Waste Management
ENVIRONMENTAL QUALITY

PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

MICHAEL SCOTT
Acting Director

April 1, 2016

Robert Dillingham
5391 Morning Star Church Rd.
Morganton, NC 28655

RE: Water Supply Well Sampling Results
5391 Morning Star Church Rd. Morganton, NC 28655
Dysartsville Dump
NONCD0000169
Morganton, Burke County

Dear Mr. Dillingham:

The sample analytical results for a water sample collected on March 3, 2016 from your well located at the address referenced above are provided with this letter. The sample was submitted for laboratory analyses for volatile organic compounds (VOCs), semi volatile organics (SVOCs) and inorganic substances (Metals, Nitrate, Sulfate, and Ammonia). The level of Inorganics detected should not result in any adverse health effects associated with any of the substances noted. Please note, the metal detections in the water sample as shown on the attached sheets are naturally occurring in North Carolina and are within the normal range for your area.

If you have any questions, please contact me at (919) 707- 8155 or Cheryl Marks at (919) 707-8333.

Sincerely,

Katie Tatum

Katie Tatum, Environmental Specialist
Inactive Hazardous Sites Branch

Enclosures: Laboratory Analytical Data for: 5391 Morning Star Church Rd. Morganton, NC

Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8260B BY SIM	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z39805.D	1	03/09/16	MM	n/a	n/a	VZ1499
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	0.0010	0.00030	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		74-125%
2037-26-5	Toluene-D8	100%		88-111%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I37867.D	1	03/14/16	WV	n/a	n/a	VI993
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.025	0.010	mg/l	
71-43-2	Benzene	ND	0.0010	0.00020	mg/l	
74-97-5	Bromochloromethane	ND	0.0010	0.00042	mg/l	
75-27-4	Bromodichloromethane	ND	0.0010	0.00024	mg/l	
75-25-2	Bromoform	ND	0.0010	0.00046	mg/l	
78-93-3	2-Butanone (MEK)	ND	0.0050	0.0026	mg/l	
75-15-0	Carbon Disulfide	ND	0.0020	0.00023	mg/l	
56-23-5	Carbon Tetrachloride	ND	0.0010	0.00030	mg/l	
108-90-7	Chlorobenzene	ND	0.0010	0.00020	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00063	mg/l	
67-66-3	Chloroform	ND	0.0010	0.00030	mg/l	
110-82-7	Cyclohexane	ND	0.0010	0.00026	mg/l	
124-48-1	Dibromochloromethane	ND	0.0010	0.00026	mg/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0050	0.00081	mg/l	
106-93-4	1,2-Dibromoethane	ND	0.0020	0.00033	mg/l	
75-71-8	Dichlorodifluoromethane	ND	0.0020	0.00050	mg/l	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00027	mg/l	
541-73-1	1,3-Dichlorobenzene	ND	0.0010	0.00024	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	0.0010	0.00039	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00028	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0010	0.00022	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0010	0.00033	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0010	0.00034	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0010	0.00026	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0010	0.00025	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00025	mg/l	
76-13-1	Freon 113	ND	0.0010	0.00032	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0020	mg/l	
98-82-8	Isopropylbenzene	ND	0.0010	0.00033	mg/l	
79-20-9	Methyl Acetate	ND	0.020	0.0050	mg/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

VOA TCL List (SOM02.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
74-83-9	Methyl Bromide	ND	0.0020	0.00050	mg/l	
74-87-3	Methyl Chloride	ND	0.0020	0.00050	mg/l	
108-87-2	Methylcyclohexane	ND	0.0010	0.00023	mg/l	
75-09-2	Methylene Chloride	ND	0.0050	0.0020	mg/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0050	0.0014	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0010	0.00020	mg/l	
100-42-5	Styrene	ND	0.0010	0.00024	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0010	0.00033	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0010	0.00020	mg/l	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0020	0.00051	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00020	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00037	mg/l	
79-01-6	Trichloroethylene	ND	0.0010	0.00027	mg/l	
75-69-4	Trichlorofluoromethane	ND	0.0020	0.00050	mg/l	
75-01-4	Vinyl Chloride	ND	0.0010	0.00031	mg/l	
	m,p-Xylene	ND	0.0020	0.00030	mg/l	
95-47-6	o-Xylene	ND	0.0010	0.00026	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	94%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

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Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L0685844.D	1	03/11/16	NJ	03/08/16	OP59621	SL3797
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

ABN TCL (SOM01.1) List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.0094	0.0024	mg/l	
59-50-7	4-Chloro-3-methyl Phenol	ND	0.0047	0.00070	mg/l	
95-57-8	2-Chlorophenol	ND	0.0047	0.00060	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0047	0.00060	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0047	0.00066	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.024	0.0047	mg/l	
534-52-1	4,6-Dinitro-o-cresol	ND	0.0094	0.0019	mg/l	
95-48-7	2-Methylphenol	ND	0.0047	0.00055	mg/l	
	3&4-Methylphenol	ND	0.0047	0.00099	mg/l	
88-75-5	2-Nitrophenol	ND	0.0047	0.00058	mg/l	
100-02-7	4-Nitrophenol	ND	0.024	0.0047	mg/l	
87-86-5	Pentachlorophenol	ND	0.024	0.0047	mg/l	
108-95-2	Phenol	ND	0.0047	0.00047	mg/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0047	0.00086	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0047	0.00094	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0047	0.00081	mg/l	
83-32-9	Acenaphthene	ND	0.0047	0.00053	mg/l	
208-96-8	Acenaphthylene	ND	0.0047	0.00054	mg/l	
98-86-2	Acetophenone	ND	0.0047	0.00067	mg/l	
120-12-7	Anthracene	ND	0.0047	0.00058	mg/l	
1912-24-9	Atrazine	ND	0.0047	0.00060	mg/l	
100-52-7	Benzaldehyde	ND	0.024	0.0047	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.0047	0.00047	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.0047	0.00047	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.0047	0.00051	mg/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.0047	0.00047	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.0047	0.00059	mg/l	
92-52-4	1,1'-Biphenyl	ND	0.0047	0.00047	mg/l	
101-55-3	4-Bromophenyl Phenyl Ether	ND	0.0047	0.00047	mg/l	
85-68-7	Butyl Benzyl Phthalate	ND	0.0047	0.00094	mg/l	
86-74-8	Carbazole	ND	0.0047	0.00053	mg/l	
106-47-8	4-Chloroaniline	ND	0.0047	0.00067	mg/l	

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Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

ABN TCL (SOM01.1) List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	0.0047	0.00064	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0047	0.00065	mg/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.0047	0.00065	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0047	0.00047	mg/l	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	0.0047	0.00055	mg/l	
218-01-9	Chrysene	ND	0.0047	0.00050	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0047	0.00072	mg/l	
132-64-9	Dibenzofuran	ND	0.0047	0.00063	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND	0.0047	0.00047	mg/l	
84-66-2	Diethyl Phthalate	ND	0.0047	0.00094	mg/l	
131-11-3	Dimethyl Phthalate	ND	0.0047	0.00094	mg/l	
84-74-2	Di-n-butyl Phthalate	ND	0.0047	0.00094	mg/l	
117-84-0	Di-n-octyl Phthalate	ND	0.0047	0.00094	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	0.0047	0.00059	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0047	0.00055	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0047	0.00094	mg/l	
206-44-0	Fluoranthene	ND	0.0047	0.00047	mg/l	
86-73-7	Fluorene	ND	0.0047	0.00061	mg/l	
118-74-1	Hexachlorobenzene	ND	0.0047	0.00052	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.0047	0.00048	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND	0.0047	0.00094	mg/l	
67-72-1	Hexachloroethane	ND	0.0047	0.00048	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0047	0.00047	mg/l	
78-59-1	Isophorone	ND	0.0047	0.00063	mg/l	
91-57-6	2-Methylnaphthalene	ND	0.0047	0.00053	mg/l	
91-20-3	Naphthalene	ND	0.0047	0.00047	mg/l	
88-74-4	2-Nitroaniline	ND	0.0047	0.00066	mg/l	
99-09-2	3-Nitroaniline	ND	0.0047	0.00071	mg/l	
100-01-6	4-Nitroaniline	ND	0.0047	0.00068	mg/l	
98-95-3	Nitrobenzene	ND	0.0047	0.00062	mg/l	
621-64-7	N-Nitrosodi-n-propylamine	ND	0.0047	0.00055	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0047	0.00066	mg/l	
85-01-8	Phenanthrene	ND	0.0047	0.00056	mg/l	
129-00-0	Pyrene	ND	0.0047	0.00052	mg/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.0047	0.00047	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		14-67%
4165-62-2	Phenol-d5	23%		10-50%

ND = Not detected MDL = Method Detection Limit
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Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

ABN TCL (SOM01.1) List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	79%		33-118%
4165-60-0	Nitrobenzene-d5	78%		42-108%
321-60-8	2-Fluorobiphenyl	79%		40-106%
1718-51-0	Terphenyl-d14	81%		39-121%

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Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	Date Sampled:	03/03/16
Matrix:	AQ - Water	Date Received:	03/04/16
		Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	0.00038 J	0.0020	0.00026	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Arsenic [a]	0.00043 J	0.0010	0.000034	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Beryllium [a]	0.00019 J	0.00050	0.000013	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Cadmium [a]	ND	0.00050	0.00012	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Chromium [a]	0.0014 J	0.0040	0.00010	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Copper [a]	0.0132	0.0040	0.00014	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Iron [a]	0.947	0.050	0.0020	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Lead [a]	0.0019	0.00050	0.000011	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Manganese [a]	0.0111	0.0010	0.000095	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Mercury	ND	0.00050	0.000030	mg/l	1	03/09/16	03/09/16	JL	EPA 245.1 [1]	EPA 245.1 [4]
Nickel [a]	0.00084 J	0.0040	0.00011	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Selenium [a]	0.00022 J	0.0010	0.00012	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Silver [a]	ND	0.0020	0.000041	mg/l	1	03/10/16	03/14/16	ANJ	EPA 200.8 [3]	EPA 200.8 [5]
Thallium [a]	0.000051 J	0.00050	0.000013	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]
Zinc [a]	0.0342	0.010	0.0012	mg/l	1	03/10/16	03/10/16	ANJ	EPA 200.8 [2]	EPA 200.8 [5]

(1) Instrument QC Batch: MA13020
(2) Instrument QC Batch: N:MA38891
(3) Instrument QC Batch: N:MA38912
(4) Prep QC Batch: MP30081
(5) Prep QC Batch: N:MP92422

(a) Analysis performed at Accutest Laboratories, Dayton, NJ.

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J = Indicates a result >= MDL but < RL

Report of Analysis

Client Sample ID:	WELL-5391		
Lab Sample ID:	FA31920-1	**Date Sampled:**	03/03/16
Matrix:	AQ - Water	**Date Received:**	03/04/16
		Percent Solids:	n/a
Project:	Dyartsville Dump; 5391 Morningside Church Rd, Morganton, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Nitrogen, Ammonia	ND	0.10	0.030	mg/l	1	03/10/16 19:09	JK	EPA 350.1
Nitrogen, Nitrate	0.66	0.10	0.050	mg/l	1	03/04/16 17:44	DM	EPA 300/SW846 9056A
Sulfate	3.6	2.0	0.60	mg/l	1	03/04/16 17:44	DM	EPA 300/SW846 9056A

RL = Reporting Limit
MDL = Method Detection Limit

ND = Not detected
J = Indicates a result >= MDL but < RL