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

DIVISION OF LAND RESOURCES
AND QUALITY SECTION

UST Section

Dexter R. Matthews
Director

John E. Skvarla, III
Secretary

Pat McCrory
Governor

MAR 4 2013

March 1, 2013

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES

NCDENR MRO HSB

MAR 4 2013

RECEIVED

Marlan Properties
1156 Perth Road
Troutman, NC 28166

Health Risk Evaluation of Water Supply
Tracking ID: 22425

Dear Property Owner:

Please find attached the Sample Analytical Results for a water sample collected from your well, identified as WSW-12, located at 1156 Perth Road, Troutman, Iredell County, on December 12, 2012. The sample was collected and analyzed as part of the investigation of a petroleum release at Skipper's Marina. The water sample was analyzed for specific target analytes (contaminants), which are listed on the attached Sample Analytical Results. Contaminants were detected in the water sample, as shown on the attached Sample Analytical Results.

Because contaminants were detected in the water sample, a Health Risk Evaluation of the water supply was performed by an environmental toxicologist in the Division of Waste Management. The Health Risk Evaluation, which is attached also, compares the detected concentration of contaminants to acceptable concentrations and provides a recommendation for safe use of the water.

If you have any questions, please contact Dave Lilley at (919) 707-8241 or contact me at the address or telephone number listed below for the Mooresville Regional Office.

Sincerely,

Erin Fogarty
Hydrogeologist
Mooresville Regional Office

Attachments: WSW-12 Sample Analytical Results
Health Risk Evaluation

cc: Mr. John Kindley, 114 MorLake Drive, Suite 102, Mooresville, NC 28117
David Hinson, Iredell County Health Department
Bruce Parris, Inactive Hazardous Waste Section, Mooresville Regional Office
Stephen Libbey, P.G., Hart & Hickman

UST Regional Offices

Asheville (ARO) – 2090 US Highway 70, Swannanoa, NC 28778 (828) 296-4500

Fayetteville (FAY) – 225 Green Street, Suite 714, Systel Building, Fayetteville, NC 28301 (910) 433-3300

Mooreville (MOR) – 610 East Center Avenue, Suite 301, Mooreville, NC 28115 (704) 663-1699

Raleigh (RRO) – 1628 Mail Service Center, Raleigh, NC 27699 (919) 791-4200

Washington (WAS) – 943 Washington Square Mall, Washington, NC 27889 (252) 946-6481

Wilmington (WIL) – 127 Cardinal Drive Extension, Wilmington, NC 28405 (910) 796-7215

Winston-Salem (WS) – 585 Waughtown Street, Winston-Salem, NC 27107 (336) 771-5000

Guilford County Environmental Health, 400 West Market Street, Suite 300, Greensboro, NC 27401, (336) 641-3771

FTP: WS HRE result 0113.dot



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February 25, 2013

TO: Erin Fogarty
Mooresville Regional Office
NC UST Section

FROM: David Lilley 
Environmental Toxicologist
NC Division of Waste Management

RE: Health Risk Evaluation
Tracking ID: 22425
Lancaster Dock Well Sampling Results
1156 Perth Road
Troutman, NC

During this sampling event, one contaminant was detected in the well water. The contaminant, chloromethane, was detected at a concentration exceeding the applicable water standard. The standards used to determine if the water is suitable for drinking and cooking are the United States Environmental Protection Agency's Maximum Contaminant Levels (MCLs) or, if no MCLs exist, North Carolina Groundwater Standards (2L).

If the contaminant concentration exceeds the applicable standard for using the water for drinking and cooking, the contaminant concentration is further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. The chart below compares the detected contaminant concentration with the applicable standard:

Sample ID	Contaminant	Concentration (ug/l)*	MCL (ug/l)	2L (ug/l)
490-13874-1	Chloromethane	29.6		3

Shaded box indicates a standard has been exceeded.

* The abbreviation ug/l stands for micrograms of contaminant per liter of water and is roughly equivalent to parts per billion.

RECOMMENDATION: The chloromethane concentration in this well exceeds the 2L standard. Therefore, this water is not recommended for drinking or cooking at this time. No restrictions are recommended for using the water for other non-ingestive uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing.

/dl

Client Sample Results

Client: Hart & Hickman, PC
 Project/Site: Skippers

Telephone: 615-490-13874-1
 SDG: KID 017

Client Sample ID: WSW-12

Date Collected: 12/06/12 09:40

Date Received: 12/07/12 08:00

Sample ID: 490-13874-1

Matrix: Water

Method: SM6200-B - Volatile Organic Compounds			RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier							
Benzene	ND		0.500		ug/L			12/13/12 01:06	1
Bromobenzene	ND		0.500		ug/L			12/13/12 01:06	1
Bromochloromethane	ND		0.500		ug/L			12/13/12 01:06	1
Bromodichloromethane	ND		0.500		ug/L			12/13/12 01:06	1
Bromoform	ND		0.500		ug/L			12/13/12 01:06	1
Bromomethane	ND		0.500		ug/L			12/13/12 01:06	1
n-Butylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
sec-Butylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
tert-Butylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
Carbon tetrachloride	ND		0.500		ug/L			12/13/12 01:06	1
Chlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1
Dibromochloromethane	ND		0.500		ug/L			12/13/12 01:06	1
Chloroethane	ND		0.500		ug/L			12/13/12 01:06	1
Chloroform	ND		0.500		ug/L			12/13/12 01:06	1
Chloromethane	29.6		0.500		ug/L			12/13/12 01:06	1
4-Chlorotoluene	ND		0.500		ug/L			12/13/12 01:06	1
2-Chlorotoluene	ND		0.500		ug/L			12/13/12 01:06	1
1,2-Dibromo-3-Chloropropane	ND		0.500		ug/L			12/13/12 01:06	1
1,2-Dibromoethane (EDB)	ND		0.500		ug/L			12/13/12 01:06	1
Dibromomethane	ND		0.500		ug/L			12/13/12 01:06	1
1,2-Dichlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1
1,3-Dichlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1
1,4-Dichlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1
1,1-Dichloroethane	ND		100		ug/L			12/13/12 01:06	1
Ethanol	ND		0.500		ug/L			12/13/12 01:06	1
1,2-Dichloroethane	ND		0.500		ug/L			12/13/12 01:06	1
trans-1,2-Dichloroethene	ND		0.500		ug/L			12/13/12 01:06	1
1,1-Dichloroethene	ND		0.500		ug/L			12/13/12 01:06	1
cis-1,2-Dichloroethene	ND		0.500		ug/L			12/13/12 01:06	1
1,2-Dichloropropane	ND		0.500		ug/L			12/13/12 01:06	1
1,3-Dichloropropane	ND		0.500		ug/L			12/13/12 01:06	1
2,2-Dichloropropane	ND		0.500		ug/L			12/13/12 01:06	1
trans-1,3-Dichloropropene	ND		0.500		ug/L			12/13/12 01:06	1
cis-1,3-Dichloropropene	ND		0.500		ug/L			12/13/12 01:06	1
1,1-Dichloropropene	ND		0.500		ug/L			12/13/12 01:06	1
Ethylbenzene	ND		1.00		ug/L			12/13/12 01:06	1
Hexachlorobutadiene	ND		1.00		ug/L			12/13/12 01:06	1
Isopropylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
p-Isopropyltoluene	ND		5.00		ug/L			12/13/12 01:06	1
Methylene Chloride	ND		5.00		ug/L			12/13/12 01:06	1
Naphthalene	ND		0.500		ug/L			12/13/12 01:06	1
N-Propylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
Styrene	ND		0.500		ug/L			12/13/12 01:06	1
1,1,1,2-Tetrachloroethane	ND		0.500		ug/L			12/13/12 01:06	1
1,1,1,2,2-Tetrachloroethane	ND		0.500		ug/L			12/13/12 01:06	1
Tetrachloroethene	ND		0.500		ug/L			12/13/12 01:06	1
Toluene	ND		0.500		ug/L			12/13/12 01:06	1
1,2,3-Trichlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1
1,2,4-Trichlorobenzene	ND		0.500		ug/L			12/13/12 01:06	1

TestAmerica Nashville

Client Sample Results

Client: Hart & Hickman, PC
 Project/Site: Skippers

TestAmerica Job ID: 490-13874-1
 SDG: KID 017

Client Sample ID: WSW-12

Lab Sample ID: 490-13874-1

Date Collected: 12/06/12 09:40

Matrix: Water

Date Received: 12/07/12 08:00

Method: SM6200-B - Volatile Organic Compounds (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.500		ug/L			12/13/12 01:06	1
1,1,1-Trichloroethane	ND		0.500		ug/L			12/13/12 01:06	1
Trichloroethene	ND		0.500		ug/L			12/13/12 01:06	1
Trichlorofluoromethane	ND		0.500		ug/L			12/13/12 01:06	1
1,2,3-Trichloropropane	ND		0.500		ug/L			12/13/12 01:06	1
1,3,5-Trimethylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
1,2,4-Trimethylbenzene	ND		0.500		ug/L			12/13/12 01:06	1
Vinyl chloride	ND		0.500		ug/L			12/13/12 01:06	1
Methyl tert-butyl ether	ND		0.500		ug/L			12/13/12 01:06	1
Diisopropyl ether	ND		0.500		ug/L			12/13/12 01:06	1
Dichlorodifluoromethane	ND		0.500		ug/L			12/13/12 01:06	1
Xylenes, Total	ND		0.500		ug/L			12/13/12 01:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		70 - 130					12/13/12 01:06	1
Toluene-d8 (Surr)	104		70 - 130					12/13/12 01:06	1
4-Bromofluorobenzene (Surr)	102		70 - 130					12/13/12 01:06	1
Dibromofluoromethane (Surr)	96		70 - 130					12/13/12 01:06	1