North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 15, 2015

James & Glenda Butler
112 Ashley Ave
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 112 & 124 Ashley Ave
Hamlet, NC 28345

Dear Mr. & Mrs. Butler:

Please find attached the Sample Analytical Results for a water sample collected from your well located at the address referenced above, on Dec. 18, 2014 The sample was submitted for laboratory analyses for Volatile Organic Compounds (VOCs). VOCs were detected in the water sample as shown on the attached sheets.

Because one or more contaminants were detected in the water sample, a Health Risk Evaluation (HRE) of the water supply was performed by our toxicologist. The HRE, which is enclosed, compares the concentration of detected contaminants to acceptable concentrations and provides a recommendation for acceptable uses of the water.

If you have any questions regarding the Health Risk Evaluation, please contact Hanna Assefa at (919) 707-8351 or me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
112 Ashley Avenue
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL19015-004	1,1-Dichloroethane	0.60	*	6	**
	1,1-Dichloroethene	4.0	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1310	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**0.60**		**0.50**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**4.0**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1310	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1413	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0007	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		81	10-122	H	74	10-122
Tetrachloro-m-xylene		81	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
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P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1413	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0007	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		81	10-122	H	74	10-122
Tetrachloro-m-xylene		81	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 14, 2015

Jimmy Johnson
107 Atkinson St
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 125 Atkinson St
Hamlet, NC 28345

Dear Mr. Johnson:

Please find attached the Sample Analytical Results for a water sample collected from your well located at the address referenced above, on Dec. 18, 2014 The sample was submitted for laboratory analyses for Volatile Organic Compounds (VOCs). There were no VOCs detected in your water supply well sample. As such, the use of your well water should not result in any adverse health effects associated with VOCs.

We attempted to collect samples from the well at 107 Atkinson St but found the pump was not working. Knowing that you are living at 107 Atkinson, where does your water come from? Are you connected to the well at 125 Atkinson? Please let us know where the water at 107 is coming from so we can properly document the source in our file.

If you have any questions or if I can be of any further assistance, please contact me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1357	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0 50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0 50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1357	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1443	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0036	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		79	46-119	H	62	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1443	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0036	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		79	46-119	H	62	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 15, 2015

Penny Myers & Lacey Haught
109 Atkinson St
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 109 & 107 Atkinson St
Hamlet, NC 28345

Dear Ms. Hought or Ms. Myers:

Please find attached the Sample Analytical Results for a water sample collected from your well located at the address referenced above, on Dec. 18, 2014 The sample was submitted for laboratory analyses for Volatile Organic Compounds (VOCs). VOCs were detected in the water sample as shown on the attached sheets.

Because one or more contaminants were detected in the water sample, a Health Risk Evaluation (HRE) of the water supply was performed by our toxicologist. The HRE, which is enclosed, compares the concentration of detected contaminants to acceptable concentrations and provides a recommendation for acceptable uses of the water.

The POE filter installed is currently working as designed so no emergency service is required. Annual maintenance will continue as scheduled.

If you have any questions regarding the Health Risk Evaluation, please contact Hanna Assefa at (919) 707-8351 or me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
109 Atkinson Street
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL05015-003	1,1-Dichloroethane	1.1	*	6	**
	1,1-Dichloroethene	6.9	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1223	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0 50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1223	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1344	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2339	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0 025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		80	10-122	H	63	10-122
Tetrachloro-m-xylene		83	46-119	H	68	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1344	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2339	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		80	10-122	H	63	10-122
Tetrachloro-m-xylene		83	46-119	H	68	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1247	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0 50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**1.1**		**0.50**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**6.9**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0 50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description. **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1247	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1359	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2353	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	73	10-122
Tetrachloro-m-xylene		78	46-119	H	59	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1359	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2353	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	73	10-122
Tetrachloro-m-xylene		78	46-119	H	59	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 14, 2015

Perry Knight
119 Orton Rd
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 113 Atkinson St & 119 Orton Rd
Hamlet, NC 28345

Dear Mr. Knight:

Please find attached the Sample Analytical Results for a water sample collected from your wells located at the addresses referenced above, on Dec. 18, 2014 The samples were submitted for laboratory analyses for Volatile Organic Compounds (VOCs). There were no VOCs detected in your water supply wells sample. As such, the use of your well water should not result in any adverse health effects associated with VOCs.

If you have any questions or if I can be of any further assistance, please contact me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-008**
Description: **113 ORTON**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1442	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA** Laboratory ID: **PL19015-008**

Description: **113 ORTON** Matrix: **Aqueous**

Date Sampled: **12/18/2014 1245**

Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1442	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **113 ORTON**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-008**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1512	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0104	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	70	10-122
Tetrachloro-m-xylene		78	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA** Laboratory ID: **PL19015-008**

Description: **113 ORTON** Matrix: **Aqueous**

Date Sampled: **12/18/2014 1245**

Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1512	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0104	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		78	10-122	H	70	10-122
Tetrachloro-m-xylene		78	46-119	H	61	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1505	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1505	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0 50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1527	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0118	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0 025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		77	46-119	H	55	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1527	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0118	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		77	46-119	H	55	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 14, 2015

Jimmy & Ruby Johnson
118 Atkinson St
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 118 & 124 Atkinson St
Hamlet, NC 28345

Dear Mr. or Ms. Johnson:

Please find attached the Sample Analytical Results for a water sample collected from your well located at the address referenced above, on Dec. 18, 2014 The sample was submitted for laboratory analyses for Volatile Organic Compounds (VOCs). There were no VOCs detected in your water supply well sample. As such, the use of your well water should not result in any adverse health effects associated with VOCs.

If you have any questions or if I can be of any further assistance, please contact me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1419	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1419	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1458	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0050	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		77	10-122	H	73	10-122
Tetrachloro-m-xylene		80	46-119	H	63	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1458	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0050	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		77	10-122	H	73	10-122
Tetrachloro-m-xylene		80	46-119	H	63	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

NCDENR
North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

January 15, 2015

William Jernigan
115 Atkinson St
Hamlet, NC 28345

RE: Water Supply Well Sampling Results – Atkinson St (NONCD0002867)
Well Address – 115 Atkinson St
Hamlet, NC 28345

Dear Mr. Jernigan:

Please find attached the Sample Analytical Results for a water sample collected from your well located at the address referenced above, on Dec. 18, 2014 The sample was submitted for laboratory analyses for Volatile Organic Compounds (VOCs). VOCs were detected in the water sample as shown on the attached sheets.

Because one or more contaminants were detected in the water sample, a Health Risk Evaluation (HRE) of the water supply was performed by our toxicologist. The HRE, which is enclosed, compares the concentration of detected contaminants to acceptable concentrations and provides a recommendation for acceptable uses of the water.

If you have any questions regarding the Health Risk Evaluation, please contact Hanna Assefa at (919) 707-8351 or me at (919) 707-8353.

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

CC: Richmond County Health Department

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone: 919-707-8200 \ Internet: http://portal.ncdenr.org/web/wm

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January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
115 Atkinson Street
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL19015-005	1,1-Dichloroethene	0.65	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1333	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**0.65**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1333	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		108	70-130

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Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1428	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0021	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		73	10-122	H	69	10-122
Tetrachloro-m-xylene		79	46-119	H	59	46-119

PQL = Practical quantitation limit
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Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1428	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0021	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		73	10-122	H	69	10-122
Tetrachloro-m-xylene		79	46-119	H	59	46-119

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January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
115 Atkinson Street
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

If contaminant concentrations exceed the applicable standards for using the water for drinking and cooking, the contaminant concentrations are further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. **Therefore, based on this evaluation, the water from this well can be used for drinking, cooking and all other purposes listed above.** The table below compares detected contaminant concentrations with the applicable standards:

Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL19015-005	1,1-Dichloroethene	0.65	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
112 Ashley Avenue
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

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Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL19015-004	1,1-Dichloroethane	0.60	*	6	**
	1,1-Dichloroethene	4.0	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

January 15, 2015

MEMORANDUM

TO: Vince Antrilli
Inactive Hazardous Sites Branch
Superfund Section

FROM: Hanna Assefa, Industrial Hygiene Consultant
Inactive Hazardous Sites Branch
Superfund Section

RE: Health Risk Evaluation
Atkinson Street Contamination Site
109 Atkinson Street
Hamlet, Richmond County
NONCD 000 2867

A water sample was collected from the subject well on December 18, 2014. None of the contaminants detected in the well water were above applicable standards. The standards used to determine if the water is suitable for drinking and cooking are the federal drinking water standards (USEPA MCL), or where there is no MCL, the health based North Carolina Groundwater Quality Standard (15A NCAC 2L)/ Interim Standard (IMAC). If the USEPA MCL and health- based North Carolina 2L/IMAC are not available, a health-based concentration is calculated.

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Sample #	Contaminant	Concentration (ug/L)	US EPA MCL (ug/L)	NC 2L (ug/L)	Calculated Health Based Concentration (ug/l)
PL05015-003	1,1-Dichloroethane	1.1	*	6	**
	1,1-Dichloroethene	6.9	7	**	**

*Not Available
** Not Applicable
ug/L= Micrograms of contaminant per liter of water.

January 14, 2015

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, IHSB

FROM: Vince Antrilli
Superfund Section, Inactive Hazardous Sites Branch (IHSB)

RE: Health Risk Evaluation Request
Atkinson St Contamination Site
109 Atkinson St
Hamlet, Richmond County
NONCD 000 2867

Please find attached a copy of the laboratory analytical results for one water supply well sample. This sample was collected on Dec. 18, 2014. Because this sample was collected from a water supply well, the IHSB requests a health risk evaluation and a recommendation for the continued use of this well. This information will be provided to the well user. The following table summarizes the detected compounds and the corresponding concentrations.

Well ID	Compound	Concentration (µg/L)
PL19015-003	1,1-Dichloroethane	1.1
	1,1-Dichloroethene	6.9

If you have any questions, please contact me at 707-8353.

Attachment

January 14, 2015

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, IHSB

FROM: Vince Antrilli
Superfund Section, Inactive Hazardous Sites Branch (IHSB)

RE: Health Risk Evaluation Request
Atkinson St Contamination Site
112 Ashley Ave
Hamlet, Richmond County
NONCD 000 2867

Please find attached a copy of the laboratory analytical results for one water supply well sample. This sample was collected on Dec. 18, 2014. Because this sample was collected from a water supply well, the IHSB requests a health risk evaluation and a recommendation for the continued use of this well. This information will be provided to the well user. The following table summarizes the detected compounds and the corresponding concentrations.

Well ID	Compound	Concentration (µg/L)
PL19015-004	1,1-Dichloroethane	0.60
	1,1-Dichloroethene	4.0

If you have any questions, please contact me at 707-8353.

Attachment

January 14, 2015

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, IHSB

FROM: Vince Antrilli
Superfund Section, Inactive Hazardous Sites Branch (IHSB)

RE: Health Risk Evaluation Request
Atkinson St Contamination Site
109 Atkinson St
Hamlet, Richmond County
NONCD 000 2867

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Well ID	Compound	Concentration (µg/L)
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	1,1-Dichloroethene	6.9

If you have any questions, please contact me at 707-8353.

Attachment

January 14, 2015

MEMORANDUM

TO: Hanna Assefa, Industrial Hygienist
Superfund Section, IHSB

FROM: Vince Antrilli
Superfund Section, Inactive Hazardous Sites Branch (IHSB)

RE: Health Risk Evaluation Request
Atkinson St Contamination Site
115 Atkinson St
Hamlet, Richmond County
NONCD 000 2867

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Well ID	Compound	Concentration (µg/L)
PL19015-005	1,1-Dichloroethene	0.65

If you have any questions, please contact me at 707-8353.

Attachment

Atkinson St - NONCD0002867

Well Address	Sample Date	Sample By	Well ID#	PCE 2L= 1 MCL= 5 RAL= 12	TCE 2L= 3 MCL= 5 RAL= 300	1,4-Dioxane 2L= 3 MCL= RAL= 611	Chloroform 2L= 70 MCL= 80 RAL= 100	1,1-DCA 2L= 6 MCL= RAL= 242	1,2-DCA 2L= 0.4 MCL= RAL=	1,1-DCE 2L= 7 MCL= 7 RAL= 7	cis-1,1-DCE 2L= 6 MCL= RAL= 242	Chloromethane 2L= 3 MCL= RAL= 563	HRE Sent	Comments
109 Atkinson St (Haught) - [Prefilter]	9/10/2010	SME	WSW-1					1.2		7.1				
	9/27/2011	BAF	WSW-1			5.2		1.2		9.3		1.3		
	12/18/2014	BAF						1.1		6.9				
109 Atkinson St (Haught) - [Post filter]	9/27/2011	BAF	WSW-1											
109 Atkinson St (Haught) - [Post filter kitchen]	9/27/2011	BAF	WSW-1									1.5		
115 Atkinson St (Jernigan)	9/10/2010	SME	WSW-2							0.7				
	12/18/2014	BAF								0.65				
112 Ashley St (Butler) [serves also 124 Ashley Ave]	9/10/2010	SME	WSW-3							2.6				
	12/18/2014	BAF						0.6		4				
125 Atkinson St (Johnson)	12/18/2014	BAF	No Detects											
124 Atkinson St (Johnson) [serves also 118 Atkinson St]	12/18/2014	BAF	No Detects											
113 Atkinson St (Knight)	12/18/2014	BAF	No Detects											
119 Orton Rd (Knight)	12/18/2014	BAF	No Detects											

Notes:
All units in ug/l (ppb)
Above MDL Limt = BOLD
Above 2L Limit = BOLD
Above MCL Limit = BOLD
Above RAL = BOLD
Chloroform Below 2L = NOT BOLD
HRE Sent =
*=Sample collected after filter system
(T) or (t) = Total

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
Chloromethane (AKA - Methyl Chloride)

1/14/2015

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

NCDENR - DWM - DSCA
217 West Jones St.
Raleigh, NC 27603
Attention: Vincent Antrilli

Project Name: **Atkinson Street**

Project Number: **NONCD0002867**

Lot Number: **PL19015**

Date Completed: **01/06/2015**

Nisreen Saikaly
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
NCDENR - DWM - DSCA
Lot Number: PL19015

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Pesticides

Samples -002 to -009 were initially analyzed within the holding time but were associated with an LCS that did not meet QC criteria for Endrin. The samples were re-extracted and reanalyzed outside the holding time.

Sample Summary
NCDENR - DWM - DSCA
Lot Number: PL19015

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	TRIP BLANK	Aqueous	12/18/2014	12/19/2014
002	109 ATKINSON-A	Aqueous	12/18/2014 0938	12/19/2014
003	109 ATKINSON-B	Aqueous	12/18/2014 0943	12/19/2014
004	112 ASHLEY	Aqueous	12/18/2014 1025	12/19/2014
005	115 ATKINSON	Aqueous	12/18/2014 1050	12/19/2014
006	125 ATKINSON	Aqueous	12/18/2014 1125	12/19/2014
007	124 ATKINSON	Aqueous	12/18/2014 1200	12/19/2014
008	113 ORTON	Aqueous	12/18/2014 1245	12/19/2014
009	119 ORTON	Aqueous	12/18/2014 1225	12/19/2014

(9 samples)

Executive Summary
NCDENR - DWM - DSCA
Lot Number: PL19015

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	109 ATKINSON-B	Aqueous	1,1-Dichloroethane	8260B	1.1		ug/L	11
003	109 ATKINSON-B	Aqueous	1,1-Dichloroethene	8260B	6.9		ug/L	11
004	112 ASHLEY	Aqueous	1,1-Dichloroethane	8260B	0.60		ug/L	15
004	112 ASHLEY	Aqueous	1,1-Dichloroethene	8260B	4.0		ug/L	15
005	115 ATKINSON	Aqueous	1,1-Dichloroethene	8260B	0.65		ug/L	19

(5 detections)

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **TRIP BLANK**
Date Sampled: **12/18/2014**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-001**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1201	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0 50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **TRIP BLANK**
Date Sampled: **12/18/2014**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-001**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1201	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		105	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		104	70-130

PQL = Practical quantitation limit
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Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1223	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
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J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-A**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Laboratory ID. **PL19015-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1223	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0 50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-002**
Description: **109 ATKINSON-A**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1344	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2339	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0 025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0 025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		80	10-122	H	63	10-122
Tetrachloro-m-xylene		83	46-119	H	68	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-002**
Description. **109 ATKINSON-A**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 0938**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1344	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2339	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0 025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0 025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		80	10-122	H	63	10-122
Tetrachloro-m-xylene		83	46-119	H	68	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
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Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1247	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**1.1**		**0.50**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**6.9**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1247	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **109 ATKINSON-B**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-003**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1359	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2353	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0 025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	73	10-122
Tetrachloro-m-xylene		78	46-119	H	59	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-003**
Description: **109 ATKINSON-B**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 0943**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1359	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/05/2015 2353	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	73	10-122
Tetrachloro-m-xylene		78	46-119	H	59	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA** Laboratory ID: **PL19015-004**

Description: **112 ASHLEY** Matrix: **Aqueous**

Date Sampled: **12/18/2014 1025**

Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1310	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	**75-34-3**	**8260B**	**0.60**		**0.50**	**ug/L**	**1**
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**4.0**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1310	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1413	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0007	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0 025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0 025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0 10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		81	10-122	H	74	10-122
Tetrachloro-m-xylene		81	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **112 ASHLEY**
Date Sampled: **12/18/2014 1025**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-004**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1413	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0007	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0 025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		81	10-122	H	74	10-122
Tetrachloro-m-xylene		81	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1333	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0 50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	**75-35-4**	**8260B**	**0.65**		**0.50**	**ug/L**	**1**
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0 50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-005**
Description: **115 ATKINSON**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1333	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1428	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0021	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0 025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0 025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		73	10-122	H	69	10-122
Tetrachloro-m-xylene		79	46-119	H	59	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **115 ATKINSON**
Date Sampled: **12/18/2014 1050**
Date Received: **12/19/2014**

Laboratory ID. **PL19015-005**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1428	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0021	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0 025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		73	10-122	H	69	10-122
Tetrachloro-m-xylene		79	46-119	H	59	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix. **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1357	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1357	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0 50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **125 ATKINSON**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-006**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1443	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0036	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0 025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		79	46-119	H	62	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-006**
Description: **125 ATKINSON**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 1125**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1443	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0036	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		79	46-119	H	62	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1419	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0 50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0 50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0 50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1419	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-007**
Description: **124 ATKINSON**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1458	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0050	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		77	10-122	H	73	10-122
Tetrachloro-m-xylene		80	46-119	H	63	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **124 ATKINSON**
Date Sampled: **12/18/2014 1200**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-007**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1458	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0050	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0 025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0 025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		77	10-122	H	73	10-122
Tetrachloro-m-xylene		80	46-119	H	63	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **113 ORTON**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-008**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1442	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0.50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0.50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0 50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **113 ORTON**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-008**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1442	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0 50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		107	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **113 ORTON**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-008**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1512	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0104	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0 025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0 025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0 025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		78	10-122	H	70	10-122
Tetrachloro-m-xylene		78	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **113 ORTON**
Date Sampled: **12/18/2014 1245**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-008**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1512	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0104	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0 025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0.025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0.025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Run 1 Acceptance Limits	Q	Run 2 % Recovery	Run 2 Acceptance Limits
Decachlorobiphenyl		78	10-122	H	70	10-122
Tetrachloro-m-xylene		78	46-119	H	61	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description. **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1505	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acetone	67-64-1	8260B	ND		10	ug/L	1
Benzene	71-43-2	8260B	ND		0.50	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		0.50	ug/L	1
Bromoform	75-25-2	8260B	ND		0.50	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		0.50	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		0.50	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		0.50	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		0.50	ug/L	1
Chloroethane	75-00-3	8260B	ND		0.50	ug/L	1
Chloroform	67-66-3	8260B	ND		0.50	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		0.50	ug/L	1
Cyclohexane	110-82-7	8260B	ND		0.50	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		0.50	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		0.50	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		0.50	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		0.50	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		0 50	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		0.50	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		0.50	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		0.50	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		0.50	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		0.50	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		0.50	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		0.50	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		0.50	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		0 50	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		0.50	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		0.50	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		0.50	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		0.50	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		0.50	ug/L	1
Styrene	100-42-5	8260B	ND		0.50	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		0.50	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		0.50	ug/L	1
Toluene	108-88-3	8260B	ND		0.50	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		0.50	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		0.50	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		0.50	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		0.50	ug/L	1

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/23/2014 1505	EH1		63866

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Trichloroethene	79-01-6	8260B	ND		0.50	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		0.50	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		0.50	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		0.50	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		102	70-130
Toluene-d8		106	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result < PQL and ≥ MDL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
H = Out of holding time
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Laboratory ID: **PL19015-009**
Description: **119 ORTON**
Matrix: **Aqueous**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1527	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0118	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND		0.025	ug/L	1
gamma-BHC (Lindane)	58-89-9	8081B	ND		0.025	ug/L	1
alpha-BHC	319-84-6	8081B	ND		0.025	ug/L	1
beta-BHC	319-85-7	8081B	ND		0.025	ug/L	1
delta-BHC	319-86-8	8081B	ND		0.025	ug/L	1
alpha-Chlordane	5103-71-9	8081B	ND		0.025	ug/L	1
gamma-Chlordane	5103-74-2	8081B	ND		0.025	ug/L	1
4,4'-DDD	72-54-8	8081B	ND		0.025	ug/L	1
4,4'-DDE	72-55-9	8081B	ND		0.025	ug/L	1
4,4'-DDT	50-29-3	8081B	ND		0.025	ug/L	1
Dieldrin	60-57-1	8081B	ND		0.025	ug/L	1
Endosulfan I	959-98-8	8081B	ND		0.025	ug/L	1
Endosulfan II	33213-65-9	8081B	ND		0.025	ug/L	1
Endosulfan sulfate	1031-07-8	8081B	ND		0.025	ug/L	1
Endrin	72-20-8	8081B	ND		0.025	ug/L	1
Endrin aldehyde	7421-93-4	8081B	ND		0.025	ug/L	1
Endrin ketone	53494-70-5	8081B	ND		0.025	ug/L	1
Heptachlor	76-44-8	8081B	ND		0.025	ug/L	1
Heptachlor epoxide	1024-57-3	8081B	ND		0.025	ug/L	1
Methoxychlor	72-43-5	8081B	ND		0.10	ug/L	1
Toxaphene	8001-35-2	8081B	ND		0.25	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		77	46-119	H	55	46-119

PQL = Practical quantitation limit
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
H = Out of holding time
ND = Not detected at or above the PQL
J = Estimated result < PQL and ≥ MDL
P = The RPD between two GC columns exceeds 40%
N = Recovery is out of criteria
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Organochlorine Pesticides by GC

Client: **NCDENR - DWM - DSCA**
Description: **119 ORTON**
Date Sampled: **12/18/2014 1225**
Date Received: **12/19/2014**

Laboratory ID: **PL19015-009**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8081B	1	12/29/2014 1527	MEM	12/24/2014 1857	63984
2	3520C	8081B	1	01/06/2015 0118	MEM	12/30/2014 1824	64252

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Aldrin	309-00-2	8081B	ND	H	0.025	ug/L	2
gamma-BHC (Lindane)	58-89-9	8081B	ND	H	0.025	ug/L	2
alpha-BHC	319-84-6	8081B	ND	H	0.025	ug/L	2
beta-BHC	319-85-7	8081B	ND	H	0.025	ug/L	2
delta-BHC	319-86-8	8081B	ND	H	0.025	ug/L	2
alpha-Chlordane	5103-71-9	8081B	ND	H	0.025	ug/L	2
gamma-Chlordane	5103-74-2	8081B	ND	H	0.025	ug/L	2
4,4'-DDD	72-54-8	8081B	ND	H	0.025	ug/L	2
4,4'-DDE	72-55-9	8081B	ND	H	0.025	ug/L	2
4,4'-DDT	50-29-3	8081B	ND	H	0.025	ug/L	2
Dieldrin	60-57-1	8081B	ND	H	0.025	ug/L	2
Endosulfan I	959-98-8	8081B	ND	H	0 025	ug/L	2
Endosulfan II	33213-65-9	8081B	ND	H	0.025	ug/L	2
Endosulfan sulfate	1031-07-8	8081B	ND	H	0.025	ug/L	2
Endrin	72-20-8	8081B	ND	H	0.025	ug/L	2
Endrin aldehyde	7421-93-4	8081B	ND	H	0.025	ug/L	2
Endrin ketone	53494-70-5	8081B	ND	H	0 025	ug/L	2
Heptachlor	76-44-8	8081B	ND	H	0.025	ug/L	2
Heptachlor epoxide	1024-57-3	8081B	ND	H	0.025	ug/L	2
Methoxychlor	72-43-5	8081B	ND	H	0.10	ug/L	2
Toxaphene	8001-35-2	8081B	ND	H	0.25	ug/L	2

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Decachlorobiphenyl		78	10-122	H	66	10-122
Tetrachloro-m-xylene		77	46-119	H	55	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
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E = Quantitation of compound exceeded the calibration range
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Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ63866-001
Batch: 63866
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Acetone	ND		1	10	ug/L	12/23/2014 1029
Benzene	ND		1	0.50	ug/L	12/23/2014 1029
Bromodichloromethane	ND		1	0.50	ug/L	12/23/2014 1029
Bromoform	ND		1	0.50	ug/L	12/23/2014 1029
Bromomethane (Methyl bromide)	ND		1	0.50	ug/L	12/23/2014 1029
2-Butanone (MEK)	ND		1	10	ug/L	12/23/2014 1029
Carbon disulfide	ND		1	0.50	ug/L	12/23/2014 1029
Carbon tetrachloride	ND		1	0.50	ug/L	12/23/2014 1029
Chlorobenzene	ND		1	0.50	ug/L	12/23/2014 1029
Chloroethane	ND		1	0.50	ug/L	12/23/2014 1029
Chloroform	ND		1	0.50	ug/L	12/23/2014 1029
Chloromethane (Methyl chloride)	ND		1	0.50	ug/L	12/23/2014 1029
Cyclohexane	ND		1	0.50	ug/L	12/23/2014 1029
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	0 50	ug/L	12/23/2014 1029
Dibromochloromethane	ND		1	0.50	ug/L	12/23/2014 1029
1,2-Dibromoethane (EDB)	ND		1	0.50	ug/L	12/23/2014 1029
1,4-Dichlorobenzene	ND		1	0 50	ug/L	12/23/2014 1029
1,3-Dichlorobenzene	ND		1	0.50	ug/L	12/23/2014 1029
1,2-Dichlorobenzene	ND		1	0.50	ug/L	12/23/2014 1029
Dichlorodifluoromethane	ND		1	0 50	ug/L	12/23/2014 1029
1,2-Dichloroethane	ND		1	0.50	ug/L	12/23/2014 1029
1,1-Dichloroethane	ND		1	0.50	ug/L	12/23/2014 1029
trans-1,2-Dichloroethene	ND		1	0 50	ug/L	12/23/2014 1029
cis-1,2-Dichloroethene	ND		1	0.50	ug/L	12/23/2014 1029
1,1-Dichloroethene	ND		1	0.50	ug/L	12/23/2014 1029
1,2-Dichloropropane	ND		1	0.50	ug/L	12/23/2014 1029
trans-1,3-Dichloropropene	ND		1	0.50	ug/L	12/23/2014 1029
cis-1,3-Dichloropropene	ND		1	0.50	ug/L	12/23/2014 1029
Ethylbenzene	ND		1	0.50	ug/L	12/23/2014 1029
2-Hexanone	ND		1	10	ug/L	12/23/2014 1029
Isopropylbenzene	ND		1	0.50	ug/L	12/23/2014 1029
Methyl acetate	ND		1	1.0	ug/L	12/23/2014 1029
Methyl tertiary butyl ether (MTBE)	ND		1	0.50	ug/L	12/23/2014 1029
4-Methyl-2-pentanone	ND		1	10	ug/L	12/23/2014 1029
Methylcyclohexane	ND		1	5.0	ug/L	12/23/2014 1029
Methylene chloride	ND		1	0.50	ug/L	12/23/2014 1029
Styrene	ND		1	0.50	ug/L	12/23/2014 1029
1,1,2,2-Tetrachloroethane	ND		1	0.50	ug/L	12/23/2014 1029
Tetrachloroethene	ND		1	0.50	ug/L	12/23/2014 1029
Toluene	ND		1	0.50	ug/L	12/23/2014 1029
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	0 50	ug/L	12/23/2014 1029
1,2,4-Trichlorobenzene	ND		1	0.50	ug/L	12/23/2014 1029
1,1,2-Trichloroethane	ND		1	0.50	ug/L	12/23/2014 1029
1,1,1-Trichloroethane	ND		1	0.50	ug/L	12/23/2014 1029

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: PQ63866-001
Batch: 63866
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
Trichloroethene	ND		1	0.50	ug/L	12/23/2014 1029
Trichlorofluoromethane	ND		1	0.50	ug/L	12/23/2014 1029
Vinyl chloride	ND		1	0.50	ug/L	12/23/2014 1029
Xylenes (total)	ND		1	0.50	ug/L	12/23/2014 1029

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		108	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ63866-002
Batch: 63866
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	100	60-140	12/23/2014 0942
Benzene	50	52		1	104	70-130	12/23/2014 0942
Bromodichloromethane	50	54		1	107	70-130	12/23/2014 0942
Bromoform	50	49		1	97	70-130	12/23/2014 0942
Bromomethane (Methyl bromide)	50	48		1	95	60-140	12/23/2014 0942
2-Butanone (MEK)	100	99		1	99	60-140	12/23/2014 0942
Carbon disulfide	50	53		1	107	60-140	12/23/2014 0942
Carbon tetrachloride	50	57		1	113	70-130	12/23/2014 0942
Chlorobenzene	50	53		1	106	70-130	12/23/2014 0942
Chloroethane	50	49		1	99	42-163	12/23/2014 0942
Chloroform	50	51		1	102	70-130	12/23/2014 0942
Chloromethane (Methyl chloride)	50	53		1	106	20-158	12/23/2014 0942
Cyclohexane	50	50		1	101	70-130	12/23/2014 0942
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	70-130	12/23/2014 0942
Dibromochloromethane	50	55		1	110	70-130	12/23/2014 0942
1,2-Dibromoethane (EDB)	50	53		1	107	70-130	12/23/2014 0942
1,4-Dichlorobenzene	50	51		1	102	70-130	12/23/2014 0942
1,3-Dichlorobenzene	50	52		1	104	70-130	12/23/2014 0942
1,2-Dichlorobenzene	50	54		1	108	70-130	12/23/2014 0942
Dichlorodifluoromethane	50	56		1	112	60-140	12/23/2014 0942
1,2-Dichloroethane	50	52		1	103	70-130	12/23/2014 0942
1,1-Dichloroethane	50	52		1	104	70-130	12/23/2014 0942
trans-1,2-Dichloroethene	50	53		1	106	70-130	12/23/2014 0942
cis-1,2-Dichloroethene	50	51		1	101	70-130	12/23/2014 0942
1,1-Dichloroethene	50	55		1	109	70-130	12/23/2014 0942
1,2-Dichloropropane	50	54		1	107	70-130	12/23/2014 0942
trans-1,3-Dichloropropene	50	56		1	111	70-130	12/23/2014 0942
cis-1,3-Dichloropropene	50	54		1	108	70-130	12/23/2014 0942
Ethylbenzene	50	54		1	108	70-130	12/23/2014 0942
2-Hexanone	100	110		1	106	60-140	12/23/2014 0942
Isopropylbenzene	50	56		1	113	70-130	12/23/2014 0942
Methyl acetate	50	50		1	100	60-140	12/23/2014 0942
Methyl tertiary butyl ether (MTBE)	50	51		1	103	70-130	12/23/2014 0942
4-Methyl-2-pentanone	100	100		1	103	60-140	12/23/2014 0942
Methylcyclohexane	50	52		1	104	70-130	12/23/2014 0942
Methylene chloride	50	49		1	99	70-130	12/23/2014 0942
Styrene	50	56		1	111	70-130	12/23/2014 0942
1,1,2,2-Tetrachloroethane	50	51		1	103	70-130	12/23/2014 0942
Tetrachloroethene	50	55		1	110	70-130	12/23/2014 0942
Toluene	50	55		1	109	70-130	12/23/2014 0942
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	56		1	112	70-130	12/23/2014 0942
1,2,4-Trichlorobenzene	50	55		1	111	70-130	12/23/2014 0942
1,1,2-Trichloroethane	50	53		1	105	70-130	12/23/2014 0942
1,1,1-Trichloroethane	50	53		1	107	70-130	12/23/2014 0942

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: PQ63866-002
Batch: 63866
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	107	70-130	12/23/2014 0942
Trichlorofluoromethane	50	57		1	114	60-140	12/23/2014 0942
Vinyl chloride	50	52		1	103	60-140	12/23/2014 0942
Xylenes (total)	100	110		1	107	70-130	12/23/2014 0942

Surrogate	Q	% Rec	Acceptance Limit
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		109	70-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Organochlorine Pesticides by GC - MB

Sample ID: PQ63984-001
Batch: 63984
Analytical Method: 8081B

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/24/2014 1857

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
4,4'-DDD	ND		1	0.025	ug/L	12/29/2014 1130
4,4'-DDE	ND		1	0.025	ug/L	12/29/2014 1130
4,4'-DDT	ND		1	0.025	ug/L	12/29/2014 1130
Aldrin	ND		1	0.025	ug/L	12/29/2014 1130
alpha-BHC	ND		1	0.025	ug/L	12/29/2014 1130
alpha-Chlordane	ND		1	0.025	ug/L	12/29/2014 1130
beta-BHC	ND		1	0.025	ug/L	12/29/2014 1130
delta-BHC	ND		1	0 025	ug/L	12/29/2014 1130
Dieldrin	ND		1	0.025	ug/L	12/29/2014 1130
Endosulfan I	ND		1	0.025	ug/L	12/29/2014 1130
Endosulfan II	ND		1	0.025	ug/L	12/29/2014 1130
Endosulfan sulfate	ND		1	0.025	ug/L	12/29/2014 1130
Endrin	ND		1	0.025	ug/L	12/29/2014 1130
Endrin aldehyde	ND		1	0.025	ug/L	12/29/2014 1130
Endrin ketone	ND		1	0.025	ug/L	12/29/2014 1130
gamma-BHC (Lindane)	ND		1	0.025	ug/L	12/29/2014 1130
gamma-Chlordane	ND		1	0.025	ug/L	12/29/2014 1130
Heptachlor	ND		1	0.025	ug/L	12/29/2014 1130
Heptachlor epoxide	ND		1	0.025	ug/L	12/29/2014 1130
Methoxychlor	ND		1	0.10	ug/L	12/29/2014 1130
Toxaphene	ND		1	0.25	ug/L	12/29/2014 1130

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		40	10-122
Tetrachloro-m-xylene		84	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Organochlorine Pesticides by GC - LCS

Sample ID: PQ63984-002
Batch: 63984
Analytical Method: 8081B

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/24/2014 1857

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
4,4'-DDD	0.50	0.47		1	93	70-130	12/29/2014 1145
4,4'-DDE	0.50	0.45		1	90	70-130	12/29/2014 1145
4,4'-DDT	0 50	0.51		1	103	70-130	12/29/2014 1145
Aldrin	0 50	0.44		1	88	70-130	12/29/2014 1145
alpha-BHC	0.50	0.41		1	81	70-130	12/29/2014 1145
alpha-Chlordane	0.50	0.44		1	88	70-130	12/29/2014 1145
beta-BHC	0.50	0.43		1	87	70-130	12/29/2014 1145
delta-BHC	0.50	0.39		1	78	70-130	12/29/2014 1145
Dieldrin	0.50	0.46		1	92	70-130	12/29/2014 1145
Endosulfan I	0.50	0.45		1	89	70-130	12/29/2014 1145
Endosulfan II	0.50	0.44		1	89	70-130	12/29/2014 1145
Endosulfan sulfate	0 50	0.42		1	84	70-130	12/29/2014 1145
Endrin	0.50	0.19	N	1	37	70-130	12/29/2014 1145
Endrin aldehyde	0.50	0.46		1	92	70-130	12/29/2014 1145
Endrin ketone	0.50	0.67	N	1	134	70-130	12/29/2014 1145
gamma-BHC (Lindane)	0.50	0.43		1	86	70-130	12/29/2014 1145
gamma-Chlordane	0.50	0.44		1	89	70-130	12/29/2014 1145
Heptachlor	0.50	0.40		1	80	70-130	12/29/2014 1145
Heptachlor epoxide	0.50	0.44		1	87	70-130	12/29/2014 1145
Methoxychlor	0 50	0.55		1	111	70-130	12/29/2014 1145

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		82	10-122
Tetrachloro-m-xylene		81	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Organochlorine Pesticides by GC - MB

Sample ID: PQ64252-001
Batch: 64252
Analytical Method: 8081B

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/30/2014 1824

Parameter	Result	Q	Dil	PQL	Units	Analysis Date
4,4'-DDD	ND		1	0.025	ug/L	01/05/2015 2145
4,4'-DDE	ND		1	0.025	ug/L	01/05/2015 2145
4,4'-DDT	ND		1	0.025	ug/L	01/05/2015 2145
Aldrin	ND		1	0.025	ug/L	01/05/2015 2145
alpha-BHC	ND		1	0.025	ug/L	01/05/2015 2145
alpha-Chlordane	ND		1	0.025	ug/L	01/05/2015 2145
beta-BHC	ND		1	0.025	ug/L	01/05/2015 2145
delta-BHC	ND		1	0.025	ug/L	01/05/2015 2145
Dieldrin	ND		1	0.025	ug/L	01/05/2015 2145
Endosulfan I	ND		1	0.025	ug/L	01/05/2015 2145
Endosulfan II	ND		1	0.025	ug/L	01/05/2015 2145
Endosulfan sulfate	ND		1	0.025	ug/L	01/05/2015 2145
Endrin	ND		1	0.025	ug/L	01/05/2015 2145
Endrin aldehyde	**0.049**		**1**	**0.025**	**ug/L**	**01/05/2015 2145**
Endrin ketone	ND		1	0.025	ug/L	01/05/2015 2145
gamma-BHC (Lindane)	ND		1	0.025	ug/L	01/05/2015 2145
gamma-Chlordane	ND		1	0.025	ug/L	01/05/2015 2145
Heptachlor	ND		1	0.025	ug/L	01/05/2015 2145
Heptachlor epoxide	ND		1	0.025	ug/L	01/05/2015 2145
Methoxychlor	ND		1	0.10	ug/L	01/05/2015 2145
Toxaphene	ND		1	0.25	ug/L	01/05/2015 2145

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		78	10-122
Tetrachloro-m-xylene		70	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Organochlorine Pesticides by GC - LCS

Sample ID: PQ64252-002
Batch: 64252
Analytical Method: 8081B

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/30/2014 1824

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
4,4'-DDD	0.50	0.52		1	103	70-130	01/05/2015 2159
4,4'-DDE	0.50	0.51		1	101	70-130	01/05/2015 2159
4,4'-DDT	0.50	0 50		1	101	70-130	01/05/2015 2159
Aldrin	0.50	0.49		1	98	70-130	01/05/2015 2159
alpha-BHC	0.50	0.47		1	95	70-130	01/05/2015 2159
alpha-Chlordane	0.50	0.49		1	99	70-130	01/05/2015 2159
beta-BHC	0.50	0.45		1	91	70-130	01/05/2015 2159
delta-BHC	0.50	0.52		1	103	70-130	01/05/2015 2159
Dieldrin	0.50	0.52		1	105	70-130	01/05/2015 2159
Endosulfan I	0.50	0.50		1	100	70-130	01/05/2015 2159
Endosulfan II	0.50	0.52		1	105	70-130	01/05/2015 2159
Endosulfan sulfate	0.50	0.50		1	100	70-130	01/05/2015 2159
Endrin	0.50	0.50		1	101	70-130	01/05/2015 2159
Endrin aldehyde	0.50	0.51		1	102	70-130	01/05/2015 2159
Endrin ketone	0.50	0 54		1	107	70-130	01/05/2015 2159
gamma-BHC (Lindane)	0.50	0.49		1	98	70-130	01/05/2015 2159
gamma-Chlordane	0.50	0.49		1	98	70-130	01/05/2015 2159
Heptachlor	0.50	0.46		1	92	70-130	01/05/2015 2159
Heptachlor epoxide	0.50	0 49		1	98	70-130	01/05/2015 2159
Methoxychlor	0.50	0.50		1	100	70-130	01/05/2015 2159

Surrogate	Q	% Rec	Acceptance Limit
Decachlorobiphenyl		77	10-122
Tetrachloro-m-xylene		68	46-119

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
P = The RPD between two GC columns exceeds 40%
J = Estimated result < PQL and ≥ MDL
N = Recovery is out of criteria
+ = RPD is out of criteria

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Chain of Custody Record

Number 25665

Client NCDENR - DWM	**Report to Contact** YALE ANTELLI	**Sampler (Printed Name)** STEPHEN WADE KIRBY	**Quote No.**
Address 217 W JONES ST	**Telephone No. / Fax No. / Email** 919-707-8353	**Waybill No.**	**Page** 1 of 1
City RALEIGH **State** NC **Zip Code** 27603	**Preservative** 1. Unpres. 4. HNO3 7. NaOH; 2. NaOH/ZnA 5. HCL; 3. H2SO4 6. Na Thio.		**Number of Containers** 3 2 / 0 1 / 5 1
Project Name ATKINSON STREET			**Bottle (See instructions on back)**
Project Number IVONC12006867	**P.O Number**		**Preservative**

PL19015

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: GW	DW	WW	S	Other	Analysis: VOCs	BTEX
TRIP BLANK	12/4/14				✓				✓	
109 ATKINSON - A		938	G		✓					✓
109 ATKINSON - B		943								
112 ASHLEY		1025								
115 ATKINSON		1050								
125 ATKINSON		1125								
124 ATKINSON		1200								
~~ATKINSON~~ VIF		~~1225~~								
113 ORTON		1245								
119 ORTON		1225								

Turn Around Time Required (Prior lab approval required for expedited TAT): ✓ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler	12/18/14	1615	1. Received by		
2. Relinquished by	Date	Time	2. Received by	Date	Time
3. Relinquished by	Date	Time	3. Received by	Date	Time
4. Relinquished by FedEx	Date 12/19/14	Time 1010	4. Laboratory Received by	Date 12/19/14	Time 1010

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY Received on Ice (Check) ✓ Yes ☐ No ☐ Ice Pack — Receipt Temp. 1.0 °C — Temp. Blank ✓ Y / ☐ N

2 1

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Level 1 Report v2 1

SHEALY ENVIRONMENTAL SERVICES, INC.

SHEALY ENVIRONMENTAL SERVICES, INC.

mam 12/19/14

Sample Receipt Checklist (SRC)

Client: ~~NCDEP~~ NCDENR Cooler Inspected by/date: mam /12/19/14 Lot #: PL19015

Means of receipt: ☐ SESI ☐ Client ☐ UPS ☑ FedEx ☐ Airborne Exp ☐ Other

Yes ☑	No ☐		1. Were custody seals present on the cooler?
Yes ☑	No ☐	NA ☐	2. If custody seals were present, were they intact and unbroken?

Cooler ID/Original temperature upon receipt/Derived (corrected) temperature upon receipt:
1.1/1.0 °C 1.2/1.1 °C ___/___ °C ___/___ °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: #4 IR Gun Correction Factor: 0.1 °C
Method of coolant: ☑ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☑	3. If temperature of any cooler exceeded 6.0°C, was Project Manager notified? PM notified by SRC, phone, note (circle one), other:_____. (For coolers received via commercial courier, PMs are to be notified immediately.)
Yes ☑	No ☐	NA ☐	4. Is the commercial courier's packing slip attached to this form?
Yes ☑	No ☐		5. Were proper custody procedures (relinquished/received) followed?
Yes ☐	No ☑	NA ☐	5a Were samples relinquished by client to commercial courier?
Yes ☑	No ☐		6. Were sample IDs listed on the COC?
Yes ☑	No ☐		7. Were sample IDs listed on all sample containers?
Yes ☑	No ☐		8. Was collection date & time listed on the COC?
Yes ☑	No ☐		9. Was collection date & time listed on all sample containers?
Yes ☑	No ☐		10. Did all container label information (ID, date, time) agree with the COC?
Yes ☑	No ☐		11. Were tests to be performed listed on the COC?
Yes ☑	No ☐		12. Did all samples arrive in the proper containers for each test?
Yes ☑	No ☐		13. Did all containers arrive in good condition (unbroken, lids on, etc.)?
Yes ☑	No ☐		14. Was adequate sample volume available?
Yes ☑	No ☐		15. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☑		16. Were any samples containers missing?
Yes ☐	No ☑		17. Were there any excess samples not listed on COC?
Yes ☐	No ☑	NA ☐	18. Were bubbles present >"pea-size" (¼"or 6mm in diameter) in any VOA vials?
Yes ☐	No ☐	NA ☑	19. Were all metals/O&G/HEM/nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☑	20. Were all cyanide and/or sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☑	21. Were all applicable NH3/TKN/cyanide/phenol (<0.2mg/L) samples free of residual chlorine?
Yes ☐	No ☐	NA ☑	22. Were collection temperatures documented on the COC for NC samples?
Yes ☐	No ☐	NA ☑	23. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
Yes ☑	No ☐	N/A 450	24. Was the quote number used taken from the container label?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s)_____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ (H_2SO_4,HNO_3,HCl,NaOH) using SR # _____.

Sample(s)_____ were received with bubbles >6 mm in diameter.

Sample(s)_____ were received with TRC >0.2 mg/L (If #21 is No)

SC Drinking Water Project Sample(s) pH verified to be > 2 by _____ Date: _____

Sample(s)_____ were not received at a pH of <2 and were adjusted accordingly using SR#_____

Sample labels applied by: mam Verified by: _____ Date: 12/19/14

Comments:

NCDENR

North Carolina Department of Environment and Natural Resources

Division of Waste Management

MEMORANDUM

Date: December 29, 2014

To: File

From: Vince Antrilli
Raleigh Regional Office
Inactive Hazardous Sites Branch

Re: Atkinson St Wells – Sampling Trip Summary
NONCD0002867

- Wade Kirby & Bobby Lutfy visited the site on Dec 18, 2014 to perform well sampling in the area. They sampled the addresses list below:
  - 109 Atkinson St (Pre and Post filter)
  - 112 Ashley Ave (serves also 108 Atkinson St)
  - 115 Atkinson St
  - 125 Atkinson St
  - 124 Atkinson St (serves also 118 Atkinson St)
  - 119 Orton Rd
  - 113 Orton Rd
  - 107 Atkinson St (Pump not working; no sample collected)
  - 121 Atkinson St (vacant; no sample collected)
- No other residents in the area responded to sample request letters, were not available by phone and were not home during the time that we were on site to sample.
- The samples collected were sent to Shealy Lab on Dec 18, 2014.

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: Lacey Haught + Penny Myers
Well Address: 109 Atkinson Street
Well ID #: 109 Atkinson — A

Coordinates: _____ N
_____ E

Weather
Temp: low 40s
Wind: lt breeze
Percip: clear + sunny

Date: 12-18-14
Sample Team: Kirby + Luffy

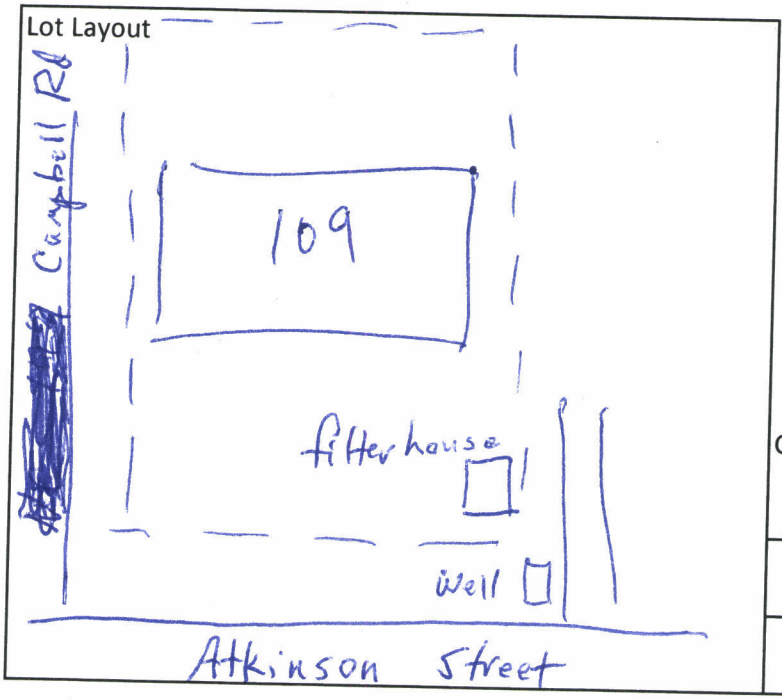
Comments (well construction, etc.) Sample at filter house
After filter sample

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	9.1°	9.0°	9.4°		
pH	5.15	5.13	~~5.09~~ 5.11		
S.C.	85.4	86.1	86.0		
Turbidity					

Time Sample Collected: 9:38

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments:
Sample After filter system

Duplex 107 + 109

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD0002867
Owner Name: Lacey Haught + Penny Myers
Well Address: 109 Atkinson Street
Well ID #: 109 Atkinson – B

Coordinates: _____ N
_____ E

Weather
Temp: low 40s
Wind: lt breeze
Percip: clear + sunny

Date: 12-18-14
Sample Team: Kirby + Luffy

Comments (well construction, etc.) Sample at filter house
Before filter sample

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)					
pH					
S.C.					
Turbidity					

Time Sample Collected: 9:43

Water Condition (turbodity, color, odor): clear

Lot Layout

Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments: Sample Before filter system

Duplex 107 + 109

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: James & Glenda Butler
Well Address: 112 Ashley Ave.
Well ID #: 112 Ashley

Weather
Temp: low 40s
Wind: breeze
Percip: Ptly Cloudy

Date: 12-18-14
Sample Team: Kirby & Lutfy

Coordinates: _____ N
_____ E

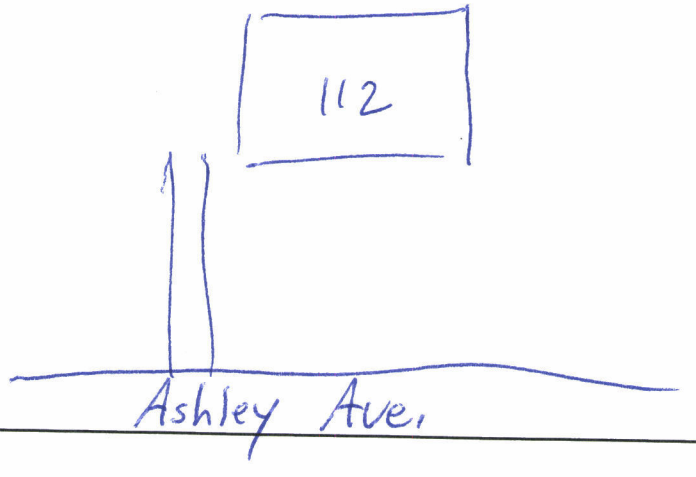
Comments (well construction, etc.) Sample from well spigot

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	13.2°	16.6	16.9		
pH	4.46	4.38	4.34		
S.C.	61.2	62.6	63.5		
Turbidity					

Time Sample Collected: 10:25

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments:

Well serves 112 Ashley Ave and 108 Atkinson Street

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD0002867
Owner Name: William Jernigan
Well Address: 115 Atkinson Street
Well ID #: 115 Atkinson

Weather
Temp: low 40s
Wind: breeze
Percip: Ptly cloudy

Date: 12-18-14
Sample Team: Kirby + Lutfy

Coordinates: _____ N
_____ E

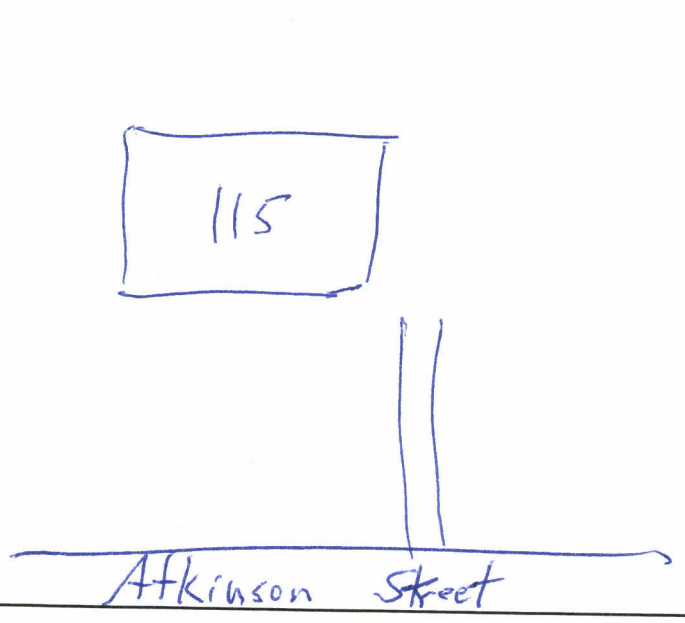
Comments (well construction, etc.) Sample spigot at well

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	14.3°	16.7°	16.7°		
pH	4.01	3.97	3.96		
S.C.	123.0	122.5	122.5		
Turbidity					

Time Sample Collected: 10:50

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments: _____

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: Jimmy Johnson
Well Address: 125 Atkinson Street
Well ID #: 125 Atkinson

Weather
Temp: mid 40s
Wind: breeze
Percip: mostly sunny

Date: 12-18-14
Sample Team: Kirby + Lutfy

Coordinates: _____ N
_____ E

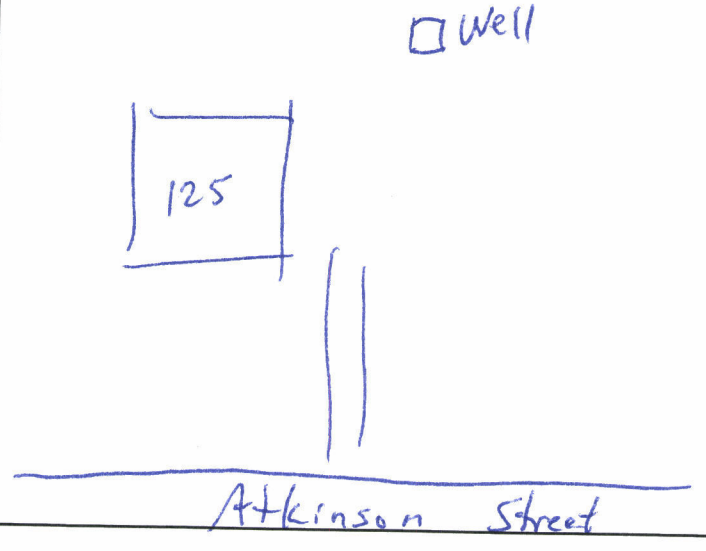
Comments (well construction, etc.) Sampled spigot at well

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	16.1	16.6	16.7		
pH	4.20	4.11	4.12		
S.C.	102.3	105.7	105.1		
Turbidity					

Time Sample Collected: 11:25

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:
- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments:

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD0002867
Owner Name: Jimmy Johnson
Well Address: 124 Atkinson Street
Well ID #: 124 Atkinson

Coordinates: _____ N
_____ E

Weather
Temp: mid 40s
Wind: H. breeze
Percip: mostly sunny

Date: 12-18-14
Sample Team: Kirby + Lutfy

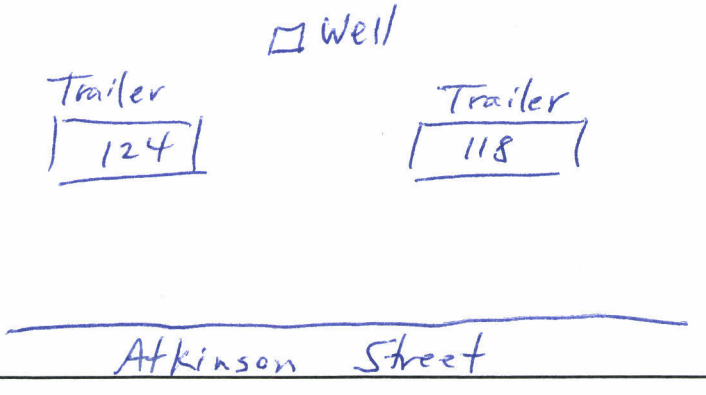
Comments (well construction, etc.) Sample spigot at well

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	17.7	17.8	17.8		
pH	4.40	4.33	4.36		
S.C.	93.3	93.3	93.0		
Turbidity					

Time Sample Collected: 12:00

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments:

Well serves 118 and 124 Atkinson Street

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: Perry Knight
Well Address: 119 Orton Road
Well ID #: 119 Orton

Weather
Temp: upper 40s
Wind: A breeze
Percip: clear + sunny

Date: 12-18-14
Sample Team: Kirby + Lutfy

Coordinates: _____ N
_____ E

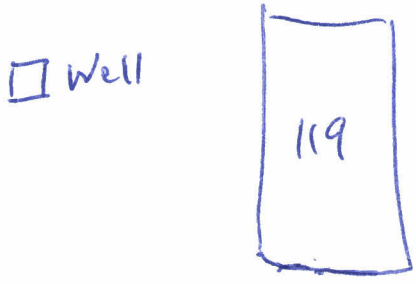
Comments (well construction, etc.) Sample spigot at well

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	13.6	14.0	16.3	15.5	
pH	4.31	4.28	4.28	4.30	
S.C.	101.0	100.5	107.0	100.3	
Turbidity					

Time Sample Collected: 12:25

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:
- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments: _____

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: Perry Knight
Well Address: 113 Orton Rd
Well ID #: 113 Orton

Weather
Temp: upper 40s
Wind: lt breeze
Percip: clear + sunny

Date: 12-18-14
Sample Team: Kirby + Lutfy

Coordinates: _____ N
_____ E

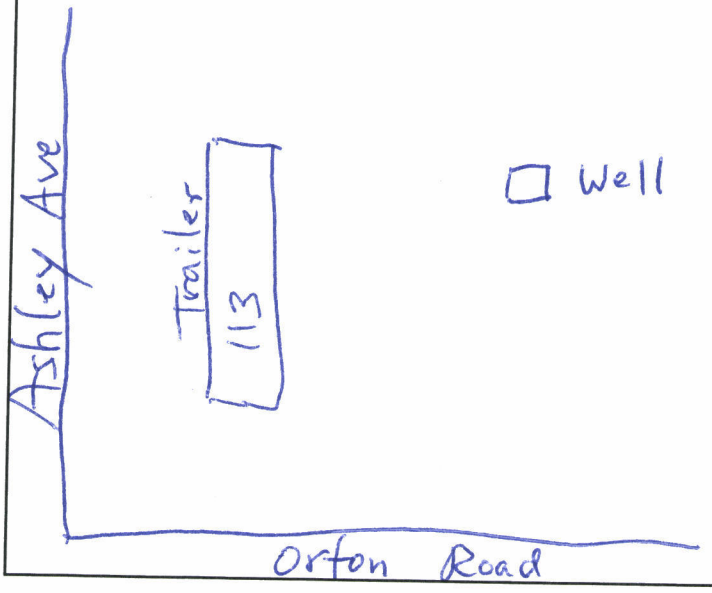
Comments (well construction, etc.) sample spigot at well

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)	17.1	17.2	17.2		
pH	4.59	4.63	4.61		
S.C.	107.3	110.2	110.3		
Turbidity					

Time Sample Collected: 12:45

Water Condition (turbodity, color, odor): clear

Lot Layout



Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ____ Pest./Herb. (2 - 1L Amber bottle)
- ✓ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments: _____

Atkinson Street
NCNCD 0002807
Perry Knight
119 Orton Road
119 Orton

Well Log Sheet

Site Name: Atkinson Street
Site Id #: NONCD 0002867
Owner Name: Jimmy Johnson
Well Address: 107 Atkinson Street
Well ID #: 107 Atkinson

Coordinates: _____ N
_____ E

Weather
Temp: mid 40s
Wind: breeze
Percip: mostly sunny

Date: 12-18-14
Sample Team: Kirby + Lutfy

Comments (well construction, etc.) ~~Sampled spigot near well~~
pump not working, no water available

Time Interval	5 Min	10 Min	15 Min	20 Min	25 Min
Temp (°C)					
pH					
S.C.					
Turbidity					

Time Sample Collected: ~~11:45~~

Water Condition (turbodity, color, odor): clear

Lot Layout

Samples Collected:

- ✓ VOCs 8260 (3 - 40ml vials)
- ____ 1,4 Dioxane (3 - 40ml vials)
- ____ SVOCs/PCBs (2 - 1L Amber bottle)
- ____ Metals (1 - 1L HDPE bottle)
- ____ Dioxin (1 - 1L bottle)
- ✓ Pest./Herb. (2 - 1L Amber bottle)
- ____ Base Neutral & Acid Extractables (2 - 1L Amber bottle)

Comments: _____

SHEALY

Chain of Custody Record

Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, South Carolina 29172
Telephone No. (803) 791-9700 Fax No. (803) 791-9111
www.shealylab.com

Number 25665

Client: NCDENR-DWM	Report to Contact: VINCE ANTRILLI	Sampler (Printed Name): STEPHEN WADE KIRBY	Quote No.
Address: 217 W JONES ST	Telephone No. / Fax No. / Email: 919-707-8353	Waybill No.	Page 1 of 1
City: RALEIGH; State: NC; Zip Code: 27603	Preservative: 1. Unpres. 2. NaOH/ZnA 3. H2SO4 4. HNO3 5. HCL 6. Na Thio. 7. NaOH		Number of Containers
Project Name: ATKINSON STREET			Bottle (See Instructions on back)
Project Number: NONCD 000 2867	P.O Number		Preservative
			Lot No.

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix GW	DW	WW	S	Other	Analysis	VOCs	Pest	Remarks / Cooler ID
										3	2	
										A	1	
										S	1	
TRIP BLANK	12/18/14									✓		
109 ATKINSON-A		938	G	✓							✓	
109 ATKINSON-B		943										
112 ASHLEY		1025										
115 ATKINSON		1050										
125 ATKINSON		1125										
124 ATKINSON		1200										
~~119 ORTON~~ WK		~~1225~~										
113 ORTON		1245										
119 ORTON		1225										

Turn Around Time Required (Prior lab approval required for expedited TAT): ☑ Standard ☐ Rush (Please Specify)

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab

QC Requirements (Specify)

Possible Hazard Identification: ☐Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison ☐Unknown

	Date	Time		Date	Time
1. Relinquished by / Sampler: Steph Wade Kirby	12/18/14	1615	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory Received by		

Note: All samples are retained for six weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Check) ☐ Yes ☐ No ☐ Ice Pack
Receipt Temp. _____ °C
Temp. Blank ☐ Y / ☐ N

Instructions

Please complete as many fields possible. Contact your lab Project Manager with any questions reagrding Chain of Custody completion.

Bottle Types (Insert letter code for bottle type submitted)

A - 40ml Vial Clear

B - 40ml Vial Amber

C - 125ml Plastic

D - 250ml Plastic

E - 250ml Amber

F - 500ml Plastic

G - 500ml Amber

H - 1L Plastic

I - 1L Amber

J - 1L Widemouth

K - 2L Plastic

L - 2 oz. jar

M - 4 oz. jar

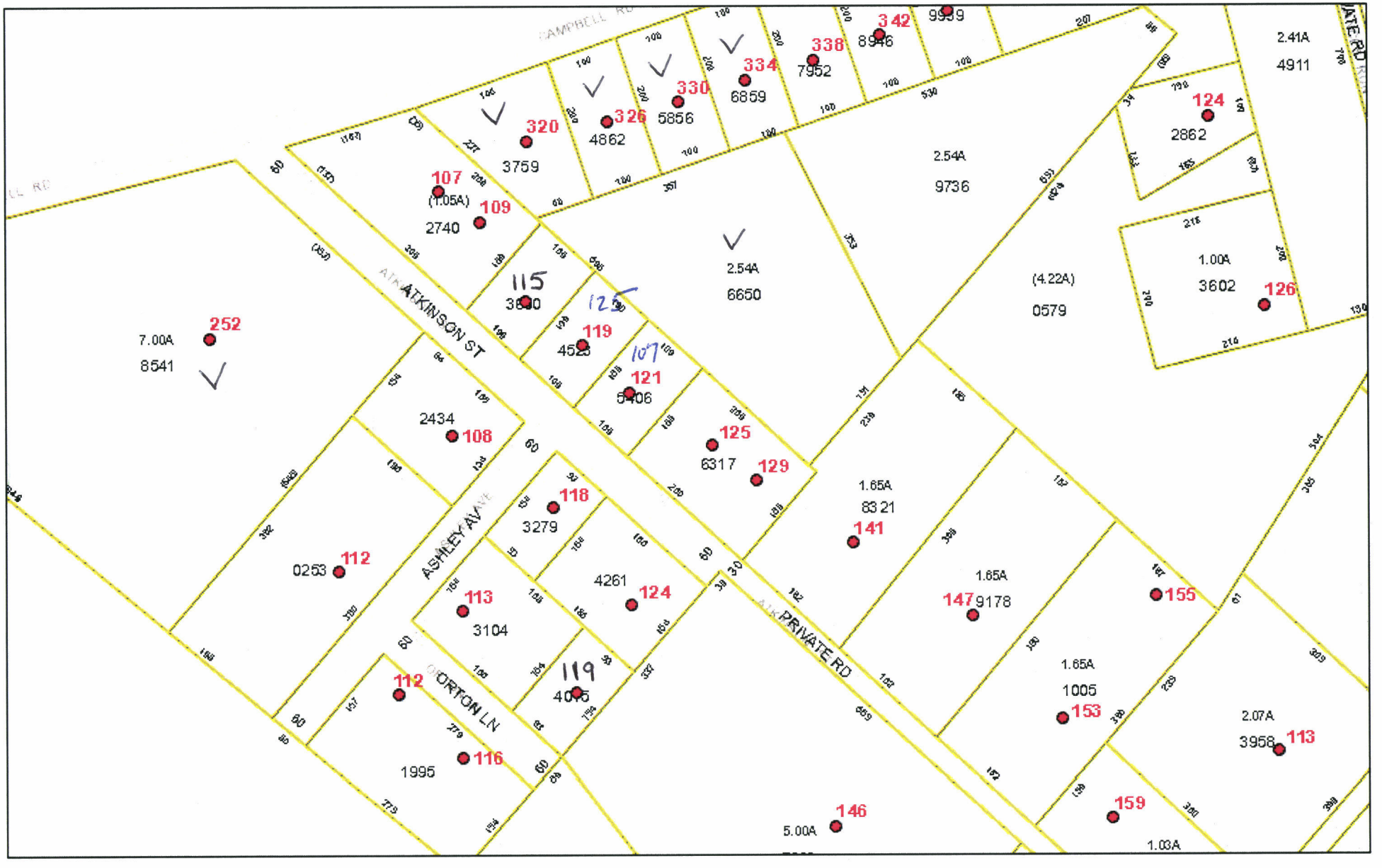
N - 9 oz jar

O - 100ml sterile

Atkinson St, Richmond County Addresses (NONCD0002867)

Well Address	Parcel ID#	Owner / Mailing Address	Phone # / email	Sampling Permission
109 Atkinson St + 107 Duplex	2740	Lacey Haught & Penny Myers 109 Atkinson St Hamlet, NC 28345		Not needed. POE installed by BAF. Collect Pre & Post Filter.
115 Atkinson St	3650	William Jernigan PO Box 661 Hamlet, NC 28345		Yes
118 & 124 Atkinson St one well		Jimmy & Ruby Johnson 118 Atkinson St Hamlet, NC 28345		~~No one home~~ Yes
112 Ashley Ave + 108 Atkinson		James & Glenda Butler 112 Ashley Ave Hamlet, NC 28345		yes, phone
~~119~~ Orton Rd + 113		Perry Knight 119 Orton Rd Hamlet, NC 28345		~~No one home~~ Yes
121 Atkinson St Vacant	125	Jody Johnson 121 Atkinson St Hamlet, NC 28345		Yes
107 119, 125, & ~~129~~ Atkinson St		Jimmy & Deborah Johnson 107 Atkinson St Hamlet, NC 28345		Yes
107 Well	107, 145	Jimmy Johnson	pump not	working
			sample result should be mailed to Jimmy Johnson	
125 Well		Jimmy Johnson		

Atkinson St Contamination NONCD 0002867



November 25, 2014

County Boundary

Parcels

AddressPoints

City Limits

1:2,751

1 inch = 229 feet

0 120 240 480 Feet

0 0.02 0.04 0.08 Miles

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL

Richmond County GIS

Atkinson St
Richmond Co
NONCD000

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

William Archie Jernigan
PO Box 661
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Mr. Jernigan:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at 115 Atkinson Road **in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

Please contact me by one of the following ways to confirm that ***we may*** collect a sample from your well. You can reach me by calling **(919) 707-8353**, emailing me at **Vincent.Antrilli@ncdenr.gov** or by responding to this letter stating that you are granting permission for the State to sample your well. **If you have any questions, comments, or concerns, please contact me.**

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

Lacey and Gordon Haught and Penny Myers
109 Atkinson Street
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Current Resident:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **109 Atkinson St in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

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Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

Jimmy and Ruby Johnson
118 Atkinson Street
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Mr. and Mrs. Johnson:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **118 and 124 Atkinson St in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

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Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

James David and Glenda Butler
112 Ashley Avenue
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Mr. and Mrs. Butler:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **108 and 112 Ashley Avenue in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

Please contact me by one of the following ways to confirm that ***we may*** collect a sample from your well. You can reach me by calling **(919) 707-8353**, emailing me at **Vincent.Antrilli@ncdenr.gov** or by responding to this letter stating that you are granting permission for the State to sample your well. **If you have any questions, comments, or concerns, please contact me.**

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Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

Perry Wayne Knight
119 Orton Road
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Mr. Knight:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **119 Orton Road in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

Please contact me by one of the following ways to confirm that ***we may*** collect a sample from your well. You can reach me by calling **(919) 707-8353**, emailing me at **Vincent.Antrilli@ncdenr.gov** or by responding to this letter stating that you are granting permission for the State to sample your well. **If you have any questions, comments, or concerns, please contact me.**

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Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

Jody Johnson
121 Atkinson Street
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Ms. Johnson:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **121 Atkinson St in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

Please contact me by one of the following ways to confirm that ***we may*** collect a sample from your well. You can reach me by calling **(919) 707-8353**, emailing me at **Vincent.Antrilli@ncdenr.gov** or by responding to this letter stating that you are granting permission for the State to sample your well. **If you have any questions, comments, or concerns, please contact me.**

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Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

December 1, 2014

Jimmy and Deborah Johnson
107 Atkinson Street
Hamlet, NC 28345

RE: Water Supply Well Sampling – Atkinson St Contamination site (NONCD0002867)

Dear Mr. and Mrs. Johnson:

My name is Vincent Antrilli and I work for the Division of Waste Management of the State of North Carolina's Department of Environment and Natural Resources. The purpose of this letter is to request your permission to sample the well(s) located at **107, 119, 125, and 129 Atkinson St in Hamlet, Richmond County,** as part of an investigation of groundwater contamination detected in your area. You do not have to be present to have your well sampled and there is no cost to you. Samples will be collected from either a faucet at the well or on the exterior of your home. The laboratory results will be forwarded to you as soon as possible.

Please contact me by one of the following ways to confirm that ***we may*** collect a sample from your well. You can reach me by calling **(919) 707-8353**, emailing me at **Vincent.Antrilli@ncdenr.gov** or by responding to this letter stating that you are granting permission for the State to sample your well. **If you have any questions, comments, or concerns, please contact me.**

Sincerely,

Vincent Antrilli, Jr.

Vincent Antrilli, Jr.
Environmental Specialist
Inactive Hazardous Sites Branch
Superfund Section

Parcels

Shows on Map

PIN	Owner Name	Owner2	Mailing Address
749204716859	TATE BOBBY & SIMMONS PATRICIA		354 CAMPBELL RD
749204713279	JOHNSON JIMMIE W & RUBY		107 ATKINSON ST
749204714523	JOHNSON JIMMIE & DEBORAH		107 ATKINSON ST
749204618541	BUTLER JAMES DAVID		112 ASHLEY AVE
749204713759	TATE BOBBY & SIMMONS PATRICIA		354 CAMPBELL RD
749204712740	HAUGHT LACEY K & PENNY MYERS	HAUGHT GORDON	109 ATKINSON ST
749204713104	KNIGHT PERRY WAYNE		119 ORTON RD
749204715406	JOHNSON JODY L		107 ATKINSON ST
749204716650	TATE BOBBY & SIMMONS PATRICIA		354 CAMPBELL RD
749204714261	JOHNSON JIMMIE W		107 ATKINSON ST
749204714862	TATE BOBBY & SIMMONS PATRICIA		354 CAMPBELL RD
749204716317	JOHNSON JIMMIE W & DEBBIE		107 ATKINSON ST
749204712434	BUTLER JAMES DAVID & GLENDA		112 ASHLEY AVE
749204713650	JERNIGAN WILLIAM ARCHIE		PO BOX 661
749204710253	BUTLER JAMES DAVID & GLENDA		112 ASHLEY AVE
749204715856	TATE BOBBY & SIMMONS PATRICIA		354 CAMPBELL RD

Data subject to change without notice.

11-21-2014 10:05 AM

HAMLET, NC	28345
HAMLET, NC	28345
HAMLET, NC	28345
HAMLET, NC	28345
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HAMLET, NC	28345
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HAMLET, NC	28345
HAMLET, NC	28345

Data subject to change without notice.

SITE HEALTH AND SAFETY PLAN

A. General Information

Site Name Atkinson Street Contamination ID # NONCD 000 2867

Location 109 Atkinson Street, Hamlet, Richmond County, NC

Proposed Date of Investigation 12/~~29~~18/14 to 1/~~29~~18/15

Date of Briefing 8/31/10

Date of Debriefing 1/29/15

Nature of Visit (check one):

On-Site Reconnaissance	X
Off-Site Reconnaissance	
Sampling	
Sampling Overview	
Remediation Overview	

Health Department Official Contacted Holly Hare's voice mail

Date of Contact 12/8/14

Site Investigation Team: All site personnel have read the Site Health and Safety Plan and are familiar with its provisions.

	Personnel	Responsibilities	Signature
Team 1	Vince Antrilli	team leader, sampling	
Team 1	Bobby Lufty	sampling	
Team 1	Wade Kirby	sampling	

Plan Preparation:

Prepared By: David Lilley, Industrial Hygiene Consultant

Reviewed By: Jim Bateson, Superfund Section Chief

B. SITE/WASTE CHARACTERISTICS

Waste Type(s) __X__Liquid ____Solid ____Sludge ____Gas
Characteristics ____Corrosive ____Ignitable ____Radioactive
__X__Volatile __X__Toxic ____Reactive ____Other
List Known or Suspected Hazards (physical, chemical biological or radioactive) on Site and their toxicological effects. Also, if known, list chemical amounts

HAZARD	WARNING PROPERTIES	TLV
1,1-Dichloroethene	Odor Threshold (OT) = 190 ppm	5 ppm
1,1-Dichloroethane	OT = 120 ppm	100 ppm
Chloromethane	OT = 10 ppm	50 ppm
1,4-Dioxane	OT = 24 ppm	20 ppm

UNDERGROUND UTILITIES CHECKLIST

Utility	Locator/Contact Person	Phone #	Date of Location
Power	NA	NA	NA
Telephone	NA	NA	NA
Gas	NA	NA	NA
Water	NA	NA	NA
Sewer	NA	NA	NA

ID # NCD 096 158 696

Facility Description: Size unknown Buildings unknown
Disposal Methods Being Investigated Spraying of pesticides on an orchard near the site.
Unusual Features on Site (dike integrity, power lines, terrain, etc.):
None known

History of the Site: Groundwater contamination from unknown source.

C. HAZARD EVALUATION

The site can be toured and sampled in level D protection. Knee length, chemically resistant boots will be worn in areas of potential surface soil contamination. Tyvek suits are recommended to keep clothing clean.

D. WORK PLAN INSTRUCTION

Map or Sketch Attached? yes

Perimeter Identified? no

Command Post Identified? no

Zones of Contamination Identified? no

Personal Protective Equipment/Level of Protection: ___C __X_D

Modifications Wear goggles, face shield, and PVC gloves while preparing acid preserved samples, goggles and PVC gloves while collecting acid preserved samples. Avoid breathing acid vapors.

ID # NCD 096 158 696

Surveillance Equipment:

_____ HNU	_____ Detector Tubes and Pumps
_____ OVA	_____ 02 Meter
_____ Explosimeter	_____ Radiation Monitor

Decontamination Procedures

_____Level C Respirator wash, respirator removal, suit wash (if needed), suit removal, boot wash, boot removal and glove removal.

__X__Level D Boot wash and rinse and boot removal, suit removal, glove and goggle removal. Goggles will be worn while washing field equipment.

Modifications Dispose of trash properly, on-site if possible.

Work Schedule/Visit Objectives The purpose of this visit is to determine if the site poses a threat to the public health or environment because of releases of contaminants to soil, surface water, groundwater, or air. Sampling may consist of groundwater sampling.

EMERGENCY PRECAUTIONS

Route of Exposure	First Aid
Eyes	irrigate immediately
Skin	soap and water wash
Inhalation	fresh air and artificial respiration
Ingestion	get medical attention immediately

ID # NCD 096 158 696

Location of Nearest Phone: unknown (nearby residences?)

Hospital (Address and Phone Number)

FirstHealth Richmond Memorial Hospital, 925 S Long Drive, Rockingham, NC (910) 417-3000

Emergency Transportation Systems (Phone Numbers)

Fire 911

Ambulance 911

Rescue Squad 911

Emergency Route to Hospital See next page.

	Air purifying respirator	X	First Aid Kit
	Cartridges for respirator	X	3 gal. Deionized H20
X	Eye Wash Unit	X	Rain suit
	HNU	X	Gloves (PE/PVC/nitrile/cloth)
	OVA	X	Boots/Boot Covers
	Explosimeter	X	Coveralls (tyvek/saranex)
	Radiation Monitor	X	Eye Protection (goggles/shield)
X	Decontamination Materials	X	Hard Hat

EQUIPMENT CHECKLIST

STATE POISON CONTROL CENTER
1-800-848-6946

North Carolina OSHA
1-800-LABOR-NC

mapquest

Trip to:
925 S Long Dr
Rockingham, NC 28379-4835
7.14 miles / 12 minutes
Notes

4 Ways to Avoid Running Out of Money During Retirement

If you have a $500,000 portfolio, download the guide by *Forbes* columnist Ken Fisher's firm. Even if you have something else in place, this must-read guide includes research and analysis you can use right now. Don't miss it!

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FISHER INVESTMENTS

109 Atkinson St, Hamlet, NC 28345-8006

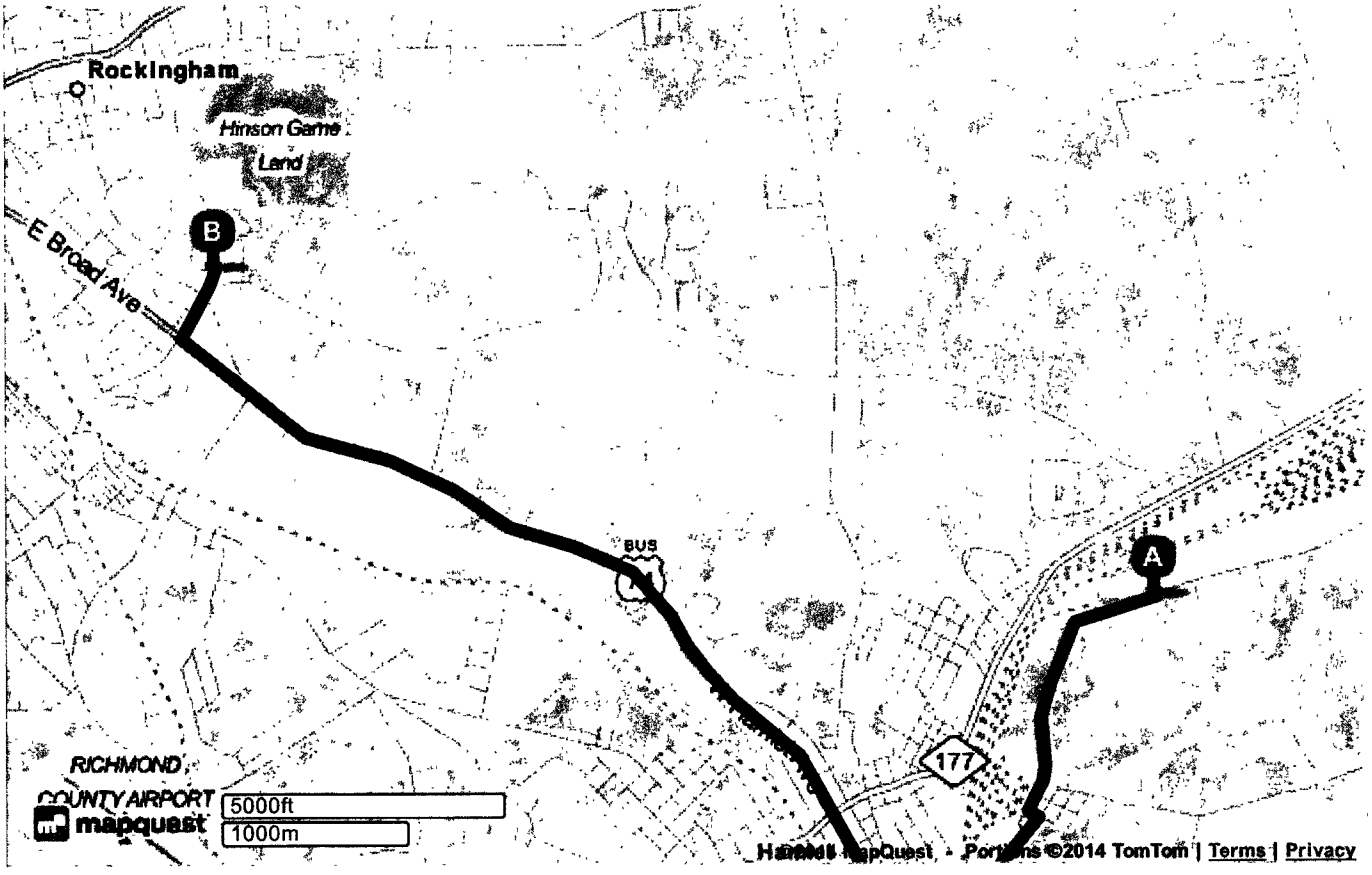
Download Free App

	1. Start out going **northwest** on **Atkinson St** toward **Campbell Rd**. Map	**0.01 Mi** *0.01 Mi Total*
↰	2. Turn **left** onto **Campbell Rd**. Map	**1.1 Mi** *1.1 Mi Total*
↑	3. **Campbell Rd** becomes **Wellington Dr**. Map	**0.2 Mi** *1.3 Mi Total*
↰	4. Turn **left** onto **Apex St**. Map	**0.06 Mi** *1.4 Mi Total*
↱	5. Take the 1st **right** onto **Veterans Dr**. Map *If you are on Sycamore St and reach Manhattan St you've gone about 0.1 miles too far*	**0.8 Mi** *2.1 Mi Total*
↱	BUS WEST 74 6. Turn **right** onto **E Spring St / US-74 Bus W.** Map *E Spring St is just past Church St* *If you reach E Hamlet Ave you've gone a little too far*	**0.2 Mi** *2.4 Mi Total*
↰	BUS WEST 74 7. Turn **left** onto **Raleigh St / US-74 Bus W.** Map *Raleigh St is 0.1 miles past N Bridges St* *If you are on Spring St and reach Wilmington St you've gone a little too far*	**0.08 Mi** *2.5 Mi Total*
↱	BUS WEST 74 8. Take the 1st **right** onto **W Hamlet Ave / US-74 Bus W.** Continue to follow **US-74 Bus W.** Map *Piggly Wiggly Supermarket is on the corner* *If you reach Charlotte St you've gone a little too far*	**4.3 Mi** *6.8 Mi Total*
↱	9. Turn **right** onto **S Long Dr.** Map *S Long Dr is 0.3 miles past Rockingham Rd* *If you reach Dogwood Ln you've gone a little too far*	**0.3 Mi** *7.1 Mi Total*
	10. **925 S LONG DR** is on the **right.** Map *Your destination is just past County Home Rd* *If you reach Crawfords Crk you've gone a little too far*	

925 S Long Dr, Rockingham, NC 28379-4835

B

Total Travel Estimate: **7.14 miles - about 12 minutes**



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HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: 1,1-Dichloroethene

I. PHYSICAL/CHEMICAL PROPERTIES	Reference
Chemical Formula $C_2H_2Cl_2$	1
Natural Physical State at 25EC liquid	2
Vapor Pressure not pertinent mm Hg at 20EC	3
Melting Point -122.5 EF/EC Boiling Point 31.7 EF/EC	1
Flash Point (open or closed cup) 0 EC/EF	3
Solubility - H_2O 0.5% at 68.02 °F	3
Other organic solvents	1

Physical Features: (odor, color, etc.) Watery colorless liquid with a sweet odor. (3)

II. TOXICOLOGICAL DATA

Standards: 5 ppm (4) TLV NA (5) PEL no data (3) IDLH

Routes of Exposure: Inhalation, Ingestion, Skin and/or eye contact

Acute/Chronic Symptoms: Vapor can cause dizziness and drunkenness; high levels cause anesthesia. Liquid irritates eyes and skin. (3)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: 1,1-Dichloroethene

III. HAZARDOUS CHARACTERISTICS — Reference

A. Combustibility Yes X No ___ — 3

Toxic by-products Hydrogen chloride and phosgene are generated — 3

B. Flammability LEL 7.3% UEL 16.0% — 3

C. Reactivity Hazard react with copper and aluminum — 3

D. Corrosivity Hazard yes/no pH: ___

Neutralizing agent: ___

E. Radioactive Hazard — Exposure Rate

Background	yes/no	___	___
Alpha particles	yes/no	___	___
Beta particles	yes/no	___	___
Gamma radiation	yes/no	___	___

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. The Condensed Chemical Dictionary, Hawley, 11th Edition, 1987.
3. Chemical Hazard Response Information System, US Coast Guard, 1985.
4. Threshold Limit Values and Biological Exposure Indices for 2007, ACGIH.
5. CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: 1,1 - dichloroethane

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula $C_2 H_4 Cl_2$	1
Natural Physical State at 25°C liquid	1
Vapor Pressure _____ mm Hg at 20°C	
Melting Point -98 °F/°C Boiling Point 57.3 °F/°C	1
Flash Point (open or closed cup) 57 °C/°F	2
Solubility - H_2O in about 200 parts water	1
Other miscible with alcohol	1

Physical Features: (odor, color, etc.) oily liquid, odor and taste as of chloroform (1) OVA Relative Response = 80%

II. TOXICOLOGICAL DATA

Standards: 100 ppm (3) TLV 100 ppm (4) PEL 4,000 ppm IDLH 2

Routes of Exposure: Inhalation, Eye Contact, Skin Contact, Ingestion

Acute/Chronic Symptoms: Salivation, sneezing, coughing, dizziness, nausea, vomiting, eye irritation, skin irritation, circulatory failure (2).

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: 1,1 - dichloroethane

III. HAZARDOUS CHARACTERISTICS

Reference

A. Combustibility Yes X No ____ — 2
Toxic by-products emits highly toxic fumes including phosgene — 2

B. Flammability LEL 5.6% UEL 11.4% — 2

C. Reactivity Hazard _____

D. Corrosivity Hazard yes/no pH: _____

Neutralizing agent: _____

E. Radioactive Hazard

		Exposure Rate	
Background	yes/no	_____	
Alpha particles	yes/no	_____	
Beta particles	yes/no	_____	
Gamma radiation	yes/no	_____	

IV. REFERENCES

(1) The Merck Index, 11th Edition, 1989.
(2) Chemical Hazard Response Information System, US Department of Transportation, 1987.
(3) Threshold Limit Values and Biological Exposure Indices, ACGIH, 2007
(4) 29 CFR 1910.1000.

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Chloromethane

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula CH_3Cl	1
Natural Physical State at 25°C gas	1
Vapor Pressure > 1 atm mm Hg at 20°C	1
Melting Point -144 °F/°C Boiling Point -12 °F/°C	1
Flash Point (open or closed cup) NA (gas) °C/°F	1
Solubility - H_2O 0.5%	
Other	

Physical Features: (odor, color, etc.) Colorless gas with a faint, sweet odor which is not noticeable at dangerous concentrations. (1)

II. TOXICOLOGICAL DATA

Standards: 50 ppm (2) TLV 100 ppm (3) PEL 10,000 ppm (1) IDLH

Routes of Exposure: Inhalation

Acute/Chronic Symptoms: Dizziness, nausea, vomiting, visual disturbances, staggering, slurred speech, convulsions, coma, liver and kidney damage, frostbite, carcinogenic

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately

Chemical Name: Chloromethane

III. HAZARDOUS CHARACTERISTICS

		Reference
A.	Combustibility Yes X No ___	
	Toxic by-products _____	_____
B.	Flammability LEL 8.1% UEL 17.4%	1
C.	Reactivity Hazard Chemically-active metals such as potassium, powdered aluminum, zinc & magnesium; water	1
D.	Corrosivity Hazard yes/no pH: _____	_____
	Neutralizing agent: _____	

E. Radioactive Hazard

		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. Pocket Guide to Chemical Hazards, NIOSH, 1990
2. Threshold Limit Values and Biological Exposure Indices, ACGIH, 2007
3. 29 CFR 1910.1000

HAZARDOUS SUBSTANCE INFORMATION FORM

Chemical Name: Dioxane

I. PHYSICAL/CHEMICAL PROPERTIES

	Reference
Chemical Formula $C_4 H_8 O_2$	1
Natural Physical State at 25EC liquid	1
Vapor Pressure 29 mm Hg at 20EC	2
Melting Point 53EF/EC Boiling Point 214EF/EC	2
Flash Point (open or closed cup) 55 EC/EF	2
Solubility - H_2O miscible	1,2
Other "the usual organic solvents"	1

Physical Features: (odor, color, etc.) Colorless liquid with a mild ether-like odor. (2) IP = 9.13 eV OVA Relative Response = 30%

II. TOXICOLOGICAL DATA

skin skin Possible

Standards: 20 ppm (3) TLV 100 ppm (4) PEL Carcinogen (2) IDLH (2,000 ppm)

Routes of Exposure: Ingestion, Inhalation, Skin absorbtion, Eye contact

Acute/Chronic Symptoms: Drowsiness; headache; nausea; vomiting; irritation of the eyes, nose, and throad; liver damage; kidney failure; skin irritation; possible carcinogen (2)

First Aid: Inhalation: artificial respiration; Ingestion: get medical attention immediately; Eye contact: irrigate immediately; Skin contact: soap and water wash immediately.

Chemical Name: Dioxane

III. HAZARDOUS CHARACTERISTICS — Reference

A. Combustibility Yes X No ___ — 2

Toxic by-products Toxic vapors are generated when heated — 3

B. Flammability LEL 2% UEL 22% — 2

C. Reactivity Hazard No reaction with common materials — 3

D. Corrosivity Hazard yes/no pH: _____ _____

Neutralizing agent: _____ _____

E. Radioactive Hazard

		Exposure Rate	
Background	yes/no	_____	_____
Alpha particles	yes/no	_____	_____
Beta particles	yes/no	_____	_____
Gamma radiation	yes/no	_____	_____

IV. REFERENCES

1. The Merck Index, 11th Edition, 1989.
2. NIOSH Pocket Guide to Chemical Hazards, 1990
3. Chemical Hazard Response Information System, US Coast Guard, 1985.
4. Threshold Limit Values and Biological Exposure Indices for 2007, ACGIH
5. CFR 1910.1000.

CORVEL

WC Authorization | Physician's Report | Pharmacy Guide

MAILING ADDRESS P O Box 77880, Charlotte, NC 28271
800-365-5998 www corvel com

EMPLOYER: Please complete the top section and give to the injured employee to take with them to their authorized treating physician. If you already have transitional duty job descriptions available, please attach a copy for the treating physician's review.

Name of Employee: **Last:**	**First:**
Date of Injury:	
Name of Employer:	
Employer Signature:	Treating Physician:

EMPLOYEE: Please take this form with you to an authorized treating physician. Please have the physician complete the middle section and return this immediately to your employer. The bottom section is for you to show the pharmacist should you need to have any prescriptions filled as prescribed by your authorized treating physician for this work related injury.

AUTHORIZED PHYSICIAN, PLEASE COMPLETE

Diagnosis: _____

A post accident drug test (check one) ( ) **has** been completed ( ) **has not** been completed

In accordance with this patient's physical capability, check all that apply:

( ) May resume work immediately, no restriction.
( ) May resume work immediately with the following restrictions:
- ( ) Sedentary work (sitting, occasional walking, standing, lifting less than 10 pounds)
- ( ) Light work (lifting less than 20 pounds)
- ( ) Medium work (lifting less than 50 pounds)
- ( ) Heavy work (lifting less than 100 pounds)
- ( ) Normal shift
- ( ) Limited hours: ____ hrs, _____hrs, _____hrs per day
- ( ) Other: _____

( ) Repetitive Motion Restrictions (specific to hand/arm injuries):

Frequency	Left	Right
No Use		
Occasional <33% of time		
Frequent 34-66% of time		
Regular 67-100% of time		

( ) Patient may return to work at full duty on (date) _____
( ) Patient has a return appointment on (date) _____ at (time) _____

Please indicate any referrals that are required: _____

Physician's Signature	Date	Physician's Name (type or print)

Physician Offices – Be sure to contact CorVel's Claim Department at 800-365-5998 for authorization for the referral.

PHARMACIST: Please use the Injured Worker's **SSN and Date of Injury (SSN+MMDDYYYY)** as their 17 digit Identification Number when entering information to process an online claim to CorVel on behalf of Department of Environmental and Natural Resources injured employees. Pharmacies can contact the **CorVel Customer Service at 800-563-8438 or CVS/Caremark Pharmacy Help Desk at 877-876-7216,** for assistance with claims processing.

DO NOT CHARGE THE PATIENT FOR THE PRESCRIPTION.

CHAIN NAME	CHAIN NAME	CHAIN NAME	CHAIN NAME
Bi-Lo Pharmacy	Horizon Pharmacy	Revco drugs	VIX Pharmacy
Bi-Mart	HyVee Drugtown	Rite-Aid drugs	Walgreen's
Brooks Drugs	J & J Pharmacy	RX Discount Pharmacy	Wal-Mart Pharmacy
Brookshire Brothers	Joel & Jerry's	Sack-n-Save	Wegman Pharmacy
Cub Pharmacy	Kash N Karry	Sav-A-Lot	Winn-Dixie
CVS Drugs	Kerr Drugs	Sams Club Pharmacy	
Drug Emporium	K-mart phcy	Save Mart	
Eckerds(all others)	Long's Phcy	Stop N Shop	
Franck's Pharmacy	Medicine Shoppe	Super D	
Fred Meyer	Medistat Phcy	Super Valu	
Fred's Pharmacy	Milner-Rushing Drugs	Super X (HSI)	
Giant Pharmacy	Pathmark Pharmacy	Tom Thumb Phcy	
Goodings	Perry Drg Str	Tops Pharmacy	
Hannaford Food &	Phar-Mor	Tri Daly Drugs	

Group Number: RXFFWC311
CCRx BIN: 004336
PCN: ADV Rev. 6/10
Dept. of Environ. & Natural Res.

CORVEL

*** All participating pharmacies have not been included on this list. Please have your pharmacy call regarding any questions/ authorizations 800-563-8438.**