenzene	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
Ethylbenzene	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
Styrene	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
Total Xylenes	<5.	µg/L	1.0		5 EPA 8240	04/12/96	DW	
1,2-Dichloroethane-d4 (% Recovery)	108.	%	1.0		EPA 8240	04/12/96	DW	
Toluene-d8 (% Recovery)	90.	%	1.0		EPA 8240	04/12/96	DW	
p-Bromofluorobenzene (% Recovery)	113.	%	1.0		EPA 8240	04/12/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp (dw) /kwh/tjg



CLIENT: DENNIS TUMBLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD014XXBKX	Solid	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Total	14000	mg/kgdrywt	1.0	10	6010	04/15/96 CD	1
Antimony, Total	<2.0	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Arsenic, Total	9.2	mg/kgdrywt	1.0	0.80	6010	04/15/96 CD	1
Barium, Total	40	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Beryllium, Total	<1.2	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Cadmium, Total	<2.5	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	1
Calcium, Total	1600	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Chromium, Hexavalent	0.74	mg/kgwetwt	1.0	0.50	6010	04/16/96 EM	2
Chromium, Total	24	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	1
Cobalt, Total	7.8	mg/kgdrywt	1.0	3.0	6010	04/15/96 CD	1
Copper, Total	29	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Iron, Total	11000	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	1
Lead, Total	33	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1
Magnesium, Total	3900	mg/kgdrywt	1.0	5.0	6010	04/15/96 CD	1
Manganese, Total	160	mg/kgdrywt	1.0	0.50	6010	04/15/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/12/96 by DJE using 3050
- (2) Sample Preparation on 04/15/96 by GFB using 3060/7195

04/24/96

LJO/kdwkdw
 MD12ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Mercury, Total	<0.27	µg/gdrywt	1.0	0.10	7471	04/16/96 JF	1
Nickel, Total	19	mg/kgdrywt	1.0	4.0	6010	04/15/96 CD	2
Potassium, Total	980	mg/kgdrywt	1.0	100	6010	04/15/96 EM	2
Selenium, Total	<2.5	mg/kgdrywt	1.0	1.0	6010	04/15/96 CD	2
Silver, Total	<3.9	mg/kgdrywt	1.0	1.5	6010	04/18/96 CD	3
Sodium, Total	140	mg/kgdrywt	1.0	10	6010	04/15/96 EM	2
Thallium, Total	<3.7	mg/kgdrywt	1.0	1.5	6010	04/15/96 CD	2
Vanadium, Total	32	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2
Zinc, Total	78	mg/kgdrywt	1.0	2.5	6010	04/15/96 CD	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/15/96 by DJE using 7471
- (2) Sample Preparation on 04/12/96 by DJE using 3050
- (3) Sample Preparation on 04/17/96 by DJE using 3050

04/24/96

LJO/kdwkdw
 MD15HGS1

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	34.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96 JF.	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJC/ejnkp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							
alpha-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	1
gamma-BHC (Lindane)	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
Aldrin	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<4.9	µg/kgdrywt	2.9	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96 SW	
Endrin	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96 SW	
Endosulfan II	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SD014XXBKX	Solid	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<49.	µg/kgdrywt	2.9	17	EPA 8080	04/13/96	SW	
Endrin ketone	<9.6	µg/kgdrywt	2.9	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<96.	µg/kgdrywt	2.9	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	82.	%	2.9		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (% Recovery)	96.	%	2.9		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by							1,2
USEPA 8270B							
Phenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
bis(2-Chloroethyl) ether	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
2-Chlorophenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
1,3-Dichlorobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
1,4-Dichlorobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
1,2-Dichlorobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
2-Methylphenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
bis(2-Chloroisopropyl) ether	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
4-Methylphenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
n-Nitroso-dipropylamine	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
Hexachloroethane.	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
Nitrobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM
Isophorone	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 04/06/96 by MSK using EPA 3550A
 - (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbert/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD014XXBKX	Solid		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Nitrophenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2,4-Dimethylphenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
bis(2-Chloroethoxy)methane	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2,4-Dichlorophenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
1,2,4-Trichlorobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
Naphthalene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
4-Chloroaniline	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
Hexachlorobutadiene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
4-Chloro-3-methylphenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2-Methylnaphthalene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
Hexachlorocyclopentadiene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2,4,6-Trichlorophenol	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2,4,5-Trichlorophenol	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96 LM	
2-Chloronaphthalene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96 LM	
2-Nitroaniline	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 62 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD014XXBIX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dimethylphthalate	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Acenaphthylene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
2,6-Dinitrotoluene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
3-Nitroaniline	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
Acenaphthene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrophenol	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
4-Nitrophenol	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
Dibenzofuran	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
2,4-Dinitrotoluene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Diethylphthalate	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
4-Chlorophenyl phenyl ether	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Fluorene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
4-Nitroaniline	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
4,6-Dinitro-2-methylphenol	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
n-Nitrosodiphenylamine	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD014XXBXX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Hexachlorobenzene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Pentachlorophenol	<1300.	µg/kgdrywt	1.6	820	EPA 8270B	04/11/96	LM	
Phenanthrene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Anthracene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Carbazole	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Di-n-butylphthalate	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Fluoranthene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Pyrene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Butyl benzylphthalate	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
3,3'-Dichlorobenzidine	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Benzo(a) anthracene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Chrysene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
bis(2-Ethylhexyl)phthalate	J240.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Di-n-octylphthalate	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Benzo (b) fluoranthene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Benzo (k) fluoranthene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Benzo (a) pyrene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Indeno (1,2,3-cd) pyrene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Dibenzo (a,h) anthracene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
Benzo (g,h,i) perylene	<530.	µg/kgdrywt	1.6	330	EPA 8270B	04/11/96	LM	
2-Fluorophenol (% Recovery)	56.	%	1.6		EPA 8270B	04/11/96	LM	
Phenol-d5 (% Recovery)	68.	%	1.6		EPA 8270B	04/11/96	LM	
Nitrobenzene-d5 (% Recovery)	57.	%	1.6		EPA 8270B	04/11/96	LM	
2-Fluorobiphenyl (% Recovery)	69.	%	1.6		EPA 8270B	04/11/96	LM	
2,4,6-Tribromophenol (% Recovery)	68.	%	1.6		EPA 8270B	04/11/96	LM	
Terphenyl-d14 (% Recovery)	58.	%	1.6		EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA 8240							1,2
Chloromethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
Bromomethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
Vinyl chloride	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
Chloroethane	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
Methylene chloride	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
Acetone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG
Carbon disulfide	<29.	µg/kgdrywt	2.9	10	EPA 8240	04/10/96	TG
1,1-Dichloroethene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
1,1-Dichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Total 1,2-Dichloroethene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Chloroform	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
1,2-Dichloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
2-Butanone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 (2) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD014XXBKX	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
1,1,1-Trichloroethane	J13	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Carbon tetrachloride	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Vinyl acetate	<44.	µg/kgdrywt	2.9		15 EPA 8240	04/10/96	TG	
Bromodichloromethane	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
1,2-Dichloropropane	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
cis-1,3-Dichloropropene	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Trichloroethene	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Dibromochloromethane	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
1,1,2-Trichloroethane	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Benzene	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
trans-1,3-Dichloropropene	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
Bromofom	<15.	µg/kgdrywt	2.9		5 EPA 8240	04/10/96	TG	
2,4,4-Trimethyl-2-pentene	<29.	µg/kgdrywt	2.9		10 EPA 8240	04/10/96	TG	
2,4,4-Trimethyl-1-pentene	<29.	µg/kgdrywt	2.9		10 EPA 8240	04/10/96	TG	
4-Methyl-2-pentanone	<44.	µg/kgdrywt	2.9		15 EPA 8240	04/10/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-10
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 67 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBXX	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Hexanone	<44.	µg/kgdrywt	2.9	15	EPA 8240	04/10/96	TG
Tetrachloroethene	22.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
1,1,2,2-Tetrachloroethane	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Toluene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Chlorobenzene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Ethylbenzene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Styrene	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
Total Xylenes	<15.	µg/kgdrywt	2.9	5	EPA 8240	04/10/96	TG
1,2-Dichloroethane-d4 (% Recovery)	111.	%	2.9		EPA 8240	04/10/96	TG
Toluene-d8 (% Recovery)	101.	%	2.9		EPA 8240	04/10/96	TG
p-Bromofluorobenzene (% Recovery)	100.	%	2.9		EPA 8240	04/10/96	TG

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
SD014XXBKD	Solid		CLIENT			04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	8500	mg/kgdrywt	1.0	10	6010	04/15/96	CD	1
Antimony, Total	<1.3	mg/kgdrywt	1.0	0.80	6010	04/15/96	CD	1
Arsenic, Total	4.8	mg/kgdrywt	1.0	0.80	6010	04/15/96	CD	1
Barium, Total	25	mg/kgdrywt	1.0	0.50	6010	04/15/96	CD	1
Beryllium, Total	<0.82	mg/kgdrywt	1.0	0.50	6010	04/15/96	CD	1
Cadmium, Total	<1.6	mg/kgdrywt	1.0	1.0	6010	04/15/96	CD	1
Calcium, Total	1000	mg/kgdrywt	1.0	5.0	6010	04/15/96	CD	1
Chromium, Hexavalent	0.66	mg/kgwetwt	1.0	0.50	6010	04/16/96	EM	2
Chromium, Total	15	mg/kgdrywt	1.0	1.5	6010	04/15/96	CD	1
Cobalt, Total	<4.9	mg/kgdrywt	1.0	3.0	6010	04/15/96	CD	1
Copper, Total	17	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	1
Iron, Total	6800	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	1
Lead, Total	20	mg/kgdrywt	1.0	0.50	6010	04/15/96	CD	1
Magnesium, Total	2400	mg/kgdrywt	1.0	5.0	6010	04/15/96	CD	1
Manganese, Total	97	mg/kgdrywt	1.0	0.50	6010	04/15/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/12/96 by DJE using 3050
- (2) Sample Preparation on 04/15/96 by GFB using 3060/7195

04/24/96

LJO/kdwkdw
 MD12ICS1

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 69 of 83

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKD	Solid		CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Mercury, Total	<0.14	µg/gdrywt	1.0	0.10	7471	04/16/96	JF	1
Nickel, Total	12	mg/kgdrywt	1.0	4.0	6010	04/15/96	CD	2
Potassium, Total	630	mg/kgdrywt	1.0	100	6010	04/15/96	EM	2
Selenium, Total	<1.6	mg/kgdrywt	1.0	1.0	6010	04/15/96	CD	2
Silver, Total	<2.3	mg/kgdrywt	1.0	1.5	6010	04/18/96	CD	3
Sodium, Total	89	mg/kgdrywt	1.0	10	6010	04/15/96	EM	2
Thallium, Total	<2.5	mg/kgdrywt	1.0	1.5	6010	04/15/96	CD	2
Vanadium, Total	19	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2
Zinc, Total	45	mg/kgdrywt	1.0	2.5	6010	04/15/96	CD	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/15/96 by DJE using 7471
- (2) Sample Preparation on 04/12/96 by DJE using 3050
- (3) Sample Preparation on 04/17/96 by DJE using 3050

04/24/96

LJO/kdwkdw
 MD15HGS1



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
SD014XXBKD	Solid	CLIENT	04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Solids-Total Residue (TS)	57.	wt %	1.0	0.10	CLP/CIP SOW	04/08/96 JF	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by JF

04/24/96

LJO/ejnkp(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD014XXBKD	Solid		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Pesticides by USEPA 8080							1
alpha-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
gamma-BHC (Lindane)	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
Aldrin	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
beta-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
delta-BHC	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
Heptachlor epoxide	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
Endosulfan I	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
gamma-Chlordane	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
alpha-Chlordane	<3.1	µg/kgdrywt	1.8	1.7	EPA 8080	04/13/96 SW	
4,4'-DDE	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96 SW	
Dieldrin	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96 SW	
Endrin	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96 SW	
4,4'-DDD	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96 SW	
Endosulfan II	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96 SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/09/96 by RAL using EPA 3550A

04/24/96

LJO/jcbkp(dw)/sw

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 72 of 83

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SD014XKBKD	Solid			CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4,4'-DDT	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96	SW	
Endrin aldehyde	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96	SW	
Endosulfan sulfate	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96	SW	
Methoxychlor	<31.	µg/kgdrywt	1.8	17	EPA 8080	04/13/96	SW	
Endrin ketone	<5.9	µg/kgdrywt	1.8	3.3	EPA 8080	04/13/96	SW	
Toxaphene	<59.	µg/kgdrywt	1.8	33	EPA 8080	04/13/96	SW	
2,4,5,6-Tetrachloro-meta-xylene (%)	85.	%	1.8		EPA 8080	04/13/96	SW	
Decachlorobiphenyl (% Recovery)	95.	%	1.8		EPA 8080	04/13/96	SW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbkp(dw)/sw



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SD014XXBKD	Solid	CLIENT	04/04/96	04/05/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Semivolatile Organics by USEPA 8270B							1,2
Phenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
bis(2-Chloroethyl)ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
2-Chlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
1,3-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
1,4-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
1,2-Dichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
2-Methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
bis(2-Chloroisopropyl) ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
4-Methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
n-Nitroso-dipropylamine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
Hexachloroethane .	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
Nitrobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	
Isophorone	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/06/96 by MSK using EPA 3550A
 (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKD	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2-Nitrophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4-Dimethylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
bis(2-Chloroethoxy)methane	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4-Dichlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
1,2,4-Trichlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Naphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
4-Chloroaniline	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Hexachlorobutadiene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
4-Chloro-3-methylphenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2-Methylnaphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Hexachlorocyclopentadiene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4,6-Trichlorophenol	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4,5-Trichlorophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
2-Chloronaphthalene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKD	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Dimethylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Acenaphthylene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,6-Dinitrotoluene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
3-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
Acenaphthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4-Dinitrophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
4-Nitrophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
Dibenzofuran	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2,4-Dinitrotoluene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Diethylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
4-Chlorophenyl phenyl ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Fluorene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
4-Nitroaniline	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
4,6-Dinitro-2-methylphenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM
n-Nitrosodiphenylamine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

Page 76 of 83

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
SD014XXBKD	Solid	CLIENT	04/04/96	04/05/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
4-Bromophenyl phenyl ether	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Hexachlorobenzene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Pentachlorophenol	<1400.	µg/kgdrywt	1.7	820	EPA 8270B	04/11/96	LM	
Phenanthrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Carbazole	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Di-n-butylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Butyl benzylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
3,3'-Dichlorobenzidine	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Benzo (a) anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Chrysene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
bis (2-Ethylhexyl)phthalate	J390.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	
Di-n-octylphthalate	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp (dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD014XXBKD	Solid		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Benzo(b) fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Benzo(k) fluoranthene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Benzo(a) pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Indeno(1,2,3-cd) pyrene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Dibenzo(a,h) anthracene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
Benzo(g,h,i) perylene	<560.	µg/kgdrywt	1.7	330	EPA 8270B	04/11/96	LM
2-Fluorophenol (% Recovery)	67.	%	1.7		EPA 8270B	04/11/96	LM
Phenol-d5 (% Recovery)	72.	%	1.7		EPA 8270B	04/11/96	LM
Nitrobenzene-d5 (% Recovery)	66.	%	1.7		EPA 8270B	04/11/96	LM
2-Fluorobiphenyl (% Recovery)	87.	%	1.7		EPA 8270B	04/11/96	LM
2,4,6-Tribromophenol (% Recovery)	94.	%	1.7		EPA 8270B	04/11/96	LM
Terphenyl-d14 (% Recovery)	72.	%	1.7		EPA 8270B	04/11/96	LM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbert/jfg/kp(dw)



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKD	Solid	CLIENT		04/04/96	04/05/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics + Trimethylpentenes by USEPA. 8240							1,2,3
Chloromethane	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
Bromomethane	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
Vinyl chloride	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
Chloroethane	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
Methylene chloride	JB10	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
Acetone	<27.	µg/kgdrywt	1.8	15	EPA 8240	04/10/96 TG	
Carbon disulfide	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96 TG	
1,1-Dichloroethene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96 TG	
1,1-Dichloroethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96 TG	
Total 1,2-Dichloroethene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96 TG	
Chloroform	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96 TG	
1,2-Dichloroethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96 TG	

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.
 - (2) "B" flag denotes detection of this analyte in the laboratory method blank analyzed concurrently with the sample.
 - (3) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SD014XXBKD	Solid	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
2-Butanone	<27.	µg/kgdrywt	1.8	15	EPA 8240	04/10/96	TG	
1,1,1-Trichloroethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Carbon tetrachloride	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Vinyl acetate	<27.	µg/kgdrywt	1.8	15	EPA 8240	04/10/96	TG	
Bromodichloromethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
1,2-Dichloropropane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
cis-1,3-Dichloropropene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Trichloroethene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Dibromochloromethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
1,1,2-Trichloroethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Benzene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
trans-1,3-Dichloropropene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
Bromoform	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG	
2,4,4-Trimethyl-2-pentene	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96	TG	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-11
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SD014XXBKD	Solid		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
2,4,4-Trimethyl-1-pentene	<18.	µg/kgdrywt	1.8	10	EPA 8240	04/10/96	TG
4-Methyl-2-pentanone	<27.	µg/kgdrywt	1.8	15	EPA 8240	04/10/96	TG
2-Hexanone	<27.	µg/kgdrywt	1.8	15	EPA 8240	04/10/96	TG
Tetrachloroethene	14.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
1,1,2,2-Tetrachloroethane	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
Toluene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
Chlorobenzene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
Ethylbenzene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
Styrene	<9.	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
Total Xylenes	J4	µg/kgdrywt	1.8	5	EPA 8240	04/10/96	TG
1,2-Dichloroethane-d4 (% Recovery)	94.	%	1.8		EPA 8240	04/10/96	TG
Toluene-d8 (% Recovery)	116.	%	1.8		EPA 8240	04/10/96	TG
p-Bromofluorobenzene (% Recovery)	83.	%	1.8		EPA 8240	04/10/96	TG

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/lq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-12
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
QT003XXBKX	Aqueous		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
TCL Volatile Organics +							
Trimethylpentenes by USEPA 8240							
Chloromethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Bromomethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Vinyl chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Chloroethane	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Methylene chloride	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
Acetone	17.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
Carbon disulfide	<10.	µg/L	1.0	10	EPA 8240	04/15/96 DW	
1,1-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,1-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Total 1,2-Dichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Chloroform	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
1,2-Dichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
2-Butanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96 DW	
1,1,1-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	
Carbon tetrachloride	<5.	µg/L	1.0	5	EPA 8240	04/15/96 DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/lq(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-12
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QT003XXBKX	Aqueous	CLIENT		04/04/96	04/05/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Vinyl acetate	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Bromodichloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,2-Dichloropropane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
cis-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Trichloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Dibromochloromethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2-Trichloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Benzene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
trans-1,3-Dichloropropene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Bromoform	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-2-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
2,4,4-Trimethyl-1-pentene	<10.	µg/L	1.0	10	EPA 8240	04/15/96	DW	
4-Methyl-2-pentanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
2-Hexanone	<15.	µg/L	1.0	15	EPA 8240	04/15/96	DW	
Tetrachloroethene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
1,1,2,2-Tetrachloroethane	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	
Toluene	<5.	µg/L	1.0	5	EPA 8240	04/15/96	DW	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0640-12
 Report Date: 04/24/96
 PO No. : MSA-95-01

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
QT003XGBKX	Aqueous		CLIENT		04/04/96	04/05/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chlorobenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW
Ethylbenzene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW
Styrene	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW
Total Xylenes	<5.	µg/L	1.0		5 EPA 8240	04/15/96	DW
1,2-Dichloroethane-d4 (% Recovery)	95.	%	1.0		EPA 8240	04/15/96	DW
Toluene-d8 (% Recovery)	105.	%	1.0		EPA 8240	04/15/96	DW
p-Bromofluorobenzene (% Recovery)	110.	%	1.0		EPA 8240	04/15/96	DW

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

04/24/96

LJO/jcbjfg/kp(dw)/kwh/tjg

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0891-1
 Report Date: 05/22/96
 PO No. : 787-MD

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD010XXBKX	Solid	CLIENT		04/04/96	05/10/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Total Organic Carbon	570000	µg/g	1.0	100	Lloyd Kahn	05/17/96	LT 1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values
 (1) The laboratory was requested to perform this analysis after the expiration of the analytical hold-time.

05/22/96

LJO/ejnkp(dw)/lat/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0891-2
 Report Date: 05/22/96
 PO No. : 787-M0

REPORT OF ANALYTICAL RESULTS

Page 2 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD011XQBKX	Solid	CLIENT		04/04/96	05/10/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Total Organic Carbon	53000	µg/g	1.0	100	Lloyd Kahn	05/17/96	LT 1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) The laboratory was requested to perform this analysis after the expiration of the analytical hold-time.

05/22/96

LJO/ejnkp(dw)/lat/pph

US EPA ARCHIVE DOCUMENT

CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0891-3
 Report Date: 05/22/96
 PO No. : 787-M0

REPORT OF ANALYTICAL RESULTS

Page 3 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD012XXBKX	Solid	CLIENT		04/04/96	05/10/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Total Organic Carbon	500000	µg/g	1.0	100	Lloyd Kahn	05/17/96	LT 1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) The laboratory was requested to perform this analysis after the expiration of the analytical hold-time.

05/22/96

LJO/ejnkq (dw) /lat/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0891-4
 Report Date: 05/22/96
 PO No. : 787-MO

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKX	Solid	CLIENT		04/04/96	05/10/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Total Organic Carbon	25000	µg/g	1.0	100	Lloyd Kahn	05/17/96	LT 1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) The laboratory was requested to perform this analysis after the expiration of the analytical hold-time.

05/22/96

LJO/ejnkp(dw)/lat/pph

US EPA ARCHIVE DOCUMENT



CLIENT: DENNIS TUTTLE
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0891-5
 Report Date: 05/22/96
 PO No. : 787-MO

REPORT OF ANALYTICAL RESULTS

Page 5 of 5

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SD014XXBKD	Solid	CLIENT		04/04/96	05/10/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Total Organic Carbon	28000	µg/g	1.0	100	Lloyd Kahn	05/17/96	LT 1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) The laboratory was requested to perform this analysis after the expiration of the analytical hold-time.

05/22/96

LJO/ejnkp(dw)/lat/pph

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-1
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#18	Aqueous	R. SCHMIDT		04/17/96	04/18/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/23/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Barium, Dissolved	0.021	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Calcium, Dissolved	600.	mg/L	10	0.50	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/23/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Magnesium, Dissolved	5.4	mg/L	1.0	0.050	200.7/6010	04/23/96	CD	1
Manganese, Dissolved	0.22	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/23/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/22/96 by DJE using 3010
- (2) Sample Preparation on 04/22/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-1
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#18	Aqueous	R.SCHMIDT		04/17/96	04/18/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/23/96	CD	1
Potassium, Dissolved	6.9	mg/L	1.0	1.0	200.7/6010	04/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Sodium, Dissolved	84.	mg/L	1.0	0.10	200.7/6010	04/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/22/96 by DJE using 3010

05/09/96

LJO/kdwr1w(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-1
 Report Date: 05/09/96
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#18	Aqueous	R.SCHMIDT		04/17/96	04/18/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bicarbonate as HCO3	230.	mg/L	1.0	20	APHA 406C	04/24/96	CM	
Chloride, Dissolved	47.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/18/96	MB	
Nitrate+Nitrite as N	3.9	mg/L	1.0	0.050	353.2	04/18/96	BC	
Nitrogen-Ammonia as N	2.6	mg/L	1.0	0.10	350.1	05/08/96	CM	1
Sulfate, Dissolved	1200.	mg/L	100	1.0	375.4	04/23/96	WL	
pH (Laboratory)	6.2	pH Units	1.0	0.1	150.1	04/24/96	CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 05/08/96 by CLM

05/09/96

LJO/ejnpph/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#17	Aqueous			R.SCHMIDT		04/17/96	04/18/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.52	mg/L	1.0	0.10	200.7/6010	04/23/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Barium, Dissolved	0.014	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Calcium, Dissolved	2.0	mg/L	1.0	0.050	200.7/6010	04/23/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/23/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Iron, Dissolved	0.73	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Lead, Dissolved	0.006	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Magnesium, Dissolved	1.2	mg/L	1.0	0.050	200.7/6010	04/23/96	CD	1
Manganese, Dissolved	0.18	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/23/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/22/96 by DJE using 3010
- (2) Sample Preparation on 04/22/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#17	Aqueous	R.SCHMIDT		04/17/96	04/18/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/23/96	CD	1
Potassium, Dissolved	1.8	mg/L	1.0	1.0	200.7/6010	04/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Sodium, Dissolved	4.9	mg/L	1.0	0.10	200.7/6010	04/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/22/96 by DJE using 3010

05/09/96

LJO/kdwrlw(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#17	Aqueous			R.SCHMIDT		04/17/96	04/18/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bicarbonate as HCO3	210.	mg/L	1.0	20	APHA 406C	04/24/96	CM	
Chloride, Dissolved	35.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/18/96	MB	
Nitrate+Nitrite as N	3.1	mg/L	1.0	0.050	353.2	04/18/96	BC	
Nitrogen-Ammonia as N	1.3	mg/L	1.0	0.10	350.1	05/08/96	CM	1
Sulfate, Dissolved	1300.	mg/L	100	1.0	375.4	04/23/96	WL	
pH (Laboratory)	6.4	pH Units	1.0	0.1	150.1	04/24/96	CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/08/96 by CIM

05/09/96

LJO/ejnpph/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 7 of 9

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#16	Aqueous			R.SCHMIDT		04/17/96	04/18/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/23/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/23/96	CD	1
Barium, Dissolved	0.011	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Calcium, Dissolved	550.	mg/L	10	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/23/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/23/96	CD	1
Magnesium, Dissolved	22.	mg/L	1.0	0.050	200.7/6010	04/23/96	CD	1
Manganese, Dissolved	2.1	mg/L	1.0	0.005	200.7/6010	04/23/96	EM	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/23/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/22/96 by DJE using 3010
- (2) Sample Preparation on 04/22/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#16	Aqueous	R.SCHMIDT		04/17/96	04/18/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/23/96	CD	1
Potassium, Dissolved	3.1	mg/L	1.0	1.0	200.7/6010	04/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/23/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Sodium, Dissolved	220.	mg/L	1.0	0.10	200.7/6010	04/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/23/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/23/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/22/96 by DJE using 3010

05/09/96

LJO/kdwrlw(dw)
 MD22ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0728-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#16	Aqueous			R.SCHMIDT		04/17/96	04/18/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bicarbonate as HCO3	300.	mg/L	1.0	20	APHA 406C	04/24/96	CM	
Chloride, Dissolved	42.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/18/96	MB	
Nitrate+Nitrite as N	2.1	mg/L	1.0	0.050	353.2	04/18/96	EC	
Nitrogen-Ammonia as N	8.2	mg/L	1.0	0.10	350.1	05/08/96	CM	1
Sulfate, Dissolved	1500.	mg/L	100	1.0	375.4	04/23/96	WL	
pH (Laboratory)	6.5	pH Units	1.0	0.1	150.1	04/24/96	CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/08/96 by CIM

05/09/96

LJO/ejnpgh/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-1
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#12	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.018	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	100.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	4.9	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.23	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010
 (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-1
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#12	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.7	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	55.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwr:lw (dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-1
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1#12	Aqueous	R. SCHMIT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	190.	mg/L	1.0	20	APHA 406C	04/24/96	CM
Chloride, Dissolved	30.	mg/L	1.0	2.0	325.2	04/26/96	LT
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM
Nitrate+Nitrite as N	8.1	mg/L	2.0	0.050	353.2	04/22/96	LT
Nitrogen-Ammonia as N	34.	mg/L	5.0	0.10	350.1	04/30/96	CM 1
Sulfate, Dissolved	180.	mg/L	100	1.0	375.4	04/23/96	WL
pH (Laboratory)	7.5	pH Units	1.0	0.10	150.1	04/24/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/30/96 by CLM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#13	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.014	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	100.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	0.20	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	7.3	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.28	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#13	Aqueous			R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	2.3	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	72.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwrlw (dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-2
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1#13	Aqueous	R.SCHMIT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO ₃	180.	mg/L	1.0	20	APHA 406C	04/24/96 CM	
Chloride, Dissolved	32.	mg/L	1.0	2.0	325.2	04/26/96 LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96 CM	
Nitrate+Nitrite as N	7.0	mg/L	2.0	0.050	353.2	04/22/96 LT	
Nitrogen-Ammonia as N	43.	mg/L	10	0.10	350.1	04/30/96 CM	1
Sulfate, Dissolved	360.	mg/L	100	1.0	375.4	04/23/96 WL	
pH (Laboratory)	7.3	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/30/96 by CIM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#14	Aqueous	R.SCHMITT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.011	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	240.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	1.8	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	16.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.81	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010
 (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#14	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	4.6	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	200.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-3
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#14	Aqueous		R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	200.	mg/L	1.0	20	APHA 406C	04/24/96	CM
Chloride, Dissolved	68.	mg/L	1.0	2.0	325.2	04/26/96	LT
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM
Nitrate+Nitrite as N	4.8	mg/L	2.0	0.050	353.2	04/22/96	LT
Nitrogen-Ammonia as N	50.	mg/L	10	0.10	350.1	04/30/96	CM 1
Sulfate, Dissolved	820.	mg/L	100	1.0	375.4	04/23/96	WL
pH (Laboratory)	6.8	pH Units	1.0	0.10	150.1	04/24/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/30/96 by CLM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-6
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 10 of 35

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#8	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.020	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	130.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	4.4	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.35	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdw:rlw(dw)
MD23ICW1



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-6
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#8	Aqueous			R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.6	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	49.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJC/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-6
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 12 of 35

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#8	Aqueous			R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bicarbonate as HCO ₃	160.	mg/L	1.0	20	APHA 406C	04/24/96	CM	
Chloride, Dissolved	42.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM	
Nitrate+Nitrite as N	7.5	mg/L	2.0	0.050	353.2	04/22/96	LT	
Nitrogen-Ammonia as N	30.	mg/L	5.0	0.10	350.1	04/30/96	CM	1
Sulfate, Dissolved	330.	mg/L	100	1.0	375.4	04/23/96	WL	
pH (Laboratory)	6.6	pH Units	1.0	0.10	150.1	04/24/96	CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 04/30/96 by CIM

05/09/96

LJO/kdwejn/pgh/rlw(dw)



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-7
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#10	Aqueous			R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.020	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	100.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.005	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/26/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	4.4	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.27	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010
 (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-7
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#10	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.6	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	42.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwr:lw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-7
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 15 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-1#10	Aqueous	R.SCHMITT			04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	180.	mg/L	1.0	20	APHA 406C	04/24/96 CM	
Chloride, Dissolved	27.	mg/L	1.0	2.0	325.2	04/26/96 LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96 CM	
Nitrate+Nitrite as N	7.4	mg/L	2.0	0.050	353.2	04/22/96 LT	
Nitrogen-Ammonia as N	33.	mg/L	5.0	0.10	350.1	04/30/96 CM	1
Sulfate, Dissolved	140.	mg/L	100	1.0	375.4	04/23/96 WL	
pH (Laboratory)	6.8	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 04/30/96 by CLM

05/09/96

LJO/kdwejn/pph/rlw(dw)

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-8
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 16 of 35

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1#11	Aqueous		R.SCHMITT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.020	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	100.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/26/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	3.9	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.21	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwr1w(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-8
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#11	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.3	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	35.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwrlw(dw)
 MD23ICWL

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-8
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 18 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#11	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Bicarbonate as HCO ₃	180.	mg/L	1.0	20	APHA 406C	04/24/96	CM	
Chloride, Dissolved	25.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM	
Nitrate+Nitrite as N	7.5	mg/L	2.0	0.050	353.2	04/22/96	LT	
Nitrogen-Ammonia as N	31.	mg/L	5.0	0.10	350.1	04/30/96	CM	1
Sulfate, Dissolved	170.	mg/L	100	1.0	375.4	04/24/96	WL	
pH (Laboratory)	6.7	pH Units	1.0	0.10	150.1	04/24/96	CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/30/96 by CIM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-10
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#5	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	78.	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.006	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	0.007	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	260.	mg/L	1.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	2.5	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	0.18	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	0.17	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	5.7	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/26/96	CD	1
Magnesium, Dissolved	96.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	9.7	mg/L	1.0	0.005	200.7/6010	04/25/96	EM	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/24/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/23/96 by DJE using 245.1

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-10
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#5	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	0.31	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.6	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	830	mg/L	5.0	0.10	200.7/6010	04/27/96	CD	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	0.66	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by DJE using 3010

05/09/96

LJO/kdwr:lw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-10
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED	
MP-1#5	Aqueous		R.SCHMIT			04/18/96	04/19/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3 Chloride, Dissolved	Not Appl.	mg/L	1.0	20	APHA 406C	04/24/96 CM	1
Chromium, Hexavalent	900.	mg/L	20	2.0	325.2	04/26/96 LT	
Nitrate+Nitrite as N	<0.010	mg/L	1.0	0.010	7196	04/19/96 CM	
Nitrogen-Ammonia as N	2.9	mg/L	1.0	0.050	353.2	04/22/96 LT	
Sulfate, Dissolved	220.	mg/L	50	0.10	350.1	04/30/96 CM	2
pH (Laboratory)	5300.	mg/L	1000	1.0	375.4	04/24/96 WL	
	3.9	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Initial sample pH was <4.5. Bicarbonate could not be analyzed.
 (2) Sample Preparation on 04/30/96 by CIM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-11
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 22 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SOUTH DITCH #1	Aqueous	R.SCHMIT			04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/09/96

LJO/kdwr:lw(dw)



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-12
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 23 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SOUTH DITCH #2	Aqueous	R.SCHMIT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/09/96

LJO/kdwr:lw(dw)



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-13
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SOUTH DITCH #3	Aqueous	R.SCHMIT			04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/09/96

LJO/kdwr:lw(dw)



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-14
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SOUTH DITCH #4	Aqueous	R.SCHMIT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/09/96

LJO/kdwr:lw (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-15
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 26 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SOUTH DITCH POND #1	Aqueous	R.SCHMITT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Hexavalent	<0.010	mg/L	1.0	0.010	7196	04/19/96	CM

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/09/96

LJO/kdw:lw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-4
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#2	Aqueous			R.SCHMIT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1500.	mg/L	50	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	0.68	mg/L	25	0.008	200.7/6010	04/27/96	CD	1
Arsenic, Dissolved	0.57	mg/L	25	0.008	200.7/6010	04/27/96	CD	1
Barium, Dissolved	<0.050	mg/L	10	0.005	200.7/6010	04/27/96	CD	1,2
Beryllium, Dissolved	<0.13	mg/L	25	0.005	200.7/6010	04/26/96	CD	1,2
Cadmium, Dissolved	<0.10	mg/L	10	0.010	200.7/6010	04/27/96	CD	1,2
Calcium, Dissolved	420.	mg/L	50	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	1900	mg/L	500	0.015	200.7/6010	04/26/96	CD	1
Chromium, Hexavalent	97	mg/L	1000	0.015	6010	04/30/96	CD	3
Cobalt, Dissolved	8.7	mg/L	50	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	9.2	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	2100.	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	0.084	mg/L	10	0.005	200.7/6010	04/27/96	CD	1
Magnesium, Dissolved	1200.	mg/L	50	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 04/19/96 by GFB using 7195

05/09/96

LJO/kdwkdw
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-4
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-1#2	Aqueous	R.SCHMITT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	190.	mg/L	50	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	1.6	µg/L	1.0	0.20	245.1	04/26/96	DE	2
Nickel, Dissolved	7.3	mg/L	50	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	26	mg/L	5.0	1.0	200.7/6010	04/27/96	EM	1
Selenium, Dissolved	<0.10	mg/L	10	0.010	200.7/6010	04/27/96	CD	1,3
Silver, Dissolved	<0.15	mg/L	10	0.015	200.7/6010	04/27/96	CD	1,3
Sodium, Dissolved	19000	mg/L	100	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	04/27/96	CD	1,3
Vanadium, Dissolved	<1.3	mg/L	50	0.025	200.7/6010	04/25/96	CD	1,3
Zinc, Dissolved	15.	mg/L	50	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/09/96

LJO/kdwkdw
 MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-4
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1#2	Aqueous	R.SCHMITT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	Not Appl.	mg/L	1.0	20	APHA 406C	04/24/96 CM	1
Chloride, Dissolved	13000.	mg/L	100	2.0	325.2	04/26/96 LT	
Nitrate+Nitrite as N	2.5	mg/L	5.0	0.050	353.2	04/22/96 LT	
Nitrogen-Ammonia as N	5.9	mg/L	1.0	0.10	350.1	04/29/96 CM	2
Sulfate, Dissolved	64000.	mg/L	1000	1.0	375.4	04/23/96 WL	
pH (Laboratory)	3.7	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Initial sample pH was <4.5. Bicarbonate could not be analyzed.
 (2) Sample Preparation on 04/26/96 by CLM

05/09/96

LJO/kdwejn/pph/rlw(dw)

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-5
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 30 of 35

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#4	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1200.	mg/L	50	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	0.080	mg/L	5.0	0.008	200.7/6010	04/27/96	CD	1
Arsenic, Dissolved	0.064	mg/L	5.0	0.008	200.7/6010	04/27/96	CD	1
Barium, Dissolved	<0.025	mg/L	5.0	0.005	200.7/6010	04/27/96	CD	1,2
Beryllium, Dissolved	<0.13	mg/L	25	0.005	200.7/6010	04/26/96	CD	1,2
Cadmium, Dissolved	<0.050	mg/L	5.0	0.010	200.7/6010	04/27/96	CD	1,2
Calcium, Dissolved	420.	mg/L	50	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	400.	mg/L	100	0.015	200.7/6010	04/25/96	EM	1
Chromium, Hexavalent	12	mg/L	400	0.015	6010	04/30/96	CD	3
Cobalt, Dissolved	4.7	mg/L	50	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	4.7	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	190.	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.025	mg/L	5.0	0.005	200.7/6010	04/27/96	CD	1,2
Magnesium, Dissolved	900.	mg/L	50	0.050	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 04/19/96 by GFB using 7195

05/09/96

LJO/kdwkdw
MD23ICW1

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-5
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-1#4	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	110.	mg/L	50	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	1.0	µg/L	1.0	0.20	245.1	04/26/96	DE	2
Nickel, Dissolved	4.6	mg/L	50	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	<5.0	mg/L	5.0	1.0	200.7/6010	04/27/96	CD	1,3
Selenium, Dissolved	<0.050	mg/L	5.0	0.010	200.7/6010	04/27/96	CD	1,3
Silver, Dissolved	<0.075	mg/L	5.0	0.015	200.7/6010	04/27/96	CD	1,3
Sodium, Dissolved	9300.	mg/L	100	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.075	mg/L	5.0	0.015	200.7/6010	04/27/96	CD	1,3
Vanadium, Dissolved	<1.3	mg/L	50	0.025	200.7/6010	04/25/96	CD	1,3
Zinc, Dissolved	8.7	mg/L	50	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/09/96

LJO/kdwkdw
MD23ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-5
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1#4	Aqueous	R.SCHMIT		04/18/96	04/19/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	Not Appl.	mg/L	1.0	20	APHA 406C	04/24/96 CM	1
Chloride, Dissolved	6400.	mg/L	20	2.0	325.2	04/26/96 LT	
Nitrate+Nitrite as N	7.6	mg/L	5.0	0.050	353.2	04/22/96 LT	
Nitrogen-Ammonia as N	6.3	mg/L	1.0	0.10	350.1	04/30/96 CM	2
Sulfate, Dissolved	42000.	mg/L	1000	1.0	375.4	04/23/96 WL	
pH (Laboratory)	3.5	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Initial sample pH was <4.5. Bicarbonate could not be analyzed.
 (2) Sample Preparation on 04/30/96 by CIM

05/09/96

LJO/kdwejn/pph/rlw (dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-9
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-#1	Aqueous			R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1800.	mg/L	50	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	0.74	mg/L	25	0.008	200.7/6010	04/27/96	CD	1
Arsenic, Dissolved	0.77	mg/L	25	0.008	200.7/6010	04/27/96	CD	1
Barium, Dissolved	<0.050	mg/L	10	0.005	200.7/6010	04/27/96	CD	1,2
Beryllium, Dissolved	<0.25	mg/L	50	0.005	200.7/6010	04/27/96	CD	1,2
Cadmium, Dissolved	<0.10	mg/L	10	0.010	200.7/6010	04/27/96	CD	1,2
Calcium, Dissolved	420.	mg/L	50	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	2200	mg/L	500	0.015	200.7/6010	04/26/96	CD	1
Chromium, Hexavalent	150	mg/L	1000	0.015	6010	04/30/96	CD	3
Cobalt, Dissolved	9.2	mg/L	50	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	7.8	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	2800.	mg/L	50	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	0.16	mg/L	10	0.005	200.7/6010	04/27/96	CD	1
Magnesium, Dissolved	1500.	mg/L	50	0.050	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 04/19/96 by GFB using 7195

05/09/96

LJO/kdwrlw(dw)
 MD23ICW1

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0734-9
Report Date: 05/09/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 34 of 35

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-#1	Aqueous	R.SCHMIT		04/18/96	04/19/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	200.	mg/L	50	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	4.7	µg/L	1.0	0.20	245.1	04/26/96	DE	2
Nickel, Dissolved	8.3	mg/L	50	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	66	mg/L	5.0	1.0	200.7/6010	04/27/96	CD	1
Selenium, Dissolved	<0.10	mg/L	10	0.010	200.7/6010	04/27/96	CD	1,3
Silver, Dissolved	<0.15	mg/L	10	0.015	200.7/6010	04/27/96	CD	1,3
Sodium, Dissolved	25000.	mg/L	100	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	04/27/96	CD	1,3
Vanadium, Dissolved	1.3	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	19.	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/23/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/09/96

LJO/kdwr1w(dw)
MD23ICWL



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0734-9
 Report Date: 05/09/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
MP-#1	Aqueous		R.SCHMITT		04/18/96	04/19/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Bicarbonate as HCO3	Not Appl.	mg/L	1.0	20	APHA 406C	04/24/96 CM	1
Chloride, Dissolved	17000.	mg/L	100	2.0	325.2	04/26/96 LT	
Nitrate+Nitrite as N	2.1	mg/L	5.0	0.050	353.2	04/22/96 LT	
Nitrogen-Ammonia as N	7.1	mg/L	1.0	0.10	350.1	04/30/96 CM	2
Sulfate, Dissolved	74000.	mg/L	4000	1.0	375.4	04/24/96 WL	
pH (Laboratory)	3.7	pH Units	1.0	0.10	150.1	04/24/96 CM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Initial sample pH was <4.5. Bicarbonate could not be analyzed.
 (2) Sample Preparation on 04/30/96 by CLM

05/09/96

LJO/kdwejn/pph/zlw(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-1
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SO. DITCH #1	Aqueous			▶		04/19/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.24	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.042	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	27.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	0.28	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Dissolved	2.7	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.27	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010
 (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwrlw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-1
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH #1	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.8	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	57.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	0.044	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96
 LJO/kdwr1w(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-2
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO DITCH #2	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.26	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.043	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	30.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	0.27	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Dissolved	2.8	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.28	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/24/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwrlw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-2
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO.DITCH #2	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	2.2	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	58.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	0.044	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96

LJO/kdwr:lw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-2
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 6 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SO.DITCH #2	Aqueous	▶			04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride, Dissolved	75.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Nitrate+Nitrite as N	1.3	mg/L	1.0	0.050	353.2	04/25/96	CM	
Sulfate, Dissolved	120.	mg/L	20	1.0	375.4	04/24/96	WL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/08/96

LJO/ejnpgh/rlw(dw)

CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-3
 Report Date: 05/08/96
 FO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SO. DITCH #3	Aqueous	▶	04/19/96	04/23/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.24	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.035	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	30.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	0.12	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Dissolved	2.7	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.27	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/24/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwrlw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-3
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
SO. DITCH #3	Aqueous	▶	04/19/96	04/23/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	1.7	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	58.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	0.034	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96

LJO/kdwr:lw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-3
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 9 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH #3	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride, Dissolved	80.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Nitrate+Nitrite as N	1.7	mg/L	1.0	0.050	353.2	04/25/96	CM	
Sulfate, Dissolved	130.	mg/L	20	1.0	375.4	04/24/96	WL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/08/96

LJO/ejnpph/rlw(dw)

CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-4
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH #4	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.24	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.037	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	32.	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	0.094	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Dissolved	2.7	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.30	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010
 (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwkdw
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-4
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH #4	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	2.0	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	55.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	0.037	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96
 LJO/kdwkdw
 MD24ICW1
 CC: STEVE MORROW
 CLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-4
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH #4	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride, Dissolved	73.	mg/L	1.0	2.0	325.2	04/26/96	LT	
Nitrate+Nitrite as N	2.1	mg/L	1.0	0.050	353.2	04/25/96	CM	
Sulfate, Dissolved	130.	mg/L	20	1.0	375.4	04/24/96	WL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/08/96

LJO/ejnpgh/rlw(dw)

CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-5
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
SO. DITCH POND-F	Aqueous			▶		04/19/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Dissolved	0.020	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Dissolved	190.	mg/L	5.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Dissolved	3.3	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Dissolved	0.24	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/24/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwkdw
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-5
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH POND-F	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96	CD	1
Potassium, Dissolved	2.0	mg/L	1.0	1.0	200.7/6010	04/25/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Sodium, Dissolved	46.	mg/L	1.0	0.10	200.7/6010	04/25/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96

LJO/kdwkdw
 MD24 ICWL
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-6
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SO. DITCH POND-U	Aqueous	▶		04/19/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Total	0.84	mg/L	1.0	0.10	200.7/6010	04/25/96	CD	1
Antimony, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Arsenic, Total	<0.008	mg/L	1.0	0.008	200.7/6010	04/25/96	CD	1
Barium, Total	0.020	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Beryllium, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Cadmium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96	CD	1
Calcium, Total	190	mg/L	5.0	0.050	200.7/6010	04/26/96	CD	1
Chromium, Total	0.020	mg/L	1.0	0.015	200.7/6010	04/25/96	CD	1
Cobalt, Total	<0.030	mg/L	1.0	0.030	200.7/6010	04/25/96	CD	1
Copper, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Iron, Total	0.082	mg/L	1.0	0.025	200.7/6010	04/25/96	CD	1
Lead, Total	<0.005	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Magnesium, Total	3.1	mg/L	1.0	0.050	200.7/6010	04/25/96	CD	1
Manganese, Total	0.23	mg/L	1.0	0.005	200.7/6010	04/25/96	CD	1
Mercury, Total	<0.20	µg/L	1.0	0.20	245.1	04/25/96	DE	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/24/96 by DJE using 3010
- (2) Sample Preparation on 04/25/96 by DJE using 245.1

05/08/96

LJO/kdwrlw(dw)
 MD24ICW1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0749-6
Report Date: 05/08/96
PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 16 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SO. DITCH POND-U	Aqueous	▶		04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Nickel, Total	<0.040	mg/L	1.0	0.040	200.7/6010	04/25/96 CD	1
Potassium, Total	2.0	mg/L	1.0	1.0	200.7/6010	04/25/96 EM	1
Selenium, Total	<0.010	mg/L	1.0	0.010	200.7/6010	04/25/96 CD	1
Silver, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96 CD	1
Sodium, Total	46.	mg/L	1.0	0.10	200.7/6010	04/25/96 EM	1
Thallium, Total	<0.015	mg/L	1.0	0.015	200.7/6010	04/25/96 CD	1
Vanadium, Total	<0.025	mg/L	1.0	0.025	200.7/6010	04/25/96 CD	1
Zinc, Total	0.025	mg/L	1.0	0.025	200.7/6010	04/25/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 04/24/96 by DJE using 3010

05/08/96

LJO/kdwr1w (dw)
MD24ICW1
CC: STEVE MORROW
OLIN
ELIZABETH PERRY
SMITH-BCM



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-6
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 17 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SO. DITCH POND-U	Aqueous	▶		04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	42.	mg/L	1.0	2.0	325.2	04/26/96	LT
Nitrate+Nitrite as N	6.8	mg/L	2.0	0.050	353.2	04/25/96	CM
Sulfate	630	mg/L	100	1.0	375.4	04/24/96	WL

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/08/96

LJO/ejnpph/rlw(dw)

CC: STEVE MORROW
 CLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-7
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 18 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
FLOC F#1	Solid	▶		04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Total	19000	mg/kgdrywt	5.0	1.5	6010	04/30/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/29/96 by DJE using 3050

05/08/96

LJO/kcdwkdw
 MD29ICS1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-8
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
FLOC F#2	Solid	▶		04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Total	7400	mg/kgdrywt	5.0	1.5	6010	04/30/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/29/96 by DJE using 3050

05/08/96

LJO/kdwkdw
 MD29ICS1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-9
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 20 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
FLOC F#3	Solid	▶		04/19/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Total	18000	mg/kgdrywt	1.0	1.5	6010	04/30/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/29/96 by DJE using 3050

05/08/96

LJO/kdwkdw
 MD29ICS1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-10
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
FLOC F#4	Solid	▶			04/19/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Total	930	mg/kgdrywt	1.0	1.5	6010	04/30/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/29/96 by DJE using 3050

05/08/96
 LJO/kdwkdw
 MD29ICS1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0749-11
 Report Date: 05/08/96
 PO No. : SE-CH-827-VAR-C

REPORT OF ANALYTICAL RESULTS

Page 22 of 22

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
FLOC F#5	Solid	▶			04/19/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chromium, Total	5200	mg/kgdrywt	1.0	1.5	6010	04/30/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/29/96 by DJE using 3050

05/08/96

LJO/kdwkdw
 MD29ICS1
 CC: STEVE MORROW
 OLIN
 ELIZABETH PERRY
 SMITH-BCM

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-1
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 1 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SS017XXBKX	Solid	CLIENT			04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Calcium, Total	120	mg/kgdrywt	1.0	5.0	6010	04/25/96	CD	1
Potassium, Total	120	mg/kgdrywt	1.0	100	6010	04/27/96	CD	1
Sodium, Total	23	mg/kgdrywt	1.0	10	6010	04/27/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-1
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 2 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS017XXBKX	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96 CM	1
Nitrogen-Ammonia as N	34.	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96 CM	2,3
Solids-Total Residue (TS)	85.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96 JF	4
Sulfate	<40.	mg/kgdrywt	2.0	20	9038	04/29/96 WL	5,6

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CLM
- (2) Sample Preparation on 04/26/96 by CLM
- (3) Duplicate analyses were performed on this sample for this parameter. The precision of the duplicate results is outside the laboratory's acceptance range. Sample homogeneity may be a factor. The individual results were 34 and 21.
- (4) Sample Preparation on 04/24/96 by JF
- (5) Sample Preparation on 04/25/96 by JF using ASTM D3987
- (6) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/07/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-1
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS017XXBKX	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Polynuclear Aromatic Hydrocarbons							1,2
Naphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
2-Methylnaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Acenaphthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Fluorene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Phenanthrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Benzo (a) anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Chrysene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Benzo (b) fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Benzo (k) fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	
Benzo (a) pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96 LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A
 (2) Internal standard area(s) are out of criteria. Reanalysis confirmed matrix interference.

05/07/96

LJO/jcbjfg/lp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-1
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS017XXBXX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Indeno(1,2,3-cd)pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96	LM	
Dibenzo(a,h)anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96	LM	
Benzo(g,h,i)perylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/25/96	LM	
Nitrobenzene-d5 (% Recovery)	54.	‡	1.2		EPA 8270	04/25/96	LM	
2-Fluorobiphenyl (% Recovery)	64.	‡	1.2		EPA 8270	04/25/96	LM	
Terphenyl-d14 (% Recovery)	73.	‡	1.2		EPA 8270	04/25/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-2
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS015XXBXX	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	2000	mg/kgdrywt	1.0	5.0	6010	04/27/96 CD.	1
Potassium, Total	290	mg/kgdrywt	1.0	100	6010	04/27/96 CD	1
Sodium, Total	35	mg/kgdrywt	1.0	10	6010	04/27/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24 ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-2
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED	
SS01500BKX	Solid	CLIENT		04/22/96	04/23/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96	CM	1
Nitrogen-Ammonia as N	<8.0	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96	CM	2
Solids-Total Residue (TS)	91.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96	JF	3
Sulfate	<80.	mg/kgdrywt	4.0	20	9038	04/29/96	WL	4,5

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CIM
- (2) Sample Preparation on 04/26/96 by CIM
- (3) Sample Preparation on 04/24/96 by JF
- (4) Sample Preparation on 04/25/96 by JF using ASTM D3987
- (5) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/07/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-2
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
SS015XXBKX	Solid	CLIENT	04/22/96	04/23/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Polynuclear Aromatic Hydrocarbons								
Naphthalene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	1,2
2-Methylnaphthalene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Acenaphthylene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Acenaphthene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Fluorene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Phenanthrene	J43	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Anthracene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Fluoranthene	J66	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Pyrene	J65	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Benzo (a) anthracene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Chrysene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Benzo (b) fluoranthene	J62	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Benzo (k) fluoranthene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	
Benzo (a) pyrene	<360.	µg/kgdrywt	1.1		330 EPA 8270	04/25/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A
 (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

05/07/96

LJO/jcbert/jfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-2
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 8 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS015XXBKX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Indeno(1,2,3-cd)pyrene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/25/96	TN	
Dibenzo(a,h)anthracene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/25/96	TN	
Benzo(g,h,i)perylene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/25/96	TN	
Nitrobenzene-d5 (% Recovery)	48.	%	1.1		EPA 8270	04/25/96	TN	
2-Fluorobiphenyl (% Recovery)	59.	%	1.1		EPA 8270	04/25/96	TN	
Terphenyl-d14 (% Recovery)	59.	%	1.1		EPA 8270	04/25/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbert/jfg/kp(dw)/kwh



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-3
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SS016XXBXX	Solid	CLIENT			04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	270	mg/kgdrywt	1.0	5.0	6010	04/27/96 CD	1
Potassium, Total	220	mg/kgdrywt	1.0	100	6010	04/27/96 CD	1
Sodium, Total	29	mg/kgdrywt	1.0	10	6010	04/27/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24 ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-3
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS0160XBKX	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96 CM	1
Nitrogen-Ammonia as N	37.	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96 CM	2
Solids-Total Residue (TS)	77.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96 JF	3
Sulfate	<40.	mg/kgdrywt	2.0	20	9038	04/29/96 WL	4,5

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CIM
- (2) Sample Preparation on 04/26/96 by CIM
- (3) Sample Preparation on 04/24/96 by JF
- (4) Sample Preparation on 04/25/96 by JF using ASTM D3987
- (5) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/07/96

LJO/ejnkp(dw)/pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-3
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS016QXBKX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Polynuclear Aromatic Hydrocarbons								
Naphthalene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	1
2-Methylnaphthalene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Acenaphthylene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Acenaphthene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Fluorene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Phenanthrene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Anthracene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Fluoranthene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Pyrene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Benzo (a) anthracene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Chrysene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Benzo (b) fluoranthene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Benzo (k) fluoranthene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Benzo (a) pyrene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Indeno (1, 2, 3-cd) pyrene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-3
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS016XXBKX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a,h) anthracene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Benzo(g,h,i)perylene	<430.	µg/kgdrywt	1.3	330	EPA 8270	04/26/96	TN	
Nitrobenzene-d5 (% Recovery)	62.	%	1.3		EPA 8270	04/26/96	TN	
2-Fluorobiphenyl (% Recovery)	76.	%	1.3		EPA 8270	04/26/96	TN	
Terphenyl-d14 (% Recovery)	70.	%	1.3		EPA 8270	04/26/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-4
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
SS01700BKD	Solid	CLIENT			04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	130	mg/kgdrywt	1.0	5.0	6010	04/27/96 CD	1
Potassium, Total	120	mg/kgdrywt	1.0	100	6010	04/27/96 CD	1
Sodium, Total	22	mg/kgdrywt	1.0	10	6010	04/27/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-4
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS017XXBKD	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96	CM	1
Nitrogen-Ammonia as N	17.	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96	CM	2
Solids-Total Residue (TS)	85.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96	JF	3
Sulfate	30.	mg/kgdrywt	1.0	20	9038	04/29/96	WL	4

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CIM
- (2) Sample Preparation on 04/26/96 by CIM
- (3) Sample Preparation on 04/24/96 by JF
- (4) Sample Preparation on 04/25/96 by JF using ASTM D3987

05/07/96

LJO/ejnkq (dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-4
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SS017XXBKD	Solid		CLIENT		04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Polynuclear Aromatic Hydrocarbons							1,2
Naphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
2-Methylnaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Acenaphthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Fluorene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Phenanthrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Fluoranthene	J47	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Pyrene	J47	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Benzo (a) anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Chrysene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Benzo (b) fluoranthene	J58	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Benzo (k) fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN
Benzo (a) pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A
- (2) "J" flag denotes an estimated value less than the Laboratory's Practical Quantitation Level.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-4
 Report Date: 05/07/96
 FO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
SS017XXBKD	Solid	CLIENT			04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Indeno(1,2,3-cd)pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Dibenzo(a,h)anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo(g,h,i)perylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Nitrobenzene-d5 (% Recovery)	54.	%	1.2		EPA 8270	04/26/96	TN	
2-Fluorobiphenyl (% Recovery)	61.	%	1.2		EPA 8270	04/26/96	TN	
Terphenyl-d14 (% Recovery)	57.	%	1.2		EPA 8270	04/26/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-6
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-ML
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 17 of 28

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SS018XXBKX	Solid		CLIENT		04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	250	mg/kgdrywt	1.0	5.0	6010	04/27/96 CD.	1
Potassium, Total	230	mg/kgdrywt	1.0	100	6010	04/27/96 CD	1
Sodium, Total	26	mg/kgdrywt	1.0	10	6010	04/27/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-6
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SS018XXBKK	Solid		CLIENT		04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96 CM	1
Nitrogen-Ammonia as N	31.	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96 CM	2
Solids-Total Residue (TS)	84.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96 JF	3
Sulfate	<20	mg/kgdrywt	1.0	20	9038	04/29/96 WL	4

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CLM
- (2) Sample Preparation on 04/26/96 by CLM
- (3) Sample Preparation on 04/24/96 by JF
- (4) Sample Preparation on 04/25/96 by JF using ASTM D3987

05/07/96

LJO/ejnkp(dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-6
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
SS018XXBKX	Solid	CLIENT	04/22/96	04/23/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Polynuclear Aromatic Hydrocarbons								
Naphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	1
2-Methylnaphthalene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Acenaphthylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Acenaphthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Fluorene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Phenanthrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo (a) anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Chrysene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo (b) fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo (k) fluoranthene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo (a) pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Indeno (1, 2, 3- cd) pyrene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-6
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS018XXBXX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a,h) anthracene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Benzo (g,h,i) perylene	<400.	µg/kgdrywt	1.2	330	EPA 8270	04/26/96	TN	
Nitrobenzene-d5 (% Recovery)	48.	%	1.2		EPA 8270	04/26/96	TN	
2-Fluorobiphenyl (% Recovery)	58.	%	1.2		EPA 8270	04/26/96	TN	
Terphenyl-d14 (% Recovery)	59.	%	1.2		EPA 8270	04/26/96	TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-7
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS019XXBKK	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	880	mg/kgdrywt	1.0	5.0	6010	04/27/96 CD	1
Potassium, Total	260	mg/kgdrywt	1.0	100	6010	04/27/96 CD	1
Sodium, Total	28	mg/kgdrywt	1.0	10	6010	04/27/96 CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3050

05/07/96

LJO/kdwkdw
 MD24ICS1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-7
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
SS019XXBKX	Solid	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Cyanide, Total	<2.0	mg/kgdrywt	1.0	2.0	APHA 412/901	04/25/96	CM	1
Nitrogen-Ammonia as N	19.	mg/kgdrywt	1.0	8.0	APHA 420/350	04/29/96	CM	2
Solids-Total Residue (TS)	89.	wt %	1.0	0.10	CLP/CIP SOW	04/25/96	JF	3
Sulfate	<40.	mg/kgdrywt	2.0	20	9038	04/29/96	WL	4,5

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 04/25/96 by CLM
- (2) Sample Preparation on 04/26/96 by CLM
- (3) Sample Preparation on 04/24/96 by JF
- (4) Sample Preparation on 04/25/96 by JF using ASTM D3987
- (5) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

05/07/96

LJO/ejnlcp (dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-7
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
SS019XXBKX	Solid		CLIENT		04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Polynuclear Aromatic Hydrocarbons							1
Naphthalene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
2-Methylnaphthalene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Acenaphthylene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Acenaphthene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Fluorene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Phenanthrene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Anthracene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Fluoranthene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Pyrene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Benzo (a) anthracene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Chrysene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Benzo (b) fluoranthene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Benzo (k) fluoranthene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Benzo (a) pyrene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	
Indeno (1,2,3-cd) pyrene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96 TN	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by MSK using EPA 3550A

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT

CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-7
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 24 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
SS019XXBKX	Solid	CLIENT		04/22/96	04/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Dibenzo (a, h) anthracene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96	TN
Benzo (g, h, i) perylene	<360.	µg/kgdrywt	1.1	330	EPA 8270	04/26/96	TN
Nitrobenzene-d5 (% Recovery)	56.	‡	1.1		EPA 8270	04/26/96	TN
2-Fluorobiphenyl (% Recovery)	65.	‡	1.1		EPA 8270	04/26/96	TN
Terphenyl-d14 (% Recovery)	67.	‡	1.1		EPA 8270	04/26/96	TN

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kp(dw)/kwh

US EPA ARCHIVE DOCUMENT

CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-8
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-ML
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 25 of 28

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED	
QS002XXBKX	Aqueous			CLIENT		04/22/96	04/23/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Calcium, Total	0.11	mg/L	1.0	0.050	200.7/6010	04/25/96 CD	1
Potassium, Total	<1.0	mg/L	1.0	1.0	200.7/6010	04/25/96 EM	1
Sodium, Total	<0.10	mg/L	1.0	0.10	200.7/6010	04/25/96 EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/24/96 by DJE using 3010

05/07/96

LJO/kdwkdw
 MD24ICW1

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-8
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
QS002XXBKX	Aqueous			CLIENT		04/22/96	04/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Cyanide, Total	<20	µg/L	1.0	20	335.2/335.3	04/25/96	CM	1
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	04/29/96	CM	
Sulfate	<1.0	mg/L	1.0	1.0	375.4	04/26/96	WL	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/25/96 by CLM

05/07/96

LJO/ejnkp (dw) /pph

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-8
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-M1
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 27 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QS002XXBKX	Aqueous	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Polynuclear Aromatic Hydrocarbons								
Naphthalene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	1
2-Methylnaphthalene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Acenaphthylene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Acenaphthene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Fluorene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Phenanthrene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Anthracene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Fluoranthene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Pyrene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Benzo (a) anthracene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Chrysene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Benzo (b) fluoranthene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Benzo (k) fluoranthene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Benzo (a) pyrene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Indeno (1, 2, 3-cd) pyrene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 04/23/96 by MSK using EPA 3520

05/07/96

LJO/jcbjfg/kwh/mjd(dw)

US EPA ARCHIVE DOCUMENT



CLIENT: CHARLES LYMAN
 ABB-WAKEFIELD
 CORPORATE PLACE 128, BUILDING 3, SUITE 25
 WAKEFIELD, MA 01880

Lab Number : WM-0747-8
 Report Date: 05/07/96
 PO No. : MSA-95-01 806-MI
 Project : 07331.08

REPORT OF ANALYTICAL RESULTS

Page 28 of 28

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
QS002XXBKX	Aqueous	CLIENT		04/22/96	04/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Dibenzo (a, h) anthracene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM.	
Benzo (g, h, i) perylene	<10.	µg/kgdrywt	1.0	10	EPA 8270	04/25/96	LM	
Nitrobenzene-d5 (% Recovery)	56.	%	1.0		EPA 8270	04/25/96	LM	
2-Fluorobiphenyl (% Recovery)	50.	%	1.0		EPA 8270	04/25/96	LM	
Terphenyl-d14 (% Recovery)	76.	%	1.0		EPA 8270	04/25/96	LM	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/07/96

LJO/jcbjfg/kwh/mjd(dw)



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-1
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

Page 1 of 26

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW39	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000002



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-1
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW39	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	11.	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	0.69	mg/L	1.0	0.10	350.1	05/03/96	CM	
Sulfate	350.	mg/L	20	1.0	375.4	05/08/96	WL	
pH (Laboratory)	5.9	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000003

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-3
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW24	Aqueous	R.MEHALICK	05/01/96	05/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp (dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

900000

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-3
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW24	Aqueous	R.MEHALICK			05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	110.	mg/L	1.0	2.0	325.2	05/03/96	LT
Nitrogen-Ammonia as N	130.	mg/L	50	0.10	350.1	05/07/96	CM
Sulfate	340.	mg/L	20	1.0	375.4	05/08/96	WL
pH (Laboratory)	7.4	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000001



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-4
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW25	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000000

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-4
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW25	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	64.	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	56.	mg/L	10	0.10	350.1	05/03/96	CM	
Sulfate	140.	mg/L	10	1.0	375.4	05/08/96	WL	
pH (Laboratory)	6.2	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000000



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-5
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW10S	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	2.5	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000010



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-5
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
GW10S	Aqueous	R.MEHALICK	05/01/96	05/02/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	4.1	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	05/03/96	CM	
Sulfate	15.	mg/L	2.0	1.0	375.4	05/08/96	WL	
pH (Laboratory)	4.5	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000011



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-6
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW26	Aqueous	R.MEHALICK		05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96 EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96 EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp (dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000012

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-6
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW26	Aqueous	R.MEHALICK			05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	67.	mg/L	1.0	2.0	325.2	05/03/96	LT
Nitrogen-Ammonia as N	71.	mg/L	10	0.10	350.1	05/03/96	CM
Sulfate	240.	mg/L	40	1.0	375.4	05/08/96	WL
pH (Laboratory)	6.1	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000013



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-7
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

Page 11 of 26

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
GW42S	Aqueous			R.MEHALICK		05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.44	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

000014

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-7
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
GW42S	Aqueous	R.MEHALICK			05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	76.	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	6.0	mg/L	1.0	0.10	350.1	05/03/96	CM	
Sulfate	16.	mg/L	2.0	1.0	375.4	05/08/96	WL	
pH (Laboratory)	5.3	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000015



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-8
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW43S	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/kdwlp(dw)

ME03ICW1

CC: 615/336-4511*Steve Morrow

OLIN CHEMICALS

P.O. BOX 248

LOWER RIVER ROAD

000019



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-8
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY			SAMPLED DATE RECEIVED		
GW43S	Aqueous		R.MEHALICK			05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	130.	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	120.	mg/L	50	0.10	350.1	05/07/96	CM	
Sulfate	490.	mg/L	40	1.0	375.4	05/08/96	WL	
pH (Laboratory)	6.3	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000017

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-9
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW55S	Aqueous		R.MEHALICK		05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	1.9	mg/L	1.0	0.10	200.7/6010	05/07/96 EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96 EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

US EPA ARCHIVE DOCUMENT

810000

05/17/96

LJO/kdwlp (dw)
 ME03ICW1

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-9
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW555	Aqueous		R.MEHALICK		05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	330.	mg/L	2.0	2.0	325.2	05/03/96	LT
Nitrogen-Ammonia as N	280	mg/L	100	0.10	350.1	05/07/96	CM
Sulfate	1300.	mg/L	100	1.0	375.4	05/08/96	WL
pH (Laboratory)	5.6	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000010



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-10
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW19S	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

000020

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-10
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED			
GW19S	Aqueous	R.MEHALICK			05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	4.3	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	0.45	mg/L	1.0	0.10	350.1	05/03/96	CM	
Sulfate	1200.	mg/L	100	1.0	375.4	05/08/96	WL	
pH (Laboratory)	6.4	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

000021

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-11
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW35S	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	0.018	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp(dw)

ME03ICW1

CC: 615/336-4511*Steve Morrow

OLIN CHEMICALS

P.O. BOX 248

LOWER RIVER ROAD

000022



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-11
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW35S	Aqueous		R.MEHALICK		05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	30.	mg/L	1.0	2.0	325.2	05/03/96	LIT
Nitrogen-Ammonia as N	75.	mg/L	10	0.10	350.1	05/03/96	CM
Sulfate	650.	mg/L	50	1.0	375.4	05/08/96	WL
pH (Laboratory)	6.4	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000023

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-12
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW39D	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96	EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96	EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

000024

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-12
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED		
GW39D	Aqueous		R.MEHALICK		05/01/96	05/02/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	18.	mg/L	1.0	2.0	325.2	05/03/96	LT
Nitrogen-Ammonia as N	0.70	mg/L	1.0	0.10	350.1	05/03/96	CM
Sulfate	360.	mg/L	20	1.0	375.4	05/08/96	WL
pH (Laboratory)	6.1	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000025



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-13
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
RINSE BLANK	Aqueous	R.MEHALICK		05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96 EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96 EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000026



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-13
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
RINSE BLANK	Aqueous	R.MEHALICK		05/01/96	05/02/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Chloride	<2.0	mg/L	1.0	2.0	325.2	05/03/96	LT	
Nitrogen-Ammonia as N	<0.10	mg/L	1.0	0.10	350.1	05/03/96	CM	
Sulfate	<1.0	mg/L	1.0	1.0	375.4	05/08/96	WL	
pH (Laboratory)	5.2	pH Units	1.0	0.1	150.1	05/02/96	JF	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

US EPA ARCHIVE DOCUMENT

000027

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-2
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW11	Aqueous	R.MEHALICK		05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/07/96 EM	1
Chromium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/07/96 EM	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/03/96 by DJE using 3010

05/17/96

LJO/kdwlp(dw)
 ME03ICW1
 CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

000000



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0820-2
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : WEIR

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW11	Aqueous	R.MEHALICK		05/01/96	05/02/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Chloride	32.	mg/L	1.0	2.0	325.2	05/03/96	LT
Nitrogen-Ammonia as N	17.	mg/L	2.0	0.10	350.1	05/03/96	CM
Sulfate	270.	mg/L	50	1.0	375.4	05/08/96	WL
pH (Laboratory)	6.5	pH Units	1.0	0.1	150.1	05/02/96	JF

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

US EPA ARCHIVE DOCUMENT

05/17/96

LJO/ejnlp(dw)

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

500005

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0838-1
Report Date: 05/17/96
PO No. : SE-CH-827-VAR-C
Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 1 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW17S	Aqueous	R.MEHALICK			05/01/96	05/03/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.910	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-2
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-17D	Aqueous	R.MEHALICK		05/01/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-3
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-27S	Aqueous	R.MEHALICK		05/01/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-4
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 4 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-27D	Aqueous	R.MEHALICK		05/01/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-5
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-35S	Aqueous	R.MEHALICK		05/01/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore , standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-6
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 6 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-34S	Aqueous	R.MEHALICK		05/02/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0838-7
Report Date: 05/17/96
PO No. : SE-CH-827-VAR-C
Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 7 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
GW-34D	Aqueous	R.MEHALICK		05/02/96	05/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96	PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-8
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-22S	Aqueous	R.MEHALICK			05/02/96	05/03/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0838-9
Report Date: 05/17/96
PO No. : SE-CH-827-VAR-C
Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 9 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-22SD	Aqueous	R.MEHALICK			05/02/96	05/03/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD

CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0838-10
Report Date: 05/17/96
PO No. : SE-CH-827-VAR-C
Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 10 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-22D	Aqueous	R.MEHALICK		05/02/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<0.91	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
OLIN CHEMICALS
51 EAMES STREET
WILMINGTON, MA 01887

Lab Number : WM-0838-11
Report Date: 05/17/96
PO No. : SE-CH-827-VAR-C
Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

Page 11 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
GW-35D	Aqueous	R.MEHALICK		05/02/96	05/03/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	3.8	mg/L	4.0	.91	HPLC	05/14/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
OLIN CHEMICALS
P.O. BOX 248
LOWER RIVER ROAD



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-12
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
GW-36	Aqueous	R.MEHALICK	05/02/96	05/03/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: DON CAMERON
 OLIN CHEMICALS
 51 EAMES STREET
 WILMINGTON, MA 01887

Lab Number : WM-0838-13
 Report Date: 05/17/96
 PO No. : SE-CH-827-VAR-C
 Project : OPEX KEMPORE

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
GW-37	Aqueous	R.MEHALICK			05/02/96	05/03/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Azodicarbonamide	<3.6	mg/L	4.0	.91	HPLC	05/13/96 PR	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample dilution required due to matrix interference, sample viscosity or other matrix-related problem; therefore, standard laboratory Practical Quantitation Level (PQL) could not be achieved.

05/17/96

LJO/jcbejn/lp(dw)/pr

CC: 615/336-4511*Steve Morrow
 OLIN CHEMICALS
 P.O. BOX 248
 LOWER RIVER ROAD

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-1
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #15	Aqueous	CLIENT		05/20/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.02	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pgh

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-2
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #9	Aqueous	CLIENT		05/20/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.982	g/mL	1.0	0.001	ASTM	06/25/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-3
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #7	Aqueous	CLIENT		05/20/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.999	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pjh

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-4
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 4 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #6	Aqueous	CLIENT		05/20/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-5
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 5 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
MP-3 #11	Aqueous	CLIENT	05/21/96	06/24/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.998	g/mL	1.0	0.001	ASIM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-6
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-3 #17	Aqueous	CLIENT		05/21/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.997	g/mL	1.0	0.001	ASTM	06/25/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-7
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-3 #7	Aqueous	CLIENT		05/21/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw) /pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-8
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 8 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-3 #5	Aqueous	CLIENT		05/21/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-9
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 9 of 13

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-3 #4	Aqueous	CLIENT			05/22/96	06/24/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	06/25/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw) /pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GECOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1313-10
Report Date: 07/12/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
MP-1 #17	Aqueous	CLIENT	05/22/96	06/24/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.995	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1313-11
Report Date: 07/12/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #11	Aqueous	CLIENT		05/22/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.998	g/mL	1.0	0.001	ASTM	06/25/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw) /pph

CC: 610/825-3800*BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-12
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #5	Aqueous	CLIENT		05/23/96	06/24/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1313-13
 Report Date: 07/12/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-1 #7	Aqueous	CLIENT			05/23/96	06/24/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.999	g/mL	1.0	0.001	ASTM	06/25/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

07/12/96

LJO/ejnlp(dw)/pph

CC: 610/825-3800*BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0966-3
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE	RECEIVED
MP-2 #15	Aqueous	R.SCHMIDT	05/20/96	05/20/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	0.977	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-3
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 1 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #9	Aqueous	R.SCHMIDT		05/20/96	05/21/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.964	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0976-5
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-2 #7	Aqueous	R.SCHMIDT			05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.962	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0976-6
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #4	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	1.06	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0976-7
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #3	Aqueous	R.SCHMIDT		05/20/96	05/21/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.06	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-8
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 5 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-2 #2	Aqueous	R.SCHMIDT			05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.08	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-9
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 6 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #1	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	1.07	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-10
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 7 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-2 #6	Aqueous	R.SCHMIDT			05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.995	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/kwh/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462



US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GECOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0990-3
Report Date: 08/09/96
PO No. : C950085
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-3 #11	Aqueous	RICH SCHMIDT		05/21/96	05/22/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.951	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0990-8
 Report Date: 08/09/96
 PO No. : C950085
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 2 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-3 #17	Aqueous	RICH SCHMIDT			05/21/96	05/22/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.958	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/kwh/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
GECMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0990-10
Report Date: 08/09/96
PO No. : C950085
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY				SAMPLED DATE RECEIVED	
MP-3 #7	Aqueous	RICH SCHMIDT				05/21/96	05/22/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.997	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0990-12
Report Date: 08/09/96
PO No. : C950085
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY				SAMPLED DATE RECEIVED		
MP-3 #5	Aqueous	RICH SCHMIDT				05/21/96	05/22/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	0.995	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0995-1
 Report Date: 08/09/96
 PO No. : C950085
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 1 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-3 #4	Aqueous	CLIENT		05/22/96	05/22/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.967	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/kwh/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0995-2
 Report Date: 08/09/96
 PO No. : C950085
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 2 of 4

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
MP-3 #3	Aqueous	CLIENT	05/22/96	05/22/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	1.02	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0995-3
 Report Date: 08/09/96
 PO No. : C950085
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-3 #2	Aqueous	CLIENT			05/22/96	05/22/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.02	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0995-4
 Report Date: 08/09/96
 PO No. : C950085
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-3 #1	Aqueous	CLIENT			05/22/96	05/22/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.04	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: BRUCE CUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1004-2
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED				
MP-1 #17	Aqueous	CLIENT	05/22/96	05/23/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.962	g/mL	1.0	0.001	ASIM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
GECOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1004-7
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
MP-1 #11	Aqueous	CLIENT	05/22/96	05/23/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	0.955	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/kwh/lp(dw)

CC: BRUCE CUSHING
SMITH ENVIRONMENTAL TECHNOLOGIES
ONE PLYMOUTH MEETING
PLYMOUTH MEETING, PA 19462



US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1013-1
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 1 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #4	Aqueous	R.SCHMIDT		05/23/96	05/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.01	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: SMITH BCM

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1013-2
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 2 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #1	Aqueous	R.SCHMIDT		05/23/96	05/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.05	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: SMITH BCM



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1013-3
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 3 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY			SAMPLED DATE RECEIVED		
MP-1 #2	Aqueous	R.SCHMIDT			05/23/96	05/23/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.07	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: SMITH BCM



CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-1013-4
Report Date: 08/09/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 4 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED					
MP-1 #3	Aqueous	R.SCHMIDT	05/23/96	05/23/96				
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Specific Gravity	1.02	g/mL	1.0	0.001	ASTM	05/28/96	BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp (dw)

CC: SMITH BCM



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1013-5
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #3DUP	Aqueous	R.SCHMIDT		05/23/96	05/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	1.04	g/mL	1.0	0.001	ASTM	06/14/96	DN

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/drt/lp(dw)

CC: SMITH BCM

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1013-6
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-1 #5	Aqueous	R.SCHMIDT		05/23/96	05/23/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.976	g/mL	1.0	0.001	ASTM	05/28/96	BC

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/lp(dw)

CC: SMITH BCM

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-1013-7
 Report Date: 08/09/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 7 of 7

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY				SAMPLED DATE RECEIVED	
MP-1 #7	Aqueous	R.SCHMIDT				05/23/96	05/24/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Specific Gravity	0.988	g/mL	1.0	0.001	ASTM	05/28/96 BC	

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

08/09/96

LJO/ejnbac/lp(dw)

CC: SMITH BCM



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-1
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #17	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/22/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Barium, Dissolved	0.026	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Calcium, Dissolved	11.	mg/L	1.0	0.050	200.7/6010	05/23/96	EM	1
Chromium, Dissolved	0.028	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Iron, Dissolved	38.	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Magnesium, Dissolved	7.0	mg/L	1.0	0.050	200.7/6010	05/22/96	CD	1
Manganese, Dissolved	3.3	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010
 (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp (dw)
 ME21ICW3
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-1
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #17	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	3.5	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	250.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp (dw)
 ME21ICW3
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-2
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #16	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	<0.10	mg/L	1.0	0.10	200.7/6010	05/22/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Barium, Dissolved	0.023	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Calcium, Dissolved	9.7	mg/L	1.0	0.050	200.7/6010	05/23/96	EM	1
Chromium, Dissolved	0.050	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Iron, Dissolved	33.	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Magnesium, Dissolved	4.7	mg/L	1.0	0.050	200.7/6010	05/22/96	CD	1
Manganese, Dissolved	2.5	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/21/96 by DJE using 3010
- (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
GECOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0966-2
Report Date: 06/11/96
PO No. : C95008J
Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 4 of 12

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #16	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	3.3	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	220.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
(1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-3
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #15	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.15	mg/L	1.0	0.10	200.7/6010	05/22/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Barium, Dissolved	0.022	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Calcium, Dissolved	13.	mg/L	1.0	0.050	200.7/6010	05/23/96	EM	1
Chromium, Dissolved	0.15	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Iron, Dissolved	15.	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Magnesium, Dissolved	5.5	mg/L	1.0	0.050	200.7/6010	05/22/96	CD	1
Manganese, Dissolved	2.1	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010
 (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp(dw)
 ME21ICW3
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-3
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 6 of 12

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #15	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	3.4	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	270.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	0.047	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-4
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #14	Aqueous			R.SCHMIDT		05/20/96	05/20/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.21	mg/L	1.0	0.10	200.7/6010	05/22/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Barium, Dissolved	0.037	mg/L	1.0	0.005	200.7/6010	05/23/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Calcium, Dissolved	11.	mg/L	1.0	0.050	200.7/6010	05/23/96	EM	1
Chromium, Dissolved	0.14	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Iron, Dissolved	6.1	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Magnesium, Dissolved	2.9	mg/L	1.0	0.050	200.7/6010	05/23/96	CD	1
Manganese, Dissolved	0.80	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/21/96 by DJE using 3010
- (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-4
 Report Date: 06/11/96
 FO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #14	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	2.4	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	130.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	0.026	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp (dw)
 ME21ICW3
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-5
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #13	Aqueous			R.SCHMIDT		05/20/96	05/20/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.21	mg/L	1.0	0.10	200.7/6010	05/22/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96	CD	1
Barium, Dissolved	0.050	mg/L	1.0	0.005	200.7/6010	05/23/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Calcium, Dissolved	11.	mg/L	1.0	0.050	200.7/6010	05/23/96	EM	1
Chromium, Dissolved	0.21	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Iron, Dissolved	4.7	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Magnesium, Dissolved	2.9	mg/L	1.0	0.050	200.7/6010	05/23/96	CD	1
Manganese, Dissolved	0.82	mg/L	1.0	0.005	200.7/6010	05/22/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010
 (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp(dw)
 ME21ICW3
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT

CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-5
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 10 of 12

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #13	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	1.5	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	89.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	0.037	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

(1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-6
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #12	Aqueous	R.SCHMIDT		05/20/96	05/20/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	0.15	mg/L	1.0	0.10	200.7/6010	05/22/96 CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96 CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/22/96 CD	1
Barium, Dissolved	0.051	mg/L	1.0	0.005	200.7/6010	05/23/96 CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96 CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96 CD	1
Calcium, Dissolved	10.	mg/L	1.0	0.050	200.7/6010	05/23/96 EM	1
Chromium, Dissolved	0.12	mg/L	1.0	0.015	200.7/6010	05/22/96 CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/22/96 CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96 CD	1
Iron, Dissolved	3.8	mg/L	1.0	0.025	200.7/6010	05/22/96 CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/22/96 CD	1
Magnesium, Dissolved	2.2	mg/L	1.0	0.050	200.7/6010	05/23/96 CD	1
Manganese, Dissolved	0.76	mg/L	1.0	0.005	200.7/6010	05/22/96 CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/30/96 GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/21/96 by DJE using 3010
- (2) Sample Preparation on 05/29/96 by GFB using 245.1

06/11/96

LJO/kdwlp(dw)
 ME211CW3

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0966-6
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #12	Aqueous	R.SCHMIDT		05/20/96	05/20/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/22/96	CD	1
Potassium, Dissolved	1.1	mg/L	1.0	1.0	200.7/6010	05/23/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/22/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Sodium, Dissolved	36.	mg/L	1.0	0.10	200.7/6010	05/23/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/22/96	CD	1
Vanadium, Dissolved.	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/22/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/21/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)

ME21ICW3

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-1
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED	
MP-2 #11	Aqueous			R.SCHMIDT		05/20/96	05/21/96
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	0.28	mg/L	1.0	0.10	200.7/6010	05/24/96 CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96 CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96 CD	1
Barium, Dissolved	0.077	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96 CD	1
Calcium, Dissolved	12.	mg/L	1.0	0.050	200.7/6010	05/24/96 CD	1
Chromium, Dissolved	0.24	mg/L	1.0	0.015	200.7/6010	05/24/96 CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/24/96 CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96 CD	1
Iron, Dissolved	4.6	mg/L	1.0	0.025	200.7/6010	05/24/96 CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Magnesium, Dissolved	3.0	mg/L	1.0	0.050	200.7/6010	05/24/96 CD	1
Manganese, Dissolved	1.1	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96 GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1

06/11/96

LJO/kdwlp (dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-1
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #11	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	2.4	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	37.	mg/L	1.0	0.30	200.7/6010	05/24/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)
 ME23ICW1
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-2
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #10	Aqueous	R.SCHMIDT		05/20/96	05/21/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED BY	NOTES
Aluminum, Dissolved	0.29	mg/L	1.0	0.10	200.7/6010	05/24/96 CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96 CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96 CD	1
Barium, Dissolved	0.046	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96 CD	1
Calcium, Dissolved	12.	mg/L	1.0	0.050	200.7/6010	05/24/96 CD	1
Chromium, Dissolved	0.17	mg/L	1.0	0.015	200.7/6010	05/24/96 CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/24/96 CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96 CD	1
Iron, Dissolved	4.3	mg/L	1.0	0.025	200.7/6010	05/24/96 CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Magnesium, Dissolved	3.3	mg/L	1.0	0.050	200.7/6010	05/24/96 CD	1
Manganese, Dissolved	1.2	mg/L	1.0	0.005	200.7/6010	05/24/96 CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96 GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1

06/11/96

LJO/kdwlp(dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-2
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #10	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	<1.0	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	39.	mg/L	1.0	0.30	200.7/6010	05/24/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	0.026	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)
 ME23ICW1
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-3
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX		SAMPLED BY		SAMPLED DATE RECEIVED			
MP-2 #9	Aqueous		R.SCHMIDT		05/20/96	05/21/96		
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.26	mg/L	1.0	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	0.017	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Calcium, Dissolved	8.6	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	0.23	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	2.1	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	1.9	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Manganese, Dissolved	0.72	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1

06/11/96

LJO/kdwlp (dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-3
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #9	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	<1.0	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	45.	mg/L	1.0	0.30	200.7/6010	05/24/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010

06/11/96

LJO/kdwlp(dw)
 ME23ICW1
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-5
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #7	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	0.76	mg/L	1.0	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	0.012	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Calcium, Dissolved	7.1	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	1.2	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	2.6	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	2.4	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Manganese, Dissolved	0.81	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010
 (2) Sample Preparation on 05/23/96 by DJE using 245.1

06/11/96

LJO/kdwlp (dw)
 ME23ICWI
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-5
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 8 of 20

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #7	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	1.0	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	74.	mg/L	1.0	0.30	200.7/6010	05/24/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	0.031	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010

06/11/96

LJO/kdwlp (dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-6
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE RECEIVED	
MP-2 #4	Aqueous	R.SCHMIDT	05/20/96	05/21/96

PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1200.	mg/L	20	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	0.58	mg/L	25	0.008	200.7/6010	05/31/96	CD	1
Arsenic, Dissolved	0.56	mg/L	20	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	<0.10	mg/L	20	0.005	200.7/6010	05/24/96	CD	1,2
Beryllium, Dissolved	0.17	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,2
Calcium, Dissolved	390.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	1600.	mg/L	500	0.015	200.7/6010	05/28/96	CD	1
Chromium, Hexavalent	34.	mg/L	100	0.015	6010	05/30/96	EM	3
Cobalt, Dissolved	7.0	mg/L	20	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	4.3	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	1100.	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	0.72	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	770.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 05/23/96 by DJE using 3010
 - (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
 - (3) Sample Preparation on 05/21/96 by GFB using 7195

06/11/96

LJO/kdwlp (dw)
 ME23ICWL
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-6
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #4	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	290.	mg/L	20	0.005	200.7/6010	05/24/96	EM	1
Mercury, Dissolved	0.21	µg/L	1.0	0.20	245.1	05/25/96	GB	2
Nickel, Dissolved	6.0	mg/L	20	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	100.	mg/L	20	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,3
Silver, Dissolved	<0.30	mg/L	20	0.015	200.7/6010	05/24/96	CD	1,3
Sodium, Dissolved	15000.	mg/L	100	0.10	200.7/6010	05/28/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	05/31/96	CD	1,3
Vanadium, Dissolved	0.13	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	11.	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

06/11/96

LJO/kdwlp(dw)

ME23ICW1

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-7
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #3	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1100.	mg/L	20	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	<0.20	mg/L	25	0.008	200.7/6010	05/29/96	CD	1,2
Arsenic, Dissolved	0.60	mg/L	20	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	<0.10	mg/L	20	0.005	200.7/6010	05/24/96	CD	1,2
Beryllium, Dissolved	0.23	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,2
Calcium, Dissolved	340.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	2400.	mg/L	500	0.015	200.7/6010	05/28/96	CD	1
Chromium, Hexavalent	54.	mg/L	100	0.015	6010	05/30/96	EM	3
Cobalt, Dissolved	11.	mg/L	20	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	9.2	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	1000.	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	0.60	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	850.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 05/21/96 by GFB using 7195

06/11/96

LJO/kdwlp(dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-7
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #3	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	460.	mg/L	500	0.005	200.7/6010	05/28/96	CD	1
Mercury, Dissolved	0.35	µg/L	1.0	0.20	245.1	05/25/96	GB	2
Nickel, Dissolved	7.5	mg/L	20	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	98	mg/L	20	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,3
Silver, Dissolved	<0.30	mg/L	20	0.015	200.7/6010	05/24/96	CD	1,3
Sodium, Dissolved	18000.	mg/L	100	0.10	200.7/6010	05/28/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	05/31/96	CD	1,3
Vanadium, Dissolved	0.19	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	13.	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

06/11/96

LJO/kdwlp(dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-8
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #2	Aqueous	R. SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1500.	mg/L	20	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	1.2	mg/L	25	0.008	200.7/6010	05/31/96	CD	1
Arsenic, Dissolved	0.77	mg/L	20	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	<0.10	mg/L	20	0.005	200.7/6010	05/24/96	CD	1,2
Beryllium, Dissolved	0.28	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,2
Calcium, Dissolved	410.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	3300.	mg/L	1000	0.015	200.7/6010	05/28/96	CD	1
Chromium, Hexavalent	72.	mg/L	100	0.015	6010	05/30/96	EM	3
Cobalt, Dissolved	12.	mg/L	20	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	9.3	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	1100.	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	0.86	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	1100.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 05/21/96 by GFB using 7195

06/11/96

LJO/kdwlp(dw)
 ME23ICWL

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-8
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #2	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	620.	mg/L	500	0.005	200.7/6010	05/28/96	CD	1
Mercury, Dissolved	0.41	µg/L	1.0	0.20	245.1	05/25/96	GB	2
Nickel, Dissolved	8.5	mg/L	20	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	120	mg/L	20	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,3
Silver, Dissolved	<0.30	mg/L	20	0.015	200.7/6010	05/24/96	CD	1,3
Sodium, Dissolved	22000.	mg/L	100	0.10	200.7/6010	05/28/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	05/31/96	CD	1,3
Vanadium, Dissolved	<0.50	mg/L	20	0.025	200.7/6010	05/24/96	CD	1,3
Zinc, Dissolved	15.	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJR using 3010
- (2) Sample Preparation on 05/23/96 by DJR using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

06/11/96

LJO/kdwlp(dw)
 ME23ICWI

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-9
 Report Date: 06/11/96
 PO No. : C95008J
 Project : CLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #1	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1600.	mg/L	20	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	0.82	mg/L	25	0.008	200.7/6010	05/31/96	CD	1
Arsenic, Dissolved	1.2	mg/L	20	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	<0.10	mg/L	20	0.005	200.7/6010	05/24/96	CD	1,2
Beryllium, Dissolved	0.16	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,2
Calcium, Dissolved	440.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	4700.	mg/L	1000	0.015	200.7/6010	05/28/96	CD	1
Chromium, Hexavalent	89.	mg/L	100	0.015	6010	05/30/96	EM	3
Cobalt, Dissolved	8.3	mg/L	20	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	8.1	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	1600.	mg/L	20	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	0.33	mg/L	20	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	940.	mg/L	20	0.050	200.7/6010	05/24/96	CD	1

- * PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
- (1) Sample Preparation on 05/23/96 by DJE using 3010
 - (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
 - (3) Sample Preparation on 05/21/96 by GFB using 7195

06/11/96

LJO/kdwlp (dw)
 ME23ICW1
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-9
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #1	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Manganese, Dissolved	700.	mg/L	1000	0.005	200.7/6010	05/28/96	CD	1
Mercury, Dissolved	0.46	µg/L	1.0	0.20	245.1	05/25/96	GB	2
Nickel, Dissolved	6.5	mg/L	20	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	45	mg/L	20	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.20	mg/L	20	0.010	200.7/6010	05/24/96	CD	1,3
Silver, Dissolved	<0.30	mg/L	20	0.015	200.7/6010	05/24/96	CD	1,3
Sodium, Dissolved	24000.	mg/L	100	0.10	200.7/6010	05/28/96	EM	1
Thallium, Dissolved	<0.38	mg/L	25	0.015	200.7/6010	05/31/96	CD	1,3
Vanadium, Dissolved	0.84	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	11.	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

06/11/96

LJO/kdwlp(dw)

ME23ICW1

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0976-10
Report Date: 06/11/96
PO No. : C95008J
Project : OILIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 17 of 20

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #6	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	39.	mg/L	1.0	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	<0.040	mg/L	5.0	0.008	200.7/6010	05/29/96	CD	1,2
Arsenic, Dissolved	0.013	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	0.022	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Beryllium, Dissolved	0.009	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Calcium, Dissolved	120.	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	18.	mg/L	5.0	0.015	200.7/6010	05/28/96	EM	1
Chromium, Hexavalent	1.2	mg/L	1.0	0.015	6010	05/30/96	EM	3,4
Cobalt, Dissolved	0.38	mg/L	1.0	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	0.14	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	44.	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	0.025	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- (3) Sample Preparation on 05/23/96 by GFB using 7195
- (4) Sample was prepared and analyzed out of hold time for this parameter by client request.

06/11/96

LJO/kdwlp(dw)

ME23ICW1

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462

CLIENT: RICH SCHMIDT
GEOMEGA
2995 BASELINE RD #202
BOULDER CO 80303

Lab Number : WM-0976-10
Report Date: 06/11/96
PO No. : C95008J
Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

Page 18 of 20

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #6	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Magnesium, Dissolved	48.	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Manganese, Dissolved	14.	mg/L	1.0	0.005	200.7/6010	05/24/96	EM	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96	GB	2
Nickel, Dissolved	0.33	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	8.9	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	700.	mg/L	5.0	0.10	200.7/6010	05/28/96	EM	1
Thallium, Dissolved	<0.075	mg/L	5.0	0.015	200.7/6010	05/29/96	CD	1,3
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	0.57	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1
- (3) The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

06/11/96

LJO/kdwlp(dw)

ME23ICW1

CC: BRUCE CRUSHING

SMITH ENVIRONMENTAL TECHNOLOGIES

ONE PLYMOUTH MEETING

PLYMOUTH MEETING, PA 19462



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-4
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX			SAMPLED BY		SAMPLED DATE RECEIVED		
MP-2 #8	Aqueous			R.SCHMIDT		05/20/96	05/21/96	
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Aluminum, Dissolved	1.4	mg/L	1.0	0.10	200.7/6010	05/24/96	CD	1
Antimony, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Arsenic, Dissolved	<0.008	mg/L	1.0	0.008	200.7/6010	05/24/96	CD	1
Barium, Dissolved	0.018	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Beryllium, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Cadmium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Calcium, Dissolved	8.6	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Chromium, Dissolved	1.5	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Cobalt, Dissolved	<0.030	mg/L	1.0	0.030	200.7/6010	05/24/96	CD	1
Copper, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Iron, Dissolved	3.0	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Lead, Dissolved	<0.005	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Magnesium, Dissolved	2.5	mg/L	1.0	0.050	200.7/6010	05/24/96	CD	1
Manganese, Dissolved	0.97	mg/L	1.0	0.005	200.7/6010	05/24/96	CD	1
Mercury, Dissolved	<0.20	µg/L	1.0	0.20	245.1	05/25/96	GB	2

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.

- (1) Sample Preparation on 05/23/96 by DJE using 3010
- (2) Sample Preparation on 05/23/96 by DJE using 245.1

06/11/96

LJO/kdwlp (dw)
 ME23ICW1

CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT



CLIENT: RICH SCHMIDT
 GEOMEGA
 2995 BASELINE RD #202
 BOULDER CO 80303

Lab Number : WM-0976-4
 Report Date: 06/11/96
 PO No. : C95008J
 Project : OLIN-WILMINGTON

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY		SAMPLED DATE RECEIVED				
MP-2 #8	Aqueous	R.SCHMIDT		05/20/96	05/21/96			
PARAMETER	RESULT	UNITS	DF	*PQL	METHOD	ANALYZED	BY	NOTES
Nickel, Dissolved	<0.040	mg/L	1.0	0.040	200.7/6010	05/24/96	CD	1
Potassium, Dissolved	<1.0	mg/L	1.0	1.0	200.7/6010	05/24/96	EM	1
Selenium, Dissolved	<0.010	mg/L	1.0	0.010	200.7/6010	05/24/96	CD	1
Silver, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Sodium, Dissolved	53.	mg/L	1.0	0.30	200.7/6010	05/24/96	EM	1
Thallium, Dissolved	<0.015	mg/L	1.0	0.015	200.7/6010	05/24/96	CD	1
Vanadium, Dissolved	<0.025	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1
Zinc, Dissolved	0.034	mg/L	1.0	0.025	200.7/6010	05/24/96	CD	1

* PQL (Practical Quantitation Level) represents laboratory reporting limits and may not reflect sample-specific reporting limits. Sample-specific limits are indicated by results annotated with '<' values.
 (1) Sample Preparation on 05/23/96 by DJE using 3010

06/11/96

LJO/kdwlp (dw)
 ME23ICW1
 CC: BRUCE CRUSHING
 SMITH ENVIRONMENTAL TECHNOLOGIES
 ONE PLYMOUTH MEETING
 PLYMOUTH MEETING, PA 19462

US EPA ARCHIVE DOCUMENT