GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	MW-06
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-006B **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
SEMIVOLATILE ORGANICS IN WATER		**SW8270C**		**(SW3510)**	Analyst: TL
Acenaphthene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Acenaphthylene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Anthracene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Benzo[a]anthracene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Benzo[a]pyrene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Benzo[b]fluoranthene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Benzo[g,h,i]perylene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Benzo[k]fluoranthene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Chrysene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Dibenz[a,h]anthracene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Fluoranthene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Fluorene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Indeno[1,2,3-cd]pyrene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Naphthalene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Phenanthrene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Pyrene	ND	0.150		µg/L	11/29/2012 8:35:00 PM
Surr: 2-Fluorobiphenyl	56.4	32.2-113		%REC	11/29/2012 8:35:00 PM
Surr: 4-Terphenyl-d14	91.0	53.5-130		%REC	11/29/2012 8:35:00 PM
Surr: Nitrobenzene-d5	54.4	18.5-130		%REC	11/29/2012 8:35:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	MW-06
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-006C **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
METALS IN WATER BY ICP		**SW6010B**		**(SW3005A)**	Analyst: AOR
Arsenic	ND	0.0100		mg/L	12/6/2012 2:44:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	DUP112812
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-007A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
METALS IN WATER BY ICP		**SW6010B**		**(SW3005A)**	Analyst: **AOR**
Lead	ND	0.00500		mg/L	12/6/2012 2:44:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	FB112812
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-008A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
SEMIVOLATILE ORGANICS IN WATER		**SW8270C**		**(SW3510)**	Analyst: TL
Acenaphthene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Acenaphthylene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Anthracene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Benzo[a]anthracene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Benzo[a]pyrene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Benzo[b]fluoranthene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Benzo[g,h,i]perylene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Benzo[k]fluoranthene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Chrysene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Dibenz[a,h]anthracene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Fluoranthene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Fluorene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Indeno[1,2,3-cd]pyrene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Naphthalene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Phenanthrene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Pyrene	ND	0.150		µg/L	11/29/2012 9:20:00 PM
Surr: 2-Fluorobiphenyl	73.1	32.2-113		%REC	11/29/2012 9:20:00 PM
Surr: 4-Terphenyl-d14	88.8	53.5-130		%REC	11/29/2012 9:20:00 PM
Surr: Nitrobenzene-d5	71.9	18.5-130		%REC	11/29/2012 9:20:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	EB112812
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-009A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		**SW8260A**		**(SW5030A)**	Analyst: cc
1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1,1-Trichloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1,2-Trichloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1-Dichloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1-Dichloroethene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,1-Dichloropropene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2,3-Trichloropropane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2,4-Trimethylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2-Dibromo-3-chloropropane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2-Dibromoethane	ND	2.00		µg/L	11/29/2012 2:16:00 PM
1,2-Dichlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2-Dichloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,2-Dichloropropane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,3,5-Trimethylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,3-Dichlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,3-Dichloropropane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
1,4-Dichlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
2,2-Dichloropropane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
2-Butanone	ND	100		µg/L	11/29/2012 2:16:00 PM
2-Chlorotoluene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
2-Hexanone	ND	100		µg/L	11/29/2012 2:16:00 PM
4-Chlorotoluene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
4-Isopropyltoluene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
4-Methyl-2-pentanone	ND	100		µg/L	11/29/2012 2:16:00 PM
Acetone	ND	100		µg/L	11/29/2012 2:16:00 PM
Benzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Bromobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Bromochloromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Bromodichloromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Bromoform	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Bromomethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Carbon disulfide	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Carbon tetrachloride	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Chlorobenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Chloroethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Chloroform	5.30	5.00		µg/L	11/29/2012 2:16:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	EB112812
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-009A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		**SW8260A**		**(SW5030A)**	Analyst: **cc**
Chloromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
cis-1,2-Dichloroethene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
cis-1,3-Dichloropropene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Dibromochloromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Dibromomethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Dichlorodifluoromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Ethylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Hexachlorobutadiene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Isopropylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
m,p-Xylene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Methyl tert-butyl ether	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Methylene chloride	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Naphthalene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
n-Butylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
n-Propylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
o-Xylene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
sec-Butylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Styrene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
tert-Butylbenzene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Tetrachloroethene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Toluene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
trans-1,2-Dichloroethene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
trans-1,3-Dichloropropene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Trichloroethene	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Trichlorofluoromethane	ND	5.00		µg/L	11/29/2012 2:16:00 PM
Vinyl acetate	ND	100		µg/L	11/29/2012 2:16:00 PM
Vinyl chloride	ND	2.00		µg/L	11/29/2012 2:16:00 PM
Surr: 1,2-Dichloroethane d4	96.7	85.5-109		%REC	11/29/2012 2:16:00 PM
Surr: Bromofluorobenzene	101	82.8-118		%REC	11/29/2012 2:16:00 PM
Surr: Toluene-d8	100	87.1-112		%REC	11/29/2012 2:16:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-010A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		**SW8260A**		**(SW5030A)**	Analyst: cc
1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1,1-Trichloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1,2-Trichloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1-Dichloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1-Dichloroethene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,1-Dichloropropene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2,3-Trichloropropane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2,4-Trimethylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2-Dibromo-3-chloropropane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2-Dibromoethane	ND	2.00		µg/L	11/28/2012 9:15:00 PM
1,2-Dichlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2-Dichloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,2-Dichloropropane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,3,5-Trimethylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,3-Dichlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,3-Dichloropropane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
1,4-Dichlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
2,2-Dichloropropane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
2-Butanone	ND	100		µg/L	11/28/2012 9:15:00 PM
2-Chlorotoluene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
2-Hexanone	ND	100		µg/L	11/28/2012 9:15:00 PM
4-Chlorotoluene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
4-Isopropyltoluene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
4-Methyl-2-pentanone	ND	100		µg/L	11/28/2012 9:15:00 PM
Acetone	ND	100		µg/L	11/28/2012 9:15:00 PM
Benzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Bromobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Bromochloromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Bromodichloromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Bromoform	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Bromomethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Carbon disulfide	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Carbon tetrachloride	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Chlorobenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Chloroethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Chloroform	ND	5.00		µg/L	11/28/2012 9:15:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT:	The Mannik & Smith Group, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	1211017	**Tag Number:**	
Project:	C3210002-Maingate	**Collection Date:**	11/28/2012
Lab ID:	1211017-010A **Date Received:** 11/28/2012	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	Date Analyzed
VOLATILE ORGANIC COMPOUNDS IN WATER		**SW8260A**		**(SW5030A)**	Analyst: cc
Chloromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
cis-1,2-Dichloroethene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
cis-1,3-Dichloropropene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Dibromochloromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Dibromomethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Dichlorodifluoromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Ethylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Hexachlorobutadiene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Isopropylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
m,p-Xylene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Methyl tert-butyl ether	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Methylene chloride	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Naphthalene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
n-Butylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
n-Propylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
o-Xylene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
sec-Butylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Styrene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
tert-Butylbenzene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Tetrachloroethene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Toluene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
trans-1,2-Dichloroethene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
trans-1,3-Dichloropropene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Trichloroethene	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Trichlorofluoromethane	ND	5.00		µg/L	11/28/2012 9:15:00 PM
Vinyl acetate	ND	100		µg/L	11/28/2012 9:15:00 PM
Vinyl chloride	ND	2.00		µg/L	11/28/2012 9:15:00 PM
Surr: 1,2-Dichloroethane d4	97.4	85.5-109		%REC	11/28/2012 9:15:00 PM
Surr: Bromofluorobenzene	99.4	82.8-118		%REC	11/28/2012 9:15:00 PM
Surr: Toluene-d8	100	87.1-112		%REC	11/28/2012 9:15:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B_W

Sample ID: **MB-11818** SampType: **MBLK** TestCode: **6010B_W** Units: **mg/L** Prep Date: **12/5/2012** RunNo: **16800**
Client ID: **ZZZZZ** Batch ID: **11818** TestNo: **SW6010B** **(SW3005A)** Analysis Date: **12/6/2012** SeqNo: **294448**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.0100									
Chromium	ND	0.00500									
Lead	ND	0.00500									

Sample ID: **LCS-11818** SampType: **LCS** TestCode: **6010B_W** Units: **mg/L** Prep Date: **12/5/2012** RunNo: **16800**
Client ID: **ZZZZZ** Batch ID: **11818** TestNo: **SW6010B** **(SW3005A)** Analysis Date: **12/6/2012** SeqNo: **294449**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.987	0.0100	4	0	99.7	75	125				
Chromium	0.3999	0.00500	0.4	0	100	75	125				
Lead	1.013	0.00500	1	0	101	75	125				

Sample ID: **1211017-003BMS** SampType: **MS** TestCode: **6010B_W** Units: **mg/L** Prep Date: **12/5/2012** RunNo: **16800**
Client ID: **MW-03** Batch ID: **11818** TestNo: **SW6010B** **(SW3005A)** Analysis Date: **12/6/2012** SeqNo: **294451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.128	0.0100	4	0	103	97.2	112				
Chromium	0.3944	0.00500	0.4	0.0007379	98.4	94.7	107				
Lead	1.006	0.00500	1	0.001409	100	93.5	110				

Sample ID: **1211017-003BMSD** SampType: **MSD** TestCode: **6010B_W** Units: **mg/L** Prep Date: **12/5/2012** RunNo: **16800**
Client ID: **MW-03** Batch ID: **11818** TestNo: **SW6010B** **(SW3005A)** Analysis Date: **12/6/2012** SeqNo: **294452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.148	0.0100	4	0	104	97.2	112	4.128	0.484	20	
Chromium	0.4014	0.00500	0.4	0.0007379	100	94.7	107	0.3944	1.77	20	
Lead	1.012	0.00500	1	0.001409	101	93.5	110	1.006	0.593	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270C_W

Sample ID: **MB-11807** SampType: **MBLK** TestCode: **8270C_W** Units: **µg/L** Prep Date: **11/29/2012** RunNo: **16786**
Client ID: **ZZZZZ** Batch ID: **11807** TestNo: **SW8270C** **(SW3510)** Analysis Date: **11/29/2012** SeqNo: **294251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	5.00									
1,2-Dichlorobenzene	ND	5.00									
1,3-Dichlorobenzene	ND	5.00									
1,4-Dichlorobenzene	ND	5.00									
2,4,5-Trichlorophenol	ND	5.00									
2,4,6-Trichlorophenol	ND	5.00									
2,4-Dichlorophenol	ND	5.00									
2,4-Dimethylphenol	ND	5.00									
2,4-Dinitrophenol	ND	25.0									
2,4-Dinitrotoluene	ND	5.00									
2,6-Dinitrotoluene	ND	5.00									
2-Chloronaphthalene	ND	5.00									
2-Chlorophenol	ND	5.00									
2-Methylnaphthalene	ND	5.00									
2-Methylphenol	ND	5.00									
2-Nitroaniline	ND	5.00									
2-Nitrophenol	ND	5.00									
3,3'-Dichlorobenzidine	ND	25.0									
3-Nitroaniline	ND	5.00									
4,6-Dinitro-2-methylphenol	ND	25.0									
4-Bromophenyl phenyl ether	ND	5.00									
4-Chloro-3-methylphenol	ND	5.00									
4-Chloroaniline	ND	5.00									
4-Chlorophenyl phenyl ether	ND	5.00									
4-Methylphenol	ND	5.00									
4-Nitroaniline	ND	5.00									
4-Nitrophenol	ND	5.00									
Acenaphthene	ND	0.150									
Acenaphthylene	ND	0.150									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270C_W

Sample ID: **MB-11807**	SampType: **MBLK**	TestCode: **8270C_W**	Units: **µg/L**	Prep Date: **11/29/2012**	RunNo: **16786**
Client ID: **ZZZZZ**	Batch ID: **11807**	TestNo: **SW8270C**	**(SW3510)**	Analysis Date: **11/29/2012**	SeqNo: **294251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	0.150									
Benzo[a]anthracene	ND	0.150									
Benzo[a]pyrene	ND	0.150									
Benzo[b]fluoranthene	ND	0.150									
Benzo[g,h,i]perylene	ND	0.150									
Benzo[k]fluoranthene	ND	0.150									
Bis(2-chloroethoxy)methane	ND	5.00									
Bis(2-chloroethyl)ether	ND	5.00									
Bis(2-chloroisopropyl)ether	ND	5.00									
Bis(2-ethylhexyl)phthalate	ND	5.00									
Butyl benzyl phthalate	ND	5.00									
Carbazole	ND	5.00									
Chrysene	ND	0.150									
Dibenz[a,h]anthracene	ND	0.150									
Dibenzofuran	ND	5.00									
Diethyl phthalate	ND	5.00									
Dimethyl phthalate	ND	5.00									
Di-n-butyl phthalate	ND	5.00									
Di-n-octyl phthalate	ND	5.00									
Fluoranthene	ND	0.150									
Fluorene	ND	0.150									
Hexachlorobenzene	ND	5.00									
Hexachlorobutadiene	ND	5.00									
Hexachlorocyclopentadiene	ND	5.00									
Hexachloroethane	ND	5.00									
Indeno[1,2,3-cd]pyrene	ND	0.150									
Isophorone	ND	5.00									
Naphthalene	ND	0.150									
Nitrobenzene	ND	5.00									
N-Nitrosodimethylamine	ND	25.0									
N-Nitrosodi-n-propylamine	ND	5.00									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270C_W

Sample ID: **MB-11807** SampType: **MBLK** TestCode: **8270C_W** Units: **µg/L** Prep Date: **11/29/2012** RunNo: **16786**
Client ID: **ZZZZZ** Batch ID: **11807** TestNo: **SW8270C** **(SW3510)** Analysis Date: **11/29/2012** SeqNo: **294251**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	5.00									
Pentachlorophenol	ND	5.00									
Phenanthrene	ND	0.150									
Phenol	ND	5.00									
Pyrene	ND	0.150									
Surr: 2,4,6-Tribromophenol	13.04	1.00	15	0	87.0	40.7	124				
Surr: 2-Fluorobiphenyl	7.376	1.00	10	0	73.8	32.2	113				
Surr: 2-Fluorophenol	6.489	1.00	15	0	43.3	9.85	74.8				
Surr: 4-Terphenyl-d14	10.45	1.00	10	0	104	53.5	130				
Surr: Nitrobenzene-d5	8.053	1.00	10	0	80.5	18.5	130				
Surr: Phenol-d6	4.162	1.00	15	0	27.7	6.46	53.9				

Sample ID: **LCS-11807** SampType: **LCS** TestCode: **8270C_W** Units: **µg/L** Prep Date: **11/29/2012** RunNo: **16786**
Client ID: **ZZZZZ** Batch ID: **11807** TestNo: **SW8270C** **(SW3510)** Analysis Date: **11/29/2012** SeqNo: **294252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	7.573	5.00	10	0	75.7	34.8	100				
1,4-Dichlorobenzene	7.288	5.00	10	0	72.9	30.4	97.9				
2,4-Dinitrotoluene	8.971	5.00	10	0	89.7	63.1	119				
2-Chlorophenol	11.13	5.00	15	0	74.2	51.1	108				
4-Chloro-3-methylphenol	14.89	5.00	15	0	99.3	59.5	120				
4-Nitrophenol	5.989	5.00	15	0	39.9	11.9	82.7				
Acenaphthene	9.009	0.150	10	0	90.1	54.9	111				
N-Nitrosodi-n-propylamine	9.145	5.00	10	0	91.4	49	110				
Pentachlorophenol	17.57	5.00	15	0	117	61.8	134				
Phenol	5.200	5.00	15	0	34.7	18.3	52.1				
Pyrene	9.961	0.150	10	0	99.6	59.1	119				
Surr: 2,4,6-Tribromophenol	13.94	1.00	15	0	92.9	40.7	124				
Surr: 2-Fluorobiphenyl	8.313	1.00	10	0	83.1	32.2	113				
Surr: 2-Fluorophenol	8.339	1.00	15	0	55.6	9.85	74.8				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270C_W

Sample ID: **LCS-11807** SampType: **LCS** TestCode: **8270C_W** Units: **µg/L** Prep Date: **11/29/2012** RunNo: **16786**
Client ID: **ZZZZZ** Batch ID: **11807** TestNo: **SW8270C** **(SW3510)** Analysis Date: **11/29/2012** SeqNo: **294252**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	10.32	1.00	10	0	103	53.5	130				
Surr: Nitrobenzene-d5	9.657	1.00	10	0	96.6	18.5	130				
Surr: Phenol-d6	5.660	1.00	15	0	37.7	6.46	53.9				

Sample ID: **LCSD-11807** SampType: **LCSD** TestCode: **8270C_W** Units: **µg/L** Prep Date: **11/29/2012** RunNo: **16786**
Client ID: **ZZZZZ** Batch ID: **11807** TestNo: **SW8270C** **(SW3510)** Analysis Date: **11/29/2012** SeqNo: **294253**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	7.195	5.00	10	0	72.0	34.8	100	7.573	5.12	20	
1,4-Dichlorobenzene	7.146	5.00	10	0	71.5	30.4	97.9	7.288	1.97	20	
2,4-Dinitrotoluene	8.658	5.00	10	0	86.6	63.1	119	8.971	3.55	20	
2-Chlorophenol	11.75	5.00	15	0	78.4	51.1	108	11.13	5.42	20	
4-Chloro-3-methylphenol	14.30	5.00	15	0	95.3	59.5	120	14.89	4.08	20	
4-Nitrophenol	5.499	5.00	15	0	36.7	11.9	82.7	5.989	8.53	20	
Acenaphthene	8.088	0.150	10	0	80.9	54.9	111	9.009	10.8	20	
N-Nitrosodi-n-propylamine	8.781	5.00	10	0	87.8	49	110	9.145	4.06	20	
Pentachlorophenol	17.70	5.00	15	0	118	61.8	134	17.57	0.743	20	
Phenol	4.704	4.00	15	0	31.4	18.3	52.1	5.2	10.0	20	
Pyrene	9.704	0.150	10	0	97.0	59.1	119	9.961	2.61	20	
Surr: 2,4,6-Tribromophenol	14.39	1.00	15	0	95.9	40.7	124	0	0	0	
Surr: 2-Fluorobiphenyl	7.653	1.00	10	0	76.5	32.2	113	0	0	0	
Surr: 2-Fluorophenol	8.017	1.00	15	0	53.4	9.85	74.8	0	0	0	
Surr: 4-Terphenyl-d14	10.54	1.00	10	0	105	53.5	130	0	0	0	
Surr: Nitrobenzene-d5	9.055	1.00	10	0	90.6	18.5	130	0	0	0	
Surr: Phenol-d6	5.701	1.00	15	0	38.0	6.46	53.9	0	0	0	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

GEO Analytical, Inc.

Date: *07-Dec-12*

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: MB-11805	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 11/28/2012	RunNo: 16781
Client ID: ZZZZZ	Batch ID: 11805	TestNo: SW8260A	(SW5030A)	Analysis Date: 11/28/2012	SeqNo: 294202

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.00									
1,1,1-Trichloroethane	ND	5.00									
1,1,2,2-Tetrachloroethane	ND	5.00									
1,1,2-Trichloroethane	ND	5.00									
1,1-Dichloroethane	ND	5.00									
1,1-Dichloroethene	ND	5.00									
1,1-Dichloropropene	ND	5.00									
1,2,3-Trichlorobenzene	ND	5.00									
1,2,3-Trichloropropane	ND	5.00									
1,2,4-Trichlorobenzene	ND	5.00									
1,2,4-Trimethylbenzene	ND	5.00									
1,2-Dibromo-3-chloropropane	ND	5.00									
1,2-Dibromoethane	ND	2.00									
1,2-Dichlorobenzene	ND	5.00									
1,2-Dichloroethane	ND	5.00									
1,2-Dichloropropane	ND	5.00									
1,3,5-Trimethylbenzene	ND	5.00									
1,3-Dichlorobenzene	ND	5.00									
1,3-Dichloropropane	ND	5.00									
1,4-Dichlorobenzene	ND	5.00									
2,2-Dichloropropane	ND	5.00									
2-Butanone	ND	100									
2-Chlorotoluene	ND	5.00									
2-Hexanone	ND	100									
4-Chlorotoluene	ND	5.00									
4-Isopropyltoluene	ND	5.00									
4-Methyl-2-pentanone	ND	100									
Acetone	ND	100									
Benzene	ND	5.00									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: MB-11805	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 11/28/2012	RunNo: 16781
Client ID: ZZZZZ	Batch ID: 11805	TestNo: SW8260A	(SW5030A)	Analysis Date: 11/28/2012	SeqNo: 294202

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromobenzene	ND	5.00									
Bromochloromethane	ND	5.00									
Bromodichloromethane	ND	5.00									
Bromoform	ND	5.00									
Bromomethane	ND	5.00									
Carbon disulfide	ND	5.00									
Carbon tetrachloride	ND	5.00									
Chlorobenzene	ND	5.00									
Chloroethane	ND	5.00									
Chloroform	ND	5.00									
Chloromethane	ND	5.00									
cis-1,2-Dichloroethene	ND	5.00									
cis-1,3-Dichloropropene	ND	5.00									
Dibromochloromethane	ND	5.00									
Dibromomethane	ND	5.00									
Dichlorodifluoromethane	ND	5.00									
Ethylbenzene	ND	5.00									
Hexachlorobutadiene	ND	5.00									
Isopropylbenzene	ND	5.00									
m,p-Xylene	ND	5.00									
Methyl tert-butyl ether	ND	5.00									
Methylene chloride	ND	5.00									
Naphthalene	ND	5.00									
n-Butylbenzene	ND	5.00									
n-Propylbenzene	ND	5.00									
o-Xylene	ND	5.00									
sec-Butylbenzene	ND	5.00									
Styrene	ND	5.00									
tert-Butylbenzene	ND	5.00									
Tetrachloroethene	ND	5.00									
Toluene	ND	5.00									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **MB-11805** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2012** RunNo: **16781**
Client ID: **ZZZZZ** Batch ID: **11805** TestNo: **SW8260A** **(SW5030A)** Analysis Date: **11/28/2012** SeqNo: **294202**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	5.00									
trans-1,3-Dichloropropene	ND	5.00									
Trichloroethene	ND	5.00									
Trichlorofluoromethane	ND	5.00									
Vinyl acetate	ND	100									
Vinyl chloride	ND	2.00									
Surr: 1,2-Dichloroethane d4	38.49	5.00	40	0	96.2	85.5	109				
Surr: Bromofluorobenzene	40.41	5.00	40	0	101	82.8	118				
Surr: Toluene-d8	39.97	5.00	40	0	99.9	87.1	112				

Sample ID: **LCS-11805** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2012** RunNo: **16781**
Client ID: **ZZZZZ** Batch ID: **11805** TestNo: **SW8260A** **(SW5030A)** Analysis Date: **11/28/2012** SeqNo: **294203**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	48.99	5.00	40	0.263	122	73.6	131				
Benzene	43.56	5.00	40	0	109	79.4	121				
Chlorobenzene	48.68	5.00	40	0	122	86.9	119				S
Toluene	44.32	5.00	40	0	111	81.6	117				
Trichloroethene	45.66	5.00	40	0.304	113	79.8	125				
Surr: 1,2-Dichloroethane d4	38.34	5.00	40	0	95.9	85.5	109				
Surr: Bromofluorobenzene	46.24	5.00	40	0	116	82.8	118				
Surr: Toluene-d8	40.55	5.00	40	0	101	87.1	112				

Sample ID: **1211015-021BMS** SampType: **MS** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2012** RunNo: **16781**
Client ID: **ZZZZZ** Batch ID: **11805** TestNo: **SW8260A** **(SW5030A)** Analysis Date: **11/28/2012** SeqNo: **294206**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	56.70	5.00	46.5	0.325	121	69	152				
Benzene	50.66	5.00	46.5	0	109	72.6	142				
Chlorobenzene	55.86	5.00	46.5	0	120	78.2	138				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **1211015-021BMS** SampType: **MS** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2012** RunNo: **16781**
Client ID: **ZZZZZ** Batch ID: **11805** TestNo: **SW8260A** **(SW5030A)** Analysis Date: **11/28/2012** SeqNo: **294206**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	50.14	5.00	46.5	0	108	71.8	137				
Trichloroethene	53.05	5.00	46.5	1.068	112	69.1	151				
Surr: 1,2-Dichloroethane d4	38.49	5.00	40	0	96.2	85.5	109				
Surr: Bromofluorobenzene	45.27	5.00	40	0	113	82.8	118				
Surr: Toluene-d8	40.57	5.00	40	0	101	87.1	112				

Sample ID: **1211015-021BMSD** SampType: **MSD** TestCode: **8260_W** Units: **µg/L** Prep Date: **11/28/2012** RunNo: **16781**
Client ID: **ZZZZZ** Batch ID: **11805** TestNo: **SW8260A** **(SW5030A)** Analysis Date: **11/28/2012** SeqNo: **294207**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	58.92	5.00	46.5	0.325	126	69	152	56.7	3.86	20	
Benzene	51.18	5.00	46.5	0	110	72.6	142	50.66	1.02	20	
Chlorobenzene	57.14	5.00	46.5	0	123	78.2	138	55.86	2.28	20	
Toluene	52.65	5.00	46.5	0	113	71.8	137	50.14	4.88	20	
Trichloroethene	54.42	5.00	46.5	1.068	115	69.1	151	53.05	2.55	20	
Surr: 1,2-Dichloroethane d4	38.68	5.00	40	0	96.7	85.5	109	0	0	0	
Surr: Bromofluorobenzene	41.87	5.00	40	0	105	82.8	118	0	0	0	
Surr: Toluene-d8	39.55	5.00	40	0	98.9	87.1	112	0	0	0	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

GEO Analytical, Inc.

Date: 07-Dec-12

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate
Test Code: 8260_W **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	BR2FBZ	BZMED8	DCAD4					
1211015-021BMS	113	101	96.2					
1211015-021BMSD	105	98.9	96.7					
1211017-001A	100	96.0	96.4					
1211017-002A	98.8	98.0	96.6					
1211017-006A	100	97.1	96.7					
1211017-009A	101	100	96.7					
1211017-010A	99.4	100	97.4					
LCS-11805	116	101	95.9					
MB-11805	101	99.9	96.2					

Acronym		Surrogate	QC Limits
BR2FBZ	=	Bromofluorobenzene	82.8-118
BZMED8	=	Toluene-d8	87.1-112
DCAD4	=	1,2-Dichloroethane d4	85.5-109

*** Surrogate recovery outside acceptance limits**

GEO Analytical, Inc.

Date: 07-Dec-12

CLIENT: The Mannik & Smith Group, Inc.
Work Order: 1211017
Project: C3210002-Maingate
Test Code: 8270C_W **Matrix:** W

QC SUMMARY REPORT SURROGATE RECOVERIES

Sample ID	NO2BZD5	PH246BR	PH2F	PHEN2F	PHEND14	PHENOLD6		
1211017-003A	45.9			49.7	88.1			
1211017-004A	42.6			43.8	85.4			
1211017-005A	49.0			54.0	92.0			
1211017-006B	54.4			56.4	91.0			
1211017-008A	71.9			73.1	88.8			
LCS-11807	96.6	92.9	55.6	83.1	103	37.7		
LCSD-11807	90.6	95.9	53.4	76.5	105	38.0		
MB-11807	80.5	87.0	43.3	73.8	104	27.7		

Acronym		Surrogate	QC Limits
NO2BZD5	=	Nitrobenzene-d5	18.5-130
PHEN2F	=	2-Fluorobiphenyl	32.2-113
PHEND14	=	4-Terphenyl-d14	53.5-130

*** Surrogate recovery outside acceptance limits**

GEOAnalytical, Inc.

Date: 11/28/12

Shipped/Delivered by: Client

Client: Mannik & Smith

Project: C3210002 Maingate

GEO Job Number: 1211017

			Comment/Action Taken
Chain of Custody included.	Y	N	
Chain of Custody signed and dated.	Y	N	
Sample containers were intact.	Y	N	
Sample labels intact and legible.	Y	N	
Samples received matched Chain of Custody.	Y	N	
Correct containers/preservatives were used.	Y	N	
Preservative added upon laboratory receipt.	Y	N	
Sufficient sample volume for requested analyses.	Y	N	
Air bubbles present in VOA water samples?	Y	N	
Samples arrived within holding time.	Y	N	

Cooler temperatures will be referenced on the Chain of Custody.

Form completed by: J Bell

02/11/2011

G E O Analytical, Inc.

9263 Ravenna Rd. Suite A-7
Twinsburg, OH 44087
Phone Number 330 963 6990
Fax Number 330 963 6975
customerservice@geoanalytical.com

CHAIN OF CUSTODY RECORD

1211017

COMPANY NAME AND ADDRESS: The Mannik & Smith Group, 23225 Mercantile Rd, Beachwood OH 44122

PROJECT: C3210002 - Maingate

PROJECT MANAGER OR REPORT TO: John Zampino

SAMPLER SIGNATURES:

VAP: YES

STA.#	DATE	TIME	COMP.	GRAB.	STATION LOCATION	NO. OF CONTAINERS	VOCs	PAH	Lead Chromium	Lead	Arsenic				NOTES
	11/28			X	MW-01	3	3							1	
					MW-02	3	3							2	
					MW-03	3		2	1					3	
					MW-04	2		2						4	
					MW-05	2		2						5	
					MW-06	6	3	2			1			6	
					DUP112812	1				1				7	
					FB112812	2		2						8	
					EB112812	3	3							9	
					TRIP BLANK	2	2							10	

CHAIN OF CUSTODY SIGNATURES *(Name, Company, Date, Time)*

1. Relinquished By: MSG 11/28/12 @ 14:00
   Received By:
2. Relinquished By:
   Received By:
3. Relinquished By:
   Received By:
4. Submitted to Laboratory By: MSG 11/28/12
   Received for Laboratory By: J Ball 11/28/12 3:55

COOLER TEMP ON RECEIPT 5.9 °C