

Aerial photograph showing the Tannery Road Landfill in Rome, New York. The site is a large, irregularly shaped area of brown and tan ground, likely dirt or waste material, surrounded by green trees and some buildings in the background. A winding road or path cuts through the center of the landfill.

**CITY OF ROME**  
**TANNERY ROAD LANDFILL**

**2014 ANNUAL REPORT**

**Prepared for:**

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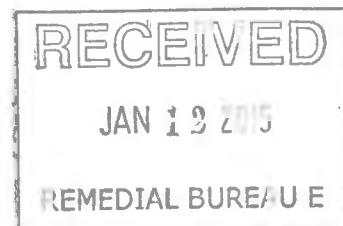
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## 1.0 INTRODUCTION

This document presents the 2014 annual report for the post closure operations, including maintenance and monitoring activities for the closed City of Rome Landfill located on Tannery Road in the City of Rome, Oneida County, New York. Final closure of the landfill was completed in September 1997 and in January 1999 the New York State Department of Environmental Conservation (NYSDEC) approved the closure certification report.

The post closure maintenance and monitoring activities were performed pursuant to the Operation, Maintenance and Monitoring Plan (Revised October 19, 1999) that was approved by the NYSDEC. This annual report covers the period from January 2014 through December 2014.

Pursuant to the approved Operation, Maintenance and Monitoring Plan (O&M), this annual report provides the following information:

- Ground water and leachate quality analytical data.
- The amount of ground water/leachate collected from the recovery wells.
- Ground water contour maps for March, June, September and December 2014.
- Quarterly Inspection Data.

## **2.0 2014 AND HISTORICAL GROUND WATER AND LEACHATE ANALYTICAL DATA**

Pursuant to the March 30, 2011 approval by the NYSDEC for a 15 month ground water monitoring schedule, ground water samples were collected in December 2014 from monitoring wells MW-1S, MW-2D, MW-3S, MW-4S, MW-5S, MW-7D and groundwater/leachate well LMW-10 and were analyzed for the Part 360 Baseline parameters. The next scheduled sampling event is March 2016.

Analytical results are summarized in Table 1 and tables summarizing the analytical data for each monitoring well from March 1999 to present are provided in Appendix A. Concentrations that exceeded applicable New York State ground water standards are presented in a bold font. Graphs of parameter concentration over time (trend graphs) for several leachate indicator parameters (alkalinity, BOD, COD, ammonia, chloride, iron, manganese, potassium, sodium, TDS and TOC) for each monitoring well are provided in Appendix B. Laboratory reporting sheets are provided in Appendix E.

Consistent with historical data, the December 2014 ground water iron concentrations in all downgradient ground water monitoring well samples and the upgradient MW-9S ground water sample were higher than the NYS ground water standard. The downgradient MW-3S, MW-5S and MW-7D ground water manganese concentrations were higher than the NYS ground water standard. Historical ground water data indicate that the ground water iron and manganese concentrations detected above the respective ground water standards in some of the down gradient landfill monitoring wells are most likely related to a combination of natural sources and

a landfill derived impact on ground water. The reported concentrations do not represent an environmental or public health threat.

The December 2014 ground water thallium concentration in the downgradient MW-3S sample and the MW-4S ground water selenium concentration were higher than the respective NYS ground water guidance value/ground water standard. Thallium has consistently been detected above the NYS ground water guidance value in ground water from monitoring MW-3S since December 2010 and as early as March 1999. Selenium has previously been detected above the NYS ground water standard in ground water from monitoring well MW-4S.

Consistent with historical data, the ground water pH from downgradient monitoring wells MW-1S, MW-2D, MW-3S, MW-4S and MW-5S and upgradient well MW-9S was less than the NYS ground water standard lower limit. The low pH is not considered related to the landfill. Historically, landfill leachate pH has typically been higher than the ground water standard lower limit.

The ground water field turbidity value in the ground water samples from all monitoring wells was above the NYS ground water standard. The turbidity is related to the movement of fine grain material into the well during the sampling procedure and is not a landfill related impact on ground water quality.

The trend graphs indicate that MW-3S ground water alkalinity, ammonia, BOD, COD, chloride, iron, manganese, potassium, sodium, TDS and TOC concentrations have exhibited a decreasing trend from the 1999 concentrations and appear to have stabilized at the current levels. MW-3 manganese concentrations exhibit an increasing trend from the low concentrations that occurred in 2004. Trend graphs indicate a decreasing trend in the MW-2D ammonia, chloride and potassium concentrations and the alkalinity, BOD, COD, chloride, iron, sodium, TDS and TOC concentrations are stable. Trend graphs indicate that MW-7D ground water alkalinity, ammonia, chloride, iron, potassium, sodium, TDS and TOC concentrations have exhibited a decreasing trend from the 1999 concentrations and appear to have stabilized at the current concentrations. The MW-1S, MW-4S and MW-5S ground water alkalinity, BOD, COD, ammonia, chloride, iron, manganese, potassium, sodium, TDS and TOC concentrations are generally stable.

### **3.0 2014 AND HISTORICAL GROUND WATER ELEVATION DATA**

Ground water elevation data were measured quarterly from monitoring wells MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-7S, MW-9S, piezometer PZ-1 and leachate wells LMW-10 and LMW-11. Due to an obstruction in the well casing water level measurements could not be obtained from LMW-12. A summary of the 2014 ground water elevation data are provided in Table 1. Ground water contour maps for March, September, September and December 2014 are enclosed. Graphs depicting historical ground water elevations over time for each monitoring well are provided in Appendix C.

Monitoring well MW-9S has been considered upgradient of the landfill. However, historical ground water elevation data indicate that there are periods when the ground water elevation in MW-9S is lower than the water level elevation in landfill leachate wells LMW-10 and LMW-11

and lower than the ground water elevation in monitoring well MW-3S. Monitoring well MW-9S is located at a greater distance in an upgradient direction from the landfill than any other monitoring well, and would be expected to exhibit less of a landfill related impact on ground water quality than any other landfill monitoring well. Therefore, for the purpose of comparing ground water analytical results, ground water data from monitoring well MW-9S has been considered representative of background conditions.

The ground water elevation data for 2014 indicates that ground water elevations in monitoring wells MW-2S, MW-4S, MW-5S and MW-9S were higher than the LMW-10 leachate monitoring well ground water elevations in March, June September and December. The MW-3S ground water elevations were higher than the LMW-10 well in June, September and December. Ground water in MW-3S was frozen in March 2014. Data indicate a consistent inward gradient at monitoring wells MW-2S, MW-3S, MW-4S, MW-5S and MW-9S throughout 2014.

Trend graphs of historical ground water elevation data indicate an increasing trend at LMW-10 and LMW-11. With the exception of monitoring well MW-2S, ground water monitoring well ground water elevations exhibited a slight increasing trend. Ground water elevations in MW-2S indicate a decreasing trend.

Data indicate that the leachate recovery wells have reduced the overall head difference between the landfill and the monitoring wells located outside the slurry/sheet pile wall. Monitoring well ground water elevation and leachate monitoring well ground water elevation data indicate an inward gradient (toward the landfill) between perimeter landfill monitoring wells MW-2S, MW-3S, MW-4S, MW-5S and MW-9S and the landfill leachate monitoring wells within the landfill slurry wall during 2014.

## **4.0 2014 SITE INSPECTIONS**

### **4.1 Weekly Site Inspections**

City of Rome personnel in accordance with the procedures detailed in the O&M manual conducted weekly landfill inspections. The weekly inspections included evaluation of the ground water/leachate pumping operation and general site security.

### **4.2 Quarterly Inspections**

Delaware Engineering performed quarterly landfill inspections. The inspections included general review of landfill cap conditions, general site conditions, evaluation and recording of data for the ground water/leachate pumping system, collection of ground water levels and operability of the landfill flares and passive gas vents.

Inspections conducted throughout 2014 of the area along the fence at the southeast end of the landfill adjacent to the constructed wetland indicate that erosion in this area continues to be a potential concern. Erosion channels are present in this area and although vegetation has colonized the channels, the potential for erosion of the landfill cap is a potential concern. Other areas where erosion is occurring are denoted on the attached figure. In the spring of 2015 it is

recommended that within erosion areas the soil be replaced, an erosion control mat (North American Green P550 or Curlex HVHD or equivalent) be installed and the areas seeded.

None of the operational flares have been ignited indicating low methane concentrations in the area of the landfill where the flares are located.

## **5.0 2014 GROUND WATER / LEACHATE PUMPING SYSTEM**

For each recovery well, readings from the flow totalizers in the meter pit were recorded during the quarterly inspections. Leachate flows for each recovery well for the period from December 19, 2013 to December 4, 2014 are presented below. A summary of the 2014 leachate pumping volumes is provided in Table 3.

RW-1	0 gallons
RW-2	384,400 gallons
RW-3	459,700 gallons
RW-4	0 gallons
Total Gallons	844,100 gallons

A summary of the total gallons of leachate that have been pumped from the landfill since 1998 is provided in the following table.

YEAR	RW-1	RW-2	RW-3	RW-4	TOTAL
1998 (To 12/18/98)	998,300	1,403,300	366,300	328,900	3,096,800
1999 (12/18/98 to 12/20/99)	822,193	1,334,300	318,500	141,000	2,615,993
2000 (12/20/99 to 1/12/01)	724,800	1,351,300	223,200	0	2,299,300
2001 (1/12/01 to 1/16/02)	596,400	1,179,900	297,500	0	2,073,800
2002 (1/16/02 to 1/9/03)	515,900	1,025,600	414,400	299,300	2,255,200
2003 (1/9/03 to 1/29/04)	487,500	1,040,800	632,900	1,497,400	3,658,600
2004 (1/29/04 to 1/20/05)	428,200	1,016,100	384,100	1,004,500	2,832,900
2005 (1/20/05 to 1/17/06)	-28,000	522,300	381,400	622,600	1,526,300
2006 (1/17/06 to 1/19/07)	0	1,132,116	474,600	0	1,606,716
2007 (1/19/07 to 1/23/2008)	-1,200	1,634,700	488,000	0	2,122,700
2008 (1/23/2008 to 1/23/2009)	0	1,162,600	594,500	0	1,757,100
2009 (1/23/2009 to 1/21/2010)	0	1,776,800	522,700	0	2,299,500
2010 (1/21/2010 to 1/31/2011)	0	418,700	454,700	0	873,400
2011 (1/31/2011 to 12/22/2011)	0	2,162,500	356,500	0	2,519,000
2012 (12/22/2011 to 12/06/2012)	0	1,211,900	361,100	0	1,573,000
2013 (12/06/2012 to 12/19/2013)	0	654,700	331,800	0	986,500
2014 (12/19/2013 to 12/4/2014)	0	384,400	459,700	0	844,100
<b>TOTAL</b>	<b>4,573,293</b>	<b>19,412,016</b>	<b>7,061,900</b>	<b>3,893,700</b>	<b>34,940,909</b>

During 2014 recovery wells RW-1 and RW-4 were not functional. As noted in the 2005 annual report a video inspection of RW-1 and RW-4 revealed that the well casings had collapsed

prohibiting the discharge of leachate from the pumps. Continual shifting of the landfill mass has previously affected site monitoring wells and leachate recovery well RW-4.

**TABLES**

**Table 1**  
**City of Rome Tannery Road Landfill**  
**December 2014 Ground Water Data**

Sample Location	MW-1S	MW-2D	MW-3S	MW-4S	MW-5S	MW-7D	MW-9S	LMW-10	NYSDEC Ground Water Standard/GV
<b>Leachate Indicators (mg/L)</b>									
Ammonia-Nitrogen (mg/L)	<0.1	0.2	0.3	0.2	<0.1	<0.1	<0.1	109	2.0
Biochemical Oxygen Demand (BOD) (mg/L)	<4.0	4	6	2	2	4	3.6	20	NS
Bromide (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2 (GV)
Chemical Oxygen Demand (COD) (mg/L)	38	26	38	113	26	42	49	117	NS
Chloride (mg/L)	<1.0	<1.0	<1.0	1.16	<1.0	<1.0	<1.0	97.3	250
Color (Pt-Co)	5	70	70	70	15	70	70	70	15
Nitrate-Nitrogen (mg/L)	0.04	0.27	0.1	0.08	0.09	0.16	0.13	<0.02	10
Sulfate (mg/L)	6.1	7.14	2.11	1.61	6.03	4.95	3.74	<1.0	250
Total Alkalinity (mg/L)	1	60	200	26	42	130	230	830	NS
Total Cyanide (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.2
Total Dissolved Solids (mg/L)	<5.0	30	155	80	50	120	220	650	500
Total Hardness (mg/L)	<5.0	61	215	39	82	142	116	318	NS
Total Kjeldahl Nitrogen (mg/L)	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	104	NS
Total Organic Carbon (mg/L)	26	7.5	11.3	41.6	7.9	17.6	21.2	38.2	NS
Total Phenols (mg/L)	<0.002	0.002	<0.002	0.002	0.002	<0.002	0.003	0.01	0.001
<b>Part 360 Routine Metals</b>									
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Calcium (mg/L)	1.22	19.9	65.1	11.5	24	42.8	40.4	82.1	NS
Iron (mg/L)	1.02	1.77	21.9	3.89	3.8	2.76	0.614	25.2	0.3
Lead (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.021	<0.005	0.025
Magnesium (mg/L)	0.099	2.71	12.6	2.4	5.38	8.62	3.76	27.3	35
Manganese (mg/L)	<0.02	0.24	0.859	0.263	0.564	1.5	0.179	0.807	0.3
Potassium (mg/L)	<0.05	3.66	5.31	0.671	1.19	6.61	3.39	74	NS
Sodium (mg/L)	0.41	0.835	0.464	0.766	0.392	2.16	52.5	84.2	20
<b>Part 360 Baseline Metals (mg/L)</b>									
Aluminum (mg/L)	11.4	<0.1	<0.1	2.03	0.329	<0.1	0.194	<0.1	NS
Antimony (mg/L)	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.003
Arsenic (mg/L)	<0.005	0.008	0.006	0.006	<0.005	0.006	<0.005	<0.005	0.025
Barium (mg/L)	0.024	0.076	0.044	0.012	0.03	0.035	0.066	0.08	1
Beryllium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.003 GV
Boron (mg/L)	<0.05	<0.05	0.092	<0.05	<0.05	0.091	<0.05	0.686	1
Chromium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05
Chromium, Hexavalent (mg/L)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05
Cobalt (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NS
Copper (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.02	<0.005	0.2
Mercury (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0007
Nickel (mg/L)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.1
Selenium (mg/L)	0.006	0.007	<0.005	0.012	<0.005	0.008	<0.005	<0.005	0.01
Silver (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05
Thallium (mg/L)	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.0005 GV
Vanadium (mg/L)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	NS
Zinc (mg/L)	0.037	<0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	2
<b>Field Parameters</b>									
Conductivity (μmhos/cm)	20	150	440	140	140	330	140	2,400	NS
pH (s.u.)	6.1	6.4	6	6.1	6	6.5	6.1	6.6	6.5-8.5
Temperature (deg C)	7	8	5	7	6	9	6	7	NS
Turbidity (NTU)	140	40	290	110	320	10	150	10	5
<b>Volatiles (ug/L)</b>									
1,1,1,2-Tetrachloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,1,1-Trichloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,1,2,2-Tetrachloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,1,2-Trichloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1
1,1-Dichloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,1-Dichloroethene (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,2,3-Trichloropropane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04
1,2-Dibromo-3-chloropropane (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	0.04
1,2-Dibromoethane (EDB) (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
1,2-Dichlorobenzene (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3
1,2-Dichloroethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6
1,2-Dichloropropane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1
1,4-Dichlorobenzene (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7	3
2-Butanone (MEK) (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
2-Hexanone (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
4-Methyl 2-pentanone (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	50 (GV)
Acetone (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
Acrylonitrile (μg/L)	<25	<25	<25	<25	<25	<25	<25	<25	5
Benzene (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7	1
Bromochloromethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Bromodichloromethane (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50(GV)
Bromoform (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50(GV)
Bromomethane (μg/L)	<10	<10	<10	<10	<10	<10	<10	<10	5
Carbon disulfide (μg/L)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	60 (GV)
Carbon tetrachloride (μg/L)	<5.0	<5							

**Table 1**  
**City of Rome Tannery Road Landfill**  
**December 2014 Ground Water Data**

Sample Location	MW-1S	MW-2D	MW-3S	MW-4S	MW-5S	MW-7D	MW-9S	LMW-10	NYSDEC Ground Water Standard/GV
Methylene Chloride ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Styrene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50
Tetrachloroethene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Toluene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	<10	<10	<10	<10	<10	<10	<10	<10	5
Trichloroethene ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Trichlorofluoromethane ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5
Vinyl Acetate ( $\mu\text{g/L}$ )	<10	<10	<10	<10	<10	<10	<10	<10	NS
Vinyl Chloride ( $\mu\text{g/L}$ )	<10	<10	<10	<10	<10	<10	<10	<10	2
Xylenes (Total) ( $\mu\text{g/L}$ )	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<b>48</b>	5*

Notes:

- 1) Results in bold typeface indicate that the result exceeds the applicable standard.
- 2) NS indicates No Standard.
- 3) GV indicates that the standard listed is a Guidance Value.
- 4) J indicates estimated value below the laboratory practical quantitation limit but above the detection limit
- 5) S indicates reported value suspect based on data validation

**Table 2**  
**Water Level Elevation Data, Comparison to LMW-10 and LMW-12**  
**City of Rome Tannery Road Landfill**

WELL	MEASURING POINT ELEVATION (FT.)	Ground Water Elevation ft/msl							
		3/28/2013	6/21/2013	9/16/2013	12/19/2013	3/28/2014	6/20/2014	8/28/2014	12/4/2014
MW-1S	449.59	4.7	5.11	6.01	5.39	5.48	6.37	5.62	5.01
MW-2S	459.44	6.95	6.57	7.51	7.01	6.85	7.75	6.96	6.64
MW-3S	456.4	3.49	3.7	3.66	3.68	Frozen	3.67	3.71	3.47
MW-4S	456.19	3.84	3.87	4.23	4.08	3.74	3.96	3.88	3.89
MW-5S	457.15	3.62	4.61	4.97	4.76	4.62	4.6	4.69	4.36
MW-7S	452.25	8.31	7.78	9.03	8.04	8.24	7.73	7.92	8.28
MW-9S	456.38	3.85	3.87	3.95	3.82	3.64	3.83	3.82	3.68
LMW-10	486.3	34.62	34.66	34.77	34.17	33.92	34.21	34.04	34.33
LMW-11	502.4	51.61	50.29	51.68	51.04	50.78	51.11	50.87	51.37
LMW-12	483.11	31.78	31.72	31.94	*	*	*	*	*
PZ-1	454.37	7.47	5.83	6.98	6.26	6.23	6.14	6.14	5.52
MW-7D	451.79	8.56	7.95	9.27	8.33	8.59	7.9	8.26	8.82

WELL	Ground Water Elevation ft/msl							
	3/28/2013	6/21/2013	9/16/2013	12/19/2013	3/28/2014	6/20/2014	8/28/2014	12/4/2014
MW-1S	444.89	444.48	443.58	444.2	444.11	443.22	443.97	444.58
MW-2S	452.49	452.87	451.93	452.43	452.59	451.69	452.48	452.8
MW-3S	452.91	452.7	452.74	452.72	Frozen	452.73	452.69	452.93
MW-4S	452.35	452.32	451.96	452.11	452.45	452.23	452.31	452.3
MW-5S	453.53	452.54	452.18	452.39	452.53	452.55	452.46	452.79
MW-7S	443.94	444.47	443.22	444.21	444.01	444.52	444.33	443.97
MW-9S	452.53	452.51	452.43	452.56	452.74	452.55	452.56	452.7
LMW-10	451.68	451.64	451.53	452.13	452.38	452.09	452.26	451.97
LMW-11	450.79	452.11	450.72	451.36	451.62	451.29	451.53	451.03
LMW-12	451.33	451.39	451.17	*	*	*	*	*
PZ-1	446.9	448.54	447.39	448.11	448.14	448.23	448.23	448.85
MW-7D	443.23	443.84	442.52	443.46	443.2	443.89	443.53	442.97

WELL	LMW-12 Comparison							
	3/28/2013	6/21/2013	9/16/2013	12/19/2013	3/28/2014	6/20/2014	8/28/2014	12/4/2014
MW-1S	6.44	6.91	7.59	*	*	*	*	*
MW-2S	-1.16	-1.48	-0.76	*	*	*	*	*
MW-3S	-1.58	-1.31	-1.57	*	*	*	*	*
MW-4S	-1.02	-0.93	-0.79	*	*	*	*	*
MW-5S	-2.2	-1.15	-1.01	*	*	*	*	*
MW-7S	7.39	6.92	7.95	*	*	*	*	*
MW-9S	-1.2	-1.12	-1.26	*	*	*	*	*
LMW-10	-0.35	-0.25	-0.36	*	*	*	*	*
LMW-11	0.54	-0.72	0.45	*	*	*	*	*
PZ-1	4.43	2.85	3.78	*	*	*	*	*
MW-7D	8.1	7.55	8.65	*	*	*	*	*

WELL	LMW-10 Comparison							
	3/28/2013	6/21/2013	9/16/2013	12/19/2012	3/28/2014	6/20/2014	8/28/2014	12/4/2014
MW-1S	6.79	7.16	7.95	7.93	8.27	8.87	8.29	7.39
MW-2S	-0.81	-1.23	-0.4	-0.3	-0.21	0.4	-0.22	-0.83
MW-3S	-1.23	-1.06	-1.21	-0.59	Frozen	-0.64	-0.43	-0.96
MW-4S	-0.67	-0.68	-0.43	0.02	-0.07	-0.14	-0.05	-0.33
MW-5S	-1.85	-0.9	-0.65	-0.26	-0.15	-0.46	-0.2	-0.82
MW-7S	7.74	7.17	8.31	7.92	8.37	7.57	7.93	8
MW-9S	-0.85	-0.87	-0.9	-0.43	-0.36	-0.46	-0.3	-0.73
PZ-1	4.78	3.1	4.14	4.02	4.24	3.86	4.03	3.12
MW-7D	8.45	7.8	9.01	8.67	9.18	8.2	8.73	9

WELL	LMW-11 Comparison							
	3/28/2013	6/21/2013	9/16/2013	12/19/2013	3/28/2014	6/20/2014	8/28/2014	12/4/2014
MW-1S	5.9	7.63	7.14	7.16	7.51	8.07	7.56	6.45
MW-2S	-1.7	-0.76	-1.21	-1.07	-0.97	-0.4	-0.95	-1.77
MW-3S	-2.12	-0.59	-2.02	-1.36	Frozen	-1.44	-1.16	-1.9
MW-4S	-1.56	-0.21	-1.24	-0.75	-0.83	-0.94	-0.78	-1.27
MW-5S	-2.74	-0.43	-1.46	-1.03	-0.91	-1.26	-0.93	-1.76
MW-7S	6.85	7.64	7.5	7.15	7.61	6.77	7.2	7.06
MW-9S	-1.74	-0.4	-1.71	-1.2	-1.12	-1.26	-1.03	-1.67
PZ-1	3.89	3.57	3.33	3.25	3.48	3.06	3.3	2.18
MW-7D	7.56	8.27	8.2	7.9	8.42	7.4	8	8.06

**Notes:**

1) A negative number indicates an inward gradient.

2) \* Obstruction in well casing unable to obtain water level measurement.

**Table 3**  
**Operational Data**  
**City of Rome**  
**Tannery Road Landfill**

**Pump Station at Tannery Road**

**Hour Meters**

	<b>12/19/2013</b>	<b>3/28/2014</b>	<b>6/20/2014</b>	<b>8/28/2014</b>	<b>12/4/2014</b>	<b>12/19/2013 - 12/04/2014</b>
<b>Pump #1</b>	102,656	103,567	104,928	105,626	106,436	3,780
<b>Pump #2</b>	87,180	87,924	89,019	89,592	90,252	3,072

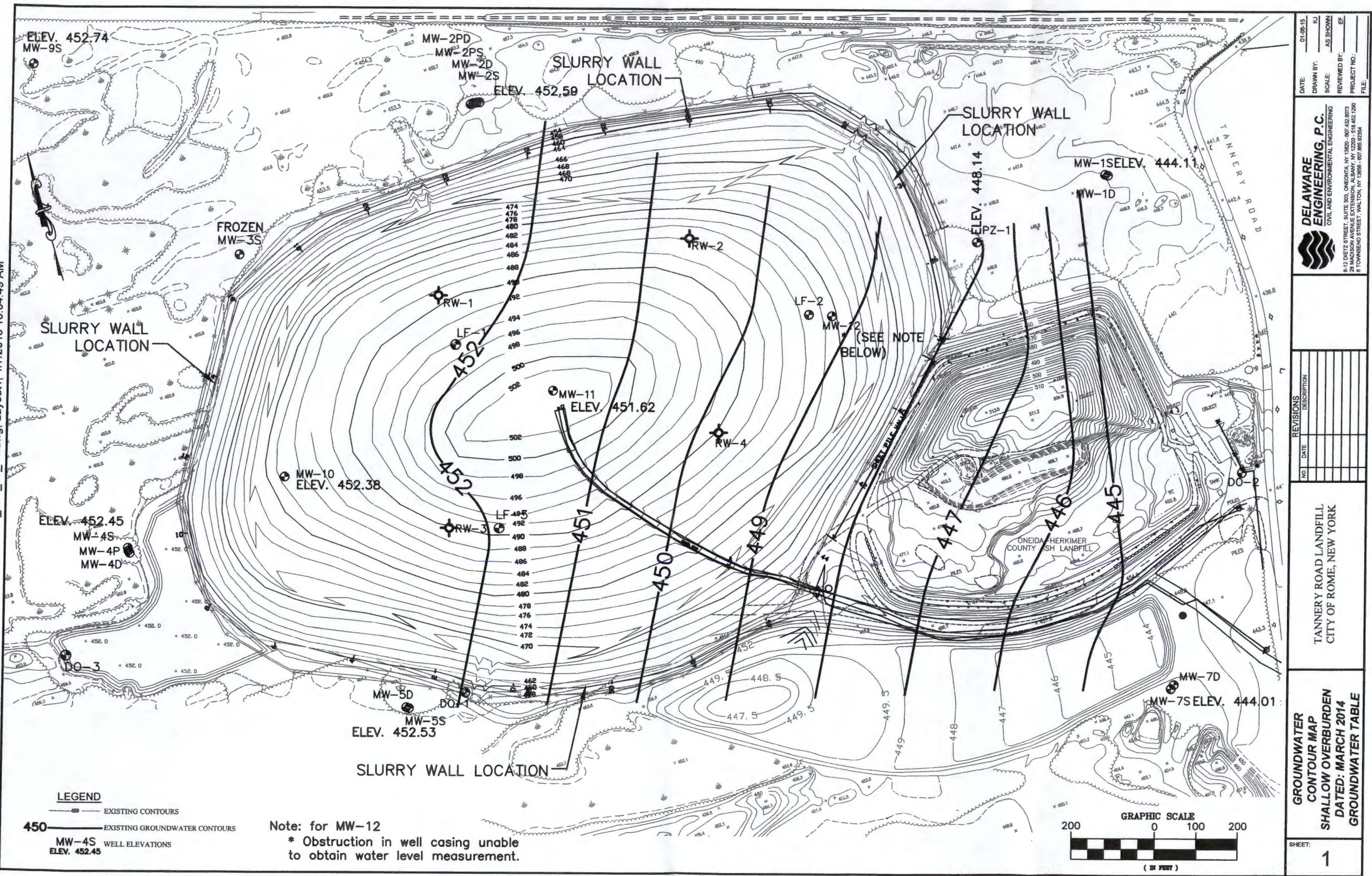
**Totalizers in Meter Pit**

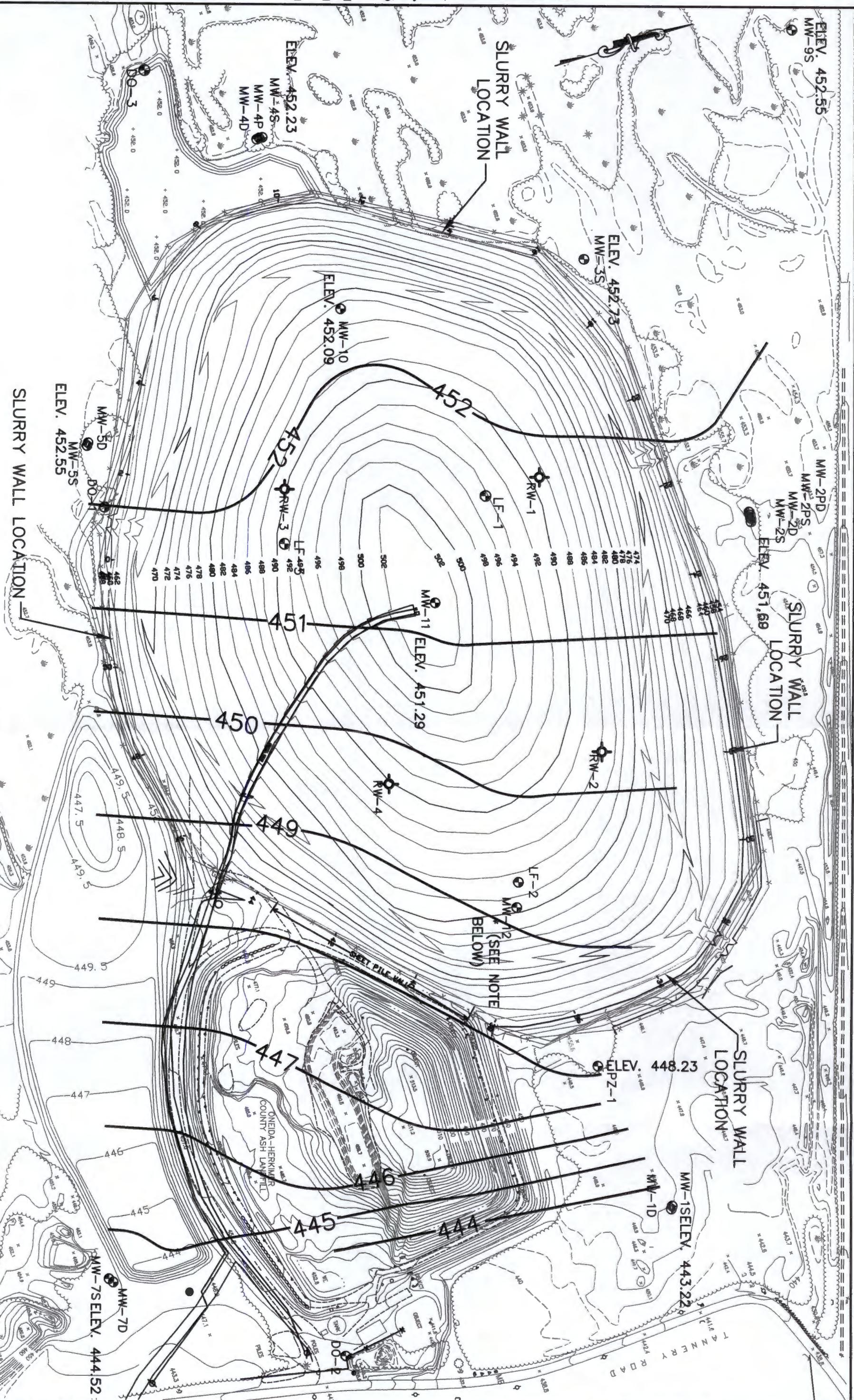
	<b>12/19/2013</b>	<b>3/28/2014</b>	<b>6/20/2014</b>	<b>8/28/2014</b>	<b>12/4/2014</b>	<b>12/19/2013 - 12/04/2014</b>
<b>RW-1</b>	4,538,600	4,538,600	4,538,600	4,538,600	4,538,600	0
<b>RW-2</b>	4,028,600	4,028,600	4,291,200	4,347,200	4,413,000	384,400
<b>RW-3</b>	4,602,200	4,752,300	4,811,900	4,925,600	5,061,900	459,700
<b>RW-4</b>	Removed	Removed	Removed	Removed	Removed	0
<b>Total</b>						844,100

**Hour Meters**

	<b>12/19/2013</b>	<b>3/28/2014</b>	<b>6/20/2014</b>	<b>8/28/2014</b>	<b>12/4/2014</b>	<b>12/19/2013 - 12/04/2014</b>
<b>RW-1</b>	19,686.5	19,686.5	19,686.5	19,686.5	19,686.5	0
<b>RW-2</b>	76,124.3	76,124.3	77,529.4	77,630.2	6,015.0	6,015
<b>RW-3</b>	84,218.2	86,588.4	88,546.3	90,163.5	91,154.1	6,936
<b>RW-4</b>	28,401.5	28,401.5	28,401.5	28,401.5	28,401.5	0

## **FIGURES**





Note: for MW-12  
\* Obstruction in well casing unable to obtain water level measurement.

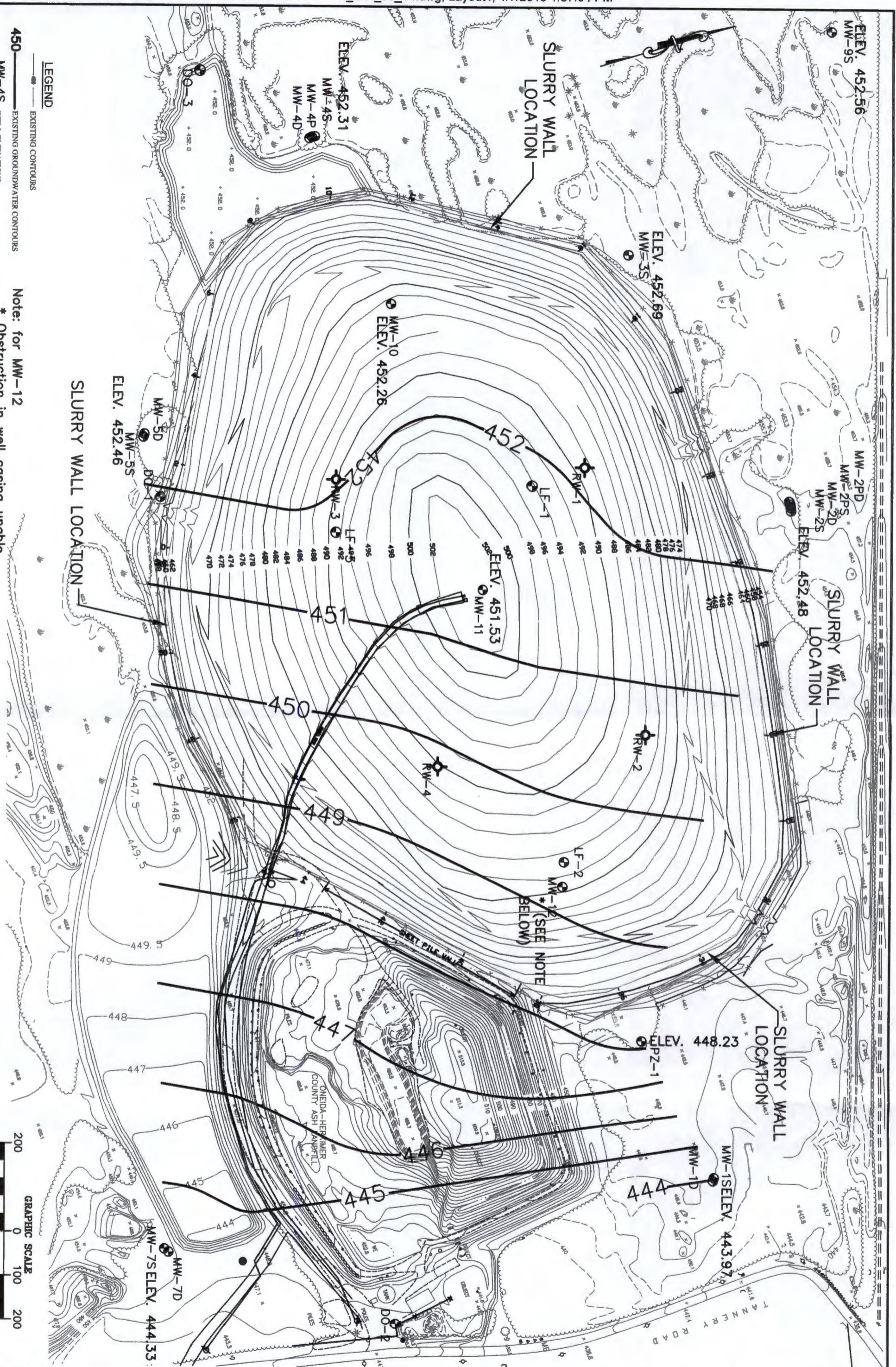
MW-7SELEV. 444.52

**TANNERY ROAD LANDFILL  
CITY OF ROME, NEW YORK**



**DELAWARE  
ENGINEERING, P.C.**

DATE: 01-08-15  
DRAWN BY: KC  
SCALE: AS SHOWN  
REVIEWED BY: EF  
PROJECT NO.: \_\_\_\_\_  
FILE: \_\_\_\_\_



**GROUNDWATER  
CONTOUR MAP  
FOLLOW OVERBURDEN  
ED: AUGUST 28, 2011  
GROUNDWATER TABLE**

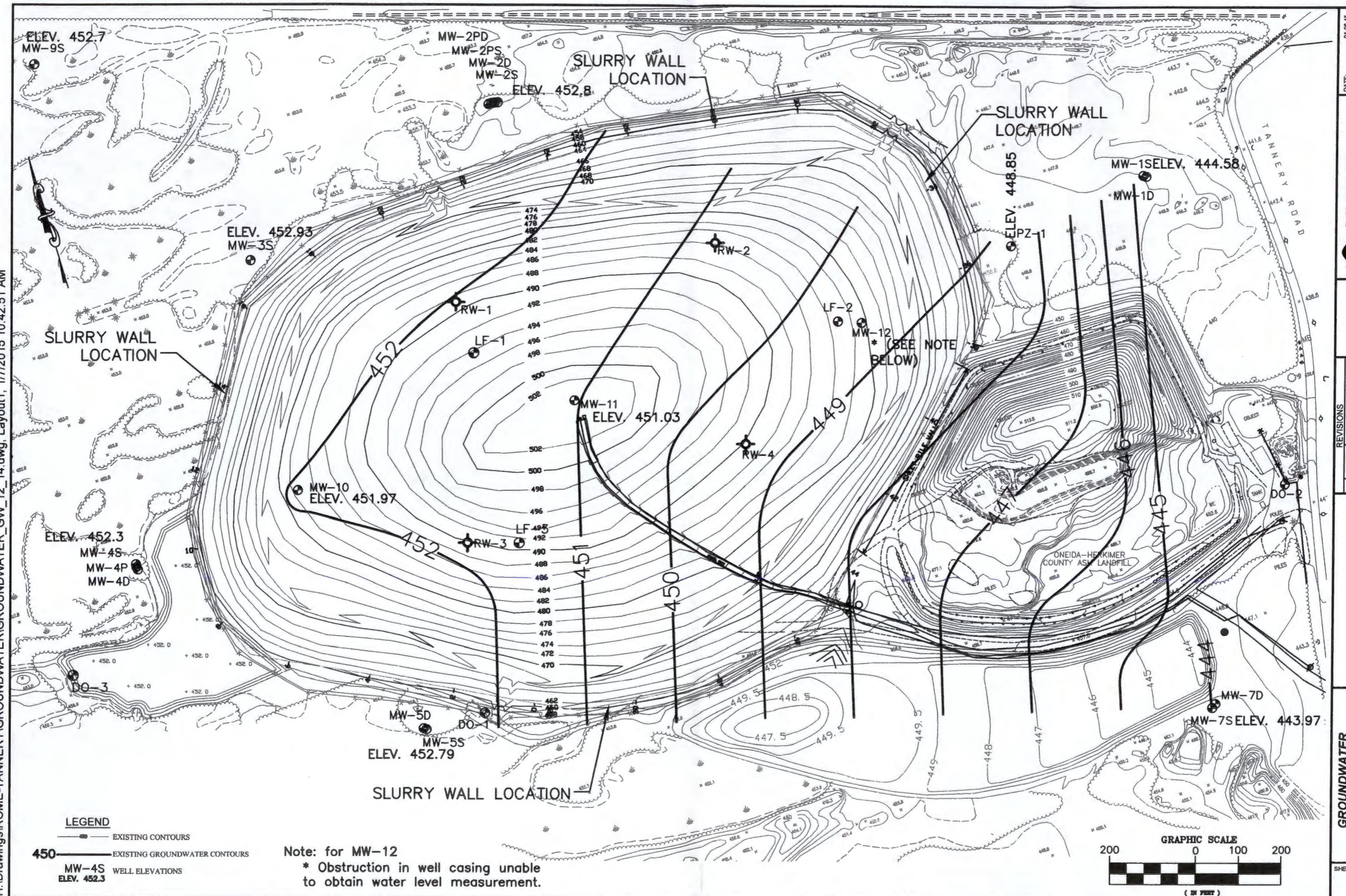
**TANNERY ROAD LANDFILL  
CITY OF ROME, NEW YORK**



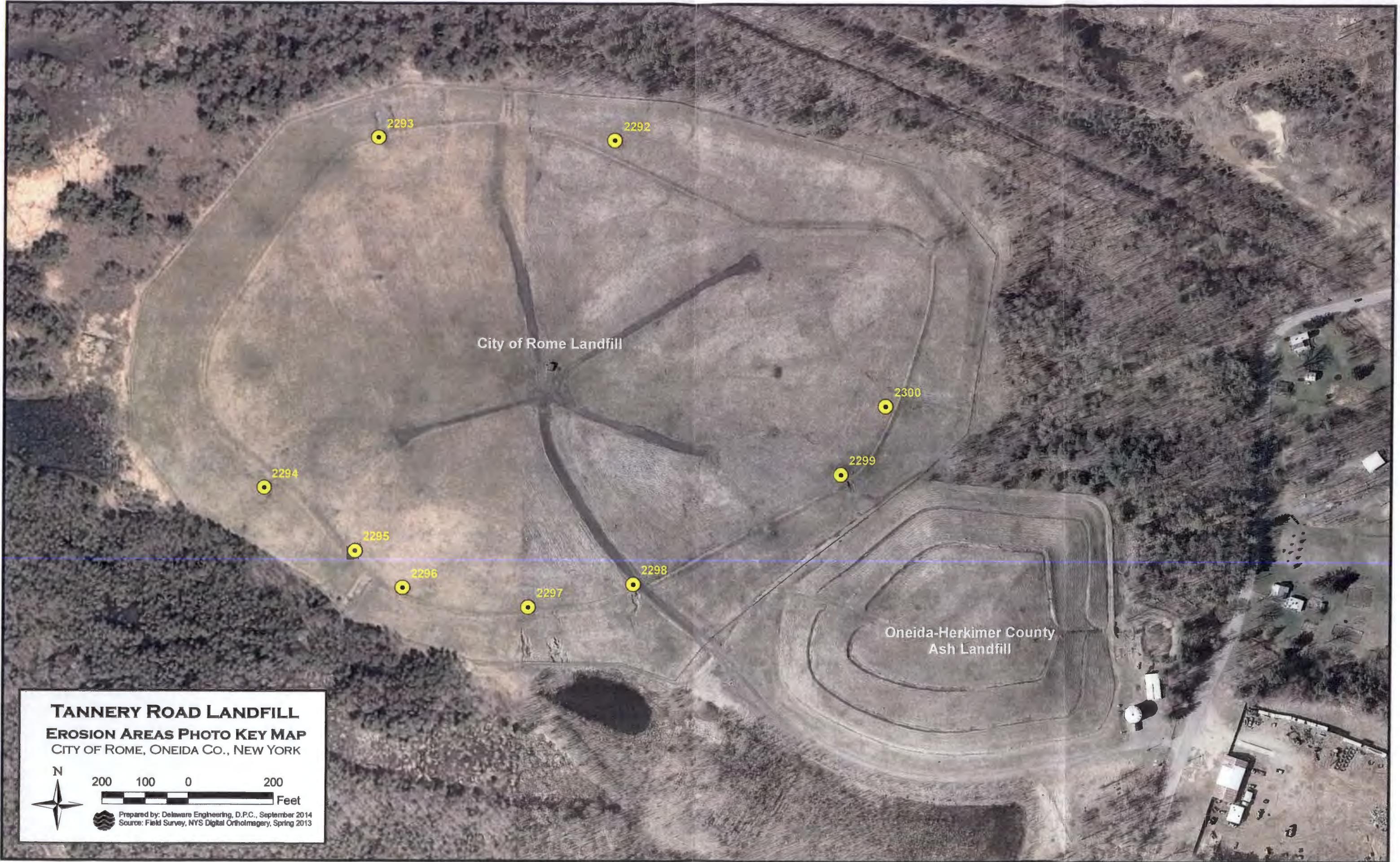
**DELAWARE  
ENGINEERING, P.C.**

8-12 DIETZ STREET, SUITE 303, ONEONTA, NY 13820 - 607.432.8073  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1296

DATE: 01-06-15  
DRAWN BY: KJ  
SCALE: AS SHOWN  
REVIEWED BY: EF  
PROJECT NO.:



DATE: 01-06-15	DRAWN BY: KJ
SCALE: AS SHOWN	REVIED BY: EF
PROJECT NO.: 12003-518-452-1200	FILE: 3806-005-9234
<b>DELAWARE ENGINEERING, P.C.</b>	
CIVIL AND ENVIRONMENTAL ENGINEERING	
8-12 DIETZ STREET, SUITE 303, ONEIDA, NY 13420 - 607-328-8073	
8-20 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518-452-1200	
6 TOWNSEND STREET, WALTON, NY 13886 - 607-386-9234	
TANNERY ROAD LANDFILL CITY OF ROME, NEW YORK	
REVISIONS	DESCRIPTION
NO.	DATE
1	1
GROUNDWATER CONTOUR MAP SHALLOW OVERBURDEN DATED: DECEMBER 2014 GROUNDWATER TABLE	
SHEET: 1	1



**APPENDIX A**

**HISTORICAL ANALYTICAL DATA SUMMARY TABLES**

**City of Rome  
Tannery Road Landfill**

## **Monitoring Well MW-1S Ground Water Analytical Data**

Date	NYSDEC Ground Water Standard	03/01/99	06/01/99	09/01/99	12/01/99	03/01/00	06/01/00	09/01/00	12/01/00	03/01/01	06/01/01	09/01/01	12/01/01	03/28/02	06/17/02	09/24/02	12/18/02	03/12/03	06/25/03	09/17/03	12/16/2003	03/23/04	06/22/04	09/28/04	12/16/04	03/22/05	06/28/05	09/27/05	12/06/05	03/28/06	06/28/06
<b>Field Parameter</b>																															
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	31	103	398	89	39	39	31	23	23	34	62	37	75	67	190	58	376	21	180	20	24	35	44	73	51	71	130	40	20	230
pH (s.u.)	6.5 - 8.5	8.64	5.97	6.37	7	5.85	7.88	6.45	5.27	6.18	4.95	5.89	6.23	7.7	6.5	7.42	7.5	4.9	6.24	6.5	5.22	5.11	5.3	6.2	6.6	6.2	6.8	7.4	5.9	6.2	
Temperature (deg C)	NS	3.2	13.3	15.2	5.9	4.2	13	15.3	3.9	14.7	14.8	6.7	6	12.5	13.7	5.3	7.2	13	13.6	6	4.2	11.5	15	7	4.3	12	6	5	16		
Turbidity (NTU)	5	785	925	560	140	222	161	527	195	316	186	88	90	145	68	126	8	65	556	52	50	113	73	29	140	124	120	5	68	218	3
Dissolved Oxygen (mg/L)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Redox	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
<b>Part 360 Leachate Indicator Parameters</b>																															
Ammonia-Nitrogen (mg/L)	2	<0.5	<0.5	2	<0.3	<0.3	<0.030	<0.030	<0.030	0.073	<0.030	0.089	<0.030	<0.030	1.1	<0.030	0.14	<0.03	0.38	<0.03	<0.030	0.059	0.14	<0.03	0.09	<0.03	1.3	<0.03	0.046	<0.030	
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	NS	8	<4.0	<2.0	2	<2.0	30	<2.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	12	<4.0	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromide (mg/L)	2	<0.2	<2.0	<2.0	<2.0	2.5	<0.010	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.12	<0.100	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chemical Oxygen Demand (mg/L)	NS	52	100	25	14	12	6.7	96	19	36	26	34	14	24	45	66	9.9	<1.0	33	25	35	18	27	7.9	9.7	22	27	30	15	12	<5.0
Chloride (mg/L)	250	<1.0	31	28	3.7	2.3	450	3.3	2.5	2.9	2.4	3.8	2.5	2.7	6.4	2.6	36	3.8	8.2	2.5	3.4	3.3	2.5	2.7	2.1	2.7	4.1	<1.0	<0.01	2.3	
Color (Pt-Co)	15	46	30	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Nitrate-Nitrogen (mg/L)	10	<0.2	<0.2	0.4	0.3	0.18	0.1	<0.100	0.15	0.15	0.16	<0.100	0.15	<0.100	0.13	0.14	<0.1	0.15	<0.1	<0.1	0.16	0.17	0.14	<0.1	<0.1	0.12	0.18	<0.1	<0.1	<0.1	
Sulfate (mg/L)	250	5	10	94	9.8	7.7	4.7	9.7	6.9	6.8	17	6.2	7	6	13	6.2	<1.0	7.9	15	6.9	7.4	8.2	7.1	6.6	7.3	6.8	6.6	9	6.1		
Total Alkalinity (mg/L)	NS	<10.0	37	84	7.8	9	1.9	15	1.2	1.4	2	12	1.9	<1.0	4	64	4	170	4	37	<1	<1.000	6	8	4	4	3	48	1	2	2
Total Cyanide (mg/L)	0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		
Total Dissolved Solids (mg/L)	500	140	140	260	39	30	1,900	26	<4.0	14	56	190	<4.0	170	26	120	42	280	30	120	34	32	20	52	14	14	50	88	36	20	20
Total Hardness (mg/L)	NS	19	120	136	14	23	8	16	7.7	10	8.6	20	9.8	6.6	7.3	60	7.6	210	12	58	<7	7.8	3.7	5.4	<7	<7.0	7	7	6.3	<7	<7.0
Total Kjeldahl Nitrogen (mg/L)	NS	<0.5	2.4	1.3	<0.3	0.6	0.3	1.3	0.39	0.62	0.6	0.23	0.13	0.42	1.7	0.25	<0.1	0.27	0.58	0.34	0.53	0.69	0.28	0.2	0.32	0.66	0.66	0.27	0.17	0.37	
Total Organic Carbon (mg/L)	NS	14	34	7	7.8	15.3	4.4	29	5.5	16	11	13	11.3	8.3	14	26	10	5.5	5.6	10	14	4.1	8.6	3	3.2	5.5	8.3	11	3.4	3.8	
Total Phenols (mg/L)	0.001	<0.005	<0.005	<0.001	0.004	0.001	<0.002	0.007	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.012	0.003	<0.002	0.0046	<0.002	<0.002	0.0034	<0.002	<0.002	<0.002	<0.010	<0.002	<0.002	<0.002	<0.002	<0.002	
<b>Part 360 Routine Metals</b>																															
Cadmium (mg/L)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Calcium (mg/L)	NS	3.26	29.1	43.2	4.2	6.7	1.5	3.1	1.4	1.9	1.7	5.7	2.2	1	1.3	18	1.4	62	3.4	18	<1	1.5	1.5	2.2	0.73	<1.0	2.8	15	1.7	1.5	<1.0
Iron (mg/L)	0.3*	16.3	30.5	33.1	3.1	4.3	1.9	17	6.3	8.8	5.6	7.8	3.2	4.5	4.7	50	7.2	2	2.8	8.1	2.7	2.4	2.3	1.1	0.16	4.2	5.9	13	3.2	1.9	
Lead (mg/L)	0.025	0.012	0.029	0.01</																											

## City of Rome

## Tannery Road Landfill

## Monitoring Well MW-1S Ground Water Analytical Data

Date	NYSDEC Ground Water Standard	03/01/99	06/01/99	09/01/99	12/01/99	03/01/00	06/01/00	09/01/00	12/01/00	03/01/01	06/01/01	09/01/01	12/01/01	03/28/02	06/17/02	09/24/02	12/18/02	03/12/03	06/25/03	09/17/03	12/16/2003	03/23/04	06/22/04	09/28/04	12/16/04	03/22/05	06/28/05	09/27/05	12/06/05	03/28/06	06/28/06	
Dibromochloromethane (µg/L)																																
Dibromomethane (µg/L)	50 (GV)	<5.0																														
Ethyl benzene (µg/L)	5	<5.0																														
Iodomethane (µg/L)	5	<5.0																														
Methylene Chloride (µg/L)	5	<5.0																														
Styrene (µg/L)	5																															
Tetrachloroethene (µg/L)	5	<5.0																														
Toluene (µg/L)	5	<5.0																														
trans-1,2-Dichloroethene (µg/L)	5	<5.0																														
trans-1,3-Dichloropropene (µg/L)	0.4**	<5.0																														
trans-1,4-Dichloro-2-butene (µg/L)	5	<5.0																														
Trichloroethene (µg/L)	5	<5.0																														
Trichlorofluoromethane (µg/L)	5	<5.0																														
Vinyl Acetate (µg/L)	NS	<50.0																														
Vinyl Chloride (µg/L)	2	<5.0																														
Xylenes (Total) (µg/L)	5	<5.0																														
1,2-Dichloroethene - Total	5																															

## Notes

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome  
Tannery Road Landfill  
Monitoring Well MW-1S Ground Water Analytical Data**

Date	NYSDEC Ground Water Standard	09/26/06	12/13/06	03/15/07	06/21/07	09/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/20008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014	
<b>Field Parameter</b>																								
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	47	20	19	23	62	18	18	18	44	152	18	28	76	17	25	14	43	19	25	24	20	20	
pH (s.u.)	6.5 - 8.5	7.07	5.64	5.02	5.44	5.7	5.34	5.43	5.23	6.26	6.84	5.58	5.16	5.75	6.75	5.98	6.66	6.74	5.69	7.05	7.65	5.9	6.1	
Temperature (deg C)	NS	13.6	8.6	3.7	12.5	5.6	4.6	11.6	13.7	5.7	4.3	12	12	7	5.3	12.1	13.6	5.8	3.7	12.2	13	7		
Turbidity (NTU)	5	-	65	0	119	116	57	30	83	4	4	50	18	91	10	59	16	88	0	87	87	110	140	
Dissolved Oxygen (mg/L)	NS				7.58																			
Redox	NS				63																			
<b>Part 360 Leachate Indicator Parameters</b>																								
Ammonia-Nitrogen (mg/L)	2	0.27	0.054	<0.03	0.85	0.3	<0.03	0.085	<0.03	0.55	<0.03	<0.03	0.044	0.38	<0.030	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	<4	<4	<4	<4	6	<4	<5	<4	<4	<4	<4	<4	<4	<4	<4	<2.0	<2.0	<4.0	<4.0	<4.0	<4.0	<4.0	
Bromide (mg/L)	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Chemical Oxygen Demand (mg/L)	NS	23	11	9.6	11	31	14	<5	<5	25	<5	<5	16	<5.0	21.4	<5.0	22	13	9	<5.0	57	38		
Chloride (mg/L)	250	4.5	3.2	2.4	3.4	4.4	3.4	<2	2.9	2.5	2.8	2.9	2.6	2.7	2.5	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Color (Pt-Co)	15				80					30														
Nitrate-Nitrogen (mg/L)	10	0.11	<0.1	<0.1	<0.1	0.11	<0.1	0.048	0.15	0.22	<0.1	<0.1	0.25	<0.1	<0.020	<0.020	0.08	<0.02	0.03	<0.02	0.03	0.04		
Sulfate (mg/L)	250	8.2	7.5	7.8	8.8	4.9	6.3	5.5	7.2	6.7	5.8	<1	6.2	6.5	6	4.6	4.45	6.12	6.08	5.54	9.17	4.07	6.1	
Total Alkalinity (mg/L)	NS	46	4	2	4	18	<1	3	4	13	2	2	<3	19	<3.0	2	3	12	3	4	2	1	1	
Total Cyanide (mg/L)	0.2					0.011																		
Total Dissolved Solids (mg/L)	500	54	34	12	52	74	12	<10	32	90	20	20	<10	40	<10	20	107	30	28	45	<10.0	<5.0		
Total Hardness (mg/L)	NS	26	<7	<7	33	25	<7	<7	12	<7	<7	<7	26	<7.0	3	<5.0	16	6	3	4	<5.0	<5.0		
Total Kjeldahl Nitrogen (mg/L)	NS	0.73	0.32	0.2	1.1	1	0.35	0.18	2.4	1.2	0.4	0.2	0.21	1.1	0.35	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0		
Total Organic Carbon (mg/L)	NS	7.8	3.1	2.4	3.1	11	4.8	2.5	4.2	6.5	2	3.6	2.6	18	3.2	5.7	3.7	9.6	4	3.6	4.2	2.4	26	
Total Phenols (mg/L)	0.001	<0.002	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	0.0039	<0.003	<0.003	<0.003	0.0043	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		
<b>Part 360 Routine Metals</b>																								
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00027	<0.005	<0.005	<0.005	0.00048	<0.00021	0.00023	<0.005			
Calcium (mg/L)	NS	8.1	1.2	<1	3.5	8.1	1.3	1.2	1.4	5	<1	1.1	70	8.1	<1.0	0.572	0.572	5.12	1.9	1.7	0.697	1.13	1.22	
Iron (mg/L)	0.3*	5.1	0.54	2.2	2	17	3.3	2.5	1.7	3.6	1.5	1.3	41	5.7	1.7	1.91	2.43	7.35	125	0.819	1.61	1.32	1.02	
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.010	<0.01	<0.002	<0.005	<0.005	<0.005	<0.0019	<0.0018	<0.002	<0.005	
Magnesium (mg/L)	35 (GV)	1.3	<1	<1	<1	1.1	<1	<1	<1	<1	<1	<1	16	1.4	<1.0	0.351	0.38	0.717	0.333	0.326	0.366	0.354	0.099	
Manganese (mg/L)	0.3*	<0.01	0.063	0.041	0.14	0.62	0.074	0.06	0.058	0.36	0.018	0.042	0.73	0.31	0.02	0.02	0.025	0.221	0.032	0.0229	0.0195	0.024	<0.02	
Potassium (mg/L)	NS	1.6	<1	<1	1.2	1.2	<1	<1	<1	0.83	6	<1	28	<1.0	<1.0	0.179	0.242	0.591	0.167	0.197	0.203	0.263	<0.05	
Sodium (mg/L)	20	<1	<1	1	2.5	<1	<1	<1	<1	1.1	<1	31	<1.0	<1.0	0.431	0.432	0.518	0.46	0.665	0.649	0.41			
<b>Part 360 Additional Baseline Metals</b>																								
Aluminum (mg/L)	NS				1.6																			
Antimony (mg/L)	0.003				<0.01																			
Arsenic (mg/L)	0.025				<0.01																			
Barium (mg/L)	1				<0.2																			
Beryllium (mg/L)	0.003 (GV)				<0.01																			
Boron (mg/L)	1				<0.5																			
Chromium (mg/L)	0.05				<0.01																			
Chromium, Hexavalent (mg/L)	0.05				<0.01																			

**City of Rome**  
**Tannery Road Landfill**  
**Monitoring Well MW-1S Ground Water Analytical Data**

Date	NYSDEC Ground Water Standard	09/26/06	12/13/06	03/15/07	06/21/07	09/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Dibromomethane ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Ethyl benzene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Iodomethane ( $\mu\text{g/L}$ )	5					<5.0				<5				<5	<10				<10	<10	<10	<10	
Methylene Chloride ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Styrene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Tetrachloroethene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Toluene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5					<5.0				<5				<5	<10				<5.0	<5.0	<5.0	<5.0	
Trichloroethene ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS					<5.0				<5				<5	<10				<10	<10	<10	<10	
Vinyl Chloride ( $\mu\text{g/L}$ )	2					<1.0				<1				<1	<10				<10	<10	<10	<10	
Xylenes (Total) ( $\mu\text{g/L}$ )	5					<1.0				<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethene - Total	5																						

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome**  
**Tannery Road Landfill**  
**Monitoring Well MW-2D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/12/2003	6/22/2004	9/28/2004	12/16/2004	3/22/2005	6/28/2005	9/27/2005	12/6/2005	3/28/2006	6/28/2006	9/26/2006	12/13/2006	3/15/2007	6/21/2007	9/25/2007	12/17/2007	3/27/2008	6/19/2008
<b>Field Parameters</b>																			
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	381	270	253	300	235	288	245	270	240	480	353	203	295	221	165	180	161	192
pH (s.u.)	6.5 - 8.5	6.7	6.73	6.98	6.8	7.62	6.96	7.45	6.7	7.3	8	7.8	6.72	7.01	7.32	7.1	7.06	7.34	7.3
Temperature (deg C)	NS	6.3	12	13.7	8	7.6		11.5	9	9	12	11.2	10.5	7.5	11	11.8	8.7	8.1	10.4
Turbidity (NTU)	5	202	138	125	150	39	100	30	38	48	28	-	6	0	67	16	6	16	97
Redox	NS														-118				
Dissolved Oxygen (mg/L)	NS														3.58				
<b>Part 360 Leachate Indicator Parameters</b>																			
Ammonia-Nitrogen (mg/L)	2	11	7.5	2.5	1.6	6.1	4.6	6.5	5.3	4.5	5.4	11	3.3	5.8	4.2	0.8	1.4	1.3	2.8
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	NS	<10.0	7.3	7.5	4.7	<4.0	<4.0	4.5	<4	<4	<4.0	5.5	<4	<20	<4	8.4	<4	<5	<4
Bromide (mg/L)	2	<0.1	<0.1	0.12	<0.1	<0.1	0.14	0.14	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chemical Oxygen Demand (mg/L)	NS	10	43	32	26	29	27	26	13	68	23	31	26	23	24	21	28	<5	19
Chloride (mg/L)	250	4.4	4.5	3.8	3.3	4	3.3	4.2	3.9	3.7	3.9	5.2	3.1	3.6	3.6	2.5	2.8	<2	3.6
Color (Pt-Co)	15			650					100	300						160			
Nitrate-Nitrogen (mg/L)	10	0.16	0.15	0.17	1.6	0.15	0.16	0.28	<0.1	<0.1	<0.10	<0.1	<0.1	0.1	0.1	0.55	<0.1	<0.04	<0.1
Sulfate (mg/L)	250	77	38	33	22	30	24	31	32	24	23	37	15	23	18	10	2.3	12	14
Total Alkalinity (mg/L)	NS	100	92	74	66	88	80	80	84	84	120	130	82	120	120	77	83	95	120
Total Cyanide (mg/L)	0.2		<0.01						<0.01	<0.01						<0.01			
Total Dissolved Solids (mg/L)	500	300	140	160	120	160	140	170	210	150	160	150	150	160	160	130	120	100	130
Total Hardness (mg/L)	NS	130	100	90	69	89	73	80	93	87	110	110	78	97	150	73	74	68	86
Total Kjeldahl Nitrogen (mg/L)	NS	13	8.4	5	1.9	7.2	4.4	6.5	3.3	3.1	4.9	11	4.9	5.8	4.7	1.4	2.6	1.7	3.7
Total Organic Carbon (mg/L)	NS	13	9.1	8	7.9	7.6	2.3	10	8	7.3	8.1	9.4	7.3	8	8.5	7.5	7	6.3	6.8
Total Phenols (mg/L)	0.001	<0.002	<0.002	<0.002	<0.002	0.0032	<0.002	0.0035	0.0023	<0.002	<0.002	<0.002	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003
<b>Part 360 Routine Metals</b>																			
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium (mg/L)	NS	44	34	29	23	30	24	26	32	29	37	38	26	33	27	24	25	23	29
Iron (mg/L)	0.3*	21	12	11	3.1	13	7.4	8.8	11	9.9	14	10	8.1	9.7	9.1	2.1	7.4	8	7.2
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (mg/L)	35 (GV)	6.3	4.1	3.9	3	3.6	3.2	3.8	3.3	3.2	4.4	4.4	2.9	3.8	3.4	3.3	2.9	2.7	3.5
Manganese (mg/L)	0.3*	1.5	1	1.1	0.97	0.96	0.87	0.93	0.89	0.84	1	<0.01	0.7	0.87	0.86	0.75	0.82	0.65	0.76
Potassium (mg/L)	NS	21	13	17	12	12	11	12	11	11	12	15	6.6	12	11	7.6	8.1	6.9	8.6
Sodium (mg/L)	20	5.7	2.4	3	2.7	1.4	2.2	2.2	2.6	2.5	3.7	4.5	1.5	2.7	2.7	1.7	1.6	1.3	1.6
<b>Part 360 Additional Baseline Metals</b>																			
Aluminum (mg/L)	NS			0.37					0.26	0.25						0.23			
Antimony (mg/L)	0.003			<0.01					<0.01	<0.01						<0.01			
Arsenic (mg/L)	0.025			0.011					<0.01	<0.01						<0.01			
Barium (mg/L)	1			0.23					0.23	0.2						<0.2			
Beryllium (mg/L)	0.003 (GV)			<0.01					<0.01	<0.01						<0.01			
Boron (mg/L)	1			0.089					<0.5	<0.5						<0.5			
Chromium (mg/L)	0.05			<0.01					<0.01	<0.01						<0.01			
Chromium, Hexavalent (mg/L)	0.05			<0.01					<0.01	<0.01						<0.01			
Cobalt (mg/L)	NS			<0.01					<0.01	<0.01						<0.01			
Copper (mg/L)	0.2			<0.01					<0.01	<0.01						<0.04			
Mercury (mg/L)	0.0007			<0.0002					<0.0002	<0.0002						<0.0002			
Nickel (mg/L)	0.1			<0.01					<0.01	<0.01						<0.01			
Selenium (mg/L)	0.01	</td																	

**City of Rome**  
**Tannery Road Landfill**  
**Monitoring Well MW-2D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/12/2003	6/22/2004	9/28/2004	12/16/2004	3/22/2005	6/28/2005	9/27/2005	12/6/2005	3/28/2006	6/28/2006	9/26/2006	12/13/2006	3/15/2007	6/21/2007	9/25/2007	12/17/2007	3/27/2008	6/19/2008
1,2,3-Trichloropropane (µg/L)	0.04	<5	<1						<1	<1								<1.0	
1,2-Dibromo-3-chloropropane (µg/L)	0.04	<5	<1						<1	<1								<1.0	
1,2-Dibromoethane (EDB) (µg/L)	5	<5	<1						<1	<1								<1.0	
1,2-Dichlorobenzene (µg/L)	3	<5	<1						<1	<1								<1.0	
1,2-Dichloroethane (µg/L)	0.6	<5	<1						<1	<1								<1.0	
1,2-Dichloropropane (µg/L)	1	<5	<1						<1	<1								<1.0	
1,4-Dichlorobenzene (µg/L)	3	<5	<1						<1	<1								<1.0	
2-Butanone (MEK) (µg/L)	50 (GV)	<10	<10						<5	<5								<5.0	
2-Hexanone (µg/L)	50 (GV)	<10	<10						<5	<5								<5.0	
4-Methyl 2-pentanone (µg/L)	NS	<10	<10						<5	<5								<5.0	
Acetone (µg/L)	50 (GV)	<10	<10						<10	<5								<5.0	
Acrylonitrile (µg/L)	5	<5	<5						<20	<20								<20	
Benzene (µg/L)	1	<5	<1						<1	<1								<1.0	
Bromochloromethane (µg/L)	5	<5	<1						<1	<1								<1.0	
Bromodichloromethane (µg/L)	50 (GV)	<5	<1						<1	<1								<1.0	
Bromoform (µg/L)	50 (GV)	<5	<1						<1	<1								<1.0	
Bromomethane (µg/L)	5	<5	<1						<1	<1								<1.0	
Carbon disulfide (µg/L)	60 (GV)	<5	<1						<1	<1								<1.0	
Carbon tetrachloride (µg/L)	5	<5	<1						<1	<1								<1.0	
Chlorobenzene (µg/L)	5	<5	<1						<1	<1								<1.0	
Chloroethane (µg/L)	5	<5	<1						<1	<1								<1.0	
Chloroform (µg/L)	7	<5	<1						<1	<1								<1.0	
Chloromethane (µg/L)	5	<5	<1						<1	<1								<1.0	
cis-1,2-Dichloroethene (µg/L)	5	<5	<1						<1	<1								<1.0	
cis-1,3-Dichloropropene (µg/L)	0.4**	<5	<1						<1	<1								<1.0	
Dibromochloromethane (µg/L)	50 (GV)	<5	<1						<1	<1								<1.0	
Dibromomethane (µg/L)	5	<5	<1						<1	<1								<1.0	
Ethyl benzene (µg/L)	5	<5	<1						<1	<1								<1.0	
Iodomethane (µg/L)	5	<5	<10						<5	<5								<5.0	
Methylene Chloride (µg/L)	5	<10	<10						<5	<1								<1.0	
Styrene (µg/L)	5	<5	<1						<1	<1								<1.0	
Tetrachloroethene (µg/L)	5	<5	<1						<1	<1								<1.0	
Toluene (µg/L)	5	<5	<1						<1	<1								<1.0	
trans-1,2-Dichloroethene (µg/L)	5	<5	<1						<1	<1								<1.0	
trans-1,3-Dichloropropene (µg/L)	0.4**	<5	<1						<1	<1								<1.0	
trans-1,4-Dichloro-2-butene (µg/L)	5	<5	<10						<5	<5								<5.0	
Trichloroethene (µg/L)	5	<5	<1						<1	<1								<1.0	
Trichlorofluoromethane (µg/L)	5	<5	<1						<1	<1								<1.0	
Vinyl Acetate (µg/L)	NS	<5	<5						<5	<5								<5.0	
Vinyl Chloride (µg/L)	2	<5	<1						<1	<1								<1.0	
Xylenes (Total) (µg/L)	5	<5	<1						<1	<1								<1.0	
1,2-Dichloroethene - Total	5	<5																	

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome**  
**Tannery Road Landfill**  
**Monitoring Well MW-2D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
<b>Field Parameters</b>															
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	228	211	162	139	147	230	194	213	230	174	194	167	140	150
pH (s.u.)	6.5 - 8.5	7.39	7.35	6.8	6.89	6.92	6.97	7.06	<b>6.41</b>	7.56	7.1	<b>6.39</b>	6.66	<b>5.1</b>	<b>6.4</b>
Temperature (deg C)	NS	10.8	8.4	8.1	12.5	11	8.8	7	10.1	10.4	9	7.1	10.6	13	8
Turbidity (NTU)	5	0	<b>8</b>	<b>22</b>	8	9	0	<b>121</b>	0	<b>35</b>	0	<b>39</b>	0	<b>8</b>	<b>40</b>
Redox	NS														
Dissolved Oxygen (mg/L)	NS														
<b>Part 360 Leachate Indicator Parameters</b>															
Ammonia-Nitrogen (mg/L)	2	<b>4.9</b>	0.28	1.6	0.89	<0.030	<b>4.3</b>	1.63	<b>2.6</b>	<b>3.3</b>	1.2	1	0.9	0.2	0.2
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	NS	<4	<4	<4	5.6	<4.0	<4.0	6	<2.0	<12	<4.0	<4.0	5	4	
Bromide (mg/L)	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand (mg/L)	NS	24	29	14	7.5	8.9	9.3	20	13	22	13	22	<b>23</b>	<b>24</b>	26
Chloride (mg/L)	250	3.9	3.1	2.8	2.8	2.6	4.5	1.6	4.77	3.38	1.42	1.23	<1.0	<1.0	<1.0
Color (Pt-Co)	15	<b>100</b>					<b>120</b>	<b>70</b>				>70	<b>&gt;70</b>	<b>60</b>	70
Nitrate-Nitrogen (mg/L)	10	0.17	<b>0.58</b>	<0.1	0.23	0.43	<0.1	0.13	<0.020	<0.020	<0.02	0.03	<0.02	0.03	0.27
Sulfate (mg/L)	250	16	10	11	9.9	10	13	14.7	13.6	15	13.6	11.4	8.28	8.61	7.14
Total Alkalinity (mg/L)	NS	150	130	<b>74</b>	85	92	86	75	100	104	80	56	86	60	60
Total Cyanide (mg/L)	0.2	<0.01					<0.01	<0.010				<0.01	<0.01	<0.010	<0.01
Total Dissolved Solids (mg/L)	500	210	110	110	96	140	120	8	172	130	145	100	90	30	
Total Hardness (mg/L)	NS	98	<b>83</b>	69	71	70	91	74	107	104	75	74	90	62	61
Total Kjeldahl Nitrogen (mg/L)	NS	5.3	1.4	2.1	1.2	0.89	2.4	2.24	3.6	3.1	1.7	3.6	<b>2</b>	<1.0	<1.0
Total Organic Carbon (mg/L)	NS	7.2	5.6	6.7	5.4	4	6.8	10.1	8.6	8.1	7.8	7.2	<b>5.8</b>	7.4	7.5
Total Phenols (mg/L)	0.001	<b>0.0055</b>	<0.003	<0.003	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<b>0.002</b>	
<b>Part 360 Routine Metals</b>															
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.010	<0.01	0.00033	<0.005	<0.005	<0.005	0.00014	<0.00021	<0.00015	<0.005	
Calcium (mg/L)	NS	32	25	23	22	30	24.7	35.5	33.8	24.8	24.1	29.4	19.6	19.9	
Iron (mg/L)	0.3*	<b>7.6</b>	<b>7.7</b>	<b>7.1</b>	<b>3.4</b>	<b>3</b>	<b>8.8</b>	<b>8.71</b>	<b>10.9</b>	<b>11.9</b>	<b>9.33</b>	<b>8.16</b>	<b>11.2</b>	<b>4.7</b>	<b>1.77</b>
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	<0.010	<0.01	<0.002	<0.005	<0.005	<0.005	<0.0019	<0.0018	<0.002	<0.005	
Magnesium (mg/L)	35 (GV)	4.4	5	2.9	3.3	3.5	3.7	2.88	4.49	4.75	3.18	3.33	3.98	3.21	2.71
Manganese (mg/L)	0.3*	<b>0.75</b>	<b>0.91</b>	<b>0.72</b>	<b>0.85</b>	<b>0.8</b>	<b>0.84</b>	<b>0.779</b>	<b>0.981</b>	<b>1.01</b>	<b>0.829</b>	<b>0.745</b>	<b>0.799</b>	<b>0.626</b>	0.24
Potassium (mg/L)	NS	9.9	7.1	5.8	4.6	5.2	9	4.55	7.41	8.07	4.49	3.98	<b>4.56</b>	2.75	3.66
Sodium (mg/L)	20	1.9	2.2	1.1	1.1	<1.0	1.8	1.08	1.79	2.07	1.13	1.2	<b>1.42</b>	0.902	0.835
<b>Part 360 Additional Baseline Metals</b>															
Aluminum (mg/L)	NS	0.22					0.12	0.053				0.116	0.287	0.025	<0.1
Antimony (mg/L)	0.003	<0.01					<0.01	<0.020				<0.0196	<0.0011	<0.002	<0.06
Arsenic (mg/L)	0.025	<0.01					<0.01	0.002				0.0055	0.007	0.002	0.008
Barium (mg/L)	1	0.21					0.15	0.121				0.11	0.119	0.072	0.076
Beryllium (mg/L)	0.003 (GV)	<0.01					<0.01	<0.00014				0.00015	<0.00016	<0.0001	<0.005
Boron (mg/L)	1	<0.5					<0.5	0.009				0.0102	<0.00057	0.008	<0.05
Chromium (mg/L)	0.05	<0.01					<0.01	<0.005				0.0084	<0.0051	<0.003	<0.005
Chromium, Hexavalent (mg/L)	0.05	<0.01					<0.01	<0.020				<0.020	<0.02	<0.020	<0.02
Cobalt (mg/L)	NS	<0.01					<0.01	<0.000				<0.00043	0.00036	<0.001	<0.05
Copper (mg/L)	0.2	<0.01					<0.01	<0.003				<0.0025	<0.0025	<0.001	<0.005
Mercury (mg/L)	0.0007	<0.0002					<0.0002	<0.00007				<0.00006	<0.0001	<0.15	<0.0002
Nickel (mg/L)	0.1	<0.01					<0.01	<0.001				<0.00056	<0.00029	<0.00046	<0.02
Selenium (mg/L)	0.01	<0.01					<0.01	<0.003				<0.0025	<0.0015	<0.003	0.007
Silver (mg/L)	0.05	<0.01					<0.01	<0.003				<0.0028	<0.0014	<0.003	<0.01
Thallium (mg/L)	0.0005 (GV)	<0.01					<0.02	<b>0.01</b>				<b>0.0168</b>	<0.0018	<0.003	<0.01
Vanadium (mg/L)	NS	<0.01					<0.01	<0.005				<0.0049	0.0123	<0.011	<0.02
Zinc (mg/L)	2	0.021					<0.02	0.007				0.0024	<0.0011	0.002	<0.01

**City of Rome**  
**Tannery Road Landfill**  
**Monitoring Well MW-2D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
1,2,3-Trichloropropane ( $\mu\text{g/L}$ )	0.04	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dibromo-3-chloropropane ( $\mu\text{g/L}$ )	0.04	<1				<1	<10				<10	<10	<10	<10	
1,2-Dibromoethane (EDB) ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethane ( $\mu\text{g/L}$ )	0.6	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)	<10				<10	<10				<10	<10	<10	<10	
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)	<10				<10	<10				<10	<10	<10	<10	
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS	<10				<10	<10				<10	<10	<10	<10	
Acetone ( $\mu\text{g/L}$ )	50 (GV)	<10				<10	<10				<10	<10	<10	<10	
Acrylonitrile ( $\mu\text{g/L}$ )	5	<20				<20	<25				<25	<25	<25	<25	
Benzene ( $\mu\text{g/L}$ )	1	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Bromochloromethane ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Bromodichloromethane ( $\mu\text{g/L}$ )	50 (GV)	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Bromomethane ( $\mu\text{g/L}$ )	5	<1				<1	<10				<10	<10	<10	<10	
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Chlorobenzene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Chloroethane ( $\mu\text{g/L}$ )	5	<1				<1	<10				<10	<10	<10	<10	
Chloroform ( $\mu\text{g/L}$ )	7	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Chloromethane ( $\mu\text{g/L}$ )	5	<1				<1	<10				<10	<10	<10	<10	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Dibromomethane ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Ethyl benzene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Iodomethane ( $\mu\text{g/L}$ )	5	<5				<5	<10				<10	<10	<10	<10	
Methylene Chloride ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Styrene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Tetrachloroethene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Toluene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5	<5				<5	<10				<10	<10	<10	<10	
Trichloroethene ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<5				<5	<10				<10	<10	<10	<10	
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<1				<1	<10				<10	<10	<10	<10	
Xylenes (Total) ( $\mu\text{g/L}$ )	5	<1				<1	<5.0				<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethene - Total	5														

**Notes**

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- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome  
Tannery Road Landfill  
MW-3S  
Ground Water Analytical Data**

**City of Rome**  
**Tannery Road Landfill**  
**MW-3S**  
**Ground Water Analytical Data**

PARAMETER	NYSDEC	03/01/99	06/01/99	09/01/99	12/01/99	03/01/00	06/01/00	09/01/00	12/01/00	03/01/01	06/01/01	09/01/01	12/01/01	03/28/02	06/17/02	09/24/02	12/18/02	03/12/03	06/25/03	09/17/03	12/16/03	03/23/04	06/22/04	09/28/04	12/16/04	03/22/05	06/28/05	09/27/05	12/06/05	03/28/06			
Carbon tetrachloride ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Chlorobenzene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Chloroethane ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Chloroform ( $\mu\text{g/L}$ )	7		<5											<5	<5			Frozen	<5		<1							<1	<1				
Chloromethane ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**		<5											<5	<5			Frozen	<5		<1							<1	<1				
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)		<5											<5	<5			Frozen	<5		<1							<1	<1				
Dibromomethane ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Ethyl benzene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Iodomethane ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<10		<10							<5	<5				
Methylene Chloride ( $\mu\text{g/L}$ )	5		<5											<10	<10			Frozen	<10		<10							<5	<5				
Styrene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Tetrachloroethene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Toluene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**		<5											<5	<5			Frozen	<5		<1							<1	<1				
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5		<5											<50	<50			Frozen	<10		<10							<5	<5				
Trichloroethene ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
Vinyl Acetate ( $\mu\text{g/L}$ )	NS		<50											<50	<50			Frozen	<5		<1							<1	<1				
Vinyl Chloride ( $\mu\text{g/L}$ )	2		<5											<5	<5			Frozen	<20		<20							<5	<5				
Xylenes (Total) ( $\mu\text{g/L}$ )	5		<5											<5	<5			Frozen	<5		<1							<1	<1				
	5																																

Notes

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**City of Rome**  
**Tannery Road Landfill**  
**MW-3S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standards	06/28/06	09/26/06	12/13/06	03/15/07	06/21/07	09/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/20014		
<b>Field Parameters</b>																										
Conductivity ( $\mu\text{hos}/\text{cm}$ )	NS	460	517	453	212	555	533	441	475	448	452	507	425	412	493	500	478	480	451	477	521	402	340	440		
pH(s.u.)	6.5 - 8.5	7.5	7.44	6.51	<b>6.38</b>	6.79	6.72	<b>6.48</b>	6.69	7.01	6.96	<b>6.31</b>	6.69	6.57	<b>6.1</b>	6.65	<b>5.54</b>	<b>6.34</b>	6.7	<b>5.86</b>	<b>6.22</b>	<b>5.7</b>	<b>6</b>			
Temperature (deg C)	NS	12	12.9	9.5	5.2	11.2	12.5	7.3	5.6	10.3	12.6	7.8	6.1	14	12	8.4	6	11	13.1	7.1	5	11.1	14	5		
Turbidity (NTU)	5	<b>55</b>	-	<b>46</b>	0	<b>21</b>	<b>101</b>	<b>10</b>	11	<b>12</b>	0	<b>85</b>	21	14	3	0	30	0	24	0	<b>23</b>	0	<b>60</b>	<b>290</b>		
Redox	NS																									
Dissolved Oxygen (mg/L)	NS																									
<b>Leachate Indicator Parameters</b>																										
Ammonia-Nitrogen (mg/L)	2	17	12	9.1	8.7	14	<b>15</b>	<b>7.3</b>	11	<b>5.8</b>	<b>9.7 J</b>	3.9	<b>3.3</b>	2.7	<b>2.4</b>	1.9	<b>2.2</b>	1.8	1.7	1.7	1.2	0.8	0.3	0.3		
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg)	NS	7.6	5.6	<4	<20	<4	13	<4	<5	<4	<4	7	4.9	<4	8.1	4.6	10	6	17	9	9	2	5	6		
Bromide (mg/L)	2	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Chemical Oxygen Demand (mg/L)	NS	40	43	35	37	41	40	27	11	34	9.6	67	23	19	26	25	32.8	22	34	22	27	20	47	38		
Chloride (mg/L)	250	2.6	3.2	2.6	2.8	2.5	4	3.4	<2	2.4	2	3.1	2.7	2.6	3.9	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Color (Pt-Co)	15																	<b>25</b>	10	<b>20</b>	<b>&gt;70</b>	<b>20</b>	<b>70</b>			
Nitrate-Nitrogen (mg/L)	10	<0.10	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.04	<0.1	0.17	<0.1	<0.1	0.23	<0.1	<0.020	<0.020	<0.020	<0.02	<0.020	<0.02	0.03	0.1			
Sulfate (mg/L)	250	3.7	4.9	4	4.1	5.4	13	4.7	2.7	4.7	4.4	4	3.7	<1	4.1	6.6	<1.0	4.77	<2.0	<2.0	<2.0	<2.0	5.26	2.11		
Total Alkalinity (mg/L)	NS	270	280	250	300	300	280	250	270	250	280	240	220	250	260	250	240	255	250	210	210	200				
Total Cyanide	0.2																									
Total Dissolved Solids (mg/L)	500	310	310	270	390	300	280	250	280	310	270	230	260	270	237	287	320	<b>5310 S</b>	200	220	155					
Total Hardness (mg/L)	NS	160	150	160	190	120	160	170	180	170	220	190	210	210	230	222	246	203	142	25	204	181	215			
Total Kjeldahl Nitrogen (mg/L)	NS	14	15	9.8	8.3	8.3	18	9.4	11	11	2.2 J	6	4.1	3.1	3.3	2.5	3.64	5	2.2	3.9	1.7	1.1	<1.0	<1.0		
Total Organic Carbon (mg/L)	NS	14	14	12	13	14	12	11	11	10	14	9.9	9.5	10	11	12.6	12.3	10.9	11.9	10.6	9.1	11.3	11.3			
Total Phenols (mg/L)	0.001	<0.002	<0.002	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	<b>0.0036</b>	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		
<b>Part 360 Routine Metals</b>																										
Cadmium (mg/L)	0.005	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.00013	<0.005	<0.005	0.00035	<0.00021	<0.00015	<0.005			
Calcium (mg/L)	NS	42	40	41	44	42	41	42	41	54	49	55	52	64	62.7	72	59.1	71.3	72.7	62.6	54.8	65.1				
Iron (mg/L)	0.3*	17	15	16	<b>21</b>	<b>18</b>	<b>18</b>	<b>21</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>22</b>	<b>27</b>	<b>23</b>	<b>24.9</b>	<b>22.4</b>	<b>26.3</b>	<b>26.9</b>	<b>11.3</b>	<b>22.4</b>	<b>19.6</b>	<b>21.9</b>				
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<0.005	<0.005	0.006	0.0023	0.0025	<0.002	<0.005				
Magnesium (mg/L)	35 (GV)	14	13	15	19	15	16	18	17	16	21	17	18	20	18	15.9	16.3	13.4	15.5	16.2	11.5	10.8	12.6			
Manganese (mg/L)	0.3*	<b>0.69</b>	<0.01	<b>0.63</b>	<b>0.93</b>	<b>0.98</b>	<b>0.72</b>	<b>0.75</b>	<b>0.92</b>	<b>0.82</b>	<b>0.72</b>	<b>1</b>	<b>0.83</b>	<b>0.94</b>	<b>0.89</b>	<b>0.92</b>	<b>1.07</b>	<b>1.03</b>	<b>1.06</b>	<b>1.24</b>	<b>1.27</b>	<b>1.03</b>	<b>0.929</b>	<b>0.859</b>		
Potassium (mg/L)	NS	47	44	19	30	35	40	26	32	25	25	19	17	16	20	18	13.2	16.2	12.9	12.5	10.3	9.05	7.89	5.31		
Sodium (mg/L)	20	3</																								

**City of Rome**  
**Tannery Road Landfill**  
**MW-3S**  
**Ground Water Analytical Data**

PARAMETER	NYSDEC	06/28/06	09/26/06	12/13/06	03/15/07	06/21/07	09/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
Carbon tetrachloride (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Chlorobenzene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Chloroethane (µg/L)	5					<1.0					<1				<1	<10					<10	<10	<10	<10
Chloroform (µg/L)	7					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Chloromethane (µg/L)	5					<1.0					<1				<1	<10					<10	<10	<10	<10
cis-1,2-Dichloroethene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene (µg/L)	0.4**					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Dibromochloromethane (µg/L)	50 (GV)					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Dibromomethane (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Ethyl benzene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Iodomethane (µg/L)	5					<5.0					<5				<5	<10					<10	<10	<10	<10
Methylene Chloride (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Styrene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Tetrachloroethene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Toluene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene (µg/L)	0.4**					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
trans-1,4-Dichloro-2-butene (µg/L)	5					<5.0					<5				<5	<10					<10	<10	<10	<10
Trichloroethene (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
Vinyl Acetate (µg/L)	NS					<5.0					<5				<5	<10					<10	<10	<10	<10
Vinyl Chloride (µg/L)	2					<1.0					<1				<1	<10					<10	<10	<10	<10
Xylenes (Total) (µg/L)	5					<1.0					<1				<1	<5.0					<5.0	<5.0	<5.0	<5.0
	5																							

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.

**City of Rome**  
**Tannery Road Landfill**  
**MW-4S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06		
<b>Field Parameter</b>																																			
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	672	1,590	2,010	444	338	334	429	374	204	247	555	177	125	161	807	163	137	123	685	207	164	203	224	450	93	437	1,200	160	100	210	300	155		
pH (s.u.)	6.5 - 8.5	7.05	6.43	6.23	7.11	6.18	6.36	6.14	6.04	5.81	5.7	6.07	6.07	5.96	6.05	8.3	5.7	5.96	6.14	5.5	5.64	5.2	5.75	6.1	6.36	6.16	6.35	6	6.5	6.8	6.81	5.67			
Temperature (deg C)	NS	5.7	15.8	15	7.1	6.3	11	14.3	6.8	5.3	15.6	12.7	7.7	5.9	11.5	13.5	6.8	5.5	14.4	15.3	6	4.9	12.3	14.8	7	4.7	12.5	8	6	13	13.2	9.2			
Turbidity (NTU)	5	137	77	87	86	40	79	58	33	29	24	19	18	17	91	0	25	147	116	6	10	341	46	70	0	66	25	0	20	18	-	6			
Redox	NS																																		
Dissolved Oxygen (mg/L)	NS																																		
<b>Part 360 Leachate Indicator Parameters</b>																																			
Ammonia-Nitrogen (mg/L)	2	26	<0.5	90	15	14	15	24	18	7.4	9.8	32	3.1	1.7	3.5	39	2.3	2.6	1.7	35	4.2	3.8	5.9	3.6	0.84	0.64	11	41	3	1.5	4.6	11	5		
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	NS	62	6	34	24	23	<2.0	14	<20.0	12	25	<10.0	<10.0	49	<10.0	6.6	4.7	15	<4	<4.0	4.3	<4	<4	<4.0	<4.0	<4	<4	<4.0	5.5	<4					
Bromide (mg/L)	2	<0.2	<0.2	<2.0	<2.0	<0.1	<0.1	<0.1	<0.1	0.12	0.24	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chemical Oxygen Demand (mg/L)	NS	540	44	22	110	120	110	160	140	110	98	160	88	62	84	230	44	54	75	220	87	74	98	120	130	93	170	350	46	64	100	130	80		
Chloride (mg/L)	250	50	3	200	23	100	2.7	21	16	7.1	8.7	43	5.6	4.5	5.3	99	4.6	5.3	3.8	98	4.8	2.5	8.4	7.4	3.2	3.7	12	110	4.2	3.6	3.8	13	3.8		
Color (Pt-Co)	15	140																																	
Nitrate-Nitrogen (mg/L)	10	<0.2	<0.2	<0.2	0.6	0.3	0.15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.25	0.13	<0.1	0.15	<0.1	<0.1	<0.1	0.14	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfate (mg/L)	250	24	32	11	56	52	28	40	35	11	17	49	27	17	15	20	39	24	14	25	31	3.2	26	8	4.8	26	14	35	13	14	29	17			
Total Alkalinity (mg/L)	NS	200	120	660	110	99	99	140	100	57	91	170	23	27	48	280	20	24	34	200	30	41	54	60	32	40	76	320	24	28	52	100	48		
Total Cyanide (mg/L)	0.2	<0.01																																	
Total Dissolved Solids (mg/L)	500	320	5,100	810	330	240	160	340	250	170	200	300	180	160	150	530	130	150	140	560	80	130	190	130	100	220	610	130	96	160	220	150			
Total Hardness (mg/L)	NS	42	110	94	49	36	41	46	44	31	40	56	42	34	36	77	42	35	35	130	37	36	43	37	34	36	43	83	44	32	41	39			
Total Kjeldahl Nitrogen (mg/L)	NS	26	0.8	70	4.6	12	23	24	20	8.2	12	34	4.6	2.1	4.9	47	2.4	2.8	2	35	4.3	3.1	5.9	6.4	1.3	15	37	31	1.5	5.8	15	7.2			
Total Organic Carbon (mg/L)	NS	71	21	47.8	35.5	39.3	45	56	62	42	43	61	33	30	41	84	21	24	27	78	32	29	38	40	48	28	44	100	24	25	42	55	34		
Total Phenols (mg/L)	0.001	0.056	<0.005	0.008	0.012	0.003	0.0023	0.0028	0.0028	<0.002	0.003	0.0024	<0.002	0.0022	0.0093	0.0056	0.0022	<0.002	0.0045	0.0036	<0.002	<0.002	0.0079	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
<b>Part 360 Routine Metals</b>																																			
Cadmium (mg/L)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			
Calcium (mg/L)	NS	11.2</td																																	

**City of Rome  
Tannery Road Landfill  
MW-4S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06
Carbon disulfide ( $\mu\text{g/L}$ )																																	
Carbon tetrachloride ( $\mu\text{g/L}$ )																																	
Chlorobenzene ( $\mu\text{g/L}$ )																																	
Chloroethane ( $\mu\text{g/L}$ )																																	
Chloroform ( $\mu\text{g/L}$ )																																	
Chloromethane ( $\mu\text{g/L}$ )																																	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )																																	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**																																
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)																																
Dibromomethane ( $\mu\text{g/L}$ )																																	
Ethyl benzene ( $\mu\text{g/L}$ )																																	
Iodomethane ( $\mu\text{g/L}$ )																																	
Methylene Chloride ( $\mu\text{g/L}$ )																																	
Styrene ( $\mu\text{g/L}$ )																																	
Tetrachloroethene ( $\mu\text{g/L}$ )																																	
Toluene ( $\mu\text{g/L}$ )																																	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )																																	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**																																
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )																																	
Trichloroethene ( $\mu\text{g/L}$ )																																	
Trichlorofluoromethane ( $\mu\text{g/L}$ )																																	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS																																
Vinyl Chloride ( $\mu\text{g/L}$ )	2																																
Xylenes (Total) ( $\mu\text{g/L}$ )	5																																
1,2-Dichloroethene - Total	5																																

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome**  
**Tannery Road Landfill**  
**MW-4S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/15/07	6/21/07	9/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
<b>Field Parameter</b>																					
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	83	507	668	140	170	209	504	770	106	88	387	168	93	136	325	207	230	197	90	140
pH (s.u.)	6.5 - 8.5	5.78	5.95	6.01	5.16	5.95	5.9	6.17	6.2	5.87	5.8	6.11	5.8	5.55	5.01	5.99	6.1	6.13	6.17	5.5	6.1
Temperature (deg C)	NS	4.8	11	13	7.7	5	10.6	12.7	7.1	5.7	13.8	12	7.8	6.1	10.9	13.4	6.9	4.7	10.9	14	7
Turbidity (NTU)	5	0	13	15	5	9	2	0	32	17	6	20	0	3	0	28	0	14	0	50	110
Redox	NS	-108																			
Dissolved Oxygen (mg/L)	NS		4.41																		
<b>Part 360 Leachate Indicator Parameters</b>																					
Ammonia-Nitrogen (mg/L)	2	3.3	23	31	3.3	3.6	7.3	30	0.87	1.6	0.5	17	12	0.54	3.2	19.3	8.4	6.2	4.6	0.2	0.2
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	<20	9.5	17	<4	6.9	<4	13	<4	<4	<4	11	<4.0	<2.0	<2.0	61	<4.0	<4.0	2	8	2
Bromide (mg/L)	2	<0.1	<0.1	0.37	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.9	<1.0	2.09	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand (mg/L)	NS	75	190	200	55	93	100	210	75	48	8.9	160	50	54.1	83	171	98	88	90	859	113
Chloride (mg/L)	250	3.2	43	60	4.6	5.5	7.6	52	3.4	3.3	2.5	13	3.2	<1.0	1.26	18.9	3.26	1.93	2.07	<1.0	1.16
Color (Pt-Co)	15		240					300				60	70				>70	>70	>70		70
Nitrate-Nitrogen (mg/L)	10	<0.1	<0.1	<0.1	<0.1	<0.04	0.15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.020	<0.020	<0.020	<0.02	0.02	<0.02	0.02	0.08
Sulfate (mg/L)	250	11	24	11	20	23	20	13	28	16	9.7	24	40	20.5	19.7	26.4	33.8	27	23	11.2	1.61
Total Alkalinity (mg/L)	NS	43	130	230	35	58	76	220	38	30	68	100	19	17	38	120	65	58	50	760	26
Total Cyanide (mg/L)	0.2		<0.01					<0.01						<0.01	<0.010		<0.01	<0.01	<0.010	<0.01	
Total Dissolved Solids (mg/L)	500	120	370	410	96	130	190	500	120	90	120	250	130	108	117	268	218	193	140	85	80
Total Hardness (mg/L)	NS	33	56	55	35	42	38	52	40	34	36	35	53	36	42	42	48	45	47	39	
Total Kjeldahl Nitrogen (mg/L)	NS	4.4	23	34	5.8	5.3	1.8	32	3.2	2.4	1.1	20	3.9	1.4	4.2	18.5	9.8	9.5	4.5	4.8	1.4
Total Organic Carbon (mg/L)	NS	33	82	100	29	34	43	90	25	23	22	66	23	22.5	37	59.3	40.8	38.1	40.2	35.9	41.6
Total Phenols (mg/L)	0.001	<0.002	<0.003	<0.003	0.0034	<0.003	0.0032	<0.003	<0.003	<0.003	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	
<b>Part 360 Routine Metals</b>																					
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.00013	<0.005	<0.005	0.00026	<0.00021	0.0011	<0.005	
Calcium (mg/L)	NS	8.7	16	17	9.2	11	10	15	10	9	9.4	10	14	9.72	11.7	12.7	11.9	13	12.5	12.7	11.5
Iron (mg/L)	0.3*	2.7	5.4	7.8	2.8	4.2	2.9	4.6	4.7	2.9	1.5	4	2.6	1.08	1.85	3.38	2.51	2.93	3.17	3.82	3.89
Lead (mg/L)	0.025	<0.01	<0.01	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.002	<0.005	<0.005	<0.005	<0.0019	<0.0018	0.022	<0.005
Magnesium (mg/L)	35 (GV)	2.7	4.6	3.3	2.8	3.5	3	3.5	3.7	2.9	3.1	2.4	4.4	2.84	3.01	2.56	2.88	3.72	3.36	3.37	2.4
Manganese (mg/L)	0.3*	0.2	0.44	0.51	0.22	0.29	0.25	0.38	0.24	0.22	0.15	0.23	0.24	0.115	0.194	0.317	0.255	0.333	0.323	0.254	0.263
Potassium (mg/L)	NS	7	21	40	8.6	11	11	25	4.4	4.5	2.7	24	6.2	1.35	6.92	24.4	14.5	12.2	5.68	1.15	0.671
Sodium (mg/L)	20	2.4	36	60	3.6	9	9.2	42	2.5	2.7	1.6	30	4.1	1.25	5.5	32.2	10.6	8.09	4.94	1.54	0.766
<b>Part 360 Additional Baseline Metals</b>																					
Aluminum (mg/L)	NS		1.6				2.6							0.77	0.678			1.05	1.37	4.83	2.03
Antimony (mg/L)	0.003	<0.01					<0.01							<0.01	<0.020			<0.0196	0.0017	0.009	<0.06
Arsenic (mg/L)	0.025		<0.01				<0.01							<0.01	<0.002			0.0052	<0.0022	<0.002	0.006
Barium (mg/L)	1		<0.2				<0.2							<0.1	0.008			0.0242	0.0138	0.023	0.012
Beryllium (mg/L)	0.003 (GV)		<0.01				<0.01							<0.01	<0.00014			<0.00014	<0.00016	<0.0001	<0.005

**City of Rome  
Tannery Road Landfill  
MW-4S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/15/07	6/21/07	9/25/07	12/17/07	3/27/2008	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Chlorobenzene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Chloroethane ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<10			<10	<10	<10	<10				
Chloroform ( $\mu\text{g/L}$ )	7	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Chloromethane ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<10			<10	<10	<10	<10				
cis-1,2-Dichloroethylene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Dibromomethane ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Ethyl benzene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Iodomethane ( $\mu\text{g/L}$ )	5	<5.0				<100				<5	<10			<10	<10	<10	<10				
Methylene Chloride ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Styrene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Tetrachloroethylene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Toluene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
trans-1,2-Dichloroethylene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5	<5.0				<100				<5	<10			<10	<10	<10	<10				
Trichloroethylene ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<5.0				<100				<5	<10			<10	<10	<10	<10				
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<1.0				<20				<1	<10			<10	<10	<10	<10				
Xylenes (Total) ( $\mu\text{g/L}$ )	5	<1.0				<20				<1	<5.0			<5.0	<5.0	<5.0	<5.0				
1,2-Dichloroethene - Total	5																				

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.

**City of Rome**  
**Tannery Road Landfill**  
**MW-5S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	
<b>Field Parameter</b>																																
Conductivity (μmhos/cm)	NS	869	340	308	195	540	230	167	219	456	163	433	227	232	223	112	252	227	208	102	230	306	112	118	276	182	227	178	550	270	420	
pH (s.u.)	6.5 - 8.5	7.56	6.75	6.48	7.3	6.46	6.75	6.85	6.67	6.26	6.5	6.75	6.84	6.57	6.85	5.67	6.5	6.77	6.85	6.9	6.15	6.1	6.44	6.6	7.18	6.66	6.9	5.9	6.9	7.2		
Temperature (deg C)	NS	5.2	16.2	13.1	7	6.5	10.9	12.8	6.6	6	14.6	11.6	7.7	4.8	10.1	13.2	6.9	5.5	13.1	14.3	7	5.4	11.3	14.1	8	5.7	12.5	9	6	11		
Turbidity (NTU)	5	64	533	204	162	74	55	198	46	35	42	68	36	47		837	0	27	334	202	140	41	150	108	154	8	149	119	38	50	10	
Redox	NS																															
Dissolved Oxygen (mg/L)	NS																															
<b>Part 360 Leachate Indicator Parameters</b>																																
Ammonia-Nitrogen (mg/L)	2	1.5	<0.5	<0.3	<0.3	0.11	0.11	0.34	1.3	0.34	1.4	0.43	0.82	0.26	0.09	0.57	0.65	0.71	0.058	0.4	0.83	<0.03	<0.03	<0.03	0.15	<0.03	<0.03	0.82	0.93	0.055		
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	11	11	2	2	62	20	<2.0	<4.0	<4.0	4.7	<4.0	<4.0	<4.0	9.5	<4.0	<4.0	<4	<4	<4.0	<4.0	<4	<4	<4.0	<4.0	7.6	<4	<4.0	7.6	<4	<4.0	
Bromide (mg/L)	2	<0.2	<0.2	<2.0	<2.0	1.3	<0.1	<0.1	<0.1	<0.1	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Chemical Oxygen Demand (mg/L)	NS	71	45	32	20	36	24	32	26	37	5.2	43	23	31	18	62	20	16	69	22	32	25	15	14	18	16	15	23	22	8.9		
Chloride (mg/L)	250	14	3	2.4	3.2	5.9	94	2.9	2.3	5	2.9	6	3.2	3.1	2.9	2.6	2.8	4.1	4	3.2	4.3	4.2	2.9	2.6	2.5	3	3.1	3.2	2.5			
Color (Pt-Co)	15		110						30						75	150															130	140
Nitrate-Nitrogen (mg/L)	10	<0.2	<0.2	<0.2	0.8	0.6	0.16	0.1	<0.1	0.22	<0.1	<0.1	<0.1	<0.1	0.19	<0.1	0.15	0.12	0.18	<0.1	0.19	0.2	0.19	0.14	0.13	0.23	<0.1	<0.1	<0.1	<0.1		
Sulfate (mg/L)	250	37	40	28	31	51	16	44	60	42	34	53	36	23	18	21	23	21	22	16	14	21	11	9.6	8.3	7.3	9	12	14	8.6		
Total Alkalinity (mg/L)	NS	470	170	300	58	260	120	52	47	200	50	190	68	82	80	110	97	86	32	100	110	48	38	88	140	24	64	230	110	44		
Total Cyanide (mg/L)	0.2		<0.01																													
Total Dissolved Solids (mg/L)	500	430	130	230	150	360	730	140	150	300	120	240	200	78	110	180	170	160	170	92	160	180	80	66	90	170	52	90	290	170	66	
Total Hardness (mg/L)	NS	320	130	148	81	228	120	96	110	200	78	230	110	110	93	110	120	130	120	66	110	130	54	52	94	130	31	84	230	130	55	
Total Kjeldahl Nitrogen (mg/L)	NS	3.1	1.1	0.9	0.4	<0.3	0.61	0.69	0.8	1.8	0.67	1.6	0.62	0.89	0.39	1.4	0.63	0.66	0.79	0.37	0.59	1.3	0.41	0.2	0.14	0.32	0.66	1.1	0.8	0.23		
Total Organic Carbon (mg/L)	NS	22	15	15.1	17.1	16.8	9.7	9.1	8.5	13	7.2	13	9.6	11	6.5	22	8.1	10	5.7	10	8.9	4.5	3.6	5.4	5.6	5.1	5.4	9.7	9.4	4.7		
Total Phenols (mg/L)	0.001	<0.005	<0.005	<0.001	0.003	0.001	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0097	0.0033	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0039	<0.002	<0.002	0.0037	<0.002	0.0035	0.0021	0.0032	
<b>Part 360 Routine Metals</b>																																
Cadmium (mg/L)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010		
Calcium (mg/L)	NS	97.8	35	43	23.3	69.9	35	27	31	64	23	72	35	35	30	27	41	42	39	20	35	42	17	16	24	9.3	24	71	42	16		
Iron (mg/L)	0.3*	31.4	20.8	14.2	9.3	24.8	7.6	11	8	15	10	15	6.1	12	8.2	97	11	10	11	13												

**City of Rome  
Tannery Road Landfill  
MW-5S  
Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06
Bromomethane (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Carbon disulfide (µg/L)	60 (GV)	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Carbon tetrachloride (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Chlorobenzene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Chloroethane (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Chloroform (µg/L)	7	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Chloromethane (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
cis-1,2-Dichlorethene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
cis-1,3-Dichloropropene (µg/L)	0.4**	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Dibromochloromethane (µg/L)	50 (GV)	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Dibromomethane (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Ethyl benzene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5											<1	<1	
Iodomethane (µg/L)	5	<5.0						<20.0					<20.0	<10.0			<10	<10										<5	<5		
Methylene Chloride (µg/L)	5	<5.0						<10.0					<10.0	<10.0			<10	<10										<5	<1		
Styrene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
Tetrachloroethene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
Toluene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
trans-1,2-Dichloroethene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
trans-1,3-Dichloropropene (µg/L)	0.4**	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
trans-1,4-Dichloro-2-butene (µg/L)	5	<5.0						<50.0					<50.0	<10.0			<10	<10									<5	<5			
Trichloroethene (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
Trichlorofluoromethane (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
Vinyl Acetate (µg/L)	NS	<50.0						<20.0					<20.0	<20.0			<20	<20									<5	<5			
Vinyl Chloride (µg/L)	2	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
Xylenes (Total) (µg/L)	5	<5.0						<5.0					<5.0	<5.0			<5	<5										<1	<1		
1,2-Dichloroethene - Total	5																														

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome  
Tannery Road Landfill  
MW-5S**

Parameter	NYSDEC Ground Water Standard	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014	
<b>Field Parameter</b>																								
Conductivity ( $\mu\text{hos}/\text{cm}$ )	NS	102	324	172	109	97	324	326	79	80	324	274	108	81	119	52	185	129	237	252	100	100	140	
pH (s.u.)	6.5 - 8.5	7.19	6.45	6.38	6.72	6.32	6.13	6.38	6.75	6.48	6.67	5.92	6.13	6.13	6.4	6.2	5.36	6.37	6.6	5.98	6.77	6.4	6	
Temperature (deg C)	NS	12	9.4	5.5	9.8	11.1	7.4	5.1	8.7	11.5	7.8	5.1	10.6	10.5	7.9	5.2	9.9	12.5	7	4.2	9.6	14	6	
Turbidity (NTU)	5	-	28	0	161	260	15	55	78	3	74	121	310	127	22	107	116	102	0	73	97	50	320	
Redox	NS				-8																			
Dissolved Oxygen (mg/L)	NS					5.14																		
<b>Part 360 Leachate Indicator Parameters</b>																								
Ammonia-Nitrogen (mg/L)	2	<0.03	0.88	0.28	0.14	<0.03	0.51	0.83	<0.03	1.2	0.44	<0.03	<0.030	0.058	<0.1	<0.1	<0.1	0.3	0.2	<0.1	<0.1	<0.1	<0.1	
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	<4	<4	<4	<4	<4	5.2	<5	<4	<4	<4	<4	<4.0	<4.0	<2.0	<2.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	2	
Bromide (mg/L)	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chemical Oxygen Demand (mg/L)	NS	16	23	12	19	30	14	30	<5	7.6	40	14	<5	20	<5.0	8.2	<5.0	9	13	8	<5.0	147	26	
Chloride (mg/L)	250	2.9	2.7	2.9	2.7	2.2	3	<2	2.7	2.2	3.1	2.6	2.4	2.5	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Color (Pt-Co)	15				100						200					<5	<5.0		10	5	5	15		
Nitrate-Nitrogen (mg/L)	10	0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	0.17	0.18	<0.1	<0.1	<0.1	<0.1	<0.1	0.03	<0.020	<0.020	<0.02	0.02	<0.02	<0.02	0.09	
Sulfate (mg/L)	250	8.8	8.1	9.4	8.2	7.3	6	8.3	6.6	6.7	6.8	7.9	8.1	6.9	5.6	10.2	6.37	5.4	5.86	5.32	6.32	5.83	6.03	
Total Alkalinity (mg/L)	NS	52	150	78	56	44	170	150	37	240	200	140	120	78	60	17	95	50	135	100	44	40	42	
Total Cyanide (mg/L)	0.2				<0.01						<0.01					<0.01	<0.010			<0.01	<0.01	<0.010	<0.01	
Total Dissolved Solids (mg/L)	500	120	210	140	86	74	210	160	82	92	170	120	48	48	<10	25	102	95	138	153	60	60	50	
Total Hardness (mg/L)	NS	49	150	78	110	45	160	140	42	41	150	110	18	34	68	22	111	54	113	109	53	49	82	
Total Kjeldahl Nitrogen (mg/L)	NS	0.48	1.1	0.51	0.37	0.42	1.2	1.8	1.4	0.34	2.8	0.77	0.25	0.66	0.23	<1.0	<1.0	1.4	1.7	<1.0	<1.0	<1.0	<1.0	
Total Organic Carbon (mg/L)	NS	4.3	7.2	4.2	5	12	7.8	7.8	3.9	4.6	4.7	6.9	5.7	3.9	5.1	3	4	3.6	5.6	4.8	3.1	3.9	7.9	
Total Phenols (mg/L)	0.001	<0.002	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	
<b>Part 360 Routine Metals</b>																								
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.00013	<0.005	<0.005	<0.00013	0.00023	<0.00015	0.00023	<0.0005		
Calcium (mg/L)	NS	15	47	23	16	13	48	43	13	12	45	35	4.6	9.6	20	6.02	32.5	15.5	34.6	32.1	15.4	14.6	24	
Iron (mg/L)	0.3*	2.8	12	4.8	13	65	12	9.1	5.9	6.4	17	11	1	12	6.6	18.3	6.1	6.53	6.73	3.39	8.94	5.41	3.8	
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.002	<0.005	<0.005	<0.0019	<0.0018	<0.002	<0.005			
Magnesium (mg/L)	35 (GV)	2.9	9	4.9	3.8	2.9	8.8	7.4	2.6	2.6	9	6.5	1.5	2.4	4.3	1.58	7.29	3.65	6.55	6.97	3.45	3.13	5.38	
Manganese (mg/L)	0.3*	<0.01	0.88	0.49	0.44	0.34	0.96	0.89	0.32	0.4	1.1	1.1	0.02	0.16	0.64	0.178	1.38	0.277	0.739	0.585	0.217	0.221	0.564	
Potassium (mg/L)	NS	1.8	2.5	1.9	1.8	1.6	4.2	3.8	1.5	1.6	3.9	2.6	<1	1.2	2	0.609	1.77	1.33	1.73	1.46	1.09	0.936	1.19	
Sodium (mg/L)	20	<1	1.2	1.2	1	1.5	1.3	1.1	1	<1	1.6	<1	<1	<1.0	0.365	0.798	0.646	0.734	0.705	0.418	0.574	0.392		
<b>Part 360 Additional Baseline Metals</b>																								
Aluminum (mg/L)	NS				0.64							1.2					0.15	0.234			0.0462	0.445	0.28	0.329
Antimony (mg/L)	0.003				<0.01				<0.01				<0.01				<0.020			<0.0196	<0.0011	<0.002	<0.06	
Arsenic (mg/L)	0.025				<0.01				<0.01				<0.01				<0.008			0.0039	0.0097	<0.002	<0.005	
Barium (mg/L)	1				<0.2					<0.2				<0.1	0.019					0.0323	0.0358	0.028	0.03	
Beryllium (mg/L)	0.003 (GV)				<0.01				<0.01				<0.01	<0.00014					0.00019	<0.00016	<0.0001	<0.005		
Boron (mg/L)	1				<0.5				<0.5				<0.5	<0.001					0.0066	<0.00057	0.001	<0.05		
Chromium (mg/L)	0.05				<0.01				<0.01				<0.01	<0.005					0.0047	<0.0051	<0.003	<0.005		
Chromium, Hexavalent (mg/L)	0.05				<0.01				<0.01				<0.01	<0.020					0.020	<0.02	<0.020	<0.02		
Cobalt (mg/L)	NS				<0.01				<0.01				<0.01	<0.001					0.00067	0.00061	<0.001	<0.05		
Copper (mg/L)	0.2				<0.04				<0.01				<0.01	<0.003					<0.002	<0.0025	<0.001	<0.005		
Mercury (mg/L)	0.0007				<0.0002				<0.0002				<0.0002	<0.00007					<0.00006	<0.0001	<0.15	<0.0002		
Nickel (mg/L)	0.1				<0.01				<0.01				<0.01	<0.001					0.00081	0.0011	0.00049	<0.02		
Selenium (mg/L)	0.01				<0.01				<0.01				<0.01	<0.003					<0.0025	<0.0015	<0.003	<0.005		
Silver (mg/L)	0.05				0.049				<0.01</															

**City of Rome**  
**Tannery Road Landfill**  
**MW-5S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	6/19/2008	9/23/2008	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014	
Bromomethane ( $\mu\text{g/L}$ )	5									<1											<10	<10	<10	<10
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)									<1											<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Chlorobenzene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Chloroethane ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Chloroform ( $\mu\text{g/L}$ )	7									<1											<10	<10	<10	<10
Chloromethane ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5									<1											<10	<10	<10	<10
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**									<1											<5.0	<5.0	<5.0	<5.0
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)									<1											<5.0	<5.0	<5.0	<5.0
Dibromomethane ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Ethyl benzene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Iodomethane ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Methylene Chloride ( $\mu\text{g/L}$ )	5									<1											<10	<10	<10	<10
Styrene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Tetrachloroethene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Toluene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**									<1											<5.0	<5.0	<5.0	<5.0
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5									<5.0											<5.0	<5.0	<5.0	<5.0
Trichloroethene ( $\mu\text{g/L}$ )	5									<1											<10	<10	<10	<10
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5									<1											<5.0	<5.0	<5.0	<5.0
Vinyl Acetate ( $\mu\text{g/L}$ )	NS									<5.0											<5.0	<5.0	<5.0	<5.0
Vinyl Chloride ( $\mu\text{g/L}$ )	2									<1.0											<10	<10	<10	<10
Xylenes (Total) ( $\mu\text{g/L}$ )	5									<1.0											<10	<10	<10	<10
1,2-Dichloroethene - Total	5																				<5.0	<5.0	<5.0	<5.0

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome**  
**Tannery Road Landfill**  
**MW-7D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	
<b>Field Parameters</b>																														
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	1,330	1,120	1,620	1,300	1,320	1,710	1,220	1,270	1,350	1,200	1,090	1,290	1,440	1,430	503	1,110	1,150	775	1,080	370	1,030	807	817	1150	785	1,131	434	730	
pH (s.u.)	6.5 - 8.5	6.64	6.53	6.4	7.92	6.5	6.88	6.41	6.46	6.2	5.96	6.39	6.31	5.96	6.25	5.4	6.3	6.42	6.48	6.9	6.23	5.7	6	6.4	6.25	6.4	7.05	6.1		
Temperature (deg C)	NS	8.1	14.5	13.2	8.1	8.4	13.3	11.5	9	8.9	12.7	11.2	10.1	9	11.6	11.6	9.5	5.5	12.1	11.7	9	9.5	12.3	12.6	9	8.7	10.8	9		
Turbidity (NTU)	5	160	42	94	247	128	83	98	62	97	112	152	53	29	345	61	69	999	128	30	59	150	165	200	70	151	104	98		
Redox	NS																													
Dissolved Oxygen (mg/L)	NS																													
<b>Part 360 Leachate Indicator Parameters</b>																														
Ammonia-Nitrogen (mg/L)	2	47	25	47	36	33	58	41	37	46	40	47	39	43	46	22	34	39	40	38	8.4	30	29	25	8.5	26	11	17	22	
Biochemical Oxygen Demand (BOD <sub>5</sub> ) (mg/L)	NS	19	17	17	11	11	4.4	10	<20.0	13	14	<20.0	<20.0	<20.0	<20.0	12	7.1	<10.0	<10.0	<10	7.2	<4	6.2	<10	13	<4				
Bromide (mg/L)	2	<0.2	<0.2	<2.0	<2.0	<2.0	<0.1	1.1	1	0.93	0.74	0.75	0.64	0.8	1	0.21	0.11	0.85	0.89	0.88	<0.1	0.83	0.68	0.5	<0.1	0.4	0.22	0.15	<0.1	
Chemical Oxygen Demand (mg/L)	NS	570	140	14	110	120	150	140	120	140	120	120	130	150	100	120	150	120	76	110	550	130	59	109	76	83	93			
Chloride (mg/L)	250	81	70	88	84	68	3.3	65	59	74	62	46	56	76	72	21	7	55	57	54	8.8	56	44	27	5.5	36	7.6	15	24	
Color (Pt-Co)	15	280																												
Nitrate-Nitrogen (mg/L)	10	<0.2	<0.2	<0.2	1.5	4.9	0.16	<0.1	<0.1	0.13	<0.1	<0.1	0.16	<0.1	0.23	<0.1	<0.1	<0.1	<0.1	<0.1	0.72	0.23	<0.1	<0.1	0.49	0.16	0.18	0.19	<0.1	
Sulfate (mg/L)	250	<5.0	35	12	28	34	9.3	41	44	35	47	45	52	58	61	47	8.6	54	57	49	28	39	37	23	14	15	7.5	5.9	5	
Total Alkalinity (mg/L)	NS	670	370	710	470	450	680	460	440	430	470	430	390	460	470	160	360	390	410	340	120	320	330	290	150	320	140	230	300	
Total Cyanide (mg/L)	0.2	<0.01																												
Total Dissolved Solids (mg/L)	500	540	540	710	660	610	400	590	600	670	570	480	650	720	650	420	520	580	640	580	240	510	440	420	240	460	280	280	360	
Total Hardness (mg/L)	NS	300	260	350	310	244	390	320	270	280	270	260	250	270	280	140	240	270	270	310	97	230	220	200	90	180	140	150	200	
Total Kjeldahl Nitrogen (mg/L)	NS	44	36	36	24	26	680	50	51	52	43	50	39	50	44	26	36	41	41	25	6.4	35	24	18	8.5	21	11	13	19	
Total Organic Carbon (mg/L)	NS	55	48	45.9	38.5	38.1	60	48	55	49	44	43	47	50	46	50	41	42	27	43	28	39	34	23	26	25	38			
Total Phenols (mg/L)	0.001	0.01	<0.005	0.01	0.014	0.006	0.0055	0.004	0.0026	0.0034	0.0039	0.0042	0.0027	0.012	0.0044	0.003	0.0032	0.003	0.0024	NA	0.004	<0.002	0.0021	<0.002	<0.01	0.0047	0.0041	0.0044		
<b>Part 360 Routine Metals</b>																														
Cadmium (mg/L)	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Calcium (mg/L)	NS	62.9	61.1	74.9	64.2	56.4	87	77	66	70	66	64	65	71	71	35	63	69	80	76	24	57	54	49	21	45	32	33	51	
Iron (mg/L)	0.3*	41.1	39.2	40.8	37.7	33.2	53	45	38	41	42	39	40	40	40	35	34	41	47	45	27	34	31	29	11	27	26	24	27	
Lead (mg/L)	0.025	0.0071	0.0041	0.006	0.014	0.006	<0.01	<0.01	<0.01	<0.01	0.013	0.014	<0.01	<0.01	0.035	0.014	<0.01	<0.01	0.018	<0.01	0.012	0.015	<0.01	0.012	<0.01	0.032	0.028	<0.01		
Magnesium (mg/L)	35 (GV)	33.6	25.9	39.5	36.5	25.1	41	32	25	25	25	22	24	25	14</td															

**City of Rome**  
**Tannery Road Landfill**  
**MW-7D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	
1,2-Dichloroethane ( $\mu\text{g/L}$ )	0.6	<5.0						<5.0					<5.0	<5.0														<1		
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1	<5.0						<5.0					<5.0	<5.0														<1		
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<5.0						<5.0					<5.0	<5.0														<1		
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0					<10.0	<10.0													<10			
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0					<10.0	<10.0													<10			
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS	<10.0						<10.0					<10.0	<10.0													<10			
Acetone ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0					<10.0	<10.0													<10			
Acrylonitrile ( $\mu\text{g/L}$ )	5	<100.0						<20.0					<20.0	<20.0													<5			
Benzene ( $\mu\text{g/L}$ )	1	<5.0						14					17	24													4.3			
Bromoform ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Bromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0											<5.0	<5.0													<1			
Bromodichloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0											<5.0	<5.0													<1			
Bromomethane ( $\mu\text{g/L}$ )	5	<5.0											<5.0	<5.0													<1			
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<18.0											<5.0	<5.0													<1			
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<5.0											<5.0	<5.0													<1			
Chlorobenzene ( $\mu\text{g/L}$ )	5	23						8.4					5.8	5.3													4.4			
Chloroethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Chloroform ( $\mu\text{g/L}$ )	7	<5.0						<5.0					<5.0	<5.0													<1			
Chloromethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0						<5.0					<5.0	<5.0													<1			
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0						<5.0					<5.0	<5.0													<1			
Dibromomethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Ethyl benzene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Iodomethane ( $\mu\text{g/L}$ )	5	<5.0						<20.0					<20.0	<10.0													<10			
Methylene Chloride ( $\mu\text{g/L}$ )	5	<5.0						<10.0					<10.0	<10.0													<10			
Styrene ( $\mu\text{g/L}$ )	5							<5.0					<5.0	<5.0													<1			
Tetrachloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Toluene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0						<5.0					<5.0	<5.0													<1			
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5							<50.0					<50.0	<10.0													<10			
Trichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<5			
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0					<5.0	<5.0													<1			
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<50.0						<20.0					<20.0	<20.0													<5			
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<5.0						<5.0					<5.0	<5.0													<1			
Xylenes (Total) ( $\mu\text{g/L}$ )	5	2						16					130	180													160	97		
1,2-Dichloroethene - Total	5																												110	

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers
- 7) J indicates estimated concentration due to QC sample recovery

**City of Rome**  
**Tannery Road Landfill**  
**MW-7D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/6/06	6/6/06	9/26/06	12/13/06	3/15/07	6/1/07	9/25/07	12/17/07	3/27/08	6/19/08	9/23/08	12/15/08	3/17/09	6/22/09	9/25/09	12/14/09	3/24/10	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
<b>Field Parameters</b>																									
Conductivity (μmhos/cm)	NS	710	450	670	684	1,020	650	287	581	656	551	649	633	327	407	258	632	440	519	578	525	599	438	320	330
pH (s.u.)	6.5 - 8.5	6.8	7.2	7.25	6.33	6.27	6.53	6.75	6.14	6.73	6.36	6.09	7.08	6.16	6.34	6.08	5.8	5.7	5.91	6.37	5.75	5.15	5.79	6.9	6.5
Temperature (deg C)	NS	10	12	11	10.1	8.7	10.8	12	9.1	9.5	10.7	10.2	9.4	10.1	13	10.5	9.7	8.6	10.7	11.1	9.4	9.1	11.4	12	9
Turbidity (NTU)	5	78	67	-	40	0	76	33	43	36	59	0	215	79	56	9	0	20	10	100	0	45	0	10	10
Redox	NS																								
Dissolved Oxygen (mg/L)	NS																								
<b>Part 360 Leachate Indicator Parameters</b>																									
Ammonia-Nitrogen (mg/L)	2	31	21	24	26	28	24	3.9	20	27	18	35 J	6.2	18	7.7	1.5	1.8	2.77	14	17.2	14.6	15.3	13	0.3	<0.1
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	7.7	8	<4	<10	180	5.2	<4	8	7.8	6.1	9.5	<10	8.4	<4	<4.0	<4.0	<2.0	6	<60	<12	7	4	6	4
Bromide (mg/L)	2	0.3	<0.10	0.32	<0.1	0.55	<0.1	<0.1	0.25	0.26	0.27	0.29	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand (mg/L)	NS	110	110	110	100	100	12	93	68	75	73	80	75	67	56	62	69.9	62	80	59	70	67	62	42	
Chloride (mg/L)	250	33	28	29	35	47	31	3.6	22	31	23	29	5.2	20	5.5	4	<1.0	2.8	9.02	8.5	9.11	6.68	5.84	<1.0	<1.0
Color (Pt-Co)	15	750						400										12	70				>70	>70	>70
Nitrate-Nitrogen (mg/L)	10	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.020	<0.020	<0.020	<0.02	0.03	0.02	0.1	0.16
Sulfate (mg/L)	250	4.8	2.8	4.4	5.2	5.9	5.6	7.7	3.6	2.1	3.3	3.2	1.9	3.4	5.2	7.8	<1.0	7.6	<2.0	<2.0	<2.0	<2.0	<2.0	4.95	
Total Alkalinity (mg/L)	NS	350	320	320	340	420	330	120	330	370	300	370	210	320	220	150	300	160	265	310	275	280	236	160	130
Total Cyanide (mg/L)	0.2	<0.01																							
Total Dissolved Solids (mg/L)	500	430	400	430	440	490	420	190	340	390	370	470	280	340	320	250	330	270	272	340	330	335	260	180	120
Total Hardness (mg/L)	NS	210	180	210	210	220	160	100	180	210	460	190	170	190	160	190	174	205	193	191	209	173	150	142	
Total Kjeldahl Nitrogen (mg/L)	NS	19	19	25	24	30	25	4.6	21	28	2	33	9.5	21	8.6	5.4	18	3.64	15.7	18.5	17.9	18.4	12.9	1.7	<1.0
Total Organic Carbon (mg/L)	NS	41	38	43	39	42	40	25	36	36	34	34 J	33	37	34	26	34	29.8	27.9	27	27.8	26.2	27.6	17.6	
Total Phenols (mg/L)	0.001	0.0021	0.0052	0.0021	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.099 J	<0.003	<0.003	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	
<b>Part 360 Routine Metals</b>																									
Cadmium (mg/L)	0.005	<0.01	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	0.00018	<0.005	<0.005	<0.00013	<0.00021	0.00015	<0.005	
Calcium (mg/L)	NS	52	46	54	53	56	43	24	49	54	130	53	45	50	45	41	51	48.2	55.8	51.2	52.2	55	46.8	42.9	42.8
Iron (mg/L)	0.3*	31	27	28	27	30	25	19	25	29	23	27	21	25	22	20	25	33.8	24.1	25.5	24.2	23.1	20.1	16.1	2.76
Lead (mg/L)	0.025	<0.01	0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	0.005	<0.005	<0.005	0.007	0.0047	0.0039	0.01	<0.005
Magnesium (mg/L)	35 (GV)	20	17	17	19	20	16	10	15	18	33	16	14	15	12	12	15	13.1	16.1	15.8	14.8	17.3	13.6	10.4	8.62
Manganese (mg/L)	0.3*	0.65	0.57	<0.01	0.64	0.6	0.52	0.62	0.6	0.61	1.8	0.59	0.81	0.63	0.66	0.86	0.61	0.642	0.62	0.667	0.653	0.629	0.669	1.24	1.5
Potassium (mg/L)	NS	34	26	29	14	31	27	7.9	23	34	4.4	26	10	23	12	7.8	24	13.1	22.2	25	19.1	21.6	16.9	7.14	6.61
Sodium (mg/L)	20	36	28	50	32	38	29	3.3	24	32	36	24	4.9	18	8.5	3.5	17	6.51	13.2	14.2	10.3	11.5	7.5	3.49	2.16
<b>Part 360 Additional Baseline Metals</b>																									

**City of Rome**  
**Tannery Road Landfill**  
**MW-7D**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/6/06	6/6/06	9/26/06	12/13/06	3/15/07	6/1/07	9/25/07	12/17/07	3/27/08	6/19/08	9/23/08	12/15/08	3/17/09	6/22/09	9/25/09	12/14/09	3/24/10	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
1,2-Dichloroethane (µg/L)	0.6	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane (µg/L)	1	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene (µg/L)	3	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK) (µg/L)	50 (GV)	<5						<5.0				<10										<10	<10	<10	<10
2-Hexanone (µg/L)	50 (GV)	<5						<5.0				<10										<10	<10	<10	<10
4-Methyl 2-pentanone (µg/L)	NS	<5						<5.0				<10										<10	<10	<10	<10
Acetone (µg/L)	50 (GV)	<5						<5.0				<10										<10	<10	<10	<10
Acrylonitrile (µg/L)	5	<40						<40				<20										<25	<25	<25	<25
Benzene (µg/L)	1	<b>8.7</b>						<b>7.5</b>				<b>6</b>										<b>5.2</b>	<b>3</b>	<5.0	<5.0
Bromochloromethane (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Bromodichloromethane (µg/L)	50 (GV)	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Bromoform (µg/L)	50 (GV)	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Bromomethane (µg/L)	5	<1						<1.0				<1										<10	<10	<10	<10
Carbon disulfide (µg/L)	60 (GV)	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Chlorobenzene (µg/L)	5	3.9						3.2				<1										<5.0	2.1	<5.0	<5.0
Chloroethane (µg/L)	5	<1						<1.0				<1										<10	<10	<10	<10
Chloroform (µg/L)	7	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Chloromethane (µg/L)	5	<1						<1.0				<1										<10	<10	<10	<10
cis-1,2-Dichloroethene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene (µg/L)	0.4**	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Dibromochloromethane (µg/L)	50 (GV)	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Dibromomethane (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Ethyl benzene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Iodomethane (µg/L)	5	<10						<1.0				<5										<10	<10	<10	<10
Methylene Chloride (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Styrene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Tetrachloroethene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Toluene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene (µg/L)	0.4**	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
trans-1,4-Dichloro-2-butene (µg/L)	5	<10						<1.0				<5										<10	<10	<10	<10
Trichloroethene (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Trichlorofluoromethane (µg/L)	5	<1						<1.0				<1										<5.0	<5.0	<5.0	<5.0
Vinyl Acetate (µg/L)	NS	<10						<1.0				<5										<10	<10	<10	<10
Vinyl Chloride (µg/L)	2	<1						<1.0				<1										<10	<10	<10	<10
Xylenes (Total) (µg/L)	5	<b>190</b>						72				<b>80</b>										<b>44</b>	<5.0		
1,2-Dichloroethene - Total		5																							

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers
- 7) J indicates estimated concentration due to QC sample recovery

**City of Rome  
Tannery Road Landfill  
MW-9S  
Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	
<b>Field Parameters</b>																										
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	485	398	369	411	413	414	411	411	419	365	390	408	435	415	377	410	423	385	392	480	413	365	394	410	
pH (s.u.)	6.5 - 8.5	7.67	7.32	7.23	7.31	7.11	6.89	6.96	7.28	7.2	6.94	6.65	7.39	7.15	7.39	8.9	7.3	7.17	7.5	7.5	6.98	6.78	6.95	7.3		
Temperature (deg C)	NS	5.8	14.6	12.9	7.4	6.4	9.8	11	8.2	6.1	11.9	11.4	8.2	7.4	9.3	12.7	8	6.3	11.3	12.8	6	5.2	11	13.2	7	
Turbidity (NTU)	5	999	324	659	999	999	999	999	999	704	241	466	460	501	999	506	218	999	614	50	492	999	331	290		
<b>Part 360 Leachate Indicator Parameters</b>																										
Ammonia-Nitrogen (mg/L)	2	<0.5	<0.5	<0.3	<0.3	0.14	0.3	0.15	0.28	0.3	0.39	0.21	0.17	0.33	0.32	0.56	0.16	1.8	0.93	<0.03	0.56	0.64	0.48	<0.03		
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	<4.0	5	3.9	5	4.7	5.6	2.1	<4.0	<4.0	4.2	<4.0	<4.0	<4.0	18	4.5	<4.0	4.4	<4.0	<4	<4.0	12	4.7	4.8		
Bromide (mg/L)	2	<0.2	<0.2	<2.0	<2.0	0.15	<0.1	<0.1	0.17	0.12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Chemical Oxygen Demand (mg/L)	NS	160	120	26	76	64	74	160	120	96	120	72	75	290	75	87	64	57	120	67	75	120	79	86		
Chloride (mg/L)	250	8	3	4.1	<2.0	2.6	3.3	3.3	3.4	3.2	3.6	3.3	3.2	3.4	3.3	3.2	3.2	3.2	3.4	3.5	3.6	3	3.1			
Color (Pt-Co)	15		530											600	850				750					700		
Nitrate-Nitrogen (mg/L)	10	<0.2	<0.2	0.5	0.3	<0.1	<0.1	<0.1	0.18	<0.1	0.17	0.16	<0.1	0.14	<0.1	<0.1	<0.1	<0.1	<0.1	0.18	<0.1	0.16	<0.1	0.15		
Sulfate (mg/L)	250	5	8	12	8	12	8.5	2.3	4.7	4.2	2.9	3.1	8.6	15	8.4	3.2	6.2	19	15	3.2	8	5.9	3.5	1.9	3	
Total Alkalinity (mg/L)	NS	230	260	1400	260	270	240	270	280	230	260	240	210	240	250	230	250	220	240	220	240	210	240			
Total Cyanide (mg/L)	0.2																								<0.01	
Total Dissolved Solids (mg/L)	500	420	260	360	340	340	390	420	400	360	380	240	430	360	330	380	390	360	340	320	360	250	370	290		
Total Hardness (mg/L)	NS	1100	530	477.2904	489.5396	466	610	720	700	1200	300	420	390	460	360	650	730	380	400	410	150	730	400	280	110	
Total Kjeldahl Nitrogen (mg/L)	NS	2.8	1.9	0.5	<0.3	<0.3	0.97	1.4	1.7	1	1.3	1	0.7	0.45	1.2	1.7	0.52	0.74	1.5	0.57	0.63	1.1	1	0.78	0.64	
Total Organic Carbon (mg/L)	NS	30	29	28.6	38.5	32.6	32	31	36	35	30	29	32	29	31	32	26	24	32	25	28	30	24	28		
Total Phenols (mg/L)	0.001	<0.005	<0.005	<0.001	0.005	<0.001	0.0022	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	0.0087	0.0035	<0.002	<0.002	0.0022	0.0026	0.0031	<0.002	<0.002	<0.002	<0.002	<0.002	
<b>Part 360 Routine Metals</b>																										
Cadmium (mg/L)	0.005	0.0088	0.0053	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Calcium (mg/L)	NS	307	142	142	138	138	160	190	180	300	88	120	110	130	100	170	200	100	110	120	50	180	120	84	38	
Iron (mg/L)	0.3*	85.3	47.8	28.2	26.8	14.3	37	56	56	110	21	30	24	29	26	48	52	25	36	29	2.6	67	13	6.1	0.75	
Lead (mg/L)	0.025	0.0381	0.021	0.011	0.017	0.008	<0.01	<0.01	0.043	0.042	0.012	0.011	0.017	0.014	0.034	0.041	<0.01	<0.01	0.023	<0.01	0.043	0.017	<0.01	<0.01		
Magnesium (mg/L)	35 (GV)	83.9	43.5	29.8	35.2	29.4	48	58	60	100	19	29	28	34	26	53	60	27	30	27	5.2	66	26	16	3.3	
Manganese (mg/L)	0.3*	4.21	2.13	1.7	1.9	1.6	2.4	2.8	2.7	5	1.1	1.5	1.5	1.8	1.4	2.6	3	1.4	1.6	1.5	0.36	3	1.4	0.96	0.25	
Potassium (mg/L)	NS	12.1	6.96	2.3	4.6	2.4	4.6	6.4	7.3	14	4.2	7.2	4.6	4.6	6.6	6.3	5.4	4.5	5.8	4.9	2.7	7.8	3.5	2.2	2.2	
Sodium (mg/L)	20	49.3	39.3	30	41.7	46	46	49	53	55	48	33	43	55	57	38	40	53	54	37	55	62	53	33	47	
<b>Part 360 Additional Baseline Metals</b>																										
Aluminum (mg/L)	NS		23.9																							

**City of Rome**  
**Tannery Road Landfill**  
**MW-9S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/1/99	6/1/99	9/1/99	12/1/99	3/1/00	6/1/00	9/1/00	12/1/00	3/1/01	6/1/01	9/1/01	12/1/01	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0						<10.0	<10.0			<10	<10					<10	
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0						<10.0	<10.0			<10	<10					<10	
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS	<10.0						<10.0						<10.0	<10.0			<10	<10					<10	
Acetone ( $\mu\text{g/L}$ )	50 (GV)	<10.0						<10.0						<10.0	<10.0			<10	<10					<10	
Acrylonitrile ( $\mu\text{g/L}$ )	5	<100.0						<20.0						<20.0	<20.0			<20						<5	
Benzene ( $\mu\text{g/L}$ )	1	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Bromochloromethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Bromodichloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Bromomethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Chlorobenzene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Chloroethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Chloroform ( $\mu\text{g/L}$ )	7	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Chloromethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Dibromomethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Ethyl benzene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Iodomethane ( $\mu\text{g/L}$ )	5	<5.0						<20.0						<20.0	<10.0			<10						<10	
Methylene Chloride ( $\mu\text{g/L}$ )	5	<5.0						<10.0						<10.0	<10.0			<10	<10					<10	
Styrene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Tetrachloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Toluene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5	<10.0						<50.0						<50.0	<10.0			<5	<5					<10	
Trichloroethene ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<50.0						<20.0						<20.0	<20.0			<20						<5	
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
Xylenes (Total) ( $\mu\text{g/L}$ )	5	<5.0						<5.0						<5.0	<5.0			<5	<5					<1	
1,2-Dichloroethene - Total	5																	<5							

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome**  
**Tannery Road Landfill**  
**MW-9S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	6/19/08	9/23/08	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	
<b>Field Parameters</b>																						
Conductivity (μmhos/cm)	NS	308	404	404	380	390	350	391	375	387	367	354	385	394	383	361	415	388	377	378	392	
pH (s.u.)	6.5 - 8.5	7.57	7.3	7.5	6.7	7.7	8.1	7.83	7.11	7.08	7.29	7.05	6.95	7.3	7.13	7.51	7.48	6.92	7.11	6.97	6.76	
Temperature (deg C)	NS	6.6		12	8	7	14	12.5	9.3	6.7	11.4	11.7	7.1	5.2	10.2	12.4	6.6	11.5	11.5	8.1		
Turbidity (NTU)	5	512	614	206	270	480	37	-	70	385	80	43	45	25	83	26	80	203	12	15	4	
<b>Part 360 Leachate Indicator Parameters</b>																						
Ammonia-Nitrogen (mg/L)	2	0.24	0.31	0.26	0.18	0.18	0.24	0.19	0.14	0.13	0.2	0.14	<0.03	0.084	0.17	0.063	<0.03	0.094	0.22	0.15	0.25	
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	4.3	4.6	6.2	<4	<4	<4.0	8.9	<4	<4	4	<4	<4	<5	<4	<4	<4	<4	<4	<4.0	<4.0	
Bromide (mg/L)	2	<0.100	<0.1	<0.1	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chemical Oxygen Demand (mg/L)	NS	140	65	66	78	58	79	97	65	83	77	48	47	52	43	57	39	39	40	36		
Chloride (mg/L)	250	3.1	4.2	3.4	3.4	3.1	3.6	3	3.2	3.2	2.5	4	<2	3.3	2.7	3.6	3.2	3.1	3.2	3	100	
Color (Pt-Co)	15				800	1,500					200				200							
Nitrate-Nitrogen (mg/L)	10	0.15	0.13	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	0.15	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Sulfate (mg/L)	250	2.3	3.2	1.8	3.3	7.5	5.4	2.3	3.8	5.6	2.9	1.6	4.6	9.7	7.2	3.2	5.8	5.2	9.4	3.3	3.8	
Total Alkalinity (mg/L)	NS	220	210	220	230	220	230	240	230	280	230	230	320	210	240	240	250	250	220	220		
Total Cyanide (mg/L)	0.2				<0.01	<0.01					<0.01						<0.01				<0.01	
Total Dissolved Solids (mg/L)	500	350	310	310	340	300	290	330	270	300	310	280	270	300	360	360	290	260	310	2,100	260	
Total Hardness (mg/L)	NS	440	120	250	290	210	400	360	240	320	420	210	150	430	170	280	180	310	160	190	390	
Total Kjeldahl Nitrogen (mg/L)	NS	0.96	0.89	0.59	0.59	0.38	0.63	1.1	6.1	0.82	0.66	0.65	0.49	0.64	1.3	0.64	0.55	0.67	0.81	0.66	0.59	
Total Organic Carbon (mg/L)	NS	26	28	25	25	22	26	25	22	25	22	24	19	19	24	20	17	22	20	20	16	
Total Phenols (mg/L)	0.001	<0.010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	<0.002	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
<b>Part 360 Routine Metals</b>																						
Cadmium (mg/L)	0.005	<0.010	<0.01	<0.01	<0.01	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	
Calcium (mg/L)	NS	120	41	75	89	65	120	110	74	91	43	70	77	120	45	87	59	94	54	65	120	
Iron (mg/L)	0.3*	23	3.2	14	12	13	12	21	3.1	18	25	6.8	8.6	24	22	10	5.7	9.8	3.9	5.4	12	
Lead (mg/L)	0.025	<0.010	0.046	0.043	<0.01	<0.01	0.014	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	<0.01	<0.010	<0.01		
Magnesium (mg/L)	35 (GV)	33	5.2	15	16	12	26	24	12	21	16	9.5	13	30	14	15	9	20	4.9	6.9	24	
Manganese (mg/L)	0.3*	1.6	0.35	0.89	0.86	0.76	1.4	0.026	0.68	1.1	0.52	0.71	0.81	1.7	0.51	0.95	0.57	1.2	0.47	0.58	1.3	
Potassium (mg/L)	NS	5.3	3.4	4.1	3.1	7	2.7	4	<1	4.4	3.2	2	3.1	3.7	27	2.9	4	3.6	3.1	2.4	2.4	
Sodium (mg/L)	20	48	43	30	26	51	34	37	34	44	29	19	31	43	21	45	37	32	42	25	31	
<b>Part 360 Additional Baseline Metals</b>																						
Aluminum (mg/L)	NS				5.6	9						1.4					3.9				4.8	
Antimony (mg/L)	0.003				<0.01	<0.01						<0.01				<0.01				<0.01		
Arsenic (mg/L)	0.025				0.029	<0.01						<0.01				<0.01				<0.01		
Barium (mg/L)	1				0.11	<0.2						0.23				<0.2				0.11		
Beryllium (mg/L)	0.003 (GV)				<0.01	<0.01						<0.01				<0.01				<0.01		
Boron (mg/L)	1				<0.5	<0.5						0.73				<0.5				<0.5		
Chromium (mg/L)	0.05				0.012	0.017						0.013				<0.01				0.013		
Chromium, Hexavalent (mg/L)	0.05				<0.01	<0.01						<0.01				<0.01				<0.01		
Cobalt (mg/L)	NS				<0.01	<0.01			</td													

**City of Rome**  
**Tannery Road Landfill**  
**MW-9S**  
**Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	6/19/08	9/23/08	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1				<1	<1					<1.0					<1				<1	
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3				<1	<1					<1.0					<1				<1	
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)				<5	<5					<5.0					<10				<10	
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)				<5	<5					<5.0					<10				<10	
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS				<5	<5					<5.0					<10				<10	
Acetone ( $\mu\text{g/L}$ )	50 (GV)				<10	<5					<5.0					<10				<10	
Acrylonitrile ( $\mu\text{g/L}$ )	5				<20	<20					<20					<20				<20	
Benzene ( $\mu\text{g/L}$ )	1				<1	<1					<1.0					<1				<1	
Bromochloromethane ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)				<1	<1					<1.0					<1				<1	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)				<1	<1					<1.0					<1				<1	
Carbon disulfide ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Carbon tetrachloride ( $\mu\text{g/L}$ )	60 (GV)				<1	<1					<1.0					<1				<1	
Chlorobenzene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Chloroethane ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Chloroform ( $\mu\text{g/L}$ )	7				<1	<1					<1.0					<1				<1	
Chloromethane ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**				<1	<1					<1.0					<1				<1	
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)				<1	<1					<1.0					<1				<1	
Dibromomethane ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Ethyl benzene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Iodomethane ( $\mu\text{g/L}$ )	5				<5	<5					<5.0					<5				<5	
Methylene Chloride ( $\mu\text{g/L}$ )	5				<5	<1					<1.0					<1				<1	
Styrene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Tetrachloroethene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Toluene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**				<1	<1					<1.0					<1				<1	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5				<5	<5					<5.0					<5				<5	
Trichloroethene ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS				<5	<5					<5.0					<5				<5	
Vinyl Chloride ( $\mu\text{g/L}$ )	2				<1	<1					<1.0					<1				<1	
Xylenes (Total) ( $\mu\text{g/L}$ )	5				<1	<1					<1.0					<1				<1	
1,2-Dichloroethene - Total	5																				

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome  
Tannery Road Landfill  
MW-9S  
Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
<b>Field Parameters</b>									
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	397	389	372	371	433	393	370	140
pH (s.u.)	6.5 - 8.5	7.08	7.38	7.18	<b>6.12</b>	<b>6.39</b>	6.74	<b>5.5</b>	<b>6.1</b>
Temperature (deg C)	NS	6.5	11.2	13.1	7.5	5	11.1	14	6
Turbidity (NTU)	5	<b>30</b>	0	<b>148</b>	<b>253</b>	<b>141</b>	9	<b>40</b>	<b>150</b>
<b>Part 360 Leachate Indicator Parameters</b>									
Ammonia-Nitrogen (mg/L)	2	1.44	<0.1	0.2	<0.1	<0.1	0.2	0.2	<0.1
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	<2.0	2	<4.0	<4.0	<4.0	3	3.9	3.6
Bromide (mg/L)	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand (mg/L)	NS	49.7	38	59	34	58	38	61	49
Chloride (mg/L)	250	1.2	1.05	<1.0	1.72	1.04	<1.0	<1.0	<1.0
Color (Pt-Co)	15	<b>70</b>				<b>&gt;70</b>	<b>70</b>	<b>&gt;70</b>	<b>70</b>
Nitrate-Nitrogen (mg/L)	10	0.26	<0.020	<0.020	<0.02	<0.020	<0.02	0.05	0.13
Sulfate (mg/L)	250	14.3	5.18	<2.0	3.18	6.18	2.57	14.2	3.74
Total Alkalinity (mg/L)	NS	235	225	220	235	230	217	230	230
Total Cyanide (mg/L)	0.2	<0.010				<0.01	<0.01	<0.010	<0.01
Total Dissolved Solids (mg/L)	500	305	280	307	332	312	350	275	220
Total Hardness (mg/L)	NS	139	340	496	447	290	702	160	116
Total Kjeldahl Nitrogen (mg/L)	NS	<1.0	6.7	1.1	<1.0	2.8	1.1	<1.0	<1.0
Total Organic Carbon (mg/L)	NS	18.7	18.7	19.5	18.6	19.2	20.4	23.9	21.2
Total Phenols (mg/L)	0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<b>0.003</b>
<b>Part 360 Routine Metals</b>									
Cadmium (mg/L)	0.005	0.00023	<0.005	<0.005	<0.005	0.00021	0.00041	0.00027	<0.005
Calcium (mg/L)	NS	48.3	100	137	126	94.9	184	54.3	40.4
Iron (mg/L)	0.3*	<b>0.364</b>	<b>18.8</b>	<b>36.3</b>	<b>31</b>	<b>2.72</b>	<b>58.6</b>	<b>5.29</b>	<b>0.614</b>
Lead (mg/L)	0.025	<0.002	<0.005	<0.005	0.007	0.0029	0.0022	<0.002	0.021
Magnesium (mg/L)	35 (GV)	4.49	21.7	<b>37.3</b>	32.3	13	<b>58.9</b>	5.92	3.76
Manganese (mg/L)	0.3*	<b>0.466</b>	<b>1.34</b>	<b>1.97</b>	<b>1.66</b>	<b>0.955</b>	<b>2.57</b>	<b>0.601</b>	0.179
Potassium (mg/L)	NS	2.13	4.31	5	4.91	1.68	6.71	2.86	3.39
Sodium (mg/L)	20	<b>32.3</b>	<b>29</b>	<b>20.8</b>	<b>27.9</b>	<b>21.4</b>	<b>24.7</b>	<b>34.9</b>	<b>52.5</b>
<b>Part 360 Additional Baseline Metals</b>									
Aluminum (mg/L)	NS	0.132				0.392	31.2	0.305	0.194
Antimony (mg/L)	0.003	<0.020				<0.0196	<0.0011	<0.002	<0.06
Arsenic (mg/L)	0.025	<0.002				0.0035	<0.0022	0.003	<0.005
Barium (mg/L)	1	0.067				0.102	0.233	0.094	0.066
Beryllium (mg/L)	0.003 (GV)	<0.00014				0.00023	0.0012	<0.0001	<0.005
Boron (mg/L)	1	0.012				0.0046	<0.00057	0.003	<0.05
Chromium (mg/L)	0.05	<0.005				<0.0047	0.0602	0.005	<0.005
Chromium, Hexavalent (mg/L)	0.05	<0.020				<0.020	<0.02	<0.020	<0.02
Cobalt (mg/L)	NS	<0.000				0.001	0.0242	<0.001	<0.05
Copper (mg/L)	0.2	0.018				0.0103	0.157	<0.001	0.02
Mercury (mg/L)	0.0007	<0.00007				<0.00006	<0.0001	<0.15	<0.0002
Nickel (mg/L)	0.1	0.007				0.0039	0.0663	0.0046	<0.02
Selenium (mg/L)	0.01	<0.003				<0.0025	<0.0015	<0.003	<0.005
Silver (mg/L)	0.05	<0.003				<0.0028	<0.0014	<0.003	<0.01
Thallium (mg/L)	0.0005 (GV)	<b>0.021</b>				<b>0.032</b>	<b>0.0028</b>	<0.003	<0.01
Vanadium (mg/L)	NS	0.005				<0.0049	0.0534	<0.011	<0.02
Zinc (mg/L)	2	0.007				0.0113	0.156	0.01	<0.01
<b>Part 360 Volatile Organics</b>									
1,1,1,2-Tetrachloroethane ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane ( $\mu\text{g}/\text{L}$ )	1	<5.0				<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane ( $\mu\text{g}/\text{L}$ )	0.04	<5.0				<5.0	<5.0	<5.0	<5.0
1,2-Dibromo-3-chloropropane ( $\mu\text{g}/\text{L}$ )	0.04	<10				<10	<10	<10	<10
1,2-Dibromoethane (EDB) ( $\mu\text{g}/\text{L}$ )	5	<5.0				<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene ( $\mu\text{g}/\text{L}$ )	3	<5.0				<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane ( $\mu\text{g}/\text{L}$ )	0.6	<5.0				<5.0	<5.0	<5.0	<5.0

**City of Rome  
Tannery Road Landfill  
MW-9S  
Ground Water Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1	<5.0			<5.0	<5.0	<5.0	<5.0	
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<5.0			<5.0	<5.0	<5.0	<5.0	
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)	<10			<10	<10	<10	<10	
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)	<10			<10	<10	<10	<10	
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS	<10			<10	<10	<10	<10	
Acetone ( $\mu\text{g/L}$ )	50 (GV)	<10			<10	<10	<10	<10	
Acrylonitrile ( $\mu\text{g/L}$ )	5	<25			<25	<25	<25	<25	
Benzene ( $\mu\text{g/L}$ )	1	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromochloromethane ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromodichloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromomethane ( $\mu\text{g/L}$ )	5	<10			<10	<10	<10	<10	
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<5.0			<5.0	<5.0	<5.0	<5.0	
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Chlorobenzene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Chloroethane ( $\mu\text{g/L}$ )	5	<10			<10	<10	<10	<10	
Chloroform ( $\mu\text{g/L}$ )	7	<5.0			<5.0	<5.0	<5.0	<5.0	
Chloromethane ( $\mu\text{g/L}$ )	5	<10			<10	<10	<10	<10	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0			<5.0	<5.0	<5.0	<5.0	
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<5.0			<5.0	<5.0	<5.0	<5.0	
Dibromomethane ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Ethyl benzene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Iodomethane ( $\mu\text{g/L}$ )	5	<10			<10	<10	<10	<10	
Methylene Chloride ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Styrene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Tetrachloroethene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Toluene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5	<10			<10	<10	<10	<10	
Trichloroethene ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<10			<10	<10	<10	<10	
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<10			<10	<10	<10	<10	
Xylenes (Total) ( $\mu\text{g/L}$ )	5	<5.0			<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethene - Total	5								

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers

**City of Rome  
Tannery Road Landfill  
Leachate Well LMW-10  
Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	
<b>Field Parameters</b>																											
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	4,940	4,970	5,440	3,780	4,050	4,810	5,600	4,300	4,810	5,990	3,480	4,743	5,320	4,787	4,570	3,600	5,800	6,400	2,110	5,160	1,420	3,860	5,410	6,070	4,780	
pH (s.u.)	6.5 - 8.5	6.48	6.63	7	6.6	6.5	6.78	6.4	6.59	6.14	6.22	6.5	7.03	6.57	6.99	6.3	7	8	7.17	6.69	6	6.57	6.59	6.65	6.71		
Temperature (deg C)	NS	12.8	15.2	17.2	10.4	7.6	19.7	15.8	9	12.8	16	16.8	10	13		15.5	12	14	18	15.1	13.5	11.3	16	15.4	10.2	13.5	
Turbidity (NTU)	5	356	183	585	164	207	383	47	430	189	10	73	189	246	236	100	68	168	600	-	81	0	67	101	134	60	
Redox	NS																										
Dissolved Oxygen (mg/L)	NS																										
<b>Part 360 Leachate Indicator Parameters</b>																											
Ammonia-Nitrogen (mg/L)	2	200	260	270	200	280	280	270	230	380	350	160	260	290	300	300	230	340	330	160	280	60	320	350	290	260	
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	38	24	46	34	30	20	36	43	28	32	31	41	<4.0	31	36	24	39	36	36	35	<20	40	30	31	29	
Bromide (mg/L)	2	2.6	3	3.9	1.9	2.1	3.2	3.8	2.3	3.7	4.2	2.5	3.3	4.2	2.7	3	2.2	17	<0.10	1.6	5.9	<0.1	3.9	3.5	2.1	2.7	
Chemical Oxygen Demand (mg/L)	NS	420	250	3,200	270	340	490	640	270	300	470	290	490	670	440	430	240	240	71	200	560	105	105	700	420	380	
Chloride (mg/L)	250	440	430	610	380	200	450	550	260	450	600	280	410	560	410	470	340	570	600	220	590	67	650	580	410	560	
Color (Pt-Co)	15	1,400							600					950				500	1,500								
Nitrate-Nitrogen (mg/L)	10	<0.1	0.16	0.17	<0.1	0.15	0.76	0.54	<0.1	0.2	0.28	0.27	0.19	<0.1	<0.1	<0.1	<0.10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2		
Sulfate (mg/L)	250	2.9	2.2	3.6	2.2	2.3	2.5	<1	2.3	3.6	1.4	2.1	2	1.8	2.3	60	<1	2.5	2.8	2.2	<1	3.1	3.1	1.8	2.6	<10	
Total Alkalinity (mg/L)	NS	1,700	1,900	2,200	1,500	1,600	1,800	2,000	1,500	2,000	2,100	1,900	2,400	2,500	1,200	1,900	2,400	2,700	1,400	2,900	570	2,000	2,200	1,600	1,700		
Total Cyanide (mg/L)	0.2	<0.01												<0.01													
Total Dissolved Solids (mg/L)	500	1,900	2,100	2,500	1,500	1,400	2,200	2,500	1,200	2,200	2,400	1,700	1,900	2,700	2,000	2,100	1,800	2,600	2,600	1,200	2,700	590	2,600	2,300	1,900	2,400	
Total Hardness (mg/L)	NS	580	580	690	480	550	750	790	430	700	590	480	520	660	670	450	600	740	690	460	800	270	310	690	530	670	
Total Kjeldahl Nitrogen (mg/L)	NS	290	220	320	220	280	300	330	350	330	380	260	220	310	270	260	210	330	390	150	280	60	280	350	270		
Total Organic Carbon (mg/L)	NS	160	150	230	99	120	120	230	110	180	240	75	160	230	200	120	13	210	270	84	180	28	230	240	160	210	
Total Phenols (mg/L)	0.001	0.016	0.02	0.015	0.026	<0.002	0.015	0.013	0.017	0.017	0.021	0.02	0.016	<0.01	<0.002	0.0022	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	0.0062	0.013	0.015	0.02	0.011
<b>Part 360 Routine Metals</b>																											
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Calcium (mg/L)	NS	120	120	140	100	110	150	91	120	110	97	110	120	91	120	120	130	100	130	73	100	120	120	130			
Iron (mg/L)	0.3*	62	60	70	48	58	61	68	52	38	47	49	35	45	35	45	34	35	49	39	16	32	38	35	55	41	
Lead (mg/L)	0.025	0.049	0.031	0.04	0.022	0.041	<0.01	0.014	0.022	0.028	<0.01	<0.01	0.017	<0.01	0.26	0.014	0.03	0.036	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	0.01		
Magnesium (mg/L)	35 (GV)	68	67	83	53	65	94	100	50	96	75	53	67	92	54	74	110	91	51	110	20	65	88	54	85		
Manganese (mg/L)	0.3*	1.3	1.5	2.4	1.6	1.5	1.7	2.7	1.3	0.74	1.5	1.6	0.85	1	0.62	1.4	0.76	0.55	1.2	0.029	0.26	0.98	0.98	1.2	1.1	70	
Potassium (mg/L)	NS	190	200	340	180	230	410	220	350	330	320	380	330	320	280	250	280	300	160								

**City of Rome  
Tannery Road Landfill  
Leachate Well LMW-10  
Analytical Data**

Parameter	NYSDEC Ground Water Standard	3/28/02	6/17/02	9/24/02	12/18/02	3/12/03	6/25/03	9/17/03	12/16/03	3/23/04	6/22/04	9/28/04	12/16/04	3/22/05	6/28/05	9/27/05	12/6/05	3/28/06	6/28/06	9/26/06	12/13/06	3/15/07	6/21/07	9/25/07	12/17/07	3/27/08	
1,2-Dibromo-3-chloropropane (µg/L)	0.04	<5.0				<5					<1						<5	<5						<5.0			
1,2-Dibromoethane (EDB) (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
1,2-Dichlorobenzene (µg/L)	3	<5.0				<5					<1						<5	<5						<5.0			
1,2-Dichloroethane (µg/L)	0.6	<5.0				<5	<5				<1						<5	<5						<5.0			
1,2-Dichloropropane (µg/L)	1	<5.0				<5	<5				<1						<5	<5						<5.0			
1,4-Dichlorobenzene (µg/L)	3	<5.0				<5					3.7						<5	<5						<5.0			
2-Butanone (MEK) (µg/L)	50 (GV)	<10.0				<10	<10				<10						<20	<50						<5.0			
2-Hexanone (µg/L)	50 (GV)	<10.0				<10	<10				<10						<20	<50						<5.0			
4-Methyl 2-pentanone (µg/L)	NS	<10.0						<10			<10						<20	<50						<5.0			
Acetone (µg/L)	50 (GV)	18				28	13				<10						<50	<50						<5.0			
Acrylonitrile (µg/L)	5	<20.0				<20					<5						<100	<200						<200			
Benzene (µg/L)	1	<b>5.5</b>				<b>5.7</b>	<5				5						<b>6.2</b>	<b>7.7</b>						7			
Bromochloromethane (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
Bromodichloromethane (µg/L)	50 (GV)	<5.0				<5	<5				<1						<5	<5						<5.0			
Bromoform (µg/L)	50 (GV)	<5.0				<5	<5				<1						<5	<5						<5.0			
Bromomethane (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
Carbon disulfide (µg/L)	60 (GV)	<5.0				<5	<5				<1						<5	<5						<5.0			
Carbon tetrachloride (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
Chlorobenzene (µg/L)	5	<5.0				<5	<5				4.1						<b>5.3</b>	<5						<5.0			
Chloroethane (µg/L)	5	<b>33</b>				<b>33</b>	<b>22</b>				22						24	<b>20</b>						<5.0			
Chloroform (µg/L)	7	<5.0				<5	<5				<1						<5	<5						<5.0			
Chloromethane (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
cis-1,2-Dichloroethene (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
cis-1,3-Dichloropropene (µg/L)	0.4**	<5.0				<5	<5				<1						<5	<5						<5.0			
Dibromochloromethane (µg/L)	50 (GV)	<5.0				<5	<5				<1						<5	<5						<5.0			
Dibromomethane (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
Ethyl benzene (µg/L)	5	<b>29</b>				<5	<5				<1						<5	<5						<5.0			
Iodomethane (µg/L)	5	<10.0					<10				<10						<20	<50						<5.0			
Methylene Chloride (µg/L)	5	<10.0				<10	<10				<10						<20	<5						<5.0			
Styrene (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
Tetrachloroethene (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
Toluene (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
trans-1,2-Dichloroethene (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
trans-1,3-Dichloropropene (µg/L)	0.4**	<5.0				<5	<5				<1						<5	<5						<5.0			
trans-1,4-Dichloro-2-butene (µg/L)	5	<10.0					<10				<10						<20	<50						<5.0			
Trichloroethene (µg/L)	5	<5.0				<5	<5				<1						<5	<5						<5.0			
Trichlorofluoromethane (µg/L)	5	<5.0				<5					<1						<5	<5						<5.0			
Vinyl Acetate (µg/L)	NS	<20.0					<20				<5						<20	<50						<5.0			
Vinyl Chloride (µg/L)	2	<5.0				<5	<5				<1						<5	<5						<5.0			
Xylenes (Total) (µg/L)	5	<b>75</b>				<b>96</b>	<b>28</b>				63						<b>69</b>	<b>26</b>						<b>63</b>			
1,2-Dichloroethene - Total		5				<5																					

**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500 µg/L.
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers
- 7) J indicates estimated concentration based on QC data

**City of Rome**  
**Tannery Road Landfill**  
**Leachate Well LMW-10**  
**Analytical Data**

Parameter	NYSDEC Ground Water Standard	6/19/08	9/23/08	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
<b>Field Parameters</b>																
Conductivity ( $\mu\text{mhos}/\text{cm}$ )	NS	4,430	5,160	4,590	5,050	5,100	1,450	1260	5,660	4,430	5,290	2850	3,100	2,770	1,700	2,400
pH (s.u.)	6.5 - 8.5	6.44	6.93	7.4	6.35	6.5	6.6	6.08	6.43	7.77	7.53	6.68	6.23	6.35	6.5	6.6
Temperature (deg C)	NS	14.9	15.3	13	13.9	14	14.5	11.8	11.5	15.5	14.3	10.4	12.3	15	14	7
Turbidity (NTU)	5	51	0	27	35	35	180	10	16	57	96	10	39	0	40	10
Redox	NS															
Dissolved Oxygen (mg/L)	NS															
<b>Part 360 Leachate Indicator Parameters</b>																
Ammonia-Nitrogen (mg/L)	2	320	260	280	260	49	270	54	310	148	235	158	167	150	86.4	109
Biochemical Oxygen Demand (BOD5) (mg/L)	NS	32	52	36	46	12	40	20	22	29	>175	35	38	36	35	20
Bromide (mg/L)	2	3.3	4.1	3.3	3	<0.1	4.3	<0.1	<1.0	<1.0	2.62	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand (mg/L)	NS	590	140	490	430	56	430	64	635	507	613	258	247	221	127	117
Chloride (mg/L)	250	540	610	540	580	34	520	83	250	508	516	188	195	231	99.2	97.3
Color (Pt-Co)	15		400					25	70				>70	>70	30	70
Nitrate-Nitrogen (mg/L)	10	0.2	0.22	<0.1	<0.1	<0.1	<0.1	<0.1	1.56	0.16	<0.020	<0.02	0.15	<0.02	0.26	<0.02
Sulfate (mg/L)	250	1.9	2	<1	2	<1	2.7	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0
Total Alkalinity (mg/L)	NS	2,200	2,400	2,300	2,300	210	1,900	620	2,200	2,100	2,300	1210	1,240	22	830	
Total Cyanide (mg/L)	0.2		0.01					<0.01	<0.010				<0.01	<0.01	<0.010	<0.01
Total Dissolved Solids (mg/L)	500	2,200	2,700	2,400	2,300	430	300	610	1,240	2,160	2,300	1,090	1,090	1,180	1,200	650
Total Hardness (mg/L)	NS	590	570	610	630	240	750	340	358	730	724	379	393	467	954	318
Total Kjeldahl Nitrogen (mg/L)	NS	310	270	260	260	53	260	54	25.2	260	231	171	169	123	83.7	104
Total Organic Carbon (mg/L)	NS	230	210	200	200	23	120	37	220	194	183	66.6	64	88.2	37.1	38.2
Total Phenols (mg/L)	0.001	0.016	0.014	0.01	0.012	0.086 J	0.009	0.01	0.003	0.007	0.018	0.01	0.018	0.005	0.009	0.01
<b>Part 360 Routine Metals</b>																
Cadmium (mg/L)	0.005	<0.01	<0.01	<0.01	<0.01	<0.010	<0.01	<0.00013	<0.005	<0.005	<0.005	0.00015	<0.00021	<0.00015	<0.005	
Calcium (mg/L)	NS	120	120	100	120	70	130	100	85.3	122	125	69.2	83.2	112	161	82.1
Iron (mg/L)	0.3*	55	40	32	38	41	43	47	33.9	26.9	35.6	30.2	21.2	41.8	65.8	25.2
Lead (mg/L)	0.025	<0.01	<0.01	<0.01	0.03	0.017	0.046	<0.01	<0.002	<0.005	<0.005	0.014	0.0046	0.0063	0.003	<0.005
Magnesium (mg/L)	35 (GV)	69	78	87	79	16	100	22	35.2	103	100	35	45	45.5	35.9	27.3
Manganese (mg/L)	0.3*	1.5	0.69	0.34	0.4	0.73	0.43	1	0.678	0.269	0.387	0.759	0.743	1.03	0.911	0.807
Potassium (mg/L)	NS	220	270	250	330	28	390	39	101	368	222	99.2	127	125	134	74
Sodium (mg/L)	20	330	340	350	450	31	670	55	112	371	346	124	146	116	130	84.2
<b>Part 360 Additional Baseline Metals</b>																
Aluminum (mg/L)	NS		0.91					0.34	0.106				0.0346	0.165	0.032	<0.1
Antimony (mg/L)	0.003		<0.01					<0.01	<0.020				<0.0196	<0.0011	<0.002	<0.06
Arsenic (mg/L)	0.025		<0.01					<0.01	<0.002				<0.0015	<0.0022	<0.002	<0.005
Barium (mg/L)	1		0.51					0.17	0.302				0.0904	0.151	0.174	0.08
Beryllium (mg/L)	0.003 (GV)		<0.01					<0.01	<0.00014				<0.00014	<0.00016	<0.0001	<0.005
Boron (mg/L)	1		2.8					<0.5	1.03				1.28	1.16	0.754	0.686
Chromium (mg/L)	0.05		<0.01					<0.01	<0.005				0.0081	<0.0051	0.006	<0.005
Chromium, Hexavalent (mg/L)	0.05		0.016					<0.01	<0.020				<0.020	<0.02	<0.020	<0.02
Cobalt (mg/L)	NS		0.013					<0.01	0.005				0.0059	0.0058	0.003	<0.05
Copper (mg/L)	0.2		<0.01					0.011	<0.003				0.0042	<0.0025	<0.001	<0.005
Mercury (mg/L)	0.0007		<0.0002					<0.0002	<0.00007				<0.00006	<0.0001	<0.15	<0.0002
Nickel (mg/L)	0.1		0.042					0.019	0.016				0.0177	0.0137	0.00079	<0.02
Selenium (mg/L)	0.01		<0.01					<0.01	<0.003				<0.0025	<0.0015	<0.003	<0.005
Silver (mg/L)	0.05		<0.01					<0.01	<0.003				<0.0028	<0.0014	<0.003	<0.01
Thallium (mg/L)	0.0005 (GV)		<0.01					<0.02	0.038				0.0219	<0.0018	0.008	<0.01
Vanadium (mg/L)	NS		0.023					<0.01	<0.005				<0.0049	0.006	<0.011	<0.02
Zinc (mg/L)	2		0.072</td													

**City of Rome  
Tannery Road Landfill  
Leachate Well LMW-10  
Analytical Data**

Parameter	NYSDEC Ground Water Standard	6/19/08	9/23/08	12/15/2008	3/17/2009	6/22/2009	9/25/2009	12/14/2009	3/24/2010	6/23/2010	9/22/2010	12/21/2010	3/29/2011	6/18/2012	9/16/2013	12/4/2014
1,2-Dibromo-3-chloropropane ( $\mu\text{g/L}$ )	0.04	<1						<1	<10			<10	<10	<10	<10	
1,2-Dibromoethane (EDB) ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
1,2-Dichlorobenzene ( $\mu\text{g/L}$ )	3	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
1,2-Dichloroethane ( $\mu\text{g/L}$ )	0.6	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
1,2-Dichloropropane ( $\mu\text{g/L}$ )	1	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
1,4-Dichlorobenzene ( $\mu\text{g/L}$ )	3	1.4						<b>6.6</b>	<5.0			<5.0	<b>3.1</b>	<b>6.9</b>	7	
2-Butanone (MEK) ( $\mu\text{g/L}$ )	50 (GV)	<10						<10	<10			<10	<10	<10	<10	
2-Hexanone ( $\mu\text{g/L}$ )	50 (GV)	<10						<10	<10			<10	<10	<10	<10	
4-Methyl 2-pentanone ( $\mu\text{g/L}$ )	NS	<10						<10	<10			<10	<10	<10	<10	
Acetone ( $\mu\text{g/L}$ )	50 (GV)	16						16	11			8.6 J	<10	<10	<10	
Acrylonitrile ( $\mu\text{g/L}$ )	5	<20						<20	<25			<25	<25	<25	<25	
Benzene ( $\mu\text{g/L}$ )	1	<b>5.9</b>						<b>6.3</b>	<b>5.6</b>			8	<b>4.4</b>	<b>7.7</b>	7	
Bromochloromethane ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromodichloromethane ( $\mu\text{g/L}$ )	50 (GV)	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromoform ( $\mu\text{g/L}$ )	50 (GV)	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Bromomethane ( $\mu\text{g/L}$ )	5	<1						<1	<10			<5.0	<5.0	<5.0	<5.0	
Carbon disulfide ( $\mu\text{g/L}$ )	60 (GV)	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Carbon tetrachloride ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Chlorobenzene ( $\mu\text{g/L}$ )	5	1.3						<b>9.7</b>	<5.0			9.3	<b>5.2</b>	<b>10</b>	<b>10</b>	
Chloroethane ( $\mu\text{g/L}$ )	5	<b>7.3</b>						<b>21</b>	<b>15</b>			42	8.8	14	18	
Chloroform ( $\mu\text{g/L}$ )	7	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Chloromethane ( $\mu\text{g/L}$ )	5	<1						<1	<10			<10	<10	<10	<10	
cis-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
cis-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Dibromochloromethane ( $\mu\text{g/L}$ )	50 (GV)	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Dibromomethane ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Ethyl benzene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Iodomethane ( $\mu\text{g/L}$ )	5	<5						<5	<10			<5.0	<5.0	<5.0	<5.0	
Methylene Chloride ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<10	<10	<10	<10	
Styrene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Tetrachloroethene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Toluene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,2-Dichloroethene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,3-Dichloropropene ( $\mu\text{g/L}$ )	0.4**	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
trans-1,4-Dichloro-2-butene ( $\mu\text{g/L}$ )	5	<5						<5	<10			<10	<10	<10	<10	
Trichloroethene ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Trichlorofluoromethane ( $\mu\text{g/L}$ )	5	<1						<1	<5.0			<5.0	<5.0	<5.0	<5.0	
Vinyl Acetate ( $\mu\text{g/L}$ )	NS	<5						<5	<10			<10	<10	<10	<10	
Vinyl Chloride ( $\mu\text{g/L}$ )	2	<1						<1	<10			<10	<10	<10	<10	
Xylenes (Total) ( $\mu\text{g/L}$ )	5	4.2						<b>85</b>	<b>15</b>			<b>72.6</b>	<b>6.2</b>	<b>5.1</b>	<b>48</b>	
1,2-Dichloroethene - Total	5															

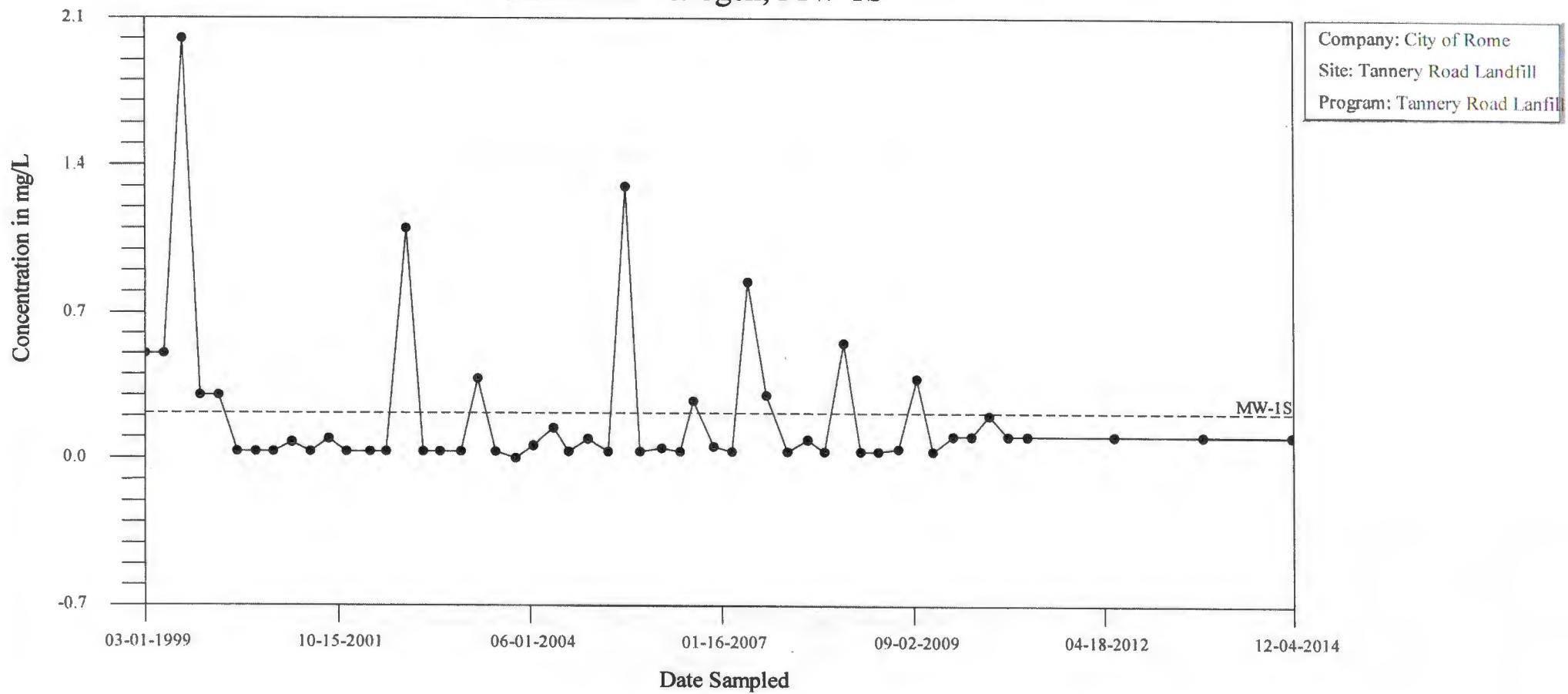
**Notes**

- 1) < indicates not detected at or above the listed value
- 2) NS indicates that no standard has been promulgated.
- 3) \* indicates that the sum of these two analytes may not exceed 500  $\mu\text{g/L}$ .
- 4) GV indicates that the value listed is a guidance value rather than a standard.
- 5) Values in bold exceeded the applicable NYSDEC ground water standard/guidance value.
- 6) \*\* Indicates standard applies to the sum of the isomers
- 7) J indicates estimated concentration based on QC data

## **APPENDIX B**

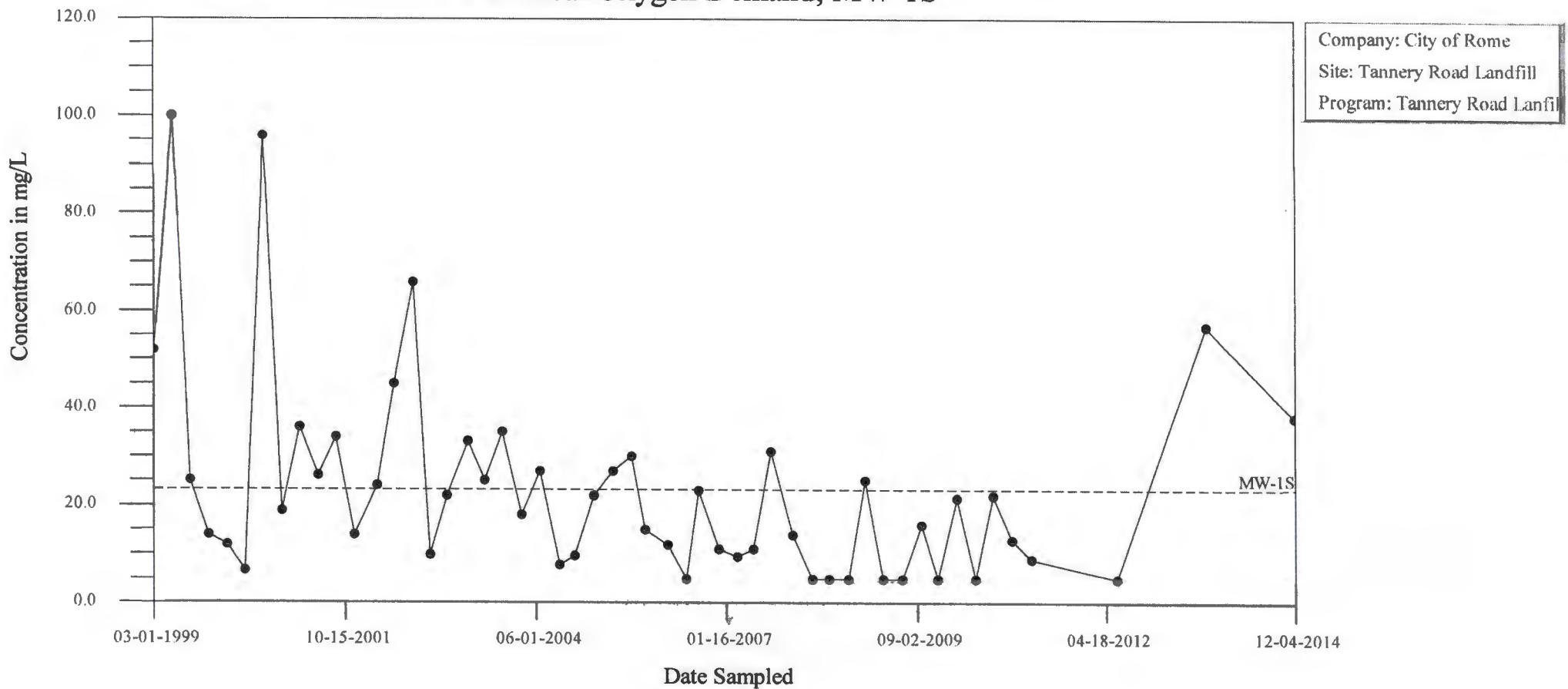
### **MONITORING WELL AND LEACHATE WELL TIME SERIES CONCENTRATION GRAPHS**

## Time-Series Plot Ammonia-Nitrogen, MW-1S

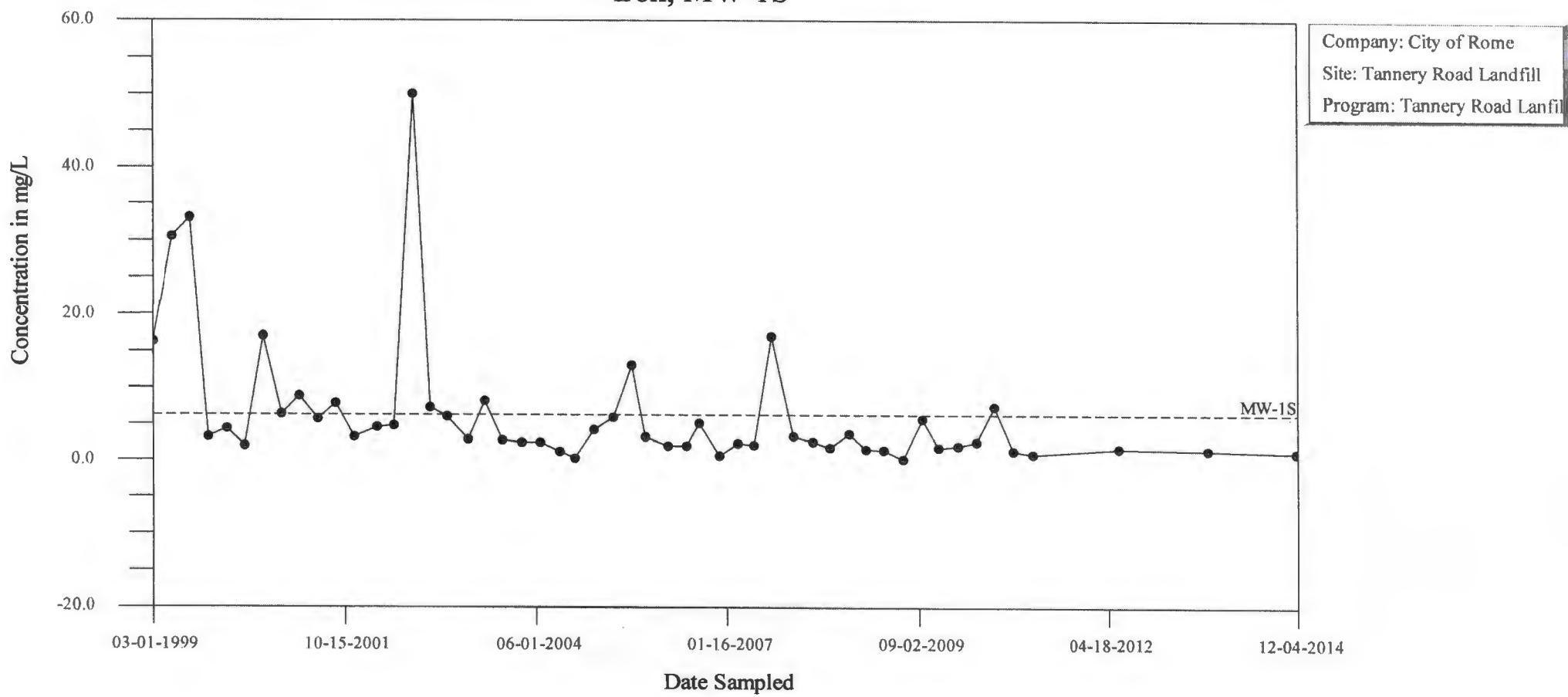


## Time-Series Plot

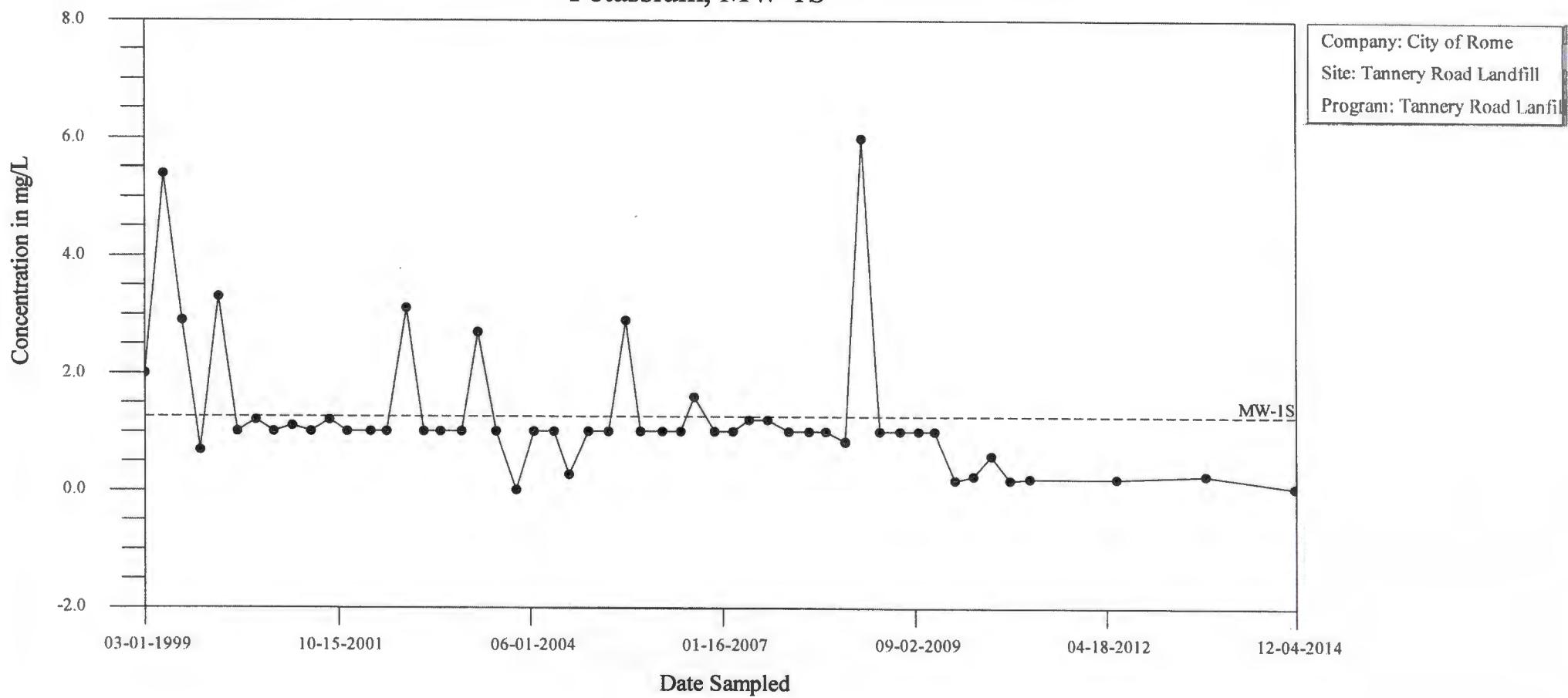
### Chemical Oxygen Demand, MW-1S



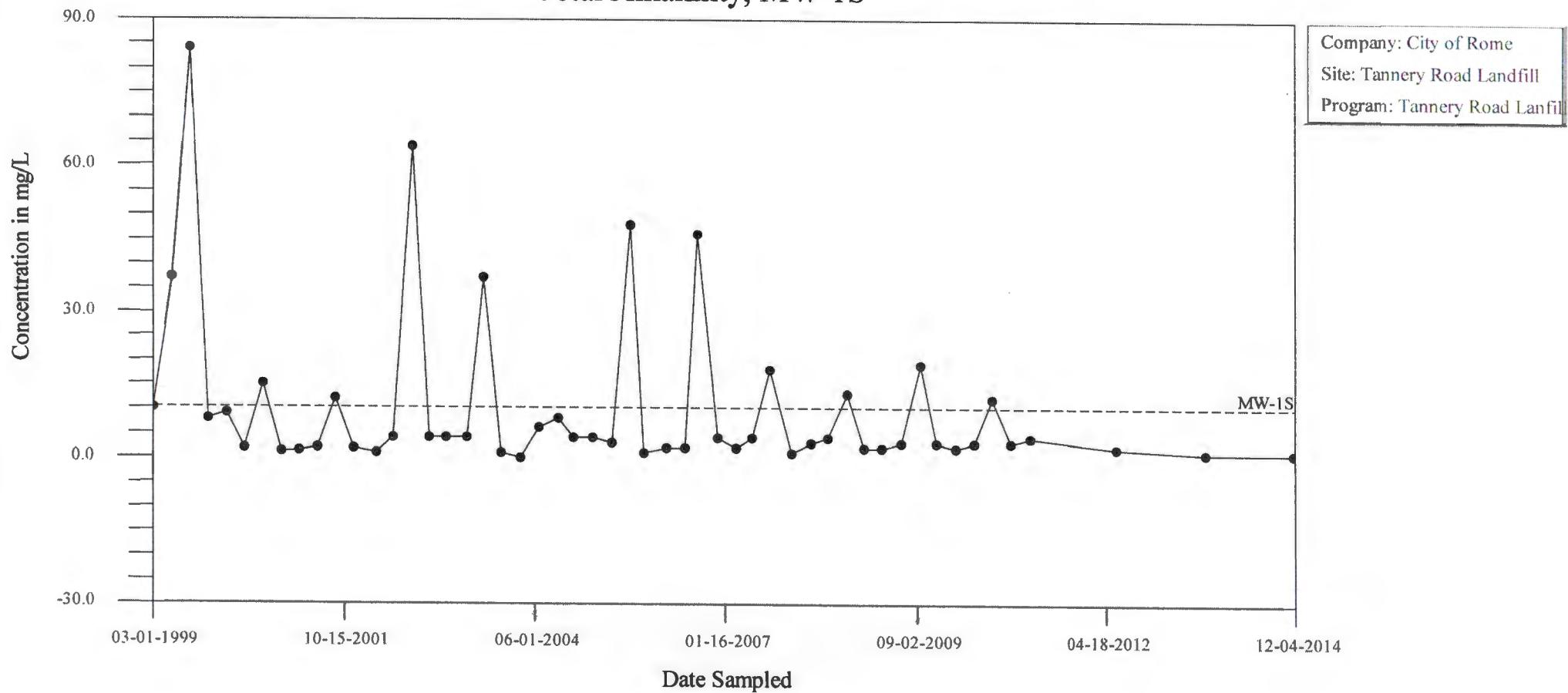
## Time-Series Plot Iron, MW-1S



## Time-Series Plot Potassium, MW-1S

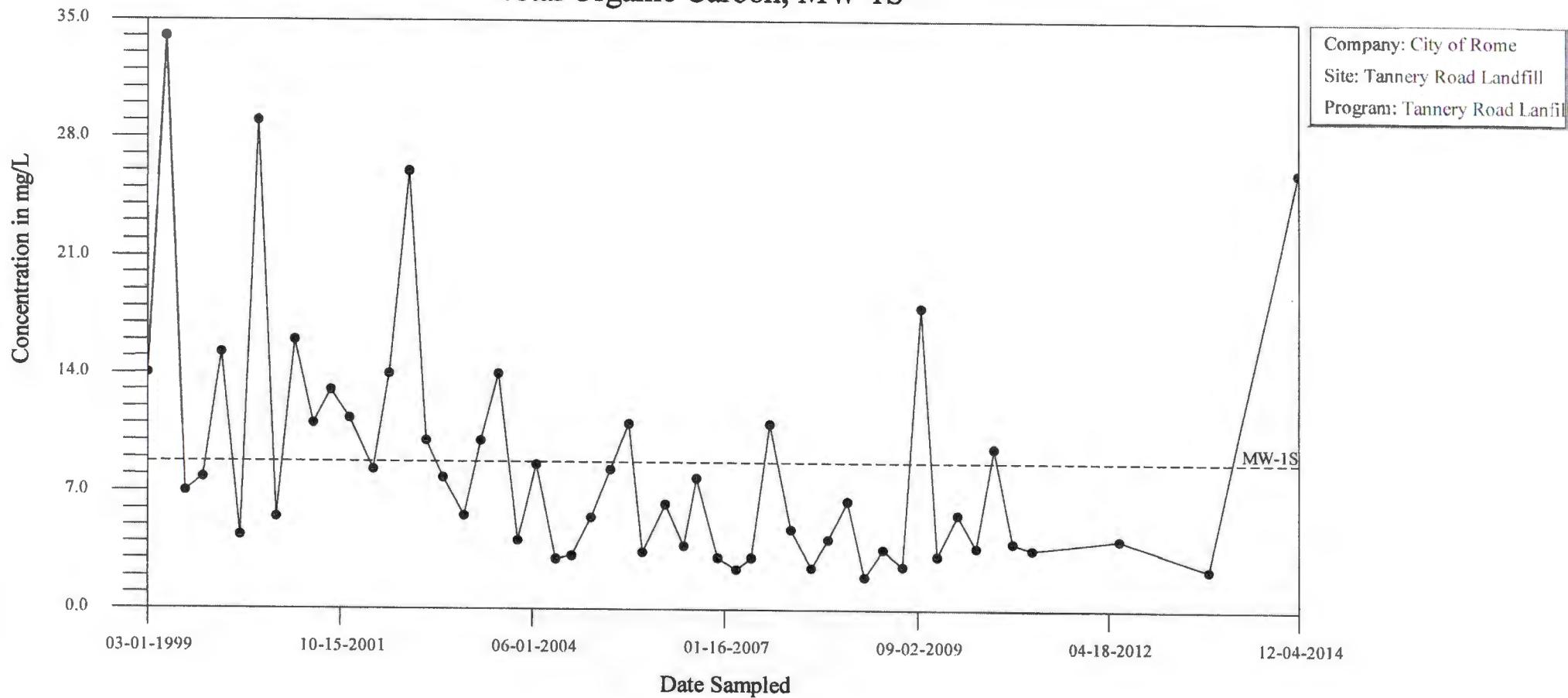


## Time-Series Plot Total Alkalinity, MW-1S



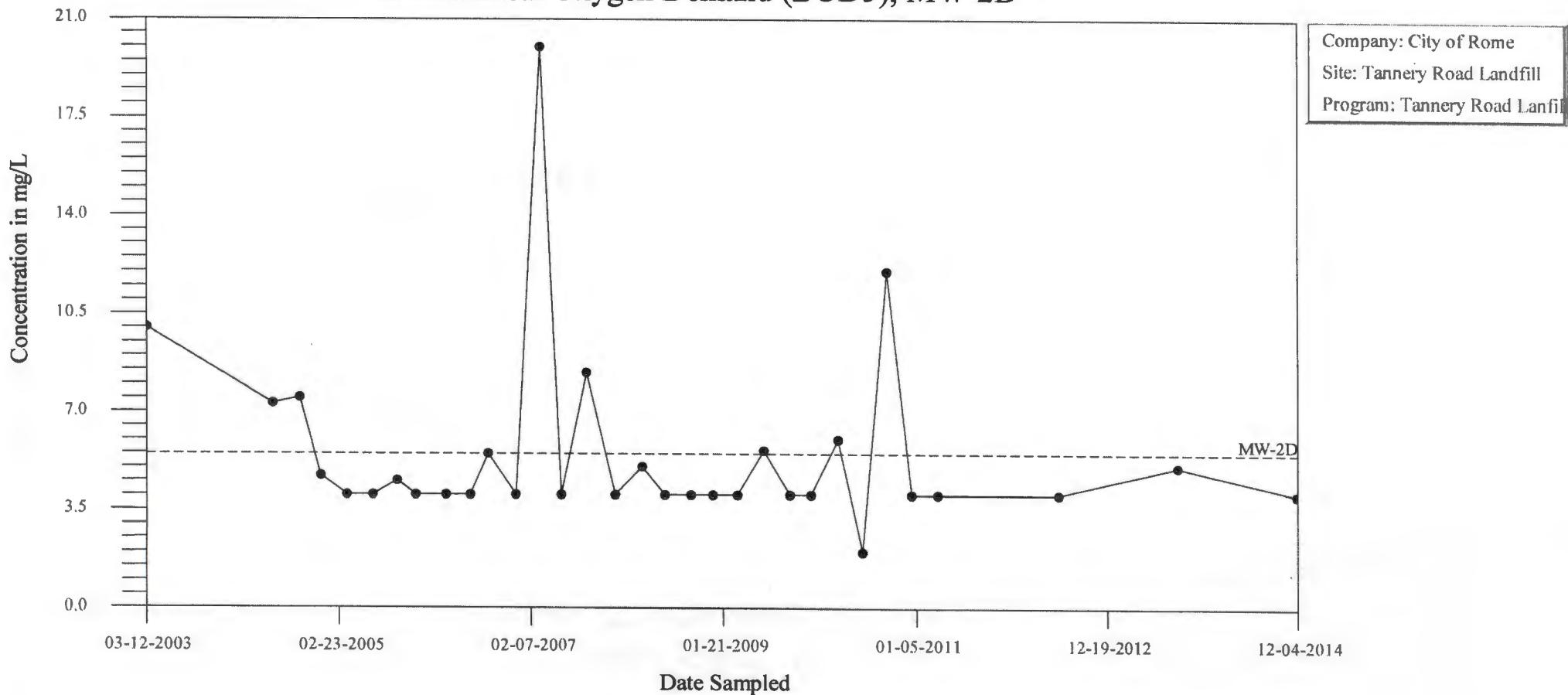
## Time-Series Plot

### Total Organic Carbon, MW-1S

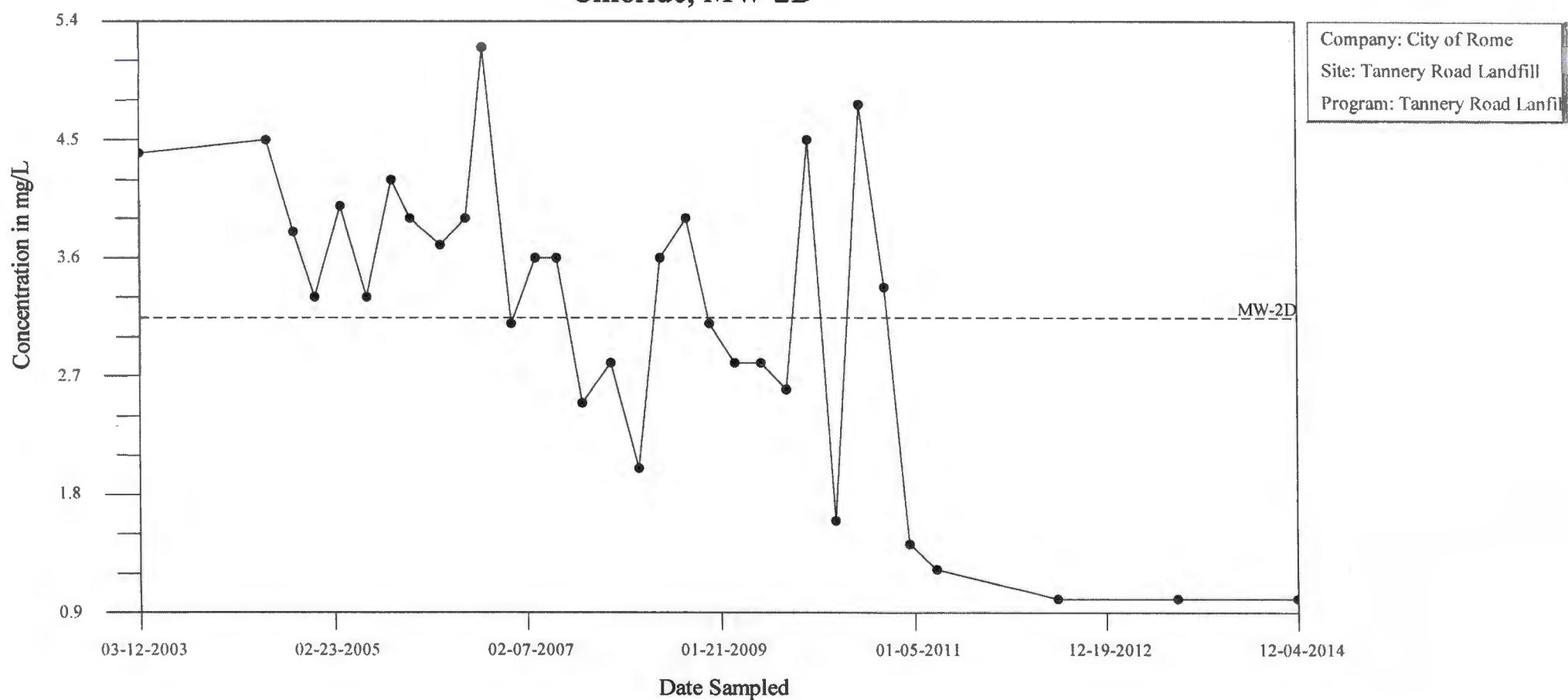


## Time-Series Plot

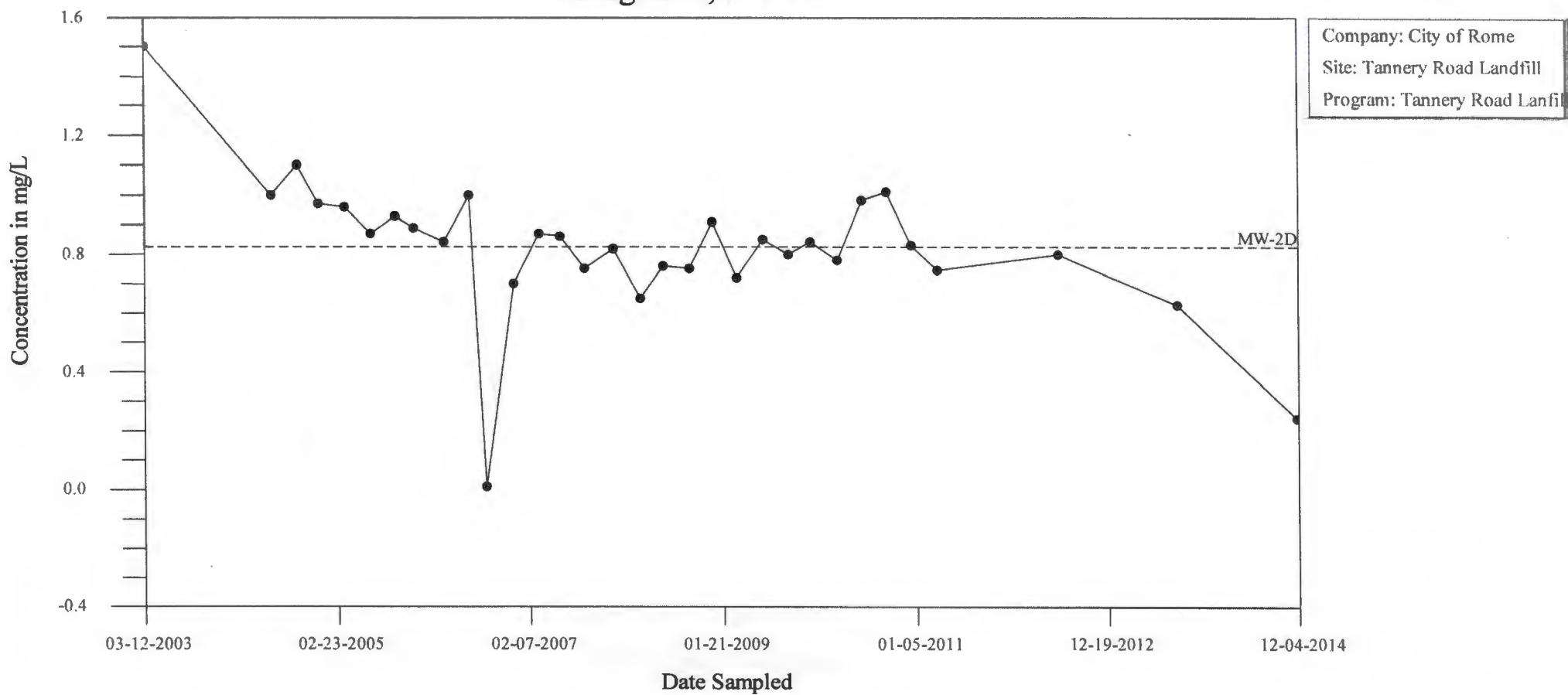
### Biochemical Oxygen Demand (BOD5), MW-2D



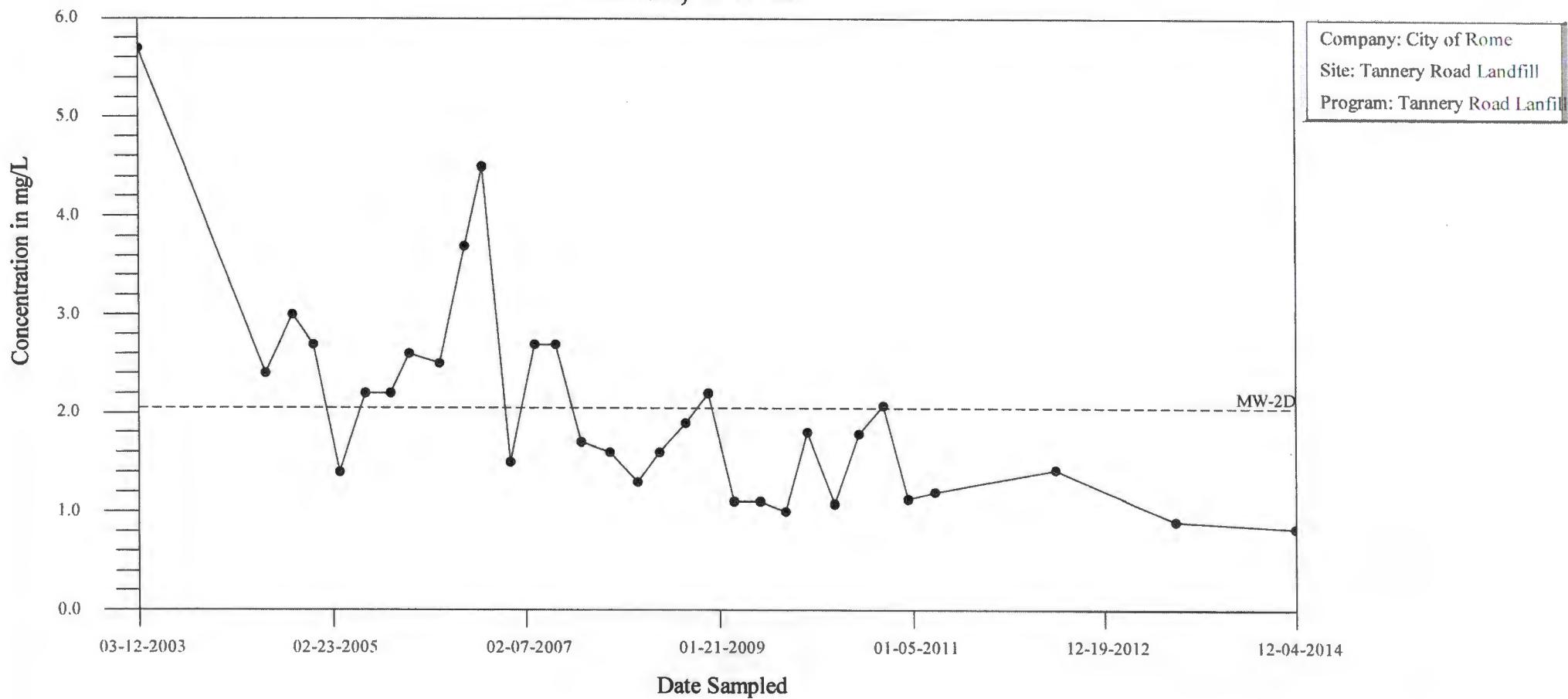
## Time-Series Plot Chloride, MW-2D



## Time-Series Plot Manganese, MW-2D

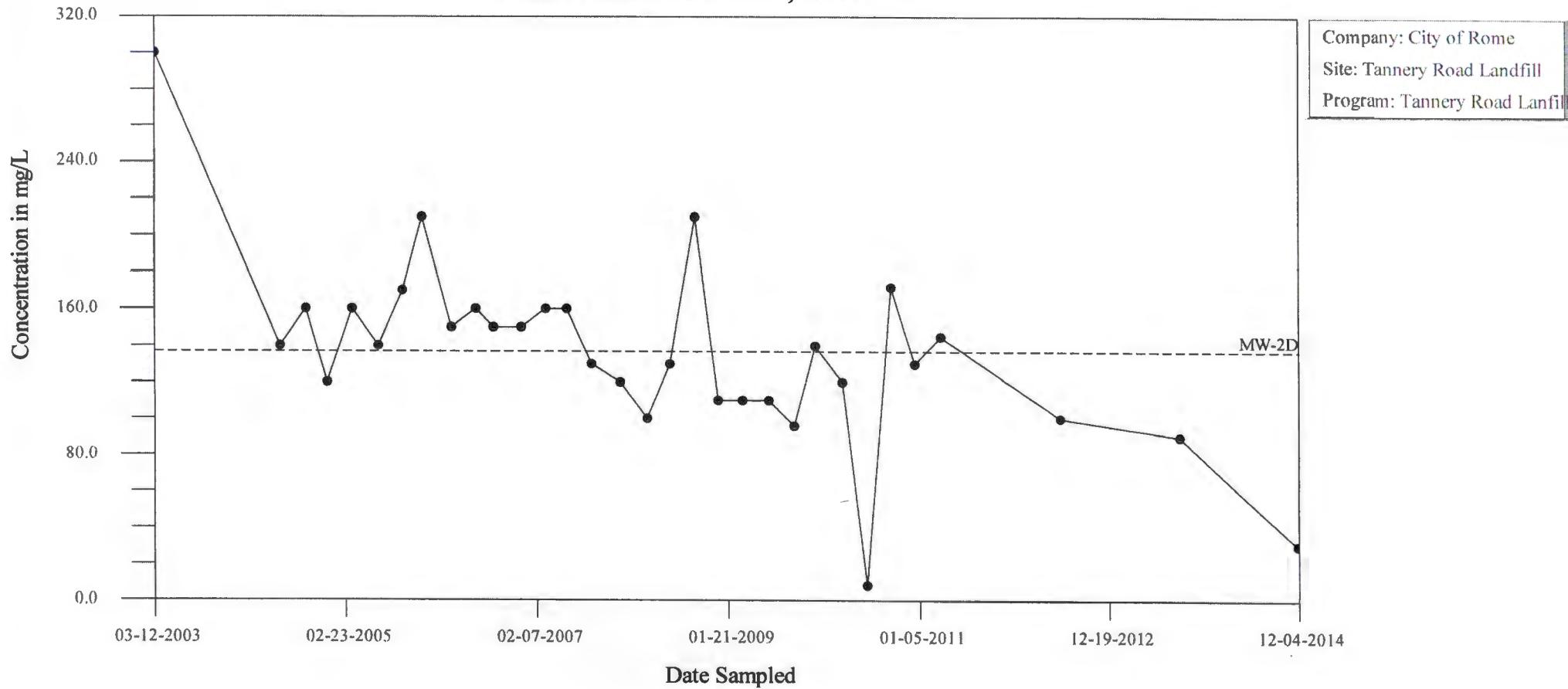


## Time-Series Plot Sodium, MW-2D

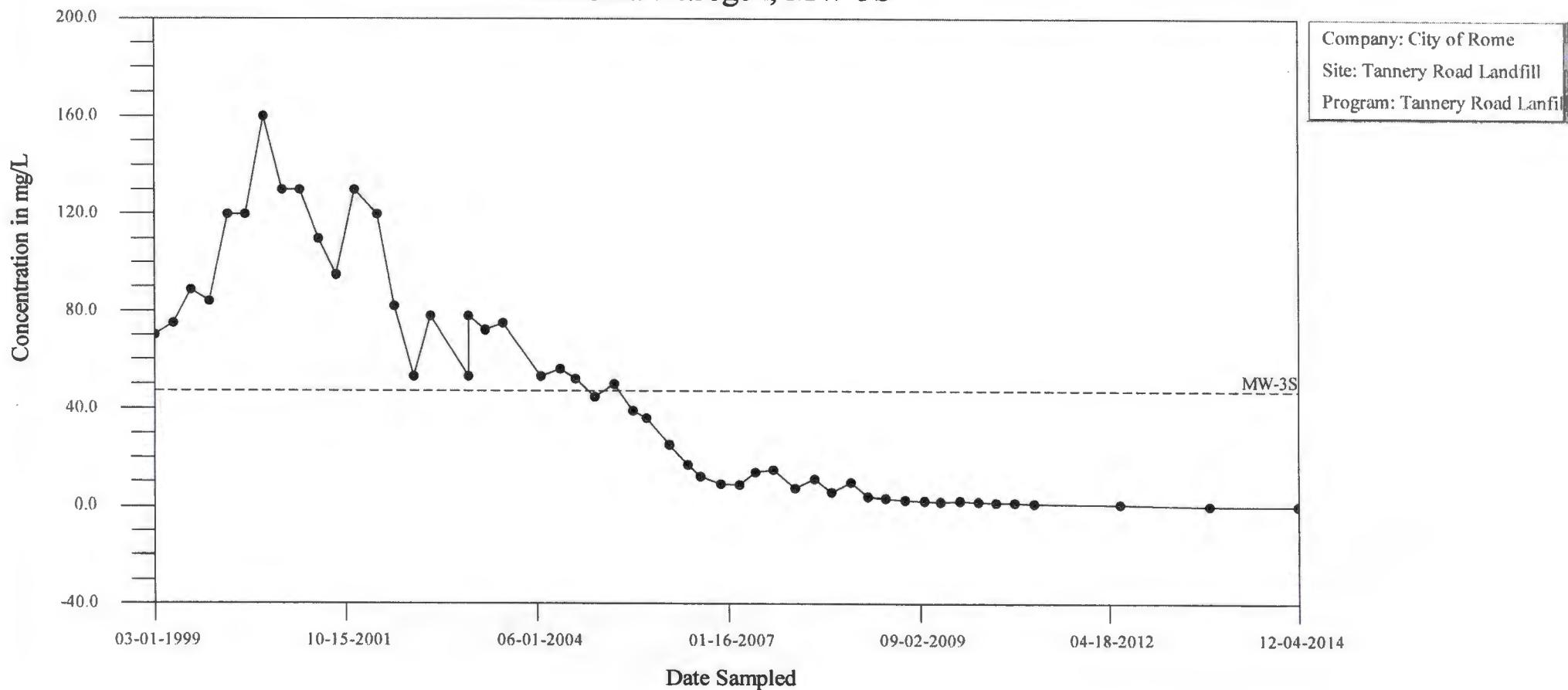


## Time-Series Plot

### Total Dissolved Solids, MW-2D

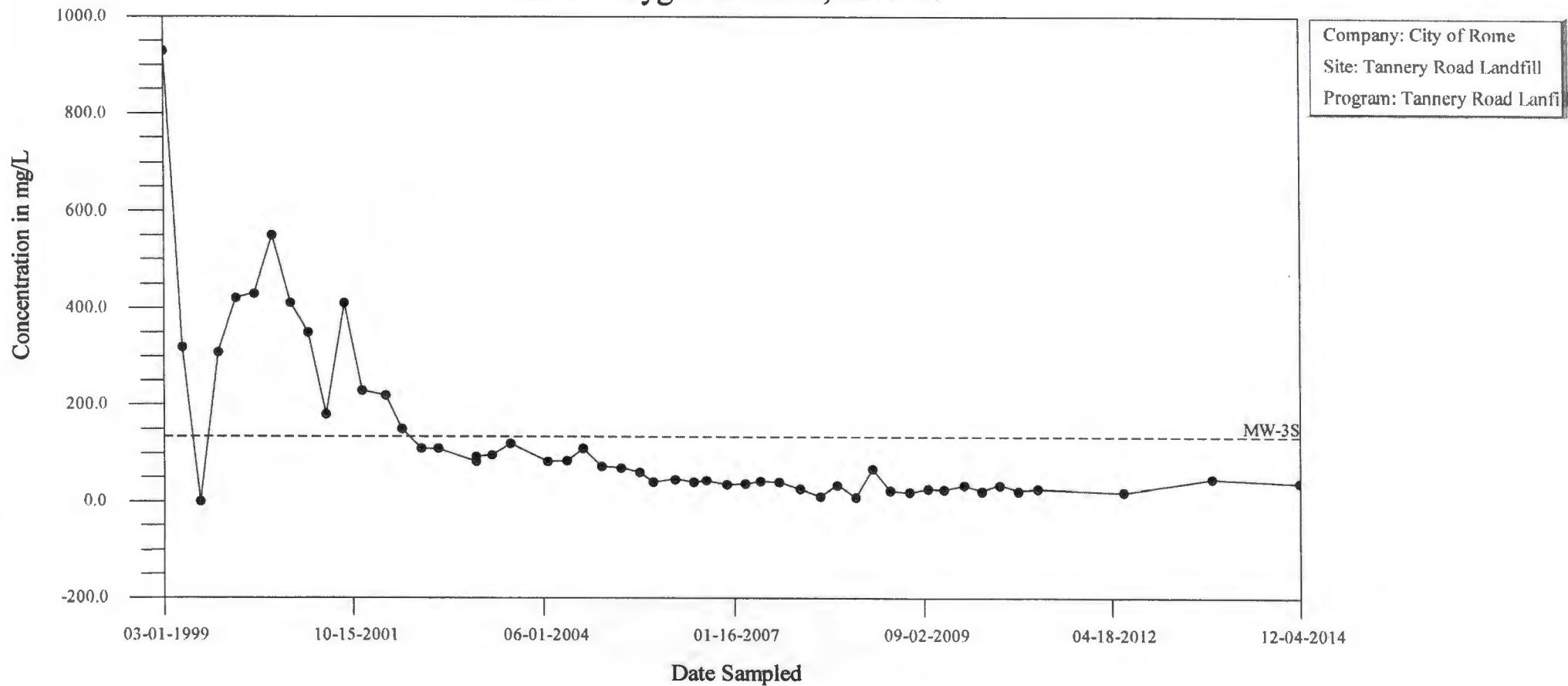


## Time-Series Plot Ammonia-Nitrogen, MW-3S

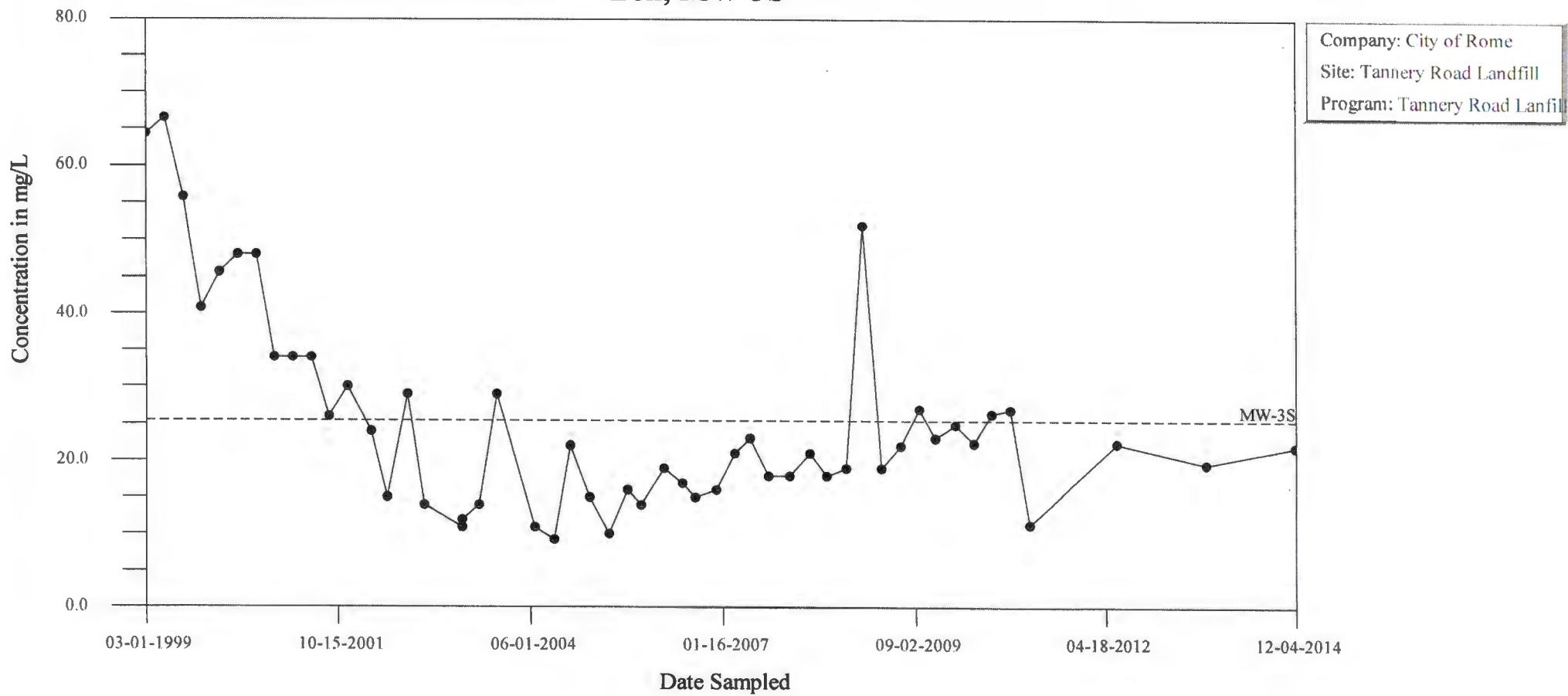


## Time-Series Plot

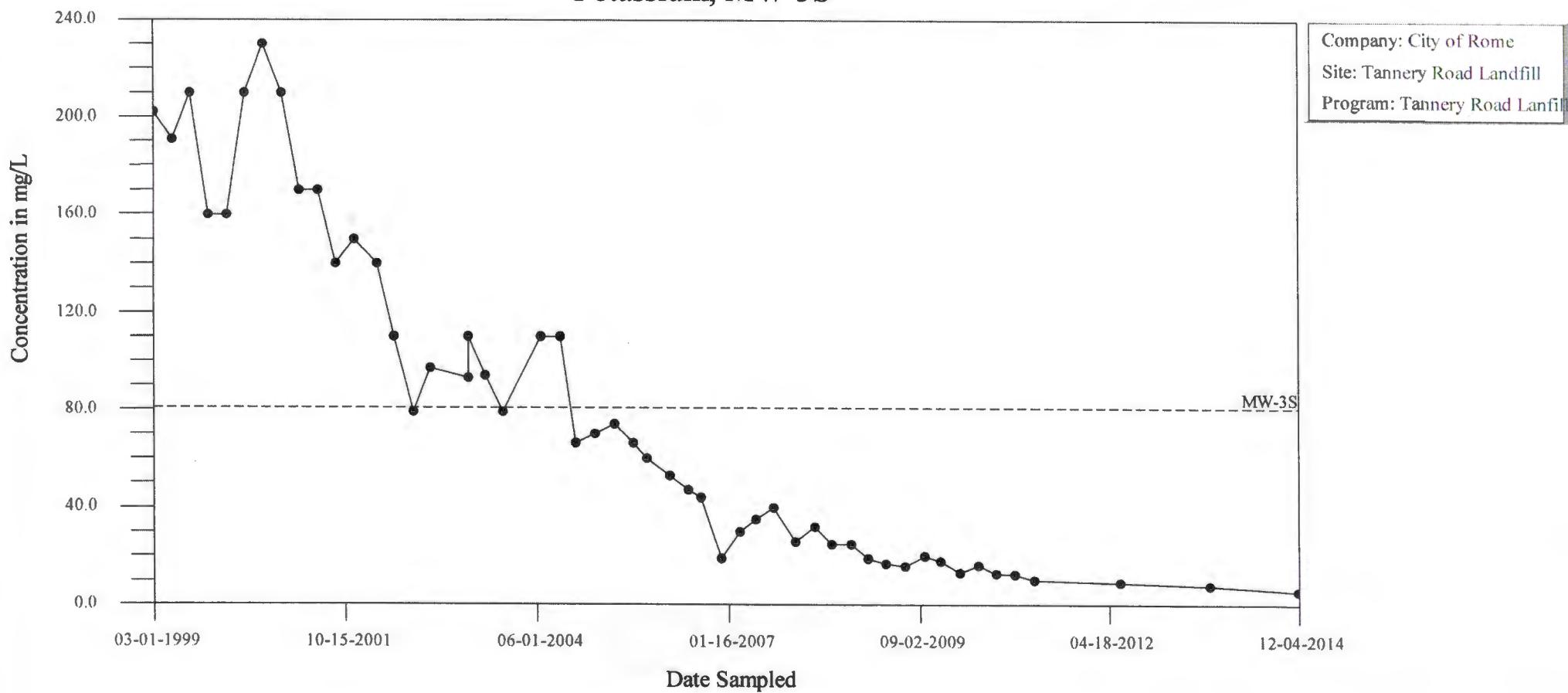
### Chemical Oxygen Demand, MW-3S



## Time-Series Plot Iron, MW-3S

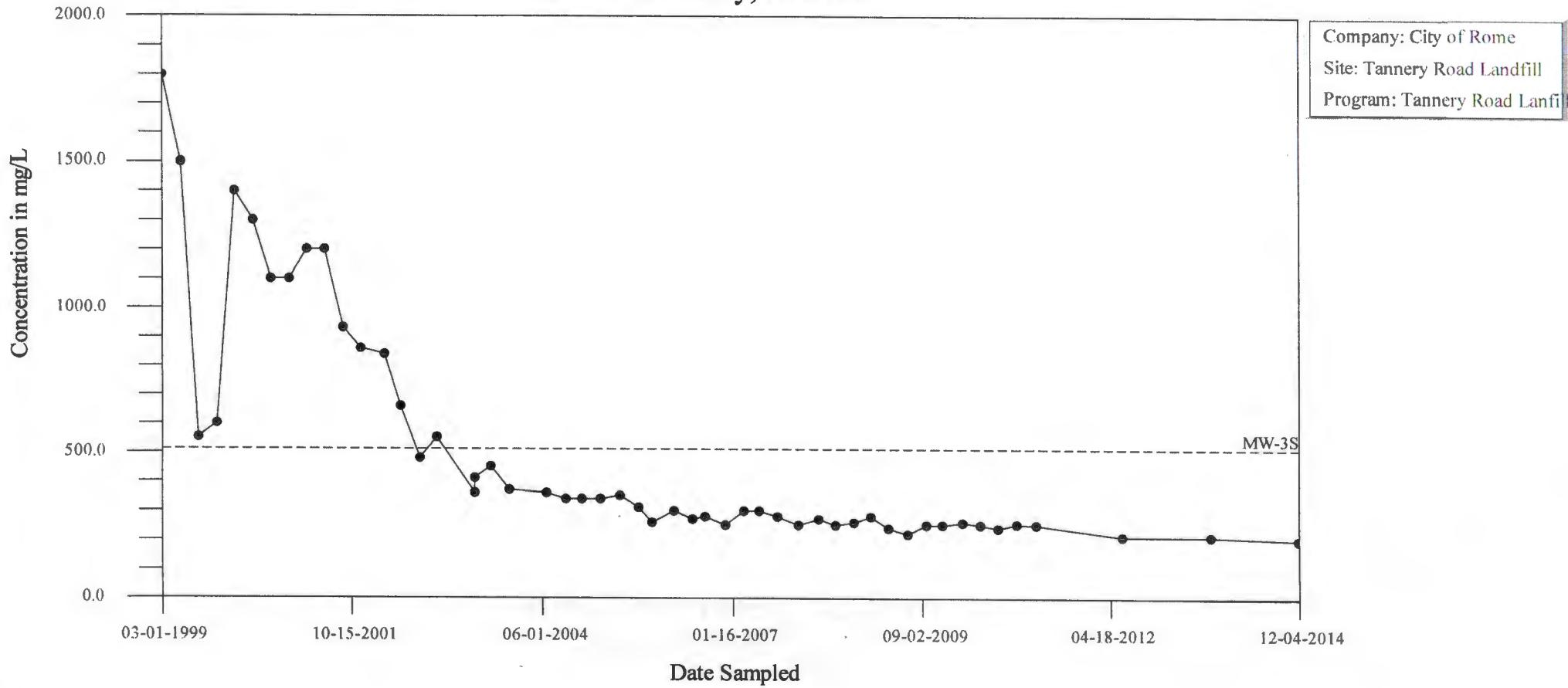


## Time-Series Plot Potassium, MW-3S

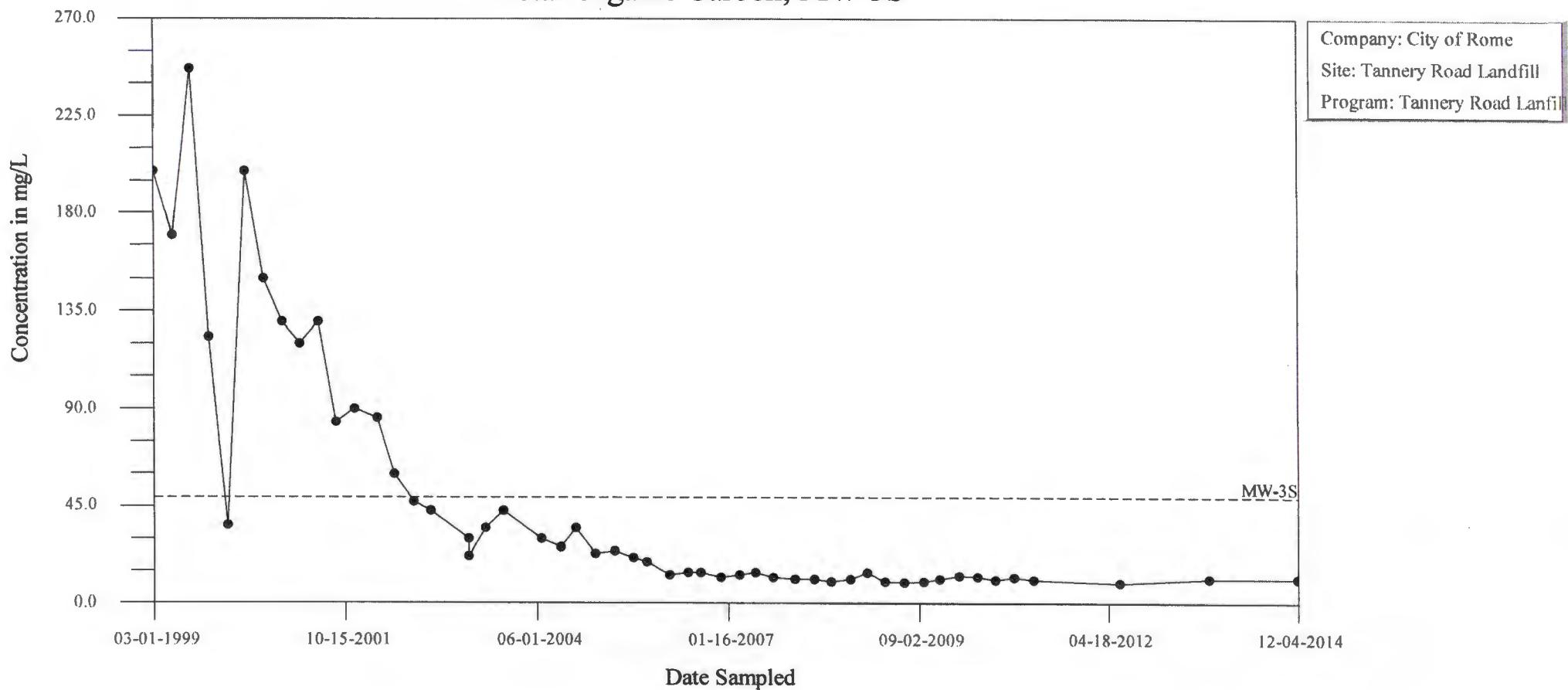


## Time-Series Plot

### Total Alkalinity, MW-3S

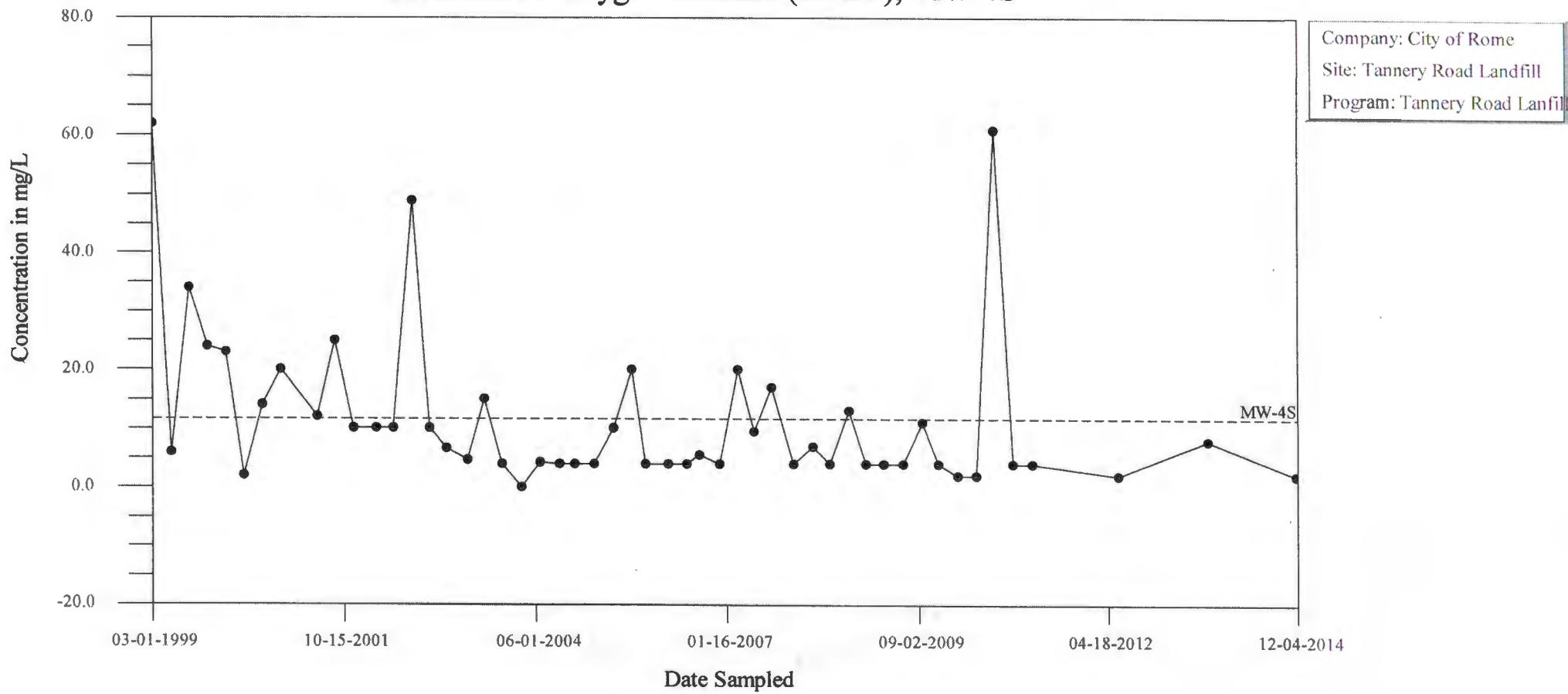


## Time-Series Plot Total Organic Carbon, MW-3S

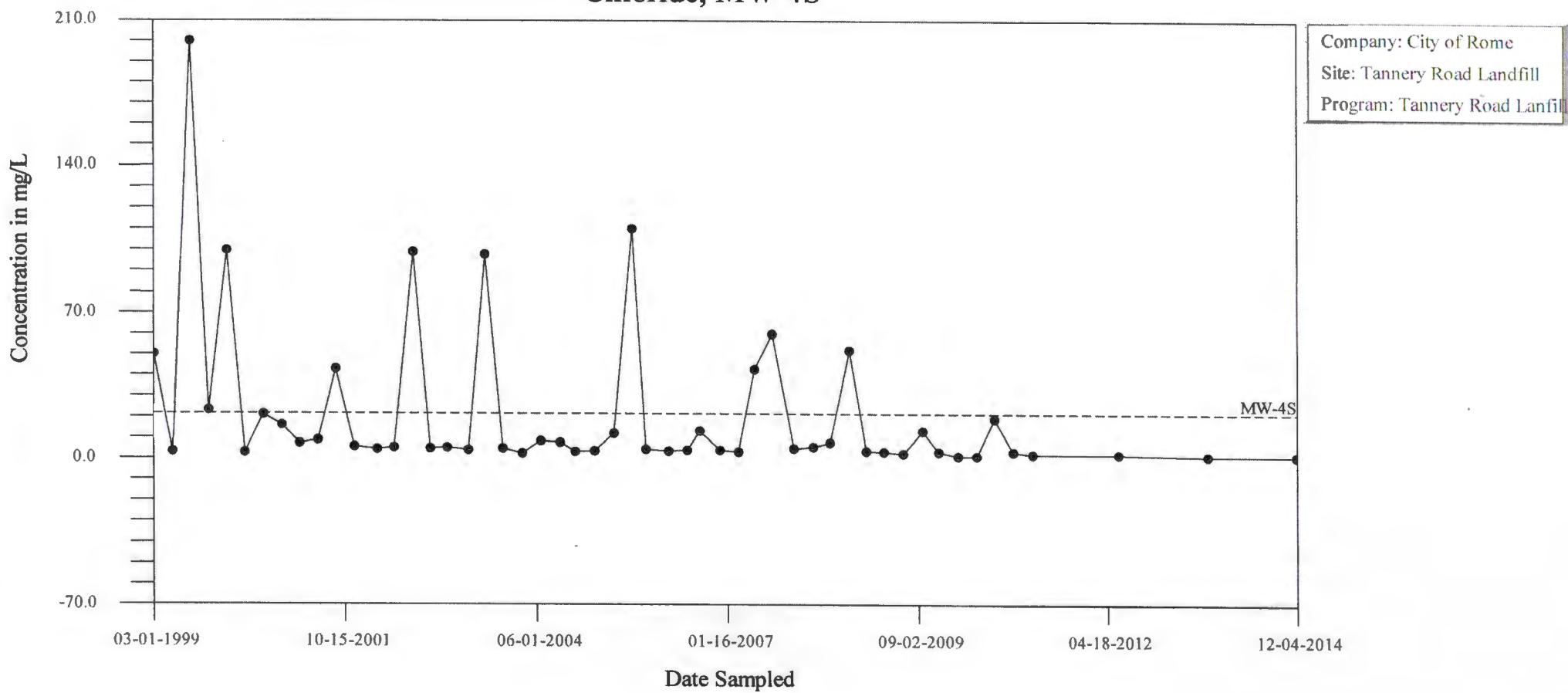


## Time-Series Plot

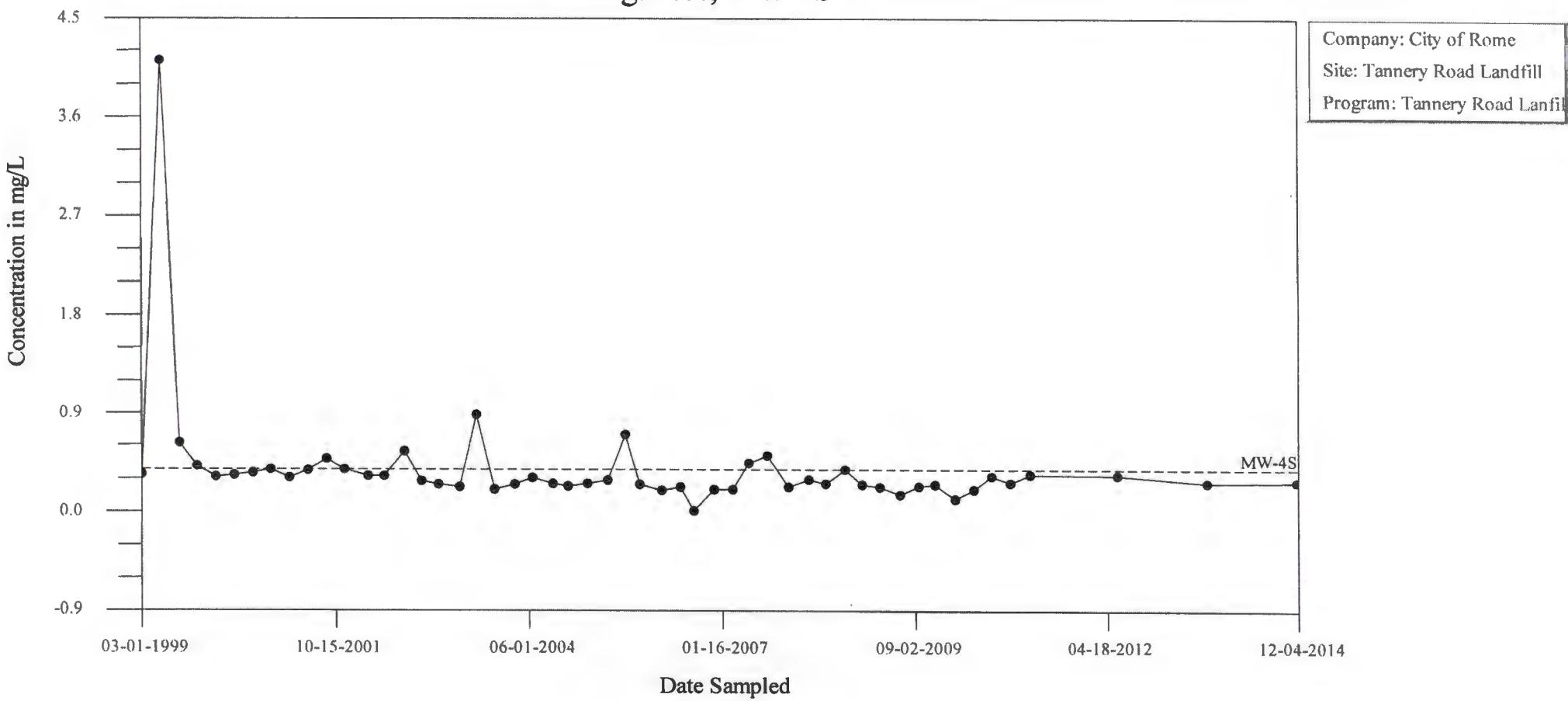
### Biochemical Oxygen Demand (BOD5), MW-4S



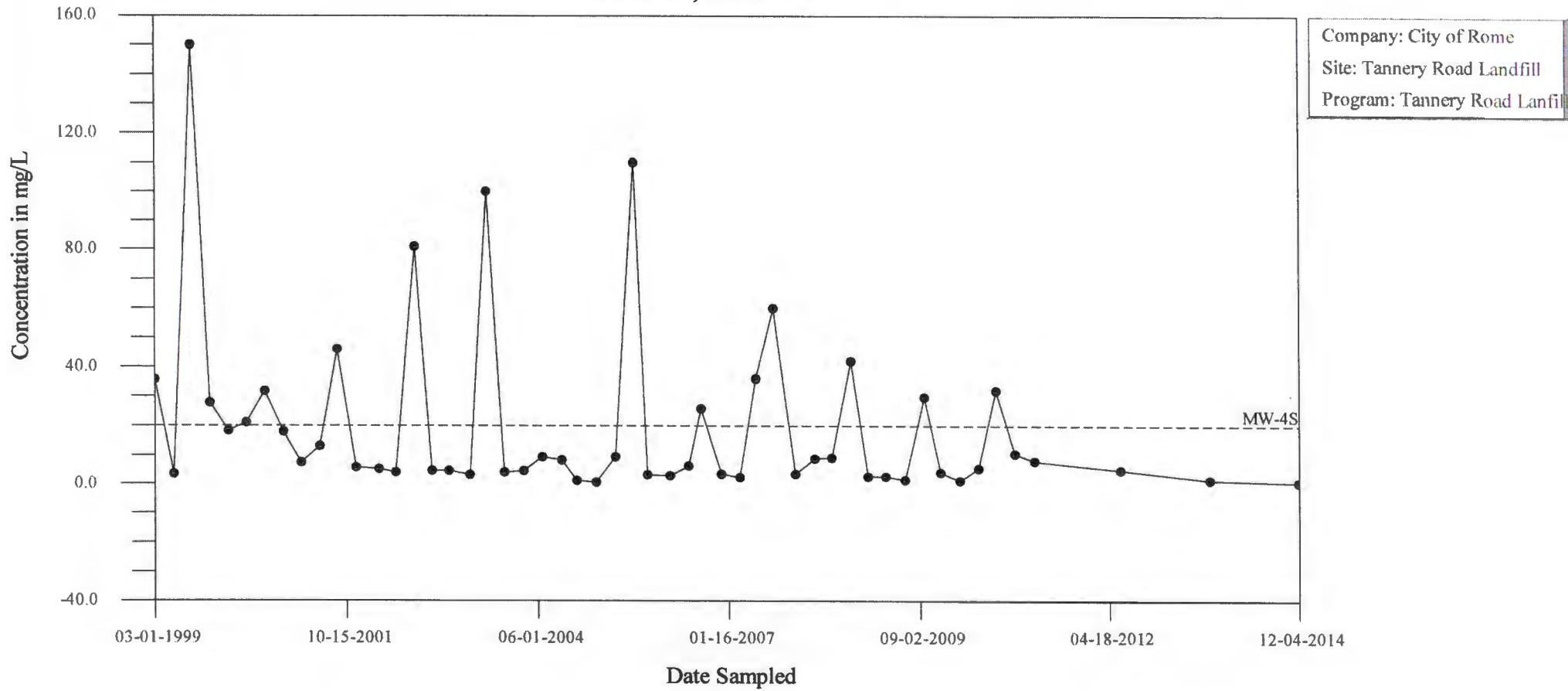
## Time-Series Plot Chloride, MW-4S



## Time-Series Plot Manganese, MW-4S

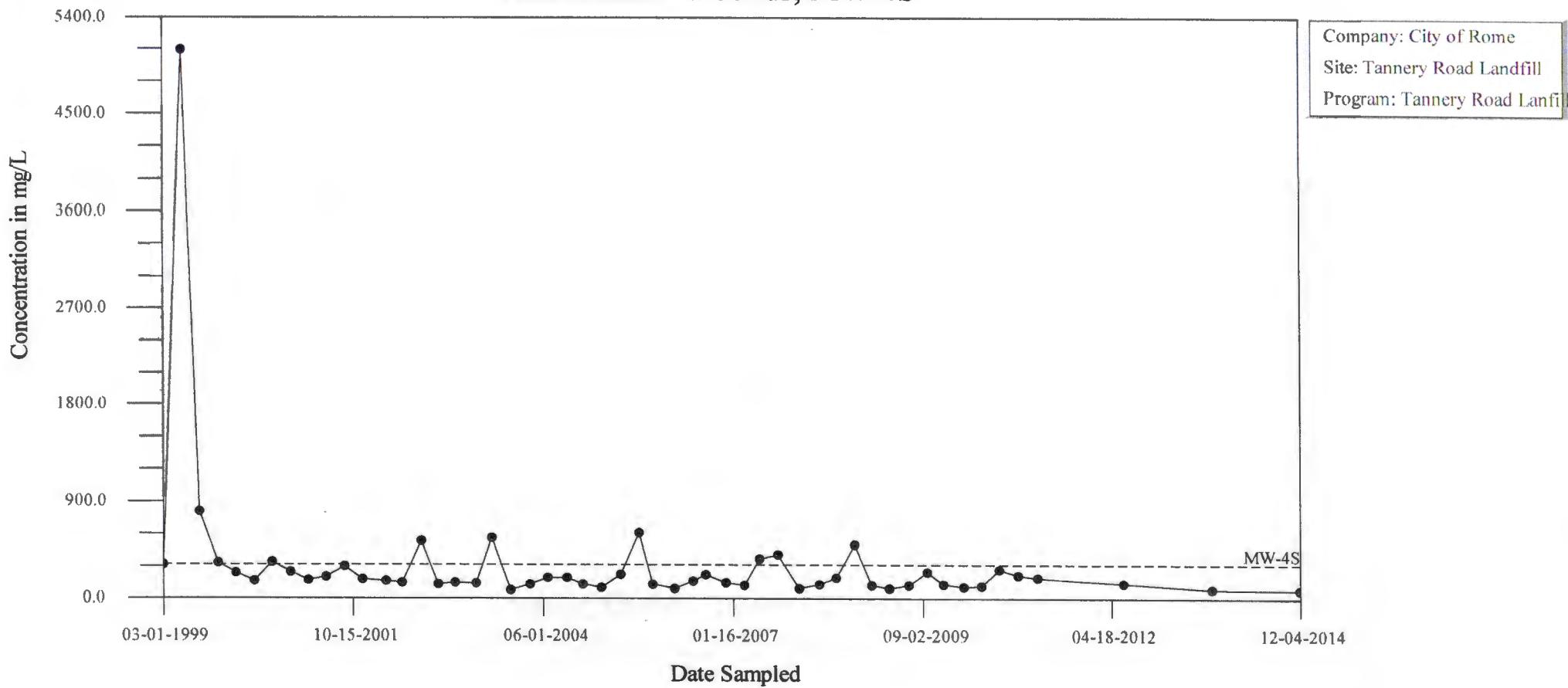


## Time-Series Plot Sodium, MW-4S



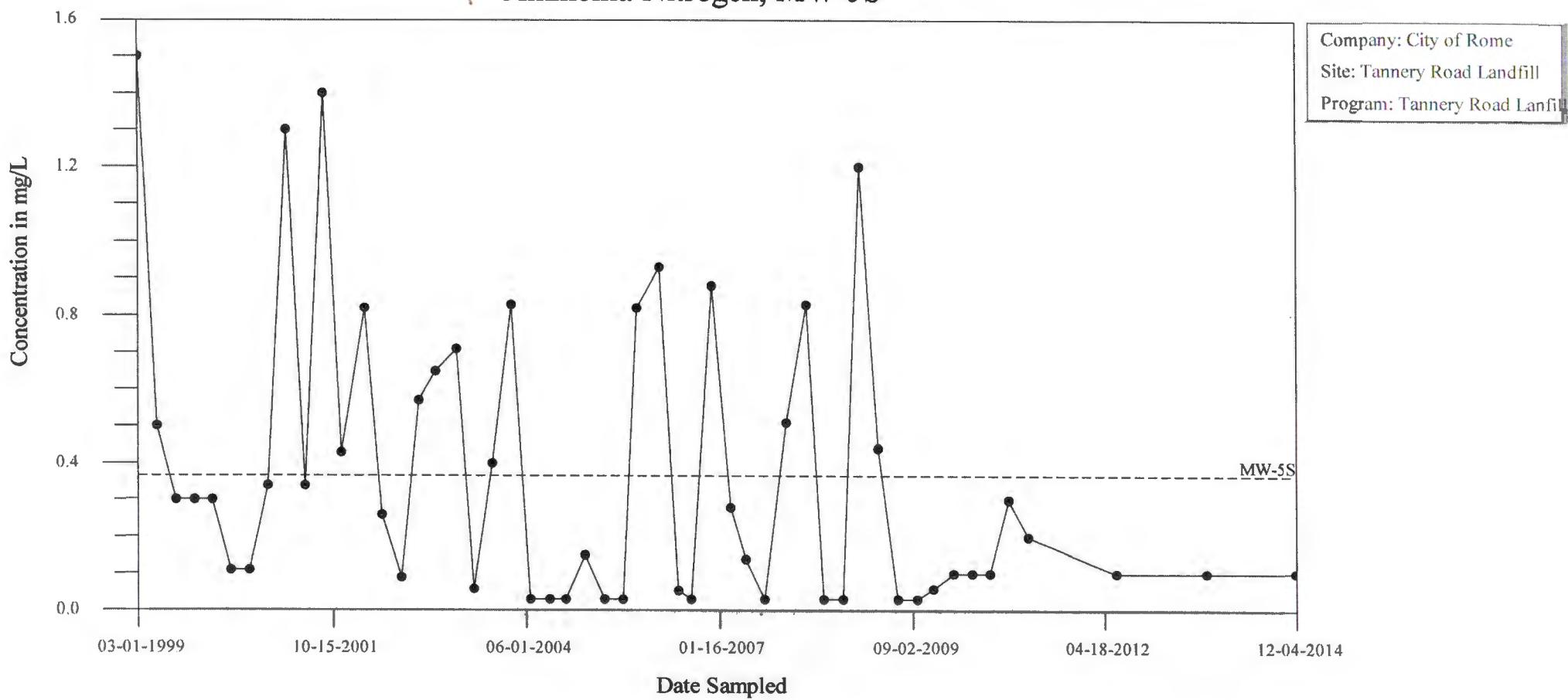
## Time-Series Plot

### Total Dissolved Solids, MW-4S



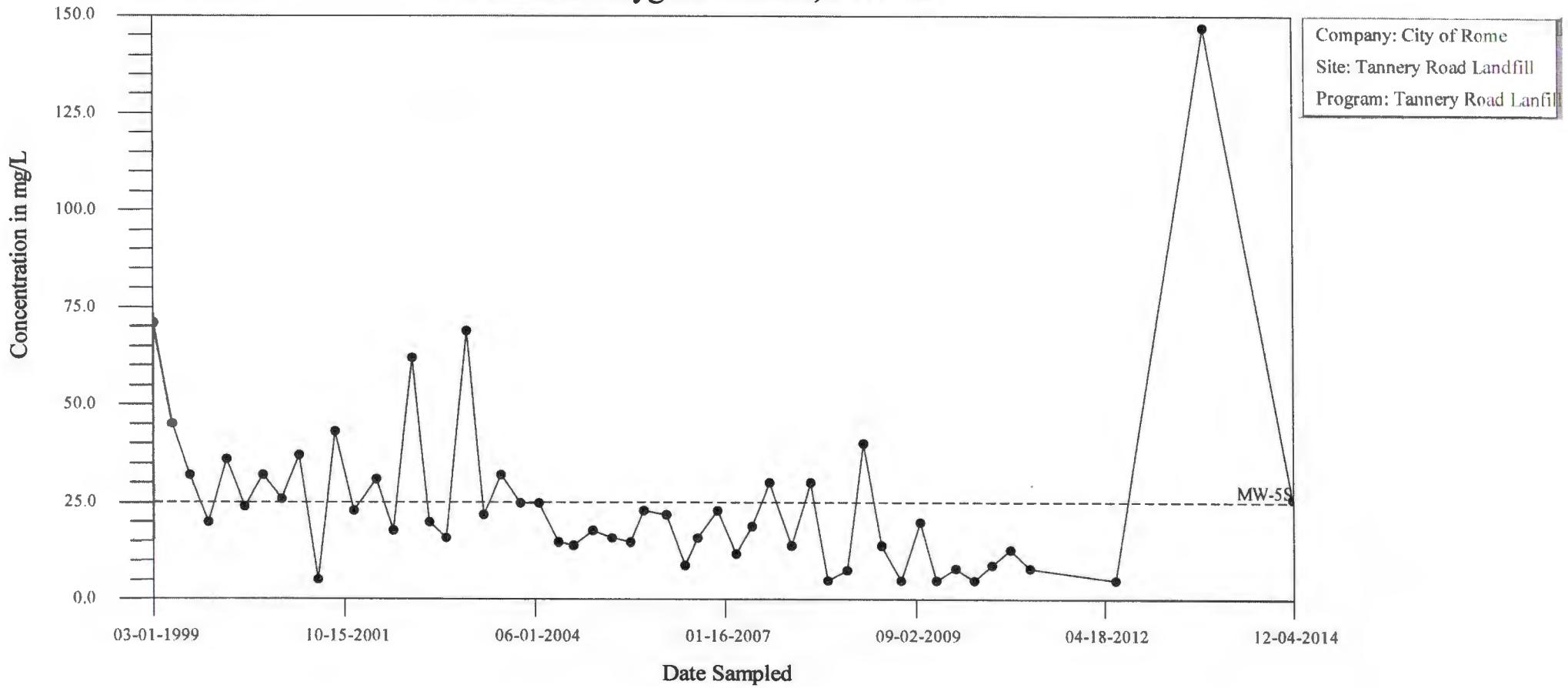
## Time-Series Plot

### Ammonia-Nitrogen, MW-5S

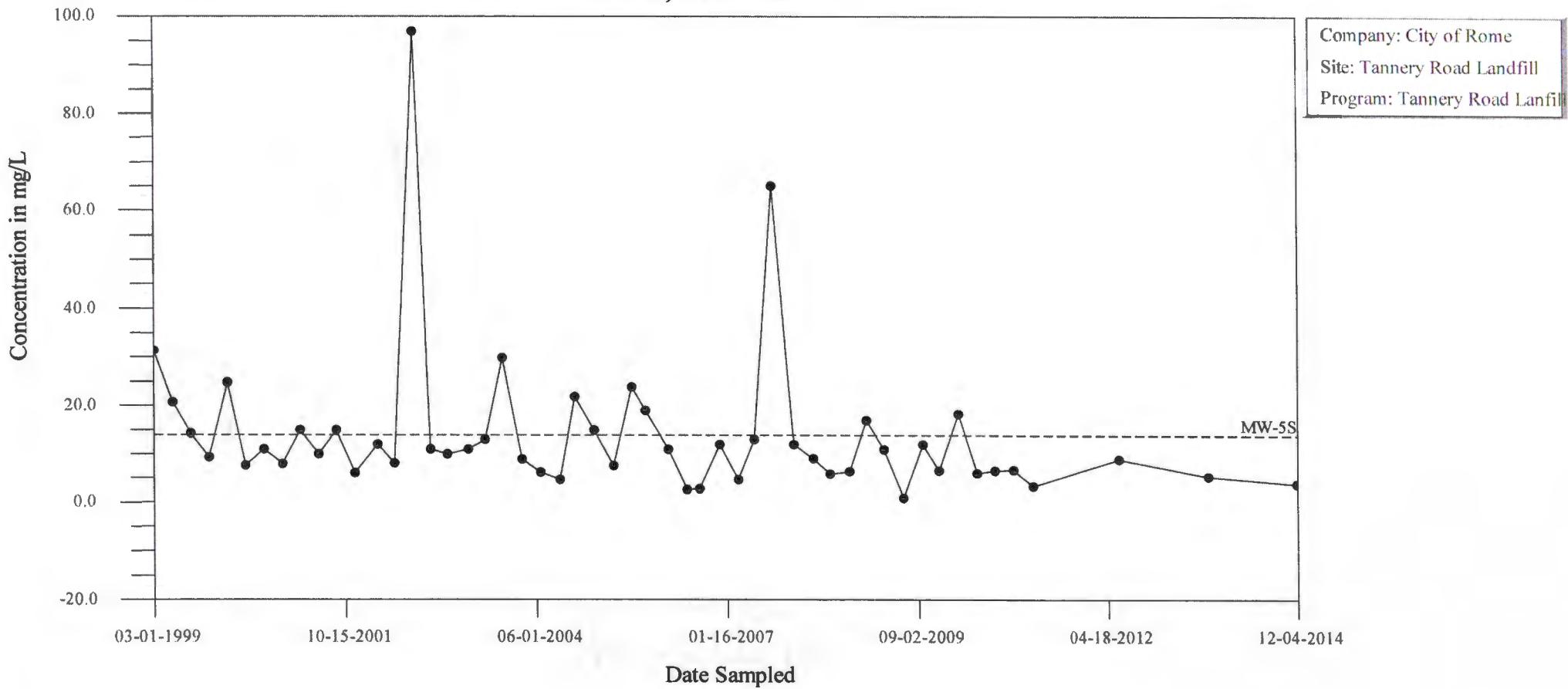


## Time-Series Plot

### Chemical Oxygen Demand, MW-5S

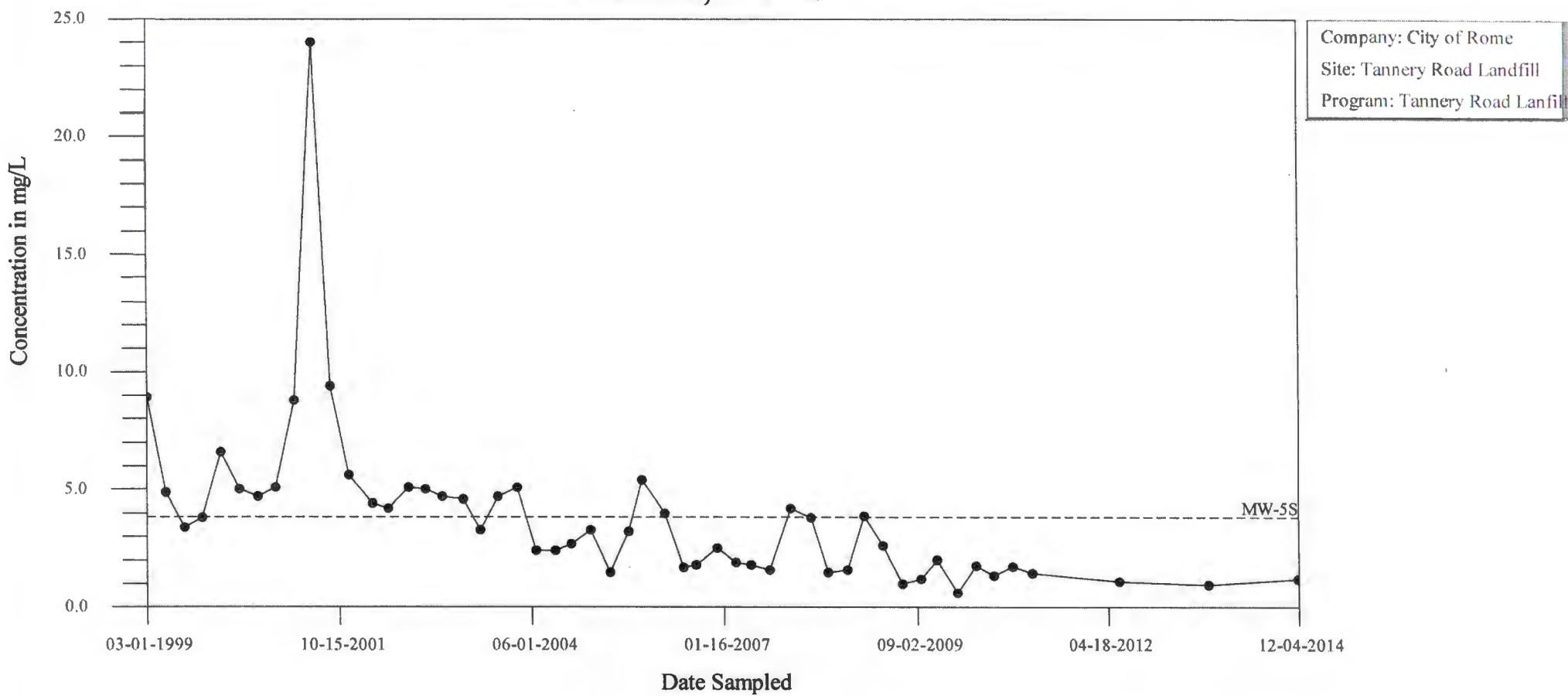


## Time-Series Plot Iron, MW-5S

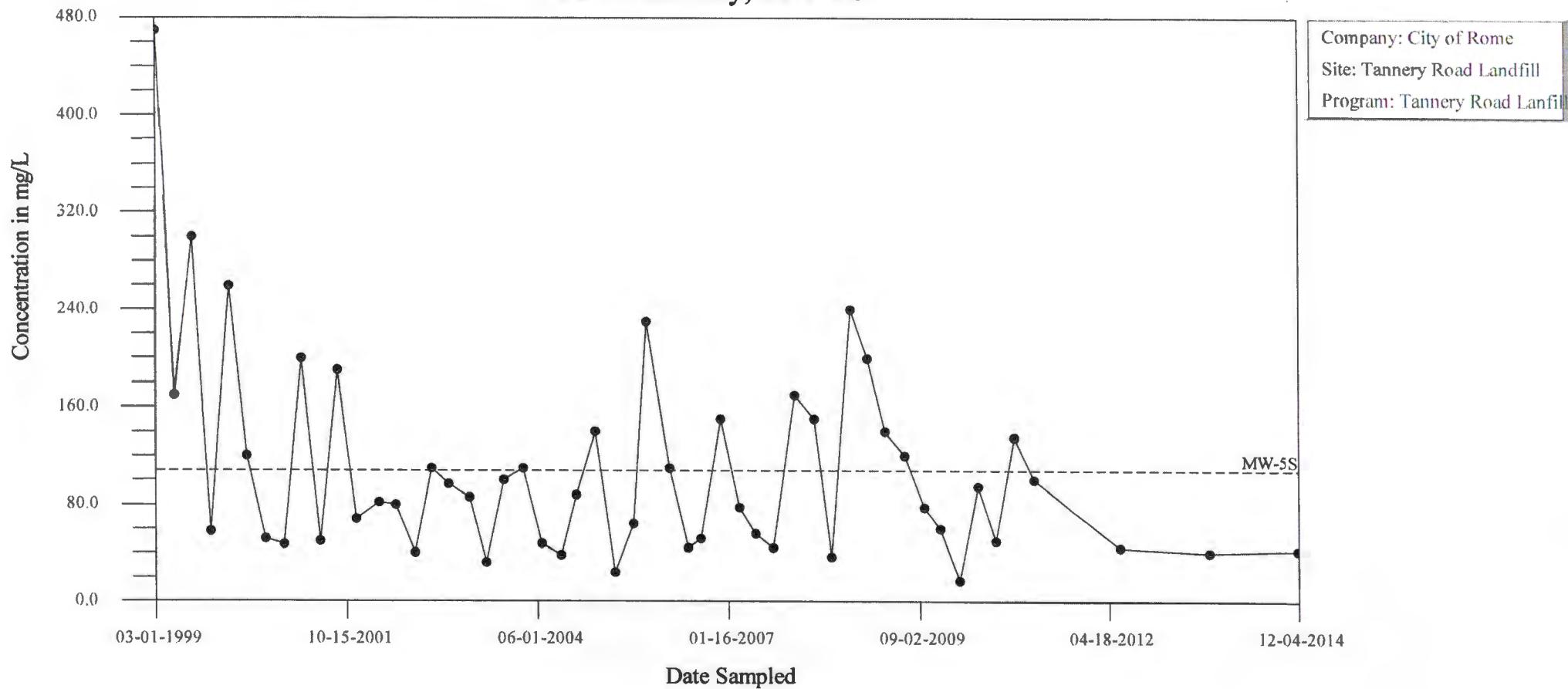


## Time-Series Plot

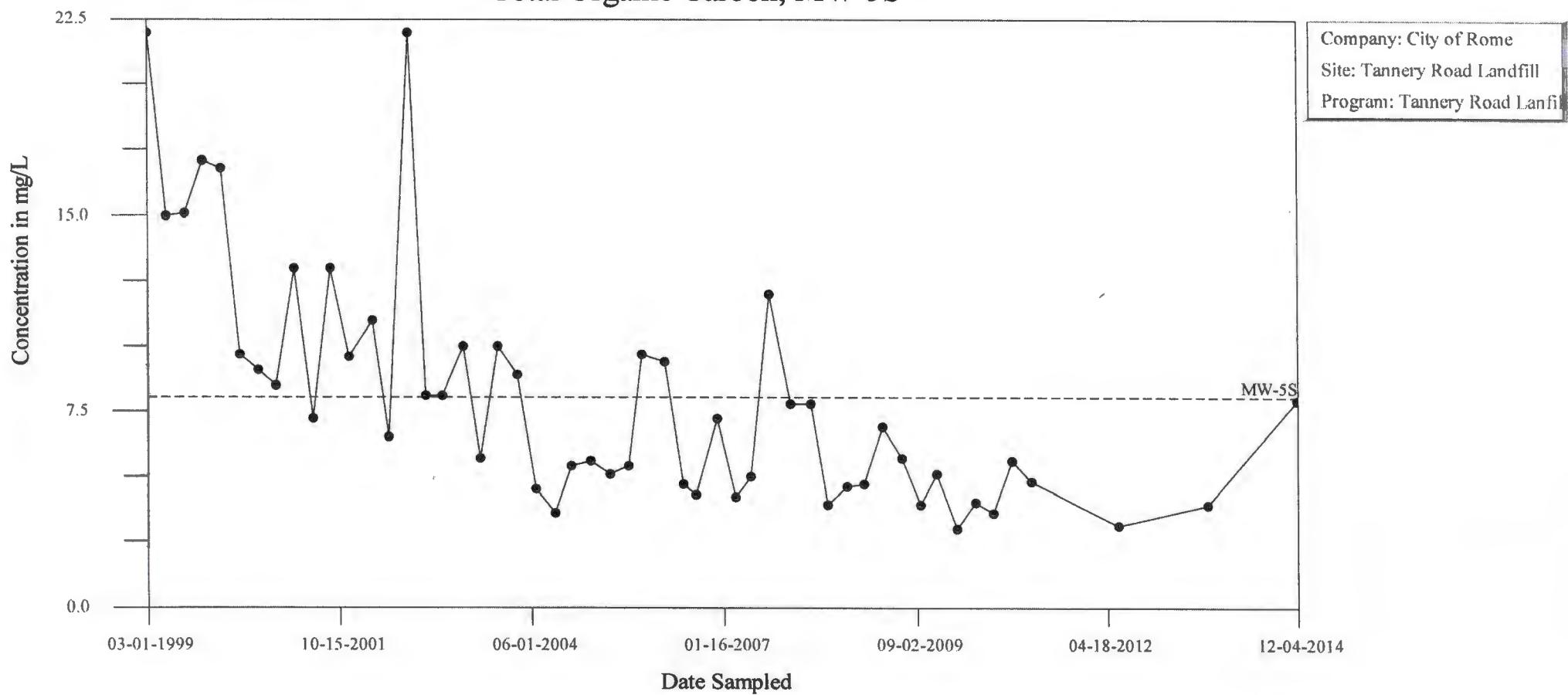
### Potassium, MW-5S



## Time-Series Plot Total Alkalinity, MW-5S

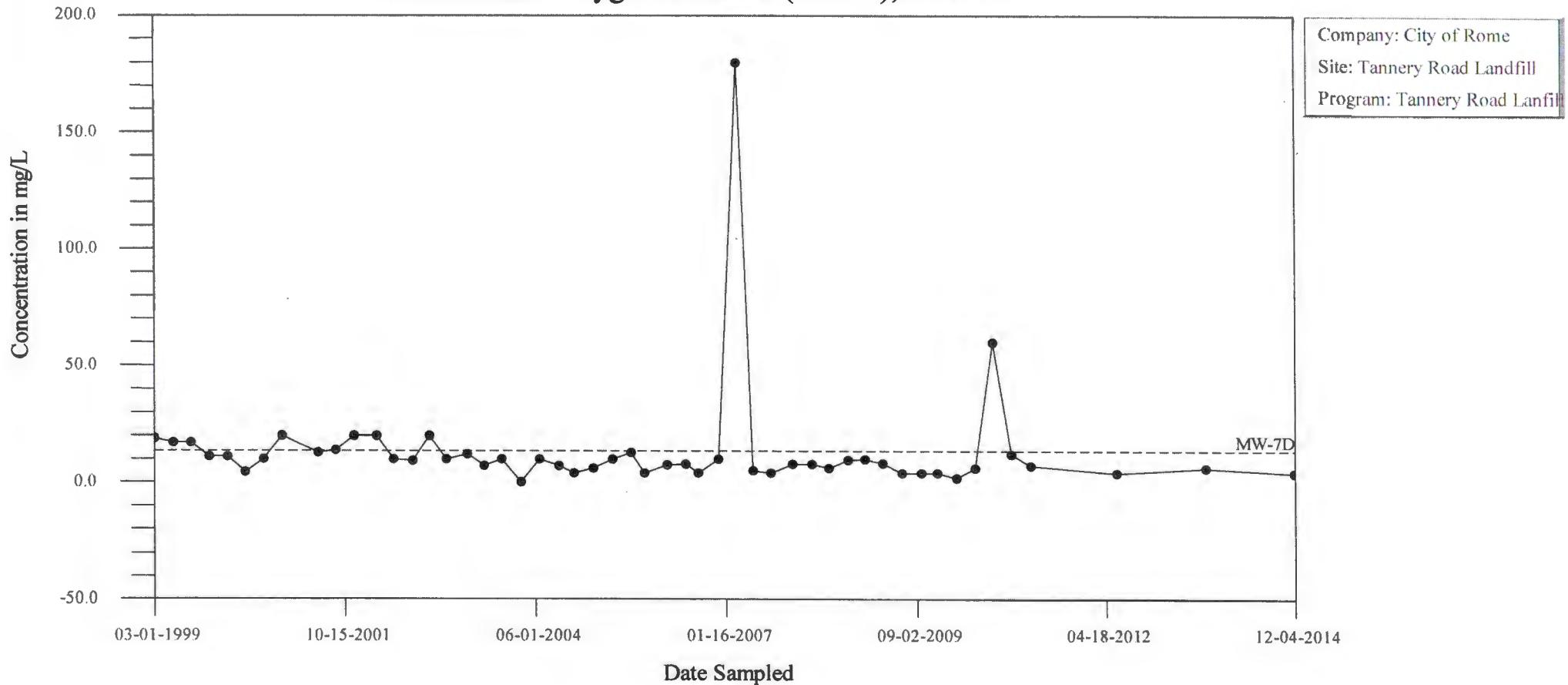


## Time-Series Plot Total Organic Carbon, MW-5S

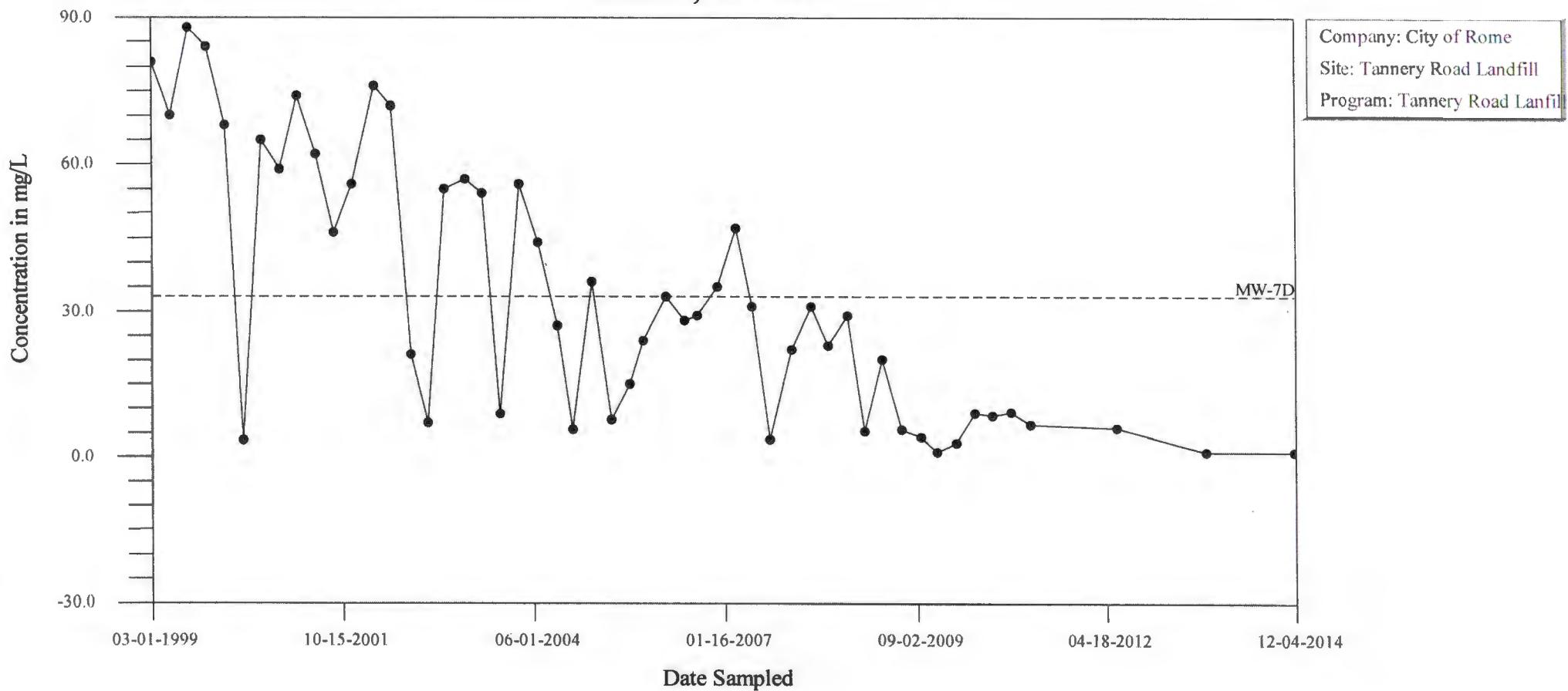


## Time-Series Plot

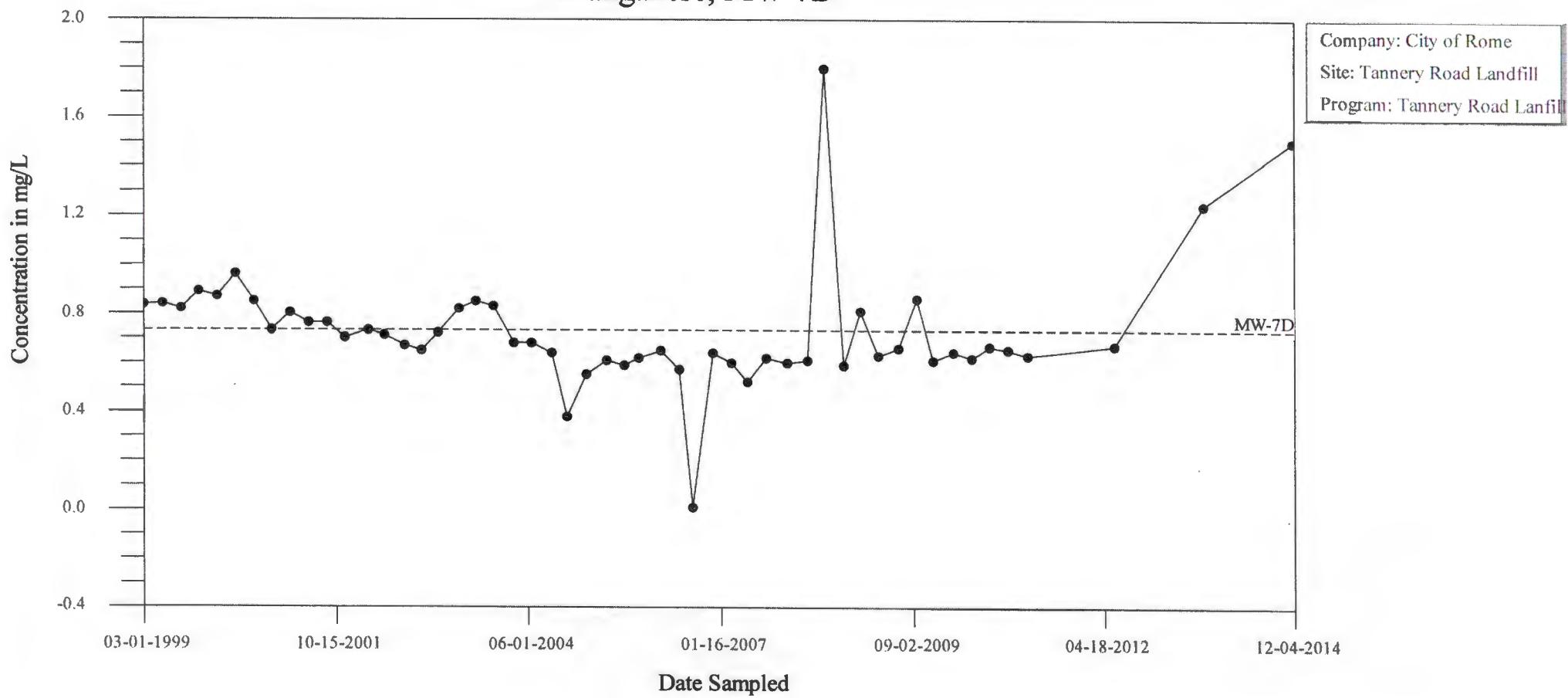
### Biochemical Oxygen Demand (BOD5), MW-7D



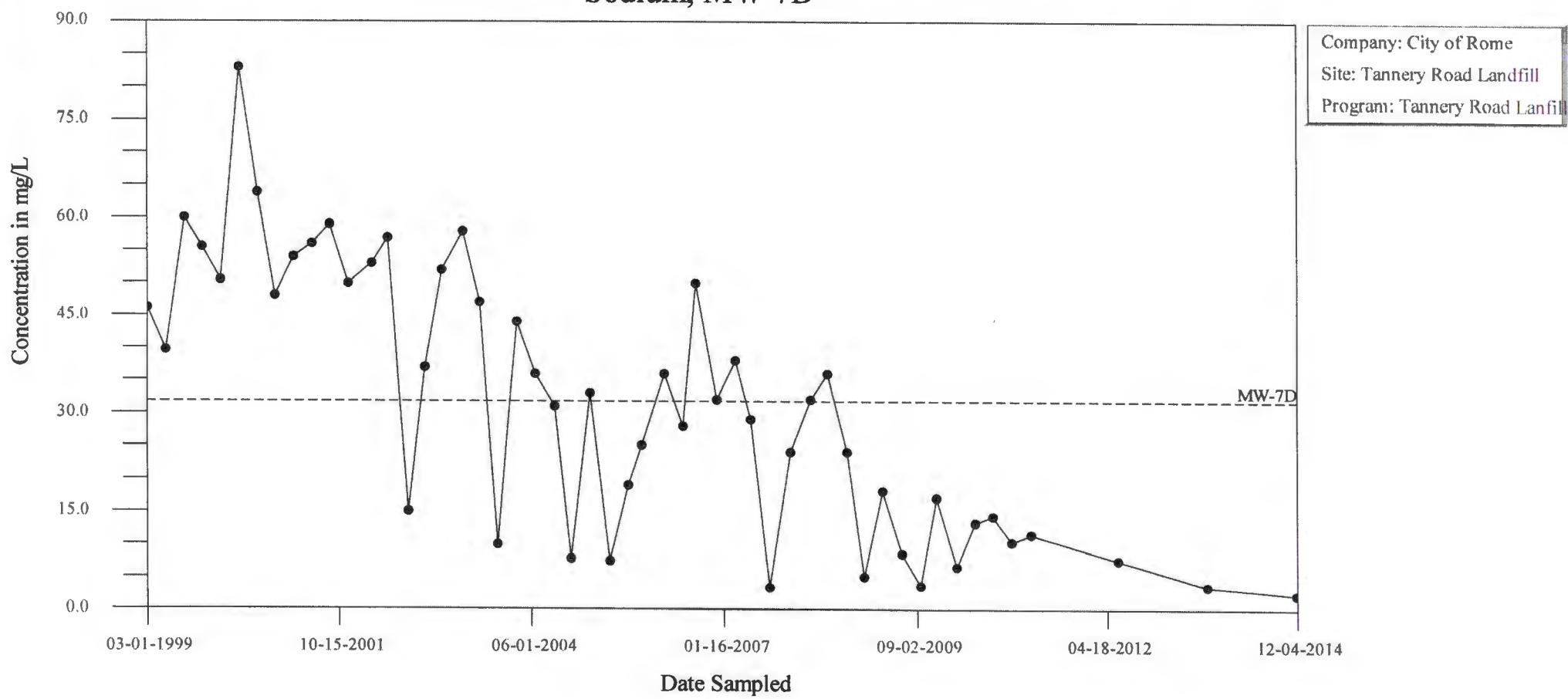
## Time-Series Plot Chloride, MW-7D



## Time-Series Plot Manganese, MW-7D

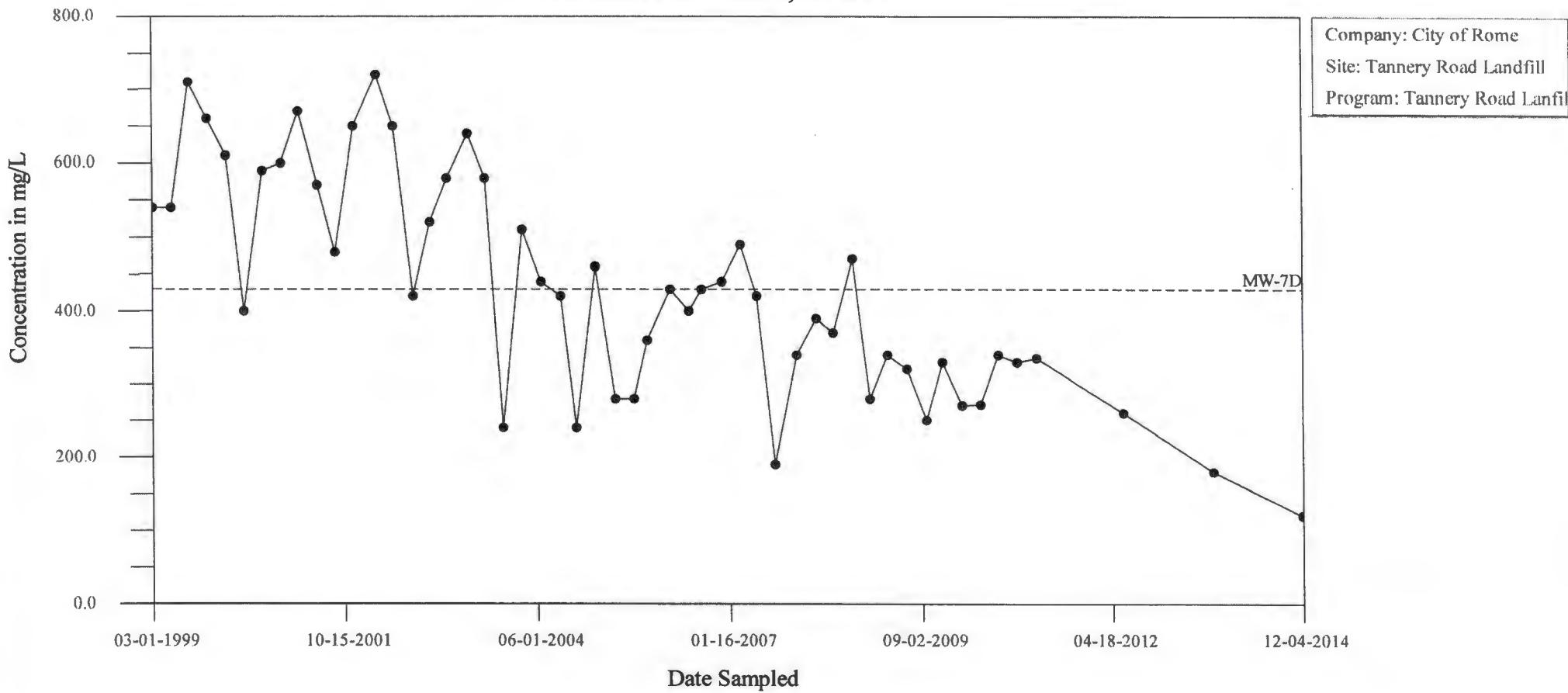


## Time-Series Plot Sodium, MW-7D



## Time-Series Plot

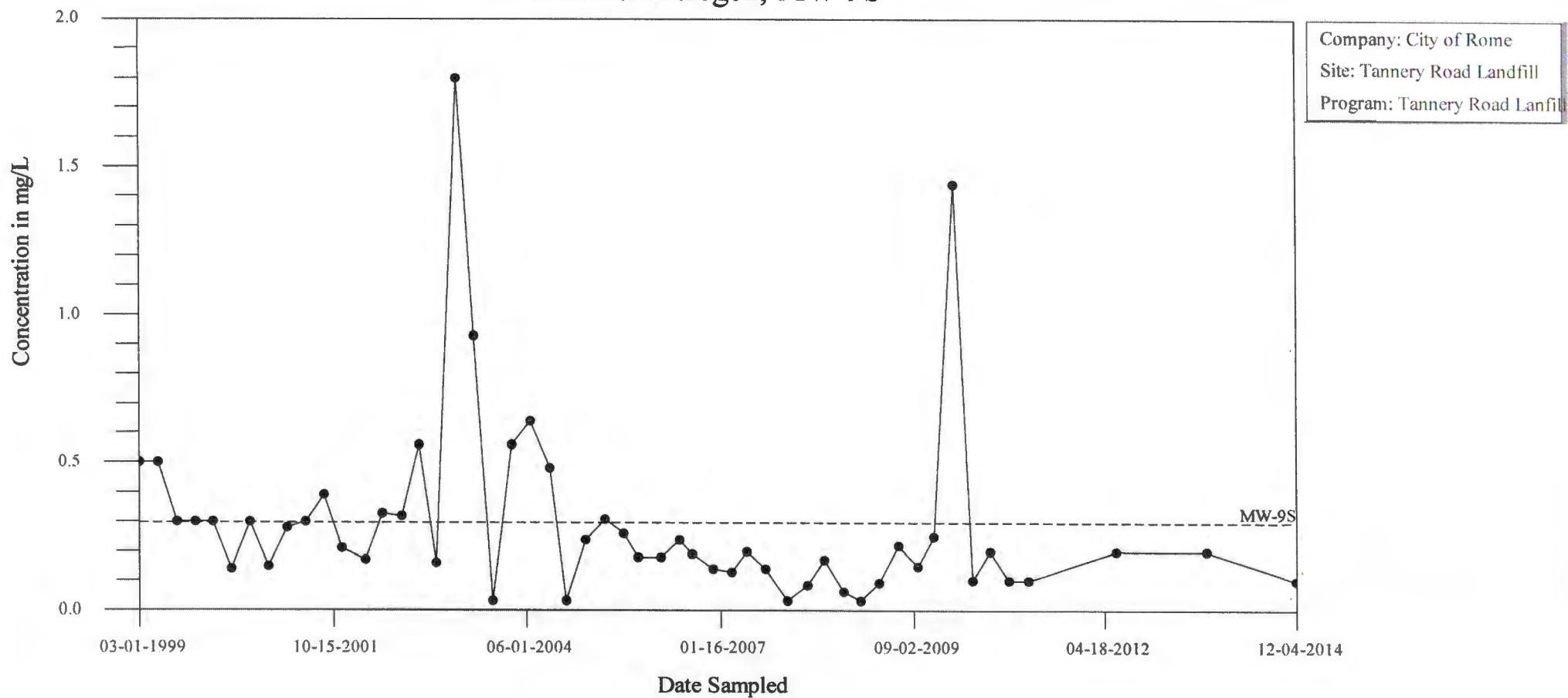
### Total Dissolved Solids, MW-7D



Company: City of Rome  
Site: Tannery Road Landfill  
Program: Tannery Road Lanfil

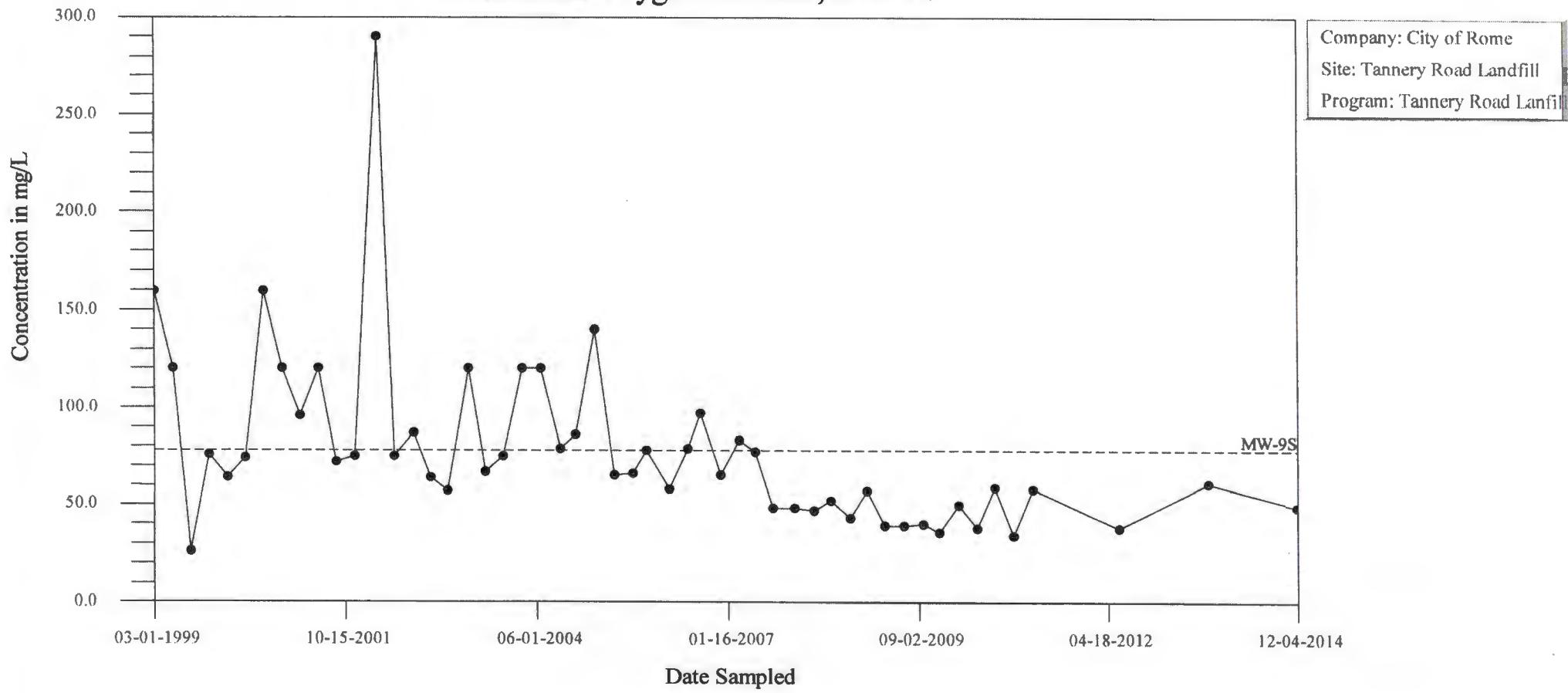
## Time-Series Plot

### Ammonia-Nitrogen, MW-9S

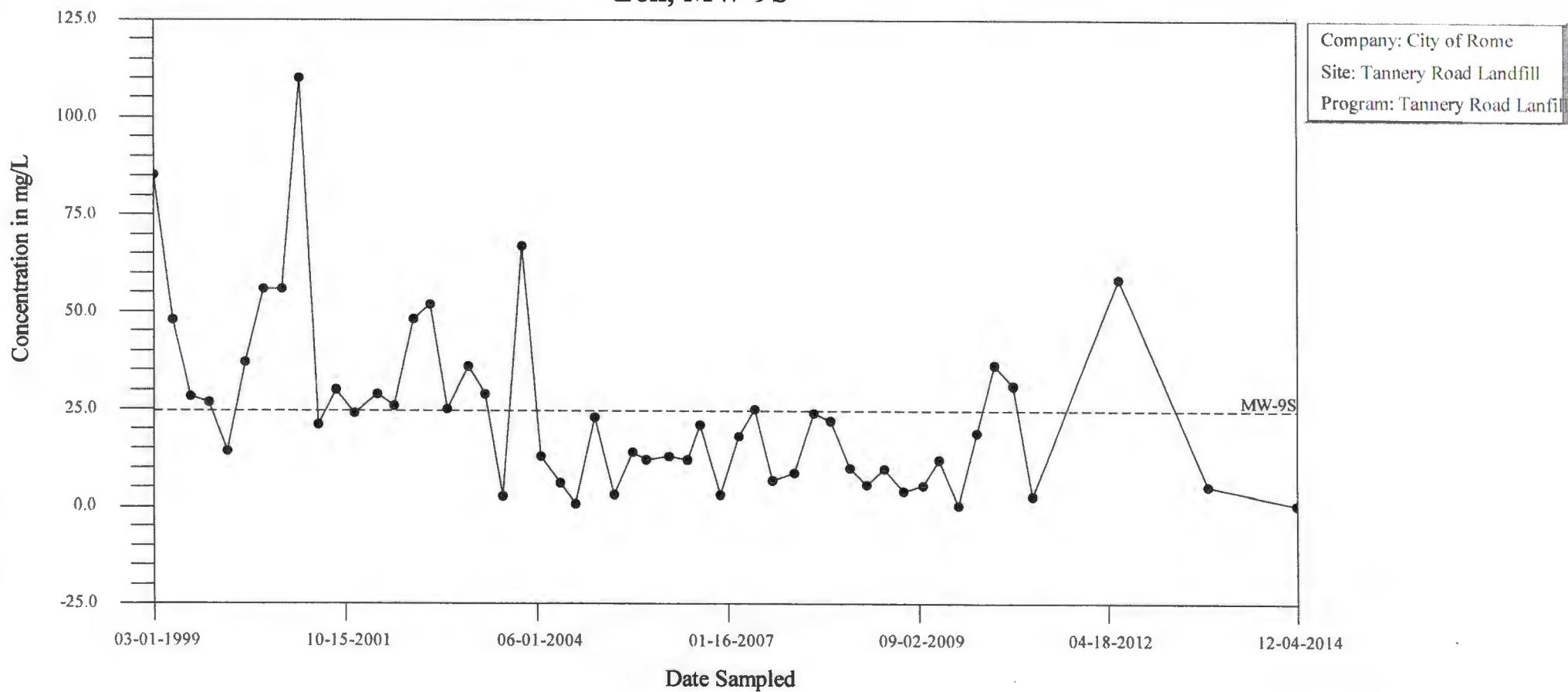


## Time-Series Plot

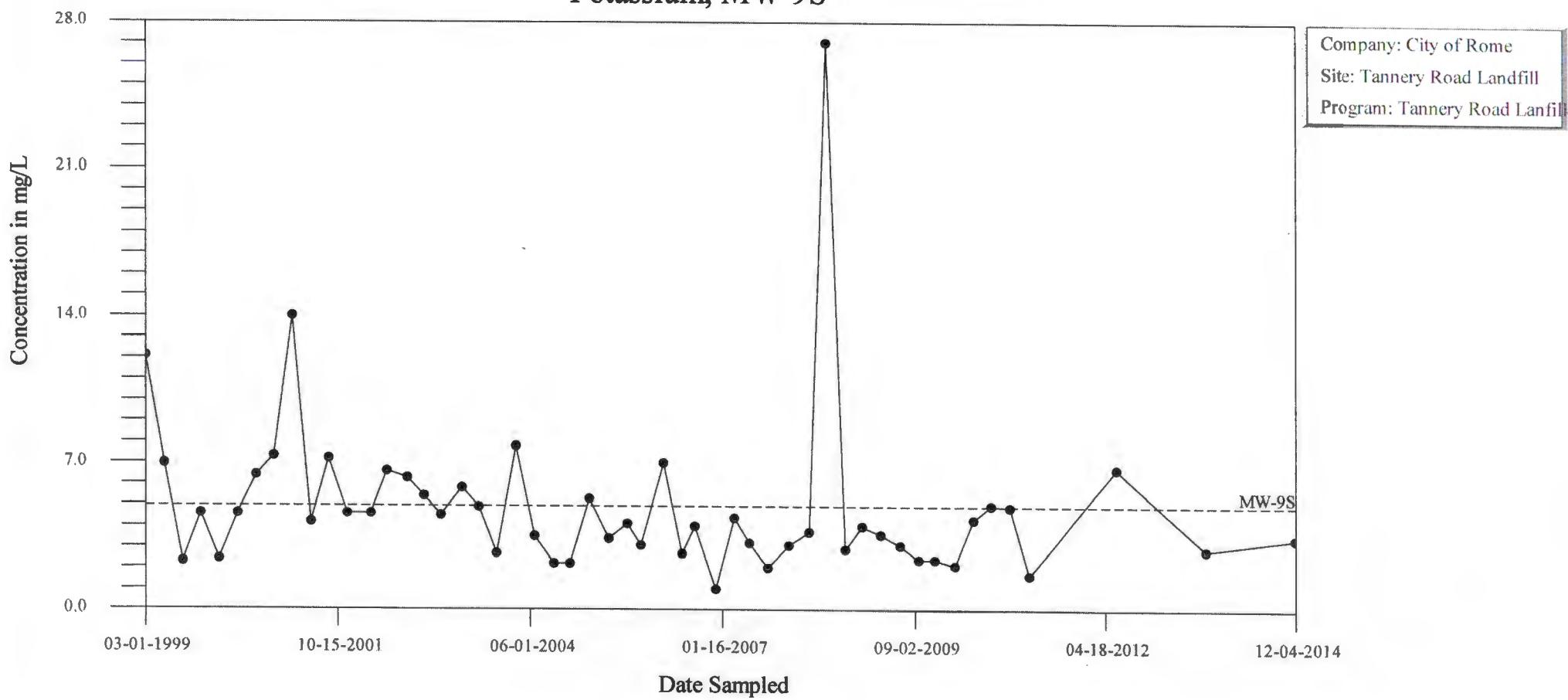
### Chemical Oxygen Demand, MW-9S



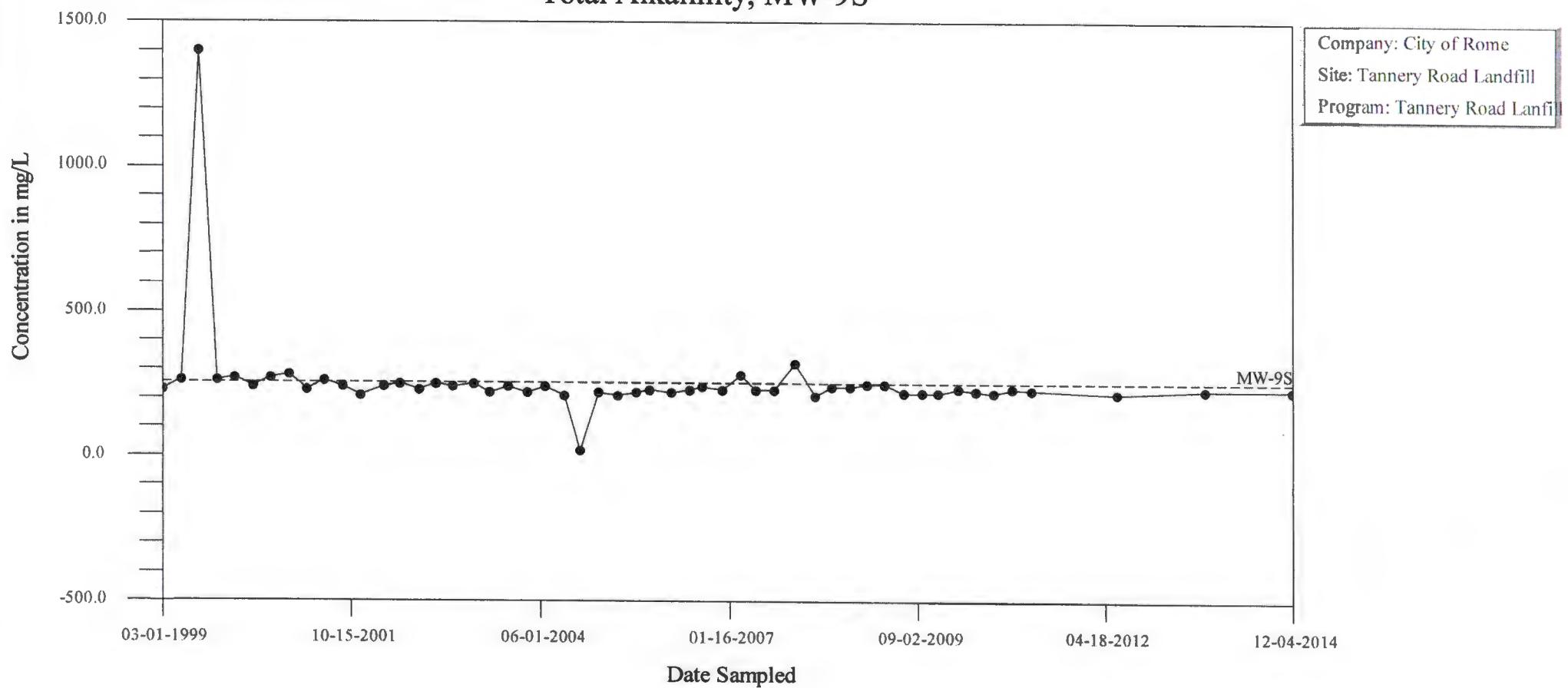
## Time-Series Plot Iron, MW-9S



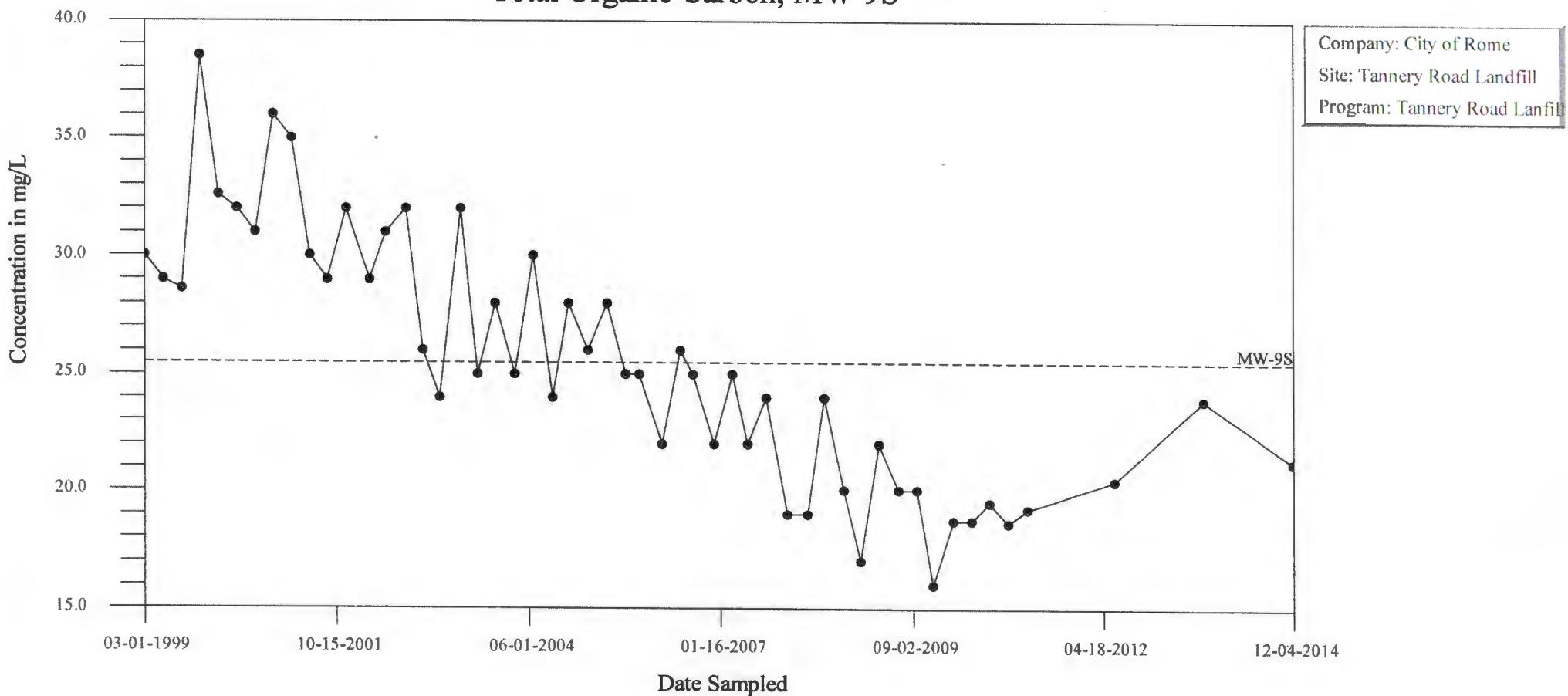
## Time-Series Plot Potassium, MW-9S



## Time-Series Plot Total Alkalinity, MW-9S

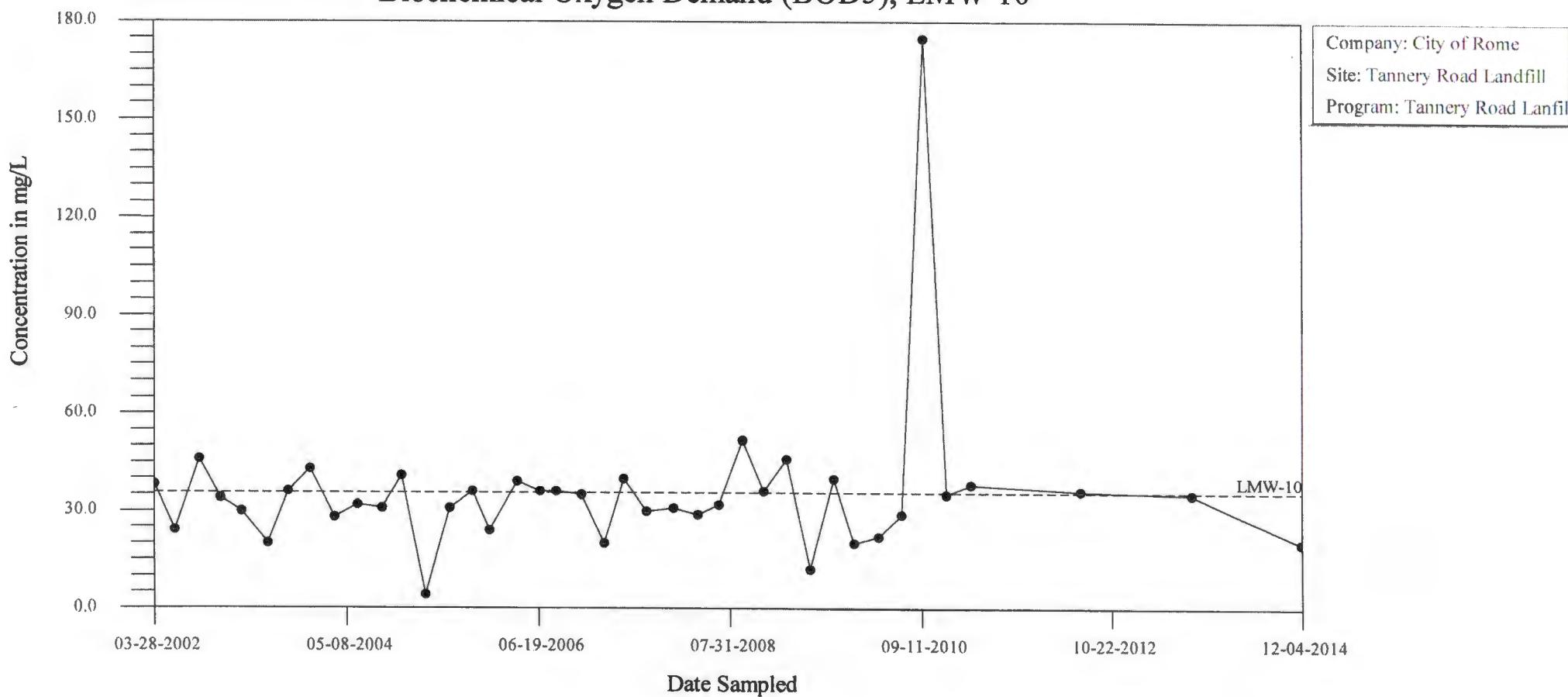


## Time-Series Plot Total Organic Carbon, MW-9S

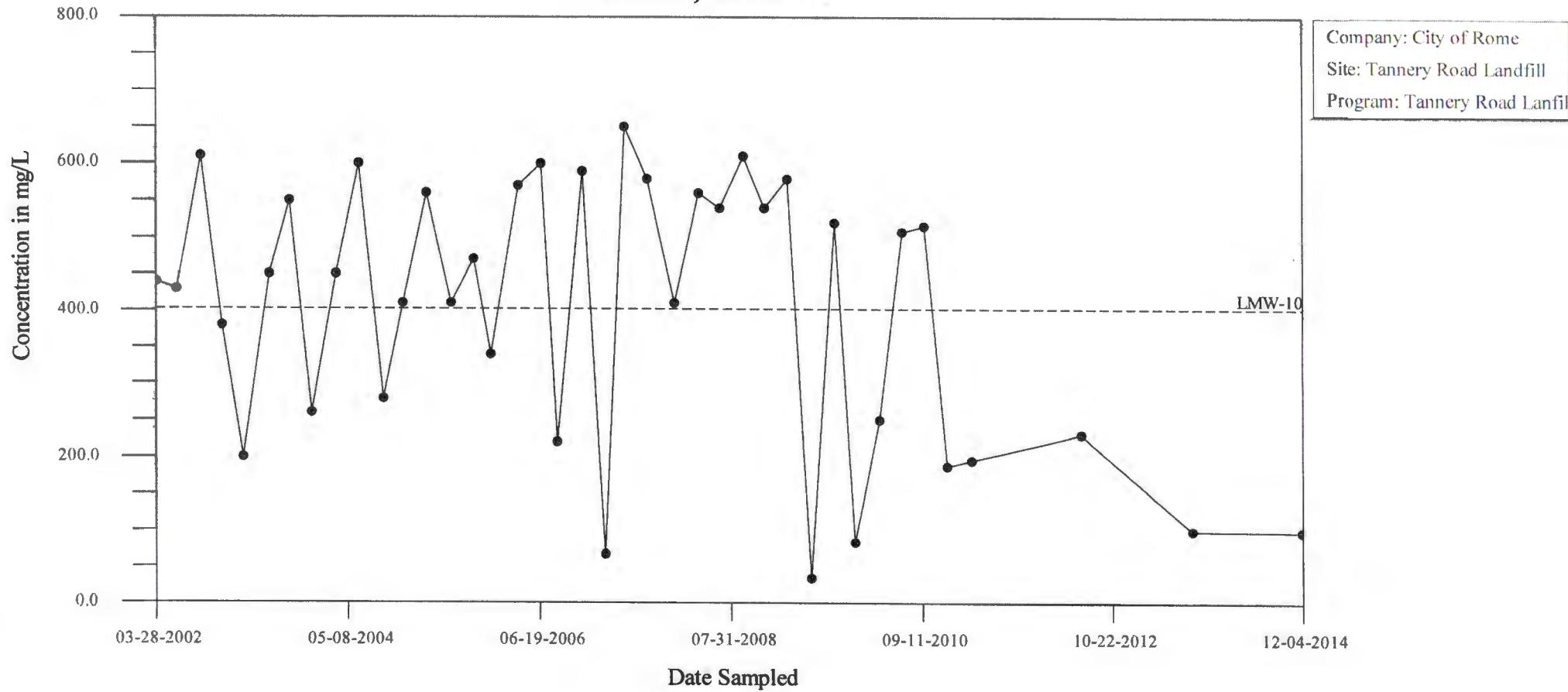


## Time-Series Plot

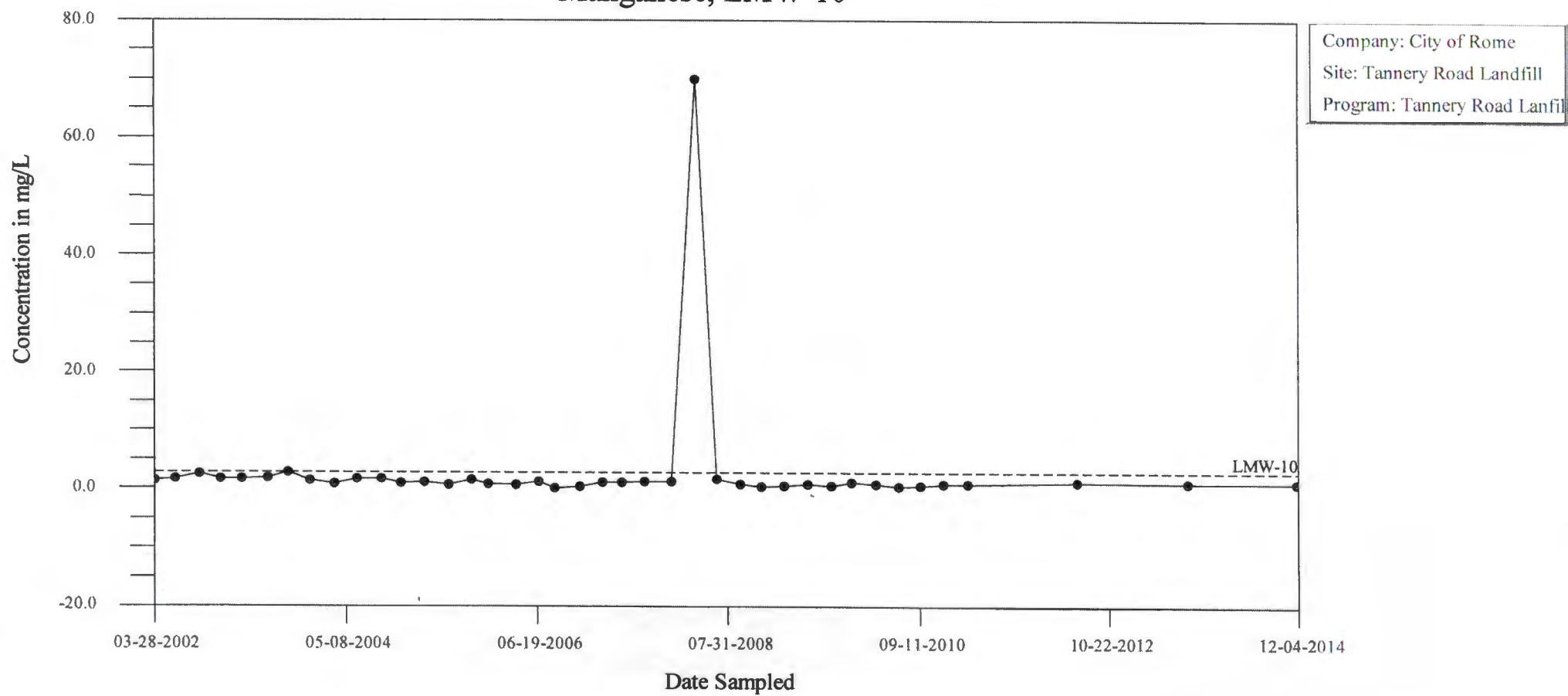
### Biochemical Oxygen Demand (BOD5), LMW-10



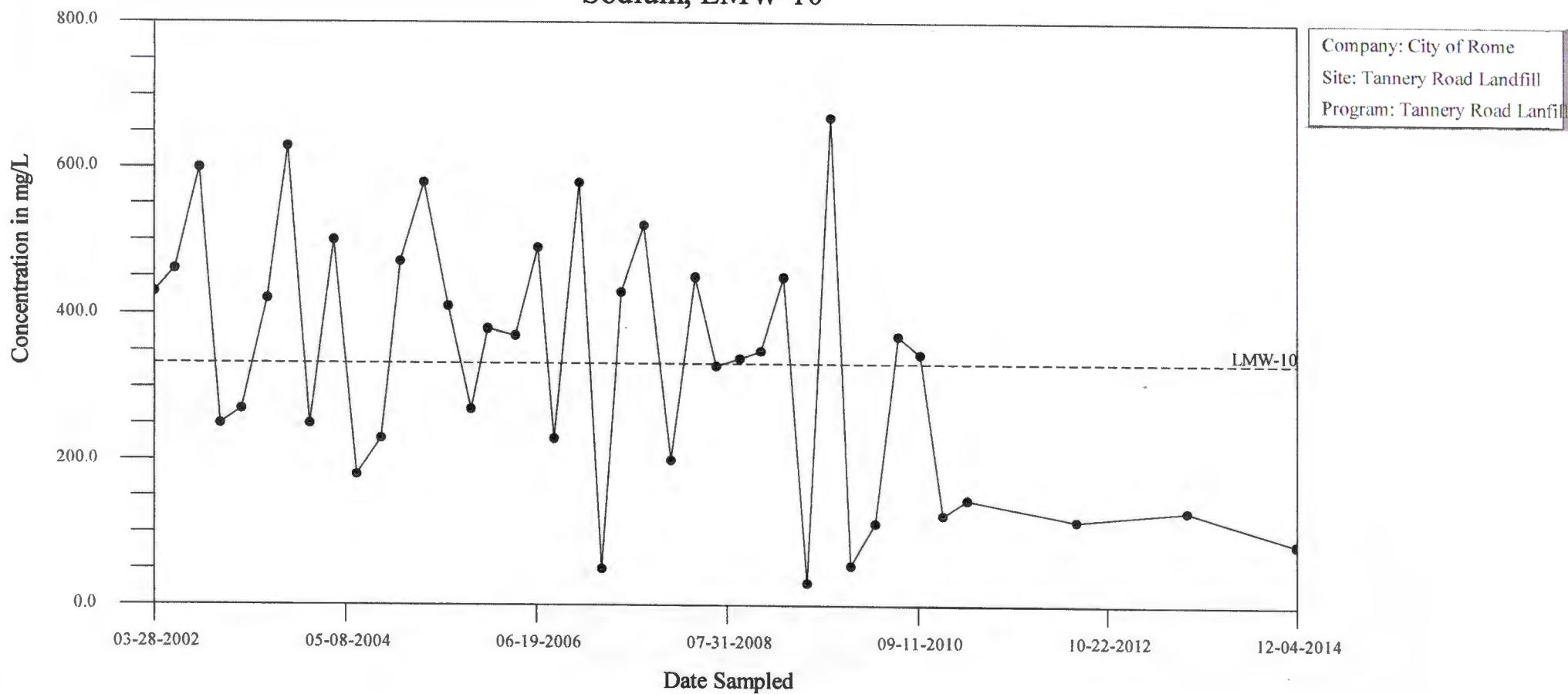
## Time-Series Plot Chloride, LMW-10



## Time-Series Plot Manganese, LMW-10

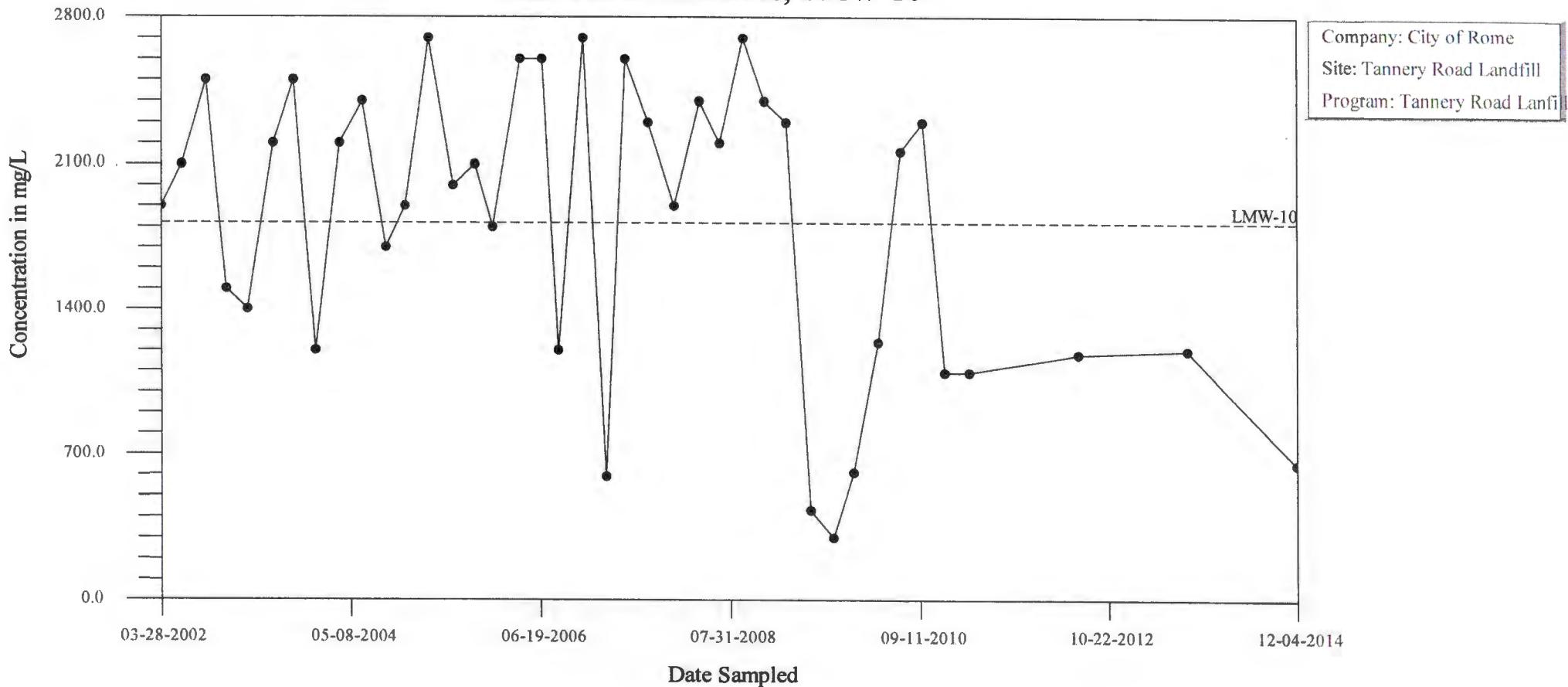


## Time-Series Plot Sodium, LMW-10



## Time-Series Plot

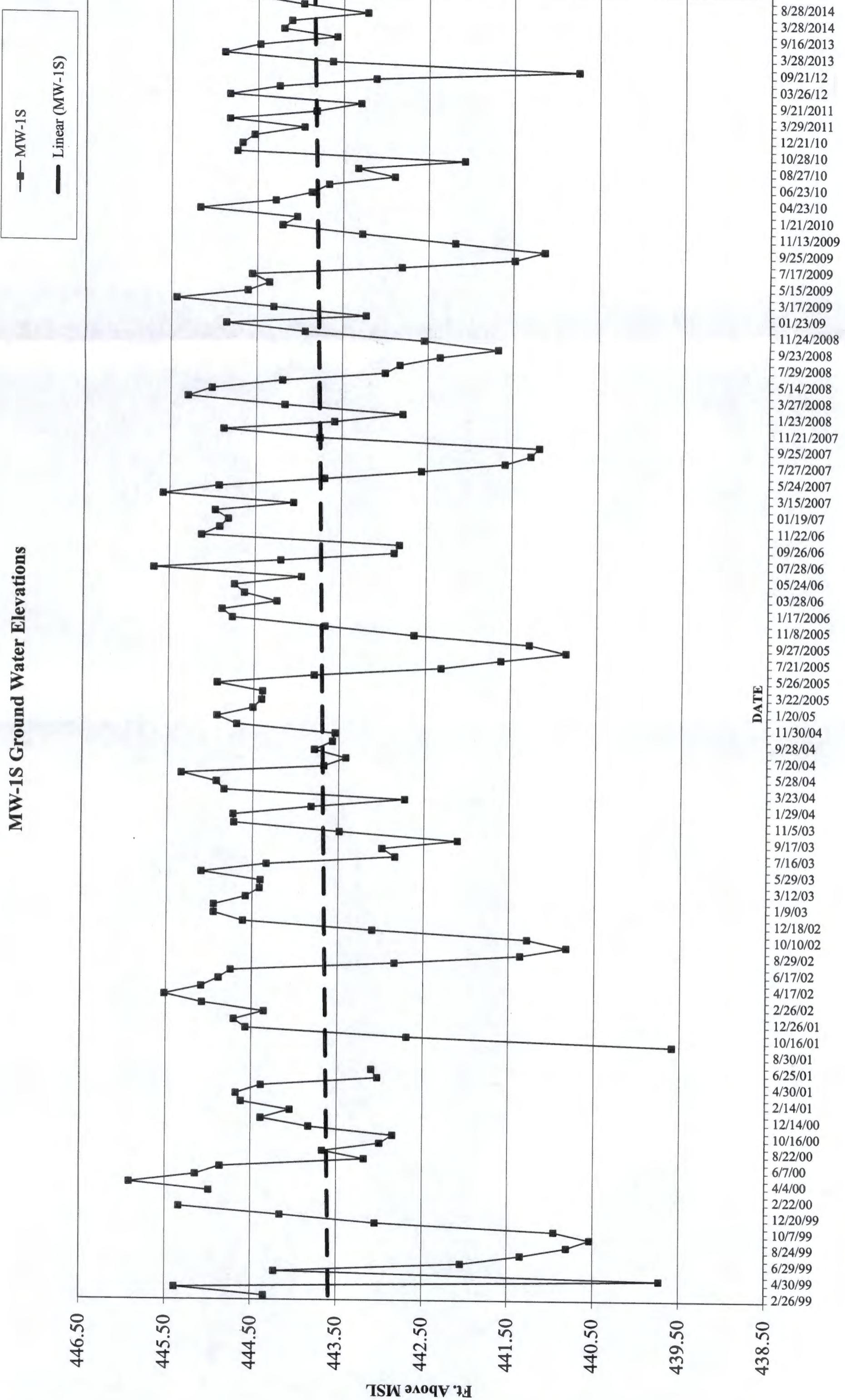
### Total Dissolved Solids, LMW-10



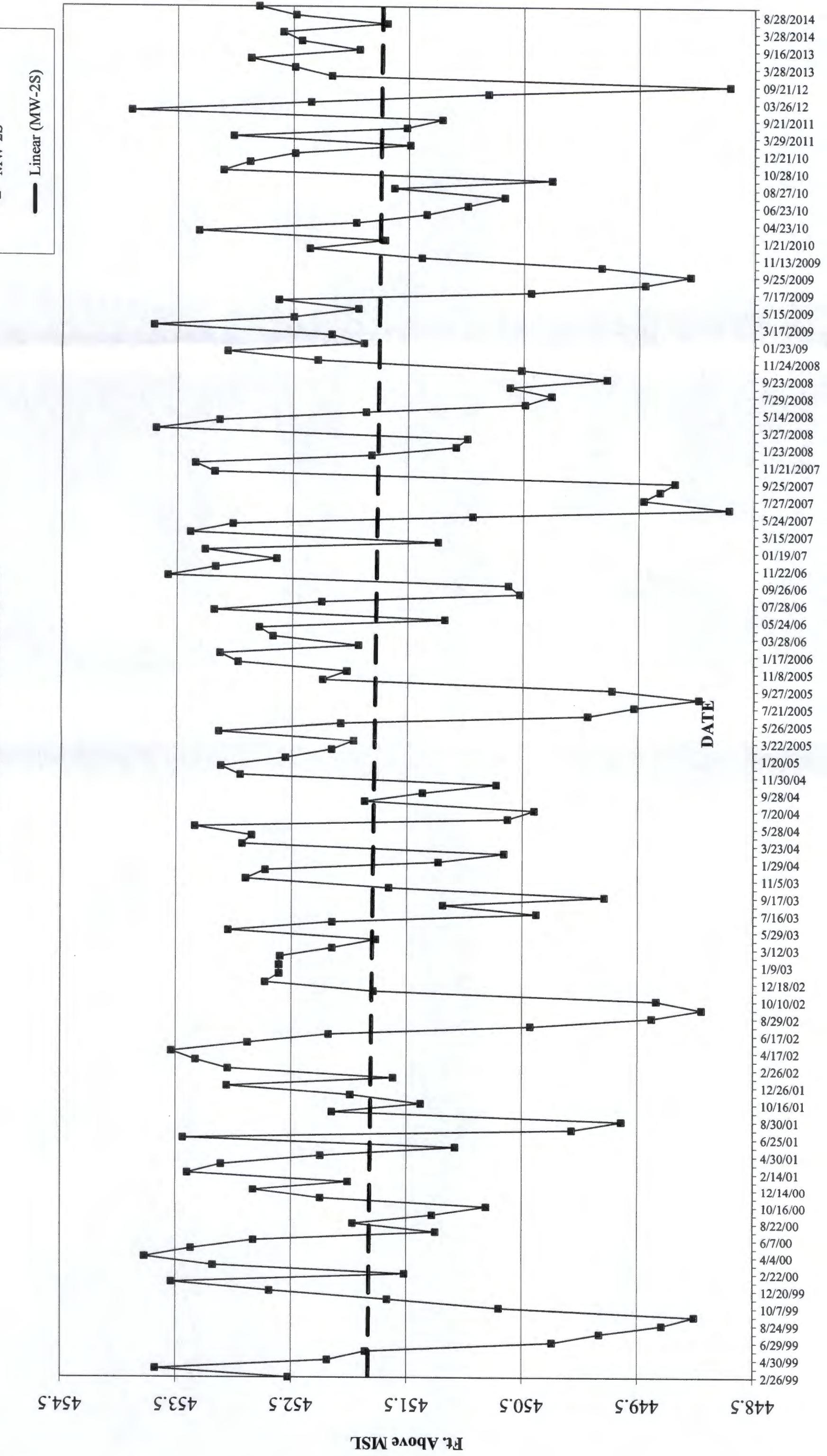
## **APPENDIX C**

### **MONITORING WELL AND LEACHATE WELL GROUND WATER ELEVATION GRAPHS**

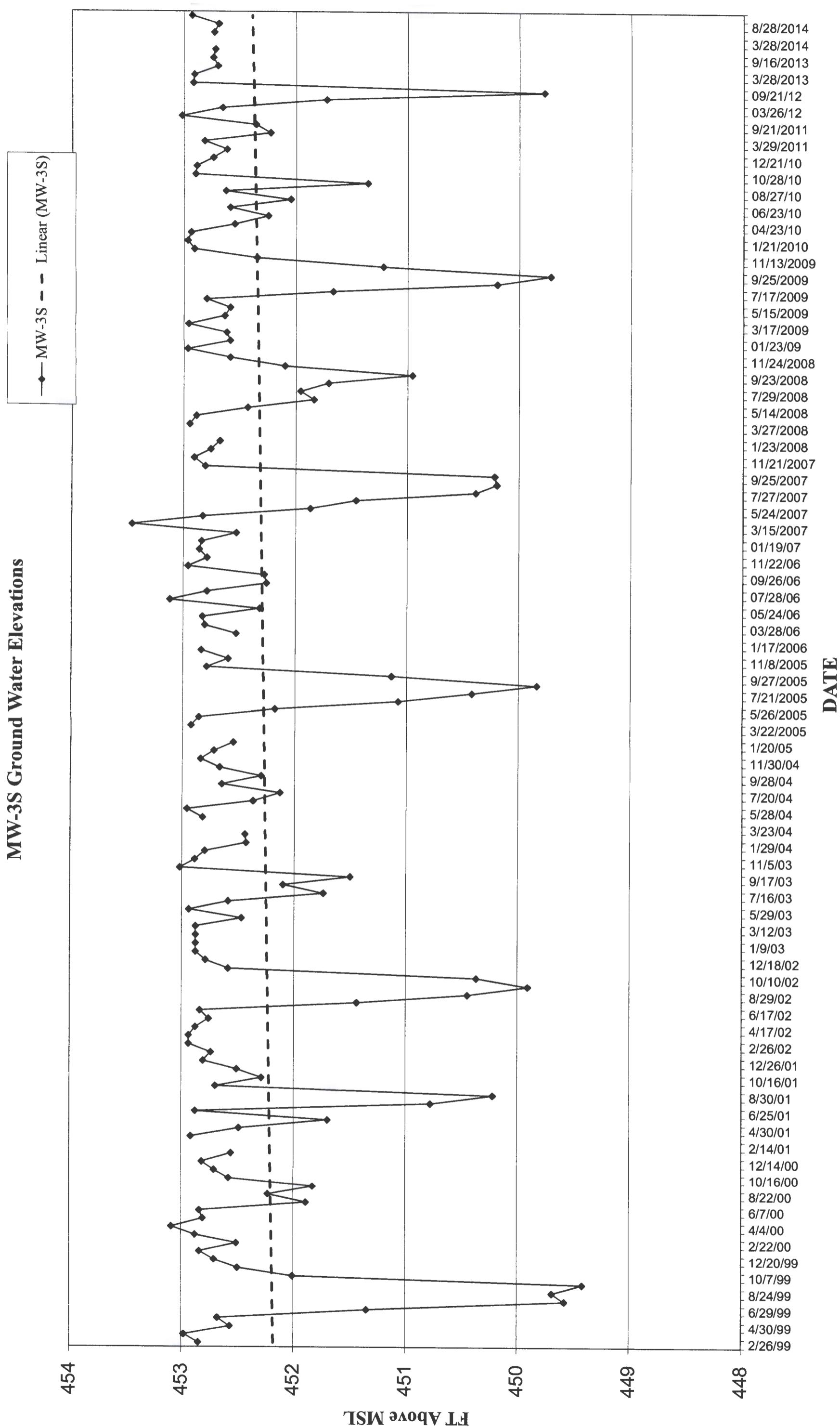
### MW-1S Ground Water Elevations



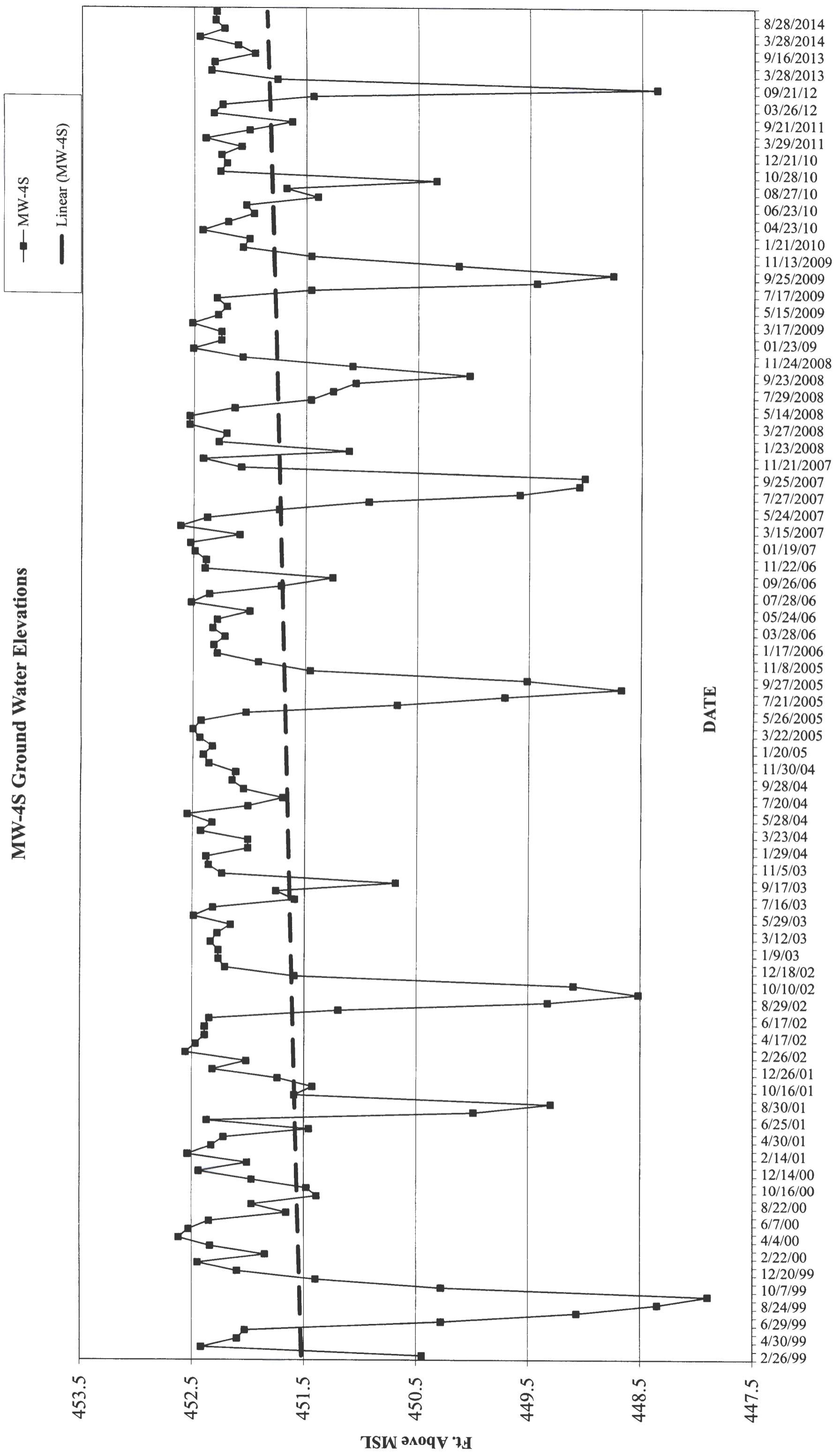
MW-2S Ground Water Elevations



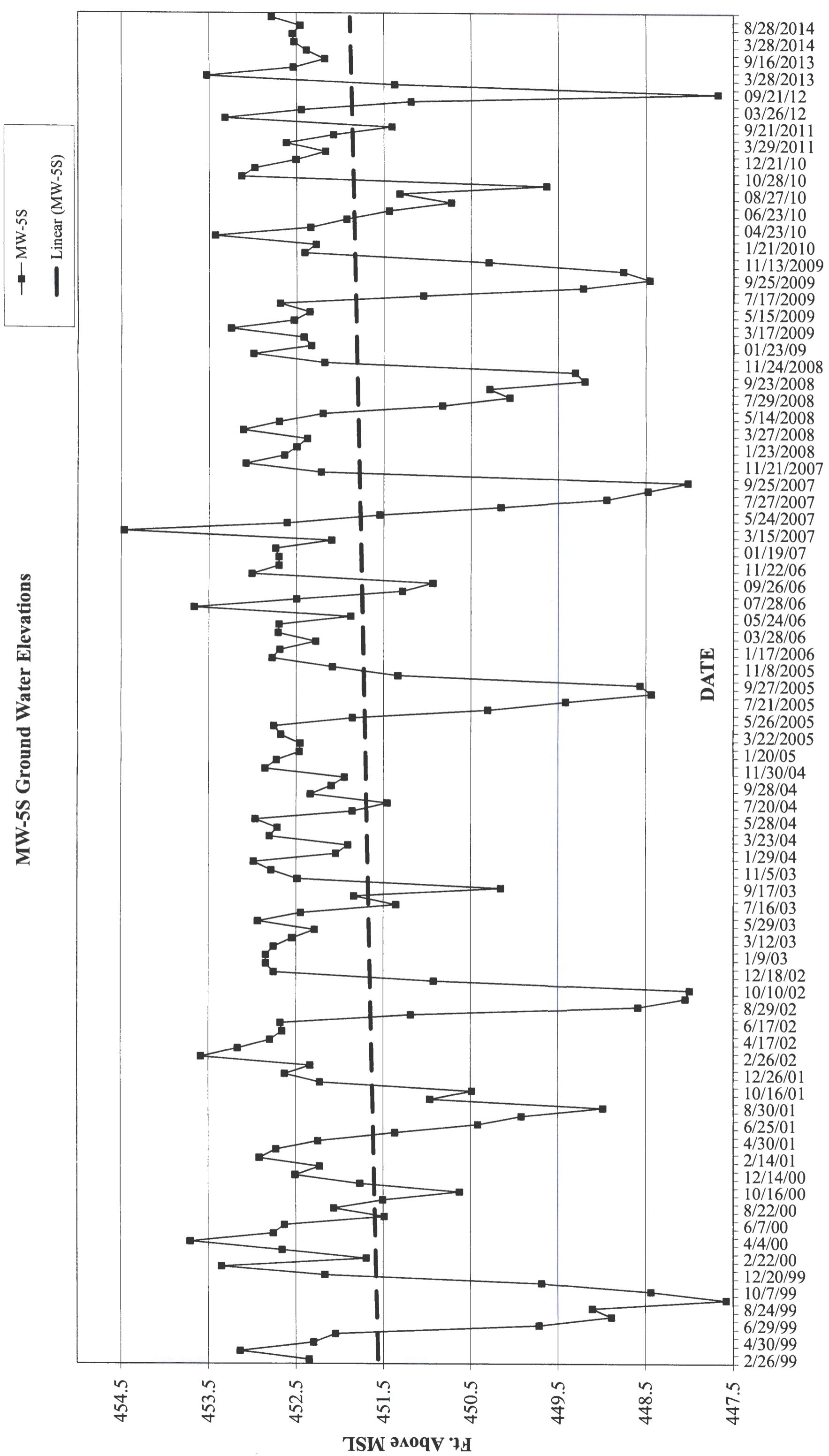
### MW-3S Ground Water Elevations



### MW-4S Ground Water Elevations

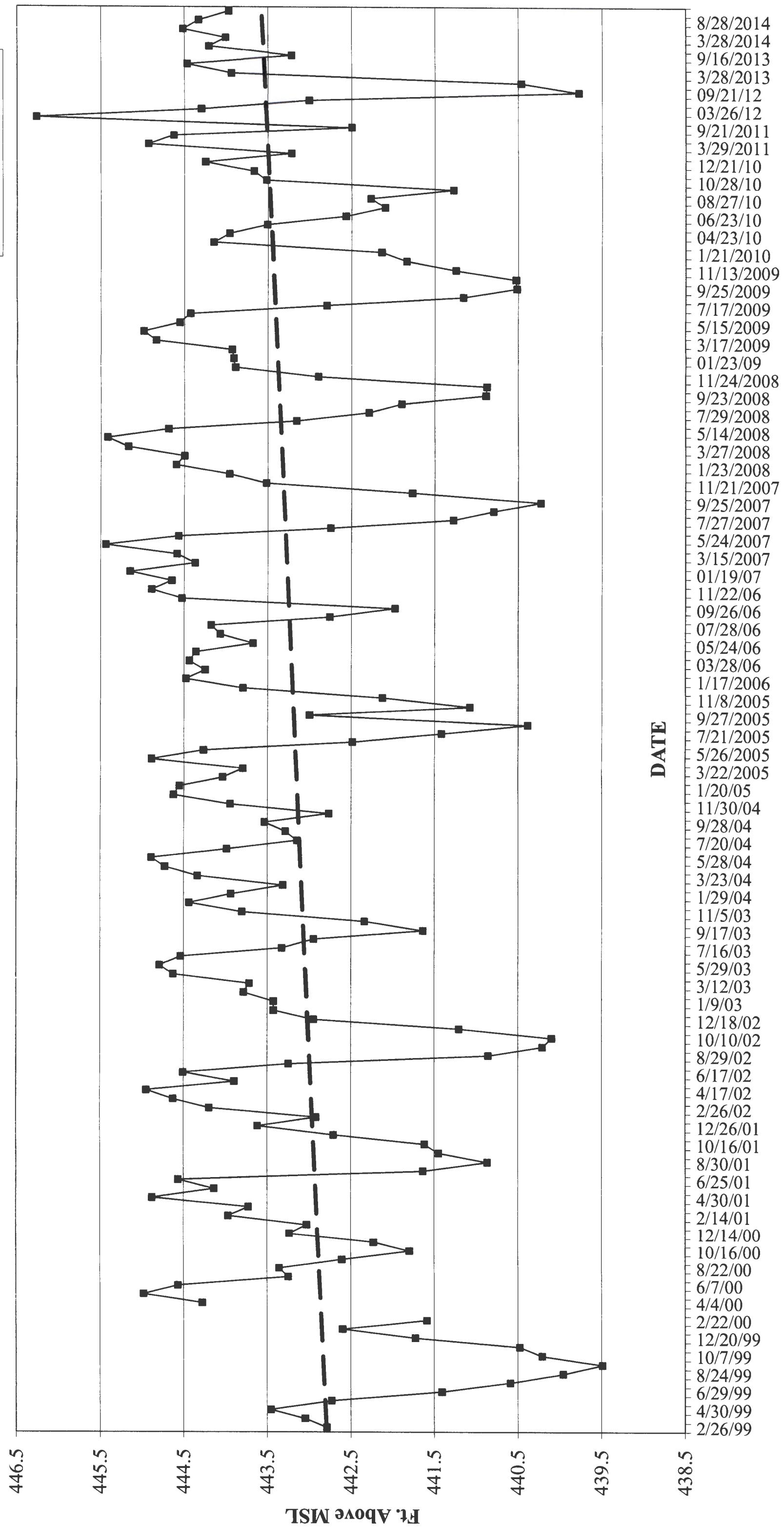


### MW-5S Ground Water Elevations

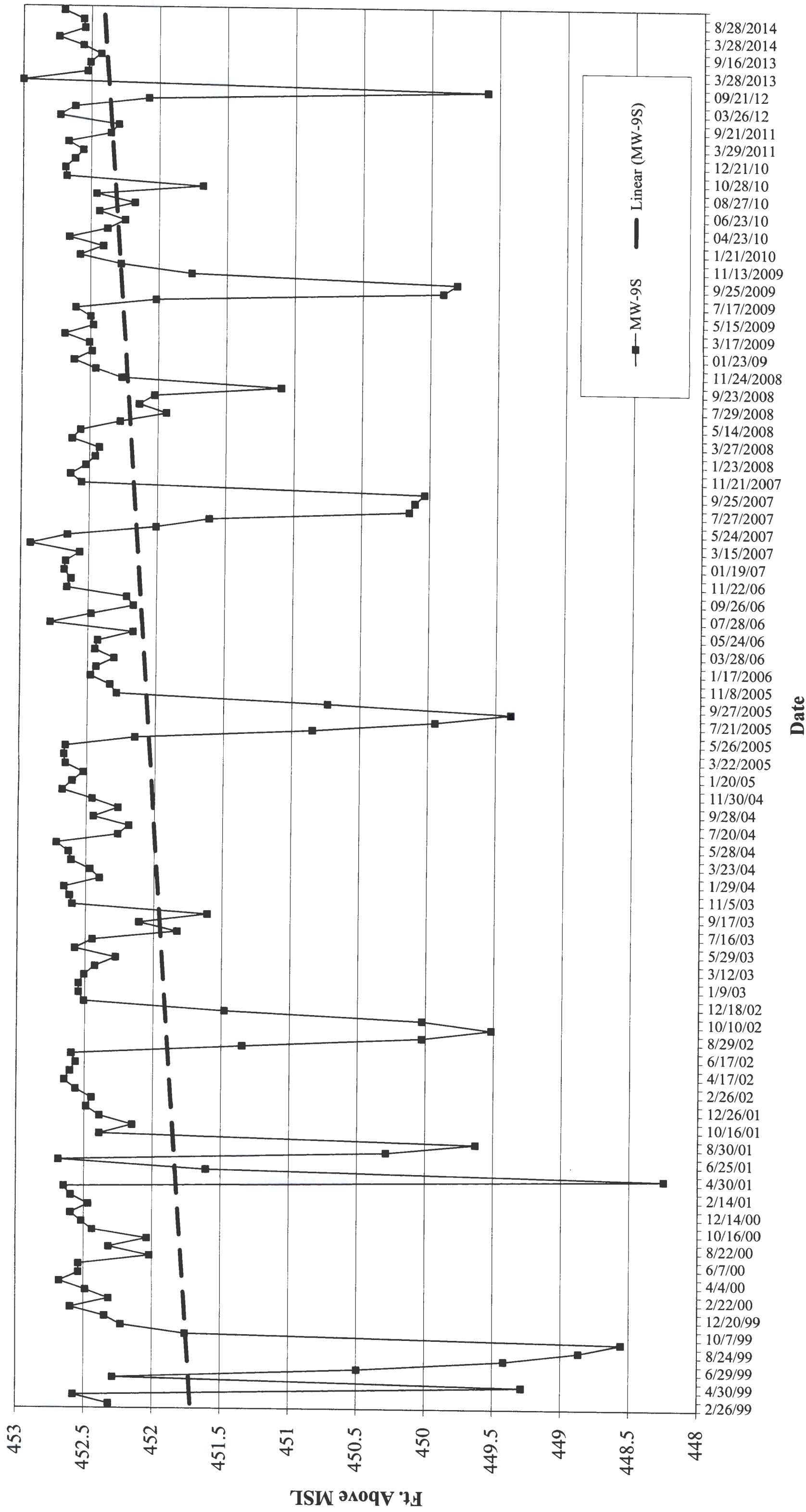


### MW-7S Ground Water Elevations

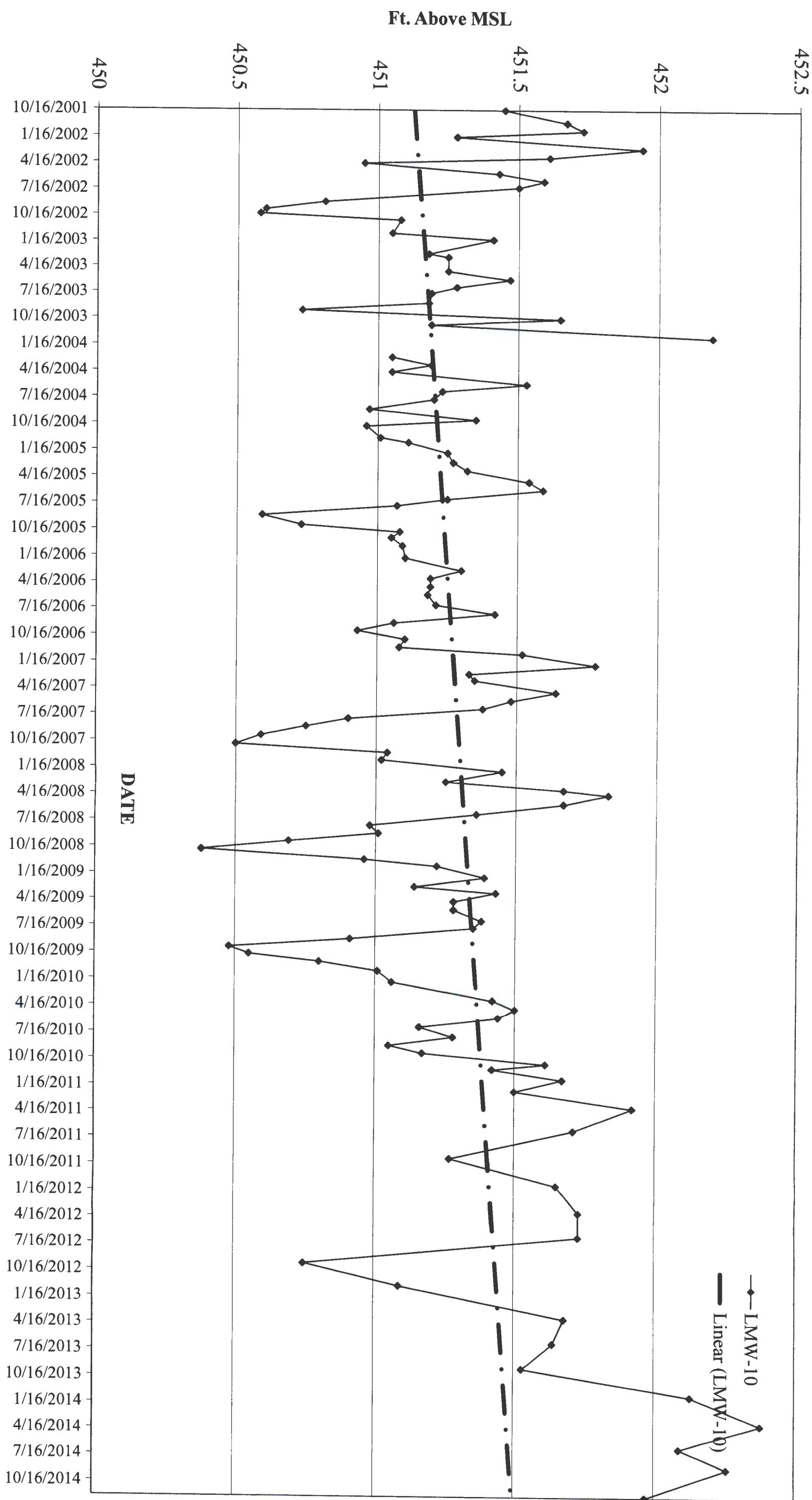
■ MW-7S  
— Linear (MW-7S)



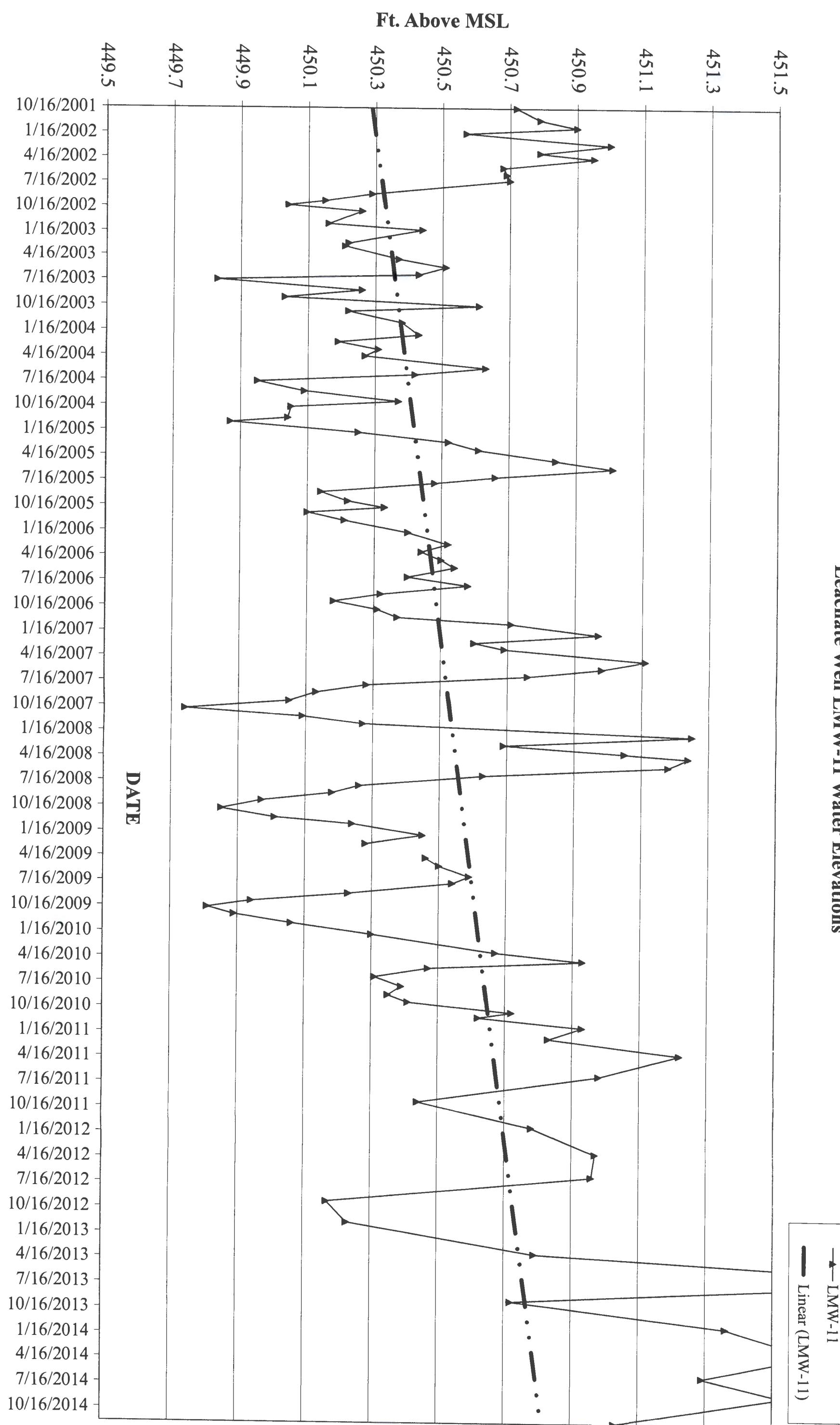
### MW-9S Ground Water Elevations



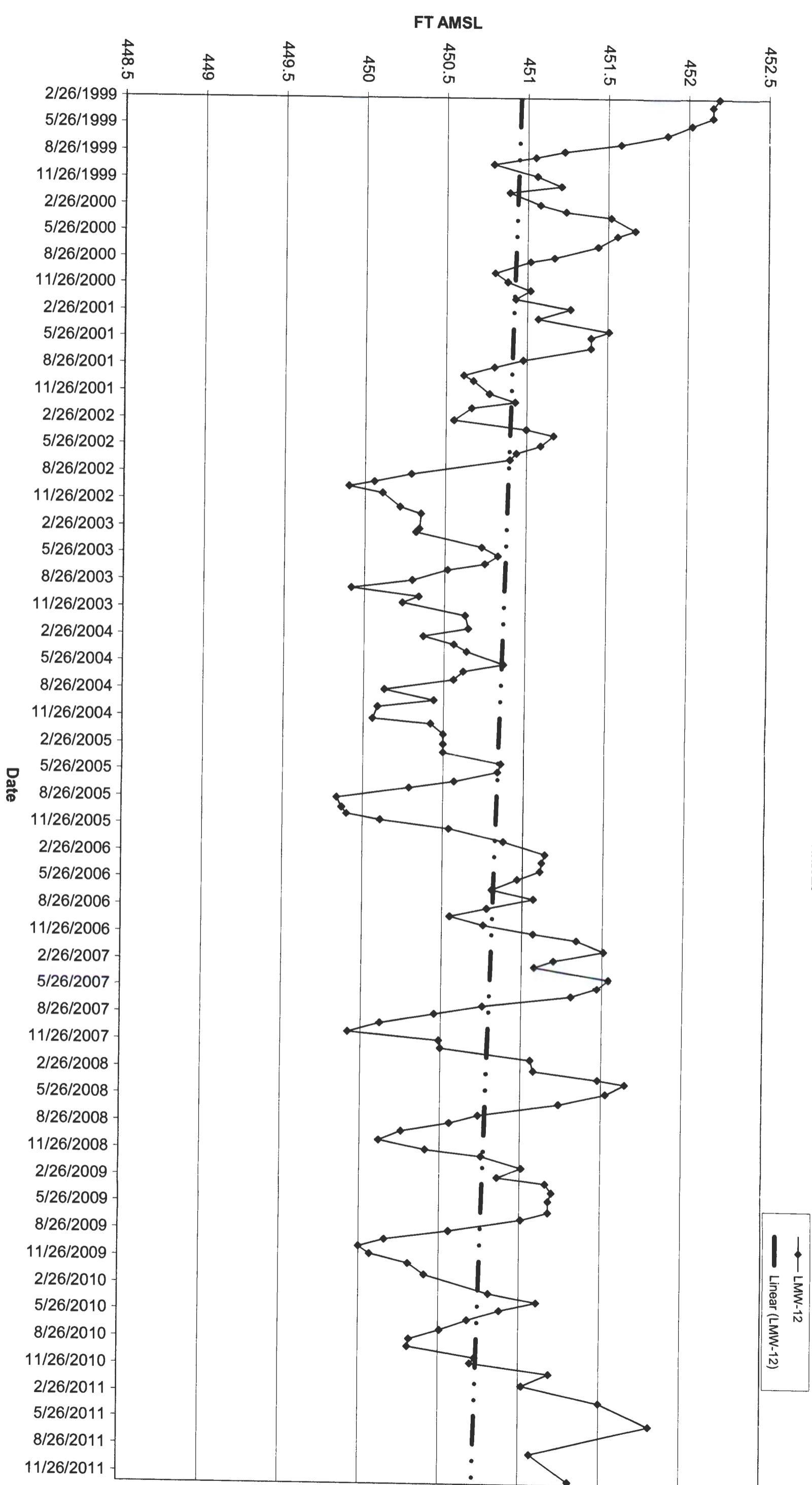
### Leachate Well LMW-10 Water Elevations



### Leachate Well LMW-11 Water Elevations



**LMW-12 Ground Water Elevations**



**APPENDIX D**

**QUARTERLY INSPECTION FORMS**

**TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST**

**Page 1 of 2**

Date & Time: 3/28/14

Inspector: Brent Zimmer

Weather: Sunny

**GENERAL INSPECTION - To Be Completed Monthly**

**General Site Condition:**

Gates - condition and locks for inner & outer gates:

OK

North Gate off Hinges

Access Road - surface/paving/snow

OK

Snow/Mud

Overall appearance (trash/litter)

OK

Good

**Pump Station at Tannery Road:**

Condition:

OK

Pump #1 Hours: 103 567

Pump #2 Hours:

0 87924

**Panel/Wells on Landfill**

Manholes along road - general condition, erosion, overflows

OK

Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity

OK

Meter Pit - open lid, check heater, leaks, etc.

OK

Panel note conditions and any alarms:  OK

Totalizers (in meter pit)

RW-1 453 8600

RW-3 475 23 00

RW-2 402 8600

RW-4 missing

**Hour Meters**

RW-1 196 865

RW-3 865 884

RW-2 761 243

RW-4 284015

**Landfill Cover Inspection**

Leachate seeps Any new seeps NO

If YES, describe: Snow covered

Drifted

Drifted

Gas vents - general condition

OK

- Unusual odors, list vents/describe.

None

Flares ignited

OK

None

Perimeter fence

OK

Erosion/animal burrows NO

If YES, describe: Snow covered

## **TANNERY ROAD LANDFILL, ROME, NY INSPECTION CHECKLIST**

Page 2 of 2

Date & Time: 3/20/14 Inspector: Brent Zimmer

## **Monitoring Well Water Level Data**

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	5.48	444.11	Good
MW - 2S	459.44	6.85	452.59	Good
MW - 3S	456.4	<del>6.85</del>	=	Frozen
MW - 4S	456.19	3.74	452.45	Good
MW - 5S	457.15	4.62	452.53	Good
MW - 7S	452.25	8.24	444.01	Good
MW - 7D	451.79	3.59	443.20	Good
MW - 9S	456.38	3.64	452.74	Good
MW - 10	486.3	33.71	452.38	Good
MW - 11	502.4	50.78	451.62	Missing Cdr
MW - 12	483.11			Obstruction 2d.64
PZ - 1*	454.37	6.23	448.14	Good

**NOTES:** 6.87 20

TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 6/20/14

Inspector: EKF

Weather: Sunny 70° F

**GENERAL INSPECTION - To Be Completed Monthly**

**General Site Condition:**

Gates - condition and locks for inner & outer gates: OK

Access Road - surface/paving/snow OK

Overall appearance (trash/litter) OK

**Pump Station at Tannery Road:**

Condition: OK

Pump #1 Hours: 10492.8

Pump #2 Hours: 08901.9

Notes Problems \_\_\_\_\_

**Panel/Wells on Landfill**

Manholes along road - general condition, erosion, overflows OK

Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity OK

Meter Pit - open lid, check heater, leaks, etc. OK

Panel note conditions and any alarms: OK

Totalizers (in meter pit)

RW-1 4538600

RW-3 4811900

RW-2 4291200

RW-4 Disconnected

Hour Meters

RW-1 196865

RW-3 885463

RW-2 775194

RW-4 284015

**Landfill Cover Inspection**

Leachate seeps Any new seeps NO

If YES, describe: \_\_\_\_\_

Western seep condition: Slight

North seep condition: Not apparent

Gas vents - general condition

- Unusual odors, list vents/describe.

OK

OK

OK

If YES, describe: \_\_\_\_\_

Flares ignited OK

None

Perimeter fence OK

Except northern mangate

Erosion/animal burrows NO OK

Off hinges

If YES, describe: \_\_\_\_\_

1. Erosion southern mangate

2. Erosion south side LF east of RW3 downspout

3. Erosion several other areas around tec-on terms. see attached sheet for locations

TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 6/20/14 Inspector: E&V

**Monitoring Well Water Level Data**

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	<u>6.27</u>	_____	_____
MW - 2S	459.44	<u>7.75</u>	_____	_____
MW - 3S	456.4	<u>3.67</u>	_____	_____
MW - 4S	456.19	<u>3.96</u>	_____	_____
MW - 5S	457.15	<u>4.60</u>	_____	_____
MW - 7S	452.25	<u>7.73</u>	_____	_____
MW - 9S	456.38	<u>3.83</u>	_____	_____
MW - 10	486.3	<u>34.21</u>	_____	_____
MW - 11	502.4	<u>51.11</u>	_____	_____
MW - 12	483.11	<u>unable to set water level meter by obstruction/bent casing</u>	at 12.70 ft.	
PZ - 1	454.37	<u>6.14</u>	_____	_____

NOTES: 7/1 7.90  
ID 5.62

Mangate North side by MW-2 cluster down

2D 7.0  
5D 4.62

**TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST**

Page 1 of 2

Date & Time: 8/28/2014

Inspector: Brent Zimmer  
Weather: Sunny

**GENERAL INSPECTION - To Be Completed Monthly**

**General Site Condition:**

Gates - condition and locks for inner & outer gates:  
Access Road - surface/paving/snow  
Overall appearance (trash/litter)

OK  
OK  
OK

North Gate is off hinges  
Good  
Good

**Pump Station at Tannery Road:**

Pump #1 Hours: 10 56 2.6 Condition: OK

Pump #2 Hours: 8959.2

OK

Good

**Panel/Wells on Landfill**

Manholes along road - general condition, erosion, overflows

OK

Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity

OK

Meter Pit - open lid, check heater, leaks, etc.

OK

Panel note conditions and any alarms: OK None

**Totalizers (in meter pit)**

RW-1 4538600

RW-3 4925600

RW-2 4347200

RW-4 Removed

**Hour Meters**

RW-1 19686.5

RW-3 90163.5

RW-2 77630.2

RW-4 28401.5

**Landfill Cover Inspection**

Leachate seeps Any new seeps NO If YES, describe: \_\_\_\_\_

OK \*

Western seep condition:

OK

North seep condition:

OK

Gas vents - general condition

OK

- Unusual odors, list vents/describe.

None

Flares ignited

OK None

Perimeter fence

OK North Gate off Hinges

Erosion/animal burrows

NO

If YES, describe: \_\_\_\_\_

\* Took 1 pictures to document locations of erosion of the tack on berm  
georeferenced

## **TANNERY ROAD LANDFILL, ROME, NY INSPECTION CHECKLIST**

Page 2 of 2

Date & Time: 8/28/2014 Inspector: Brent Zimmer

## **Monitoring Well Water Level Data**

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	5.62	443.97	Good
MW - 2S	459.44	6.96	452.48	Good
MW - 3S	456.4	3.71	452.69	Good
MW - 4S	456.19	3.88	452.31	Good
MW - 5S	457.15	4.69	452.46	Good
MW - 7S	452.25	7.92	444.33	Good
MW - 7D	451.79	8.26	443.53	Good
MW - 9S	456.38	3.82	452.56	Good
MW - 10	486.3	34.04	452.26	Good
MW - 11	502.4	50.87	451.53	Good
MW - 12	483.11	—	—	Obstruction 22.63
PZ - 1*	454.37	6.14	448.23	Good

**NOTES:** MU-20 6.99

TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 12/4/14

Inspector:

Eg F

Weather:

cloudy 30°F

**GENERAL INSPECTION - To Be Completed Monthly**

**General Site Condition:**

Gates - condition and locks for inner & outer gates:  
Access Road - surface/paving/snow  
Overall appearance (trash/litter)

	Notes	Problems
Gates - condition and locks for inner & outer gates:	OK	
Access Road - surface/paving/snow	OK	
Overall appearance (trash/litter)	OK	

**Pump Station at Tannery Road:**

Pump #1 Hours: 106436

Condition:

Pump #1 Hours:	OK
Pump #2 Hours:	<u>090252</u>

Pump #2 Hours:

**Panel/Wells on Landfill**

Manholes along road - general condition, erosion, overflows  
Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity  
Meter Pit - open lid, check heater, leaks, etc.  
Panel note conditions and any alarms: OK

Manholes along road - general condition, erosion, overflows	OK	<u>OK</u>
Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity	OK	<u>144 non operational</u>
Meter Pit - open lid, check heater, leaks, etc.	OK	<u>OK</u>
Panel note conditions and any alarms: OK		<u>OK</u>

**Totalizers (in meter pit)**

RW-1 45386  
RW-2 4413000

RW-3 50619 00  
RW-4 disconnected

**Hour Meters**

RW-1 196865  
RW-2 006015

RW-3 911541  
RW-4 284015

**Landfill Cover Inspection**

Leachate seeps Any new seeps NO

If YES, describe: \_\_\_\_\_

Not apparent

Not apparent

OK

Gas vents - general condition

- Unusual odors, list vents/describe.

Flares ignited NO

OK

Perimeter fence

OK

Erosion/animal burrows

NO

If YES, describe: \_\_\_\_\_

See attached figure

OK except Northern gate mw2

TANNERY ROAD LANDFILL, ROME, NY  
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 12/4/14 Inspector: ECP

**Monitoring Well Water Level Data**

<u>WELL No</u>	<u>Measure Pt Elev.</u>	<u>Depth to Water (ft)</u>	<u>Groundwater Elevation (ft)</u>	<u>Well Condition</u>
MW - 1S	449.59	<u>5.01</u>	_____	_____
MW - 2S	459.44	<u>6.64</u>	_____	_____
MW - 3S	456.4	<u>3.47</u>	_____	_____
MW - 4S	456.19	<u>3.89</u>	_____	_____
MW - 5S	457.15	<u>4.36</u>	_____	_____
MW - 7S	452.25	<u>8.28</u>	_____	_____
MW - 9S	456.38	<u>3.68</u>	_____	_____
MW - 10	486.3	<u>34.33</u>	_____	_____
MW - 11	502.4	<u>57.37</u>	_____	_____
MW - 12	483.11	<u>—</u>	_____	_____
PZ - 1	454.37	<u>5.52</u>	_____	_____

**NOTES:** \_\_\_\_\_

TD 8.82  
TD 5.51  
SD 4.39  
DD 6.69  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPENDIX E**

**LABORATORY REPORTING SHEETS**



**Experience is the solution**

314 North Pearl Street ♦ Albany, New York 12207  
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

December 29, 2014

Ed Fahrenkopf  
Delaware Engineering  
28 Madison Avenue Ext.  
Albany, NY 12203

Work Order No: 141204076

TEL: (518) 452-1290  
FAX: (518) 452-1335

RE:

Dear Ed Fahrenkopf:

Adirondack Environmental Services, Inc received 8 samples on 12/4/2014 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher Hess".

ELAP#: 10709

Christopher Hess  
QA Manager

**Adirondack Environmental Services, Inc****CASE NARRATIVE****CLIENT:** Delaware Engineering**Date:** 29-Dec-14**Project:****Lab Order:** 141204076

Sample containers were supplied by Adirondack Environmental Services.

---

	C - Details are above in Case Narrative
<b>Qualifiers:</b>	ND - Not Detected at reporting limit
	J - Analyte detected below quantitation limit
	B - Analyte detected in Blank
	X - Exceeds maximum contamination limit
	H - Hold time exceeded
	S - LCS Spike recovery outside acceptable limits(+ is over - is under)
	R - Duplication outside acceptable limits
	T - Tentatively Identified Compound-Estimated
	E - Above quantitation range-Estimated
	M - Matrix Spike outside acceptable limits(+ is over - is under)

**Note : All Results are reported as wet weight unless noted****The results relate only to the items tested. Information supplied by the client is assumed to be correct.**

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT: Delaware Engineering  
Work Order: 141204076  
Reference: /  
PO#:

Client Sample ID: MW-7D  
Collection Date: 12/4/2014 7:15:00 AM  
Lab Sample ID: 141204076-001  
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b> ( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )						
	142	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b> ( Prep: SW3010A - 12/5/2014 )						
Aluminum	< 0.100	0.100		mg/L	1	12/18/2014 6:08:07 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:08:07 PM
Arsenic	0.006	0.005		mg/L	1	12/18/2014 6:08:07 PM
Barium	0.035	0.010		mg/L	1	12/18/2014 6:08:07 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:08:07 PM
Boron	0.091	0.050		mg/L	1	12/18/2014 6:08:07 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:08:07 PM
Calcium	42.8	0.050		mg/L	1	12/18/2014 6:08:07 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:08:07 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:08:07 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:08:07 PM
Iron	2.76	0.050		mg/L	1	12/18/2014 6:08:07 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:08:07 PM
Magnesium	8.62	0.050		mg/L	1	12/18/2014 6:08:07 PM
Manganese	1.50	0.020		mg/L	1	12/18/2014 6:08:07 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:08:07 PM
Potassium	6.61	0.050		mg/L	1	12/18/2014 6:08:07 PM
Selenium	0.007	0.005		mg/L	1	12/18/2014 6:08:07 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:08:07 PM
Sodium	2.16	0.050		mg/L	1	12/18/2014 6:08:07 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:08:07 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:08:07 PM
Zinc	< 0.010	0.010		mg/L	1	12/18/2014 6:08:07 PM
<b>MERCURY - EPA 245.1</b> ( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						
Analyst: CS						
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 3:48:33 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 3:48:33 PM
Nitrate, Nitrogen (As N)	0.16	0.02		mg/L	1	12/5/2014 3:48:33 PM
Sulfate	4.95	1.00		mg/L	1	12/5/2014 3:48:33 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-7D  
**Collection Date:** 12/4/2014 7:15:00 AM  
**Lab Sample ID:** 141204076-001  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
Chloromethane	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 3:14:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 3:14:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 3:14:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2,3-Trichloropropene	< 5	5	S-	µg/L	1	12/8/2014 3:14:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Benzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-7D  
**Collection Date:** 12/4/2014 7:15:00 AM  
**Lab Sample ID:** 141204076-001  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:14:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 3:14:00 PM
Surr: 1,2-Dichloroethane-d4	99.2	80.7-117		%REC	1	12/8/2014 3:14:00 PM
Surr: 4-Bromofluorobenzene	97.5	80.2-127		%REC	1	12/8/2014 3:14:00 PM
Surr: Toluene-d8	91.2	79.9-122		%REC	1	12/8/2014 3:14:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						Analyst: PL
Alkalinity, Total (As CaCO3)	130	10		mg/L CaCO3	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						Analyst: RK
Nitrogen, Ammonia (As N)	< 0.1	0.1		mg/L	1	12/17/2014 2:20:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						Analyst: SH
Biochemical Oxygen Demand	4	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						Analyst: SH
Chemical Oxygen Demand	42	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						Analyst: KB
( Prep: Method - 12/8/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/9/2014 2:19:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						Analyst: KB
( Prep: Method - 12/16/2014 )						
Phenolics, Total Recoverable	< 0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering      **Client Sample ID:** MW-7D  
**Work Order:** 141204076      **Collection Date:** 12/4/2014 7:15:00 AM  
**Reference:** /      **Lab Sample ID:** 141204076-001  
**PO#:**      **Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	120	5	R	mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	17.6	1.0		mg/L	1	12/23/2014 4:20:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-1S  
**Collection Date:** 12/4/2014 8:15:00 AM  
**Lab Sample ID:** 141204076-002  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	< 5	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Aluminum	11.4	0.100		mg/L	1	12/18/2014 6:14:31 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:14:31 PM
Arsenic	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Barium	0.024	0.010		mg/L	1	12/18/2014 6:14:31 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Boron	< 0.050	0.050		mg/L	1	12/18/2014 6:14:31 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Calcium	1.22	0.050		mg/L	1	12/18/2014 6:14:31 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:14:31 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Iron	1.02	0.050		mg/L	1	12/18/2014 6:14:31 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:14:31 PM
Magnesium	0.099	0.050		mg/L	1	12/18/2014 6:14:31 PM
Manganese	< 0.020	0.020		mg/L	1	12/18/2014 6:14:31 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:14:31 PM
Potassium	< 0.050	0.050		mg/L	1	12/18/2014 6:14:31 PM
Selenium	0.006	0.005		mg/L	1	12/18/2014 6:14:31 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:14:31 PM
Sodium	0.410	0.050		mg/L	1	12/18/2014 6:14:31 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:14:31 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:14:31 PM
Zinc	0.037	0.010		mg/L	1	12/18/2014 6:14:31 PM
<b>MERCURY - EPA 245.1</b>						<b>Analyst: TM</b>
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						<b>Analyst: CS</b>
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 3:59:40 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 3:59:40 PM
Nitrate, Nitrogen (As N)	0.04	0.02		mg/L	1	12/5/2014 3:59:40 PM
Sulfate	6.10	1.00		mg/L	1	12/5/2014 3:59:40 PM

# Adirondack Environmental Services, Inc

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-1S  
**Collection Date:** 12/4/2014 8:15:00 AM  
**Lab Sample ID:** 141204076-002  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						<b>Analyst: SJ</b>
Chloromethane	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 3:35:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 3:35:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 3:35:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2,3-Trichloropropene	< 5	5	S-	µg/L	1	12/8/2014 3:35:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Benzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

<b>CLIENT:</b>	Delaware Engineering	<b>Client Sample ID:</b>	MW-1S
<b>Work Order:</b>	141204076	<b>Collection Date:</b>	12/4/2014 8:15:00 AM
<b>Reference:</b>	/	<b>Lab Sample ID:</b>	141204076-002
<b>PO#:</b>		<b>Matrix:</b>	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:35:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 3:35:00 PM
Surr: 1,2-Dichloroethane-d4	94.8	80.7-117		%REC	1	12/8/2014 3:35:00 PM
Surr: 4-Bromofluorobenzene	98.8	80.2-127		%REC	1	12/8/2014 3:35:00 PM
Surr: Toluene-d8	90.5	79.9-122		%REC	1	12/8/2014 3:35:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						Analyst: PL
Alkalinity, Total (As CaCO3)	1	1		mg/L CaCO3	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						Analyst: RK
Nitrogen, Ammonia (As N)	< 0.1	0.1		mg/L	1	12/17/2014 2:22:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						Analyst: SH
Biochemical Oxygen Demand	< 4	4		mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						Analyst: SH
Chemical Oxygen Demand	38	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						Analyst: KB
( Prep: Method - 12/8/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/9/2014 2:21:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						Analyst: KB
( Prep: Method - 12/16/2014 )						
Phenolics, Total Recoverable	< 0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-1S  
**Collection Date:** 12/4/2014 8:15:00 AM  
**Lab Sample ID:** 141204076-002  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						<b>Analyst: CS</b>
TDS (Residue, Filterable)	< 5	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						<b>Analyst: TS</b>
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						<b>Analyst: RK</b>
Total Organic Carbon	26.0	1.0		mg/L	1	12/23/2014 4:38:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						<b>Analyst: KB</b>
Color	5	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						<b>Analyst: TS</b>
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering      **Client Sample ID:** MW-5S  
**Work Order:** 141204076      **Collection Date:** 12/4/2014 9:10:00 AM  
**Reference:** /      **Lab Sample ID:** 141204076-003  
**PO#:**      **Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	82	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Aluminum	0.329	0.100		mg/L	1	12/18/2014 6:20:54 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:20:54 PM
Arsenic	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Barium	0.030	0.010		mg/L	1	12/18/2014 6:20:54 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Boron	< 0.050	0.050		mg/L	1	12/18/2014 6:20:54 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Calcium	24.0	0.050		mg/L	1	12/18/2014 6:20:54 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:20:54 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Iron	3.80	0.050		mg/L	1	12/18/2014 6:20:54 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Magnesium	5.38	0.050		mg/L	1	12/18/2014 6:20:54 PM
Manganese	0.564	0.020		mg/L	1	12/18/2014 6:20:54 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:20:54 PM
Potassium	1.19	0.050		mg/L	1	12/18/2014 6:20:54 PM
Selenium	< 0.005	0.005		mg/L	1	12/18/2014 6:20:54 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:20:54 PM
Sodium	0.392	0.050		mg/L	1	12/18/2014 6:20:54 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:20:54 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:20:54 PM
Zinc	< 0.010	0.010		mg/L	1	12/18/2014 6:20:54 PM
<b>MERCURY - EPA 245.1</b>						<b>Analyst: TM</b>
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						<b>Analyst: CS</b>
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 4:10:45 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 4:10:45 PM
Nitrate, Nitrogen (As N)	0.09	0.02		mg/L	1	12/5/2014 4:10:45 PM
Sulfate	6.03	1.00		mg/L	1	12/5/2014 4:10:45 PM

# Adirondack Environmental Services, Inc

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-5S  
**Collection Date:** 12/4/2014 9:10:00 AM  
**Lab Sample ID:** 141204076-003  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						<b>Analyst: SJ</b>
Chloromethane	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 3:57:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 3:57:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 3:57:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2,3-Trichloropropene	< 5	5	S-	µg/L	1	12/8/2014 3:57:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Benzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-5S  
**Collection Date:** 12/4/2014 9:10:00 AM  
**Lab Sample ID:** 141204076-003  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						<b>Analyst: SJ</b>
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 3:57:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 3:57:00 PM
Surr: 1,2-Dichloroethane-d4	94.1	80.7-117		%REC	1	12/8/2014 3:57:00 PM
Surr: 4-Bromofluorobenzene	99.4	80.2-127		%REC	1	12/8/2014 3:57:00 PM
Surr: Toluene-d8	94.3	79.9-122		%REC	1	12/8/2014 3:57:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						<b>Analyst: PL</b>
Alkalinity, Total (As CaCO3)	42	2		mg/L CaCO3	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						<b>Analyst: RK</b>
Nitrogen, Ammonia (As N)	< 0.1	0.1		mg/L	1	12/17/2014 2:24:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						<b>Analyst: SH</b>
Biochemical Oxygen Demand	2 J	4 B		mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						<b>Analyst: SH</b>
Chemical Oxygen Demand	26	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						<b>Analyst: KB</b>
( Prep: Method - 12/8/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/9/2014 2:27:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						<b>Analyst: KB</b>
( Prep: Method - 12/17/2014 )						
Phenolics, Total Recoverable	0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						<b>Analyst: CS</b>

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-5S  
**Collection Date:** 12/4/2014 9:10:00 AM  
**Lab Sample ID:** 141204076-003  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	50	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	7.9	1.0		mg/L	1	12/23/2014 4:55:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	15	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** LMW-10  
**Collection Date:** 12/4/2014 9:50:00 AM  
**Lab Sample ID:** 141204076-004  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	318	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						
( Prep: SW3010A - 12/5/2014 )						
Aluminum	< 0.100	0.100		mg/L	1	12/18/2014 6:27:17 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:27:17 PM
Arsenic	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Barium	0.080	0.010		mg/L	1	12/18/2014 6:27:17 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Boron	0.686	0.050		mg/L	1	12/18/2014 6:27:17 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Calcium	82.1	0.050		mg/L	1	12/18/2014 6:27:17 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:27:17 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Iron	25.2	0.050		mg/L	1	12/18/2014 6:27:17 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Magnesium	27.3	0.050		mg/L	1	12/18/2014 6:27:17 PM
Manganese	0.807	0.020		mg/L	1	12/18/2014 6:27:17 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:27:17 PM
Potassium	74.0	0.050		mg/L	1	12/18/2014 6:27:17 PM
Selenium	< 0.005	0.005		mg/L	1	12/18/2014 6:27:17 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:27:17 PM
Sodium	84.2	0.050		mg/L	1	12/18/2014 6:27:17 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:27:17 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:27:17 PM
Zinc	< 0.010	0.010		mg/L	1	12/18/2014 6:27:17 PM
<b>MERCURY - EPA 245.1</b>						
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						
( Prep: E300.0 - 12/5/2014 )						
Chloride	97.3	1.00		mg/L	1	12/5/2014 5:29:16 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 5:29:16 PM
Nitrate, Nitrogen (As N)	< 0.02	0.02		mg/L	1	12/5/2014 5:29:16 PM
Sulfate	< 1.00	1.00		mg/L	1	12/5/2014 5:29:16 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** LMW-10  
**Collection Date:** 12/4/2014 9:50:00 AM  
**Lab Sample ID:** 141204076-004  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						
						Analyst: SJ
Chloromethane	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 4:18:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Chloroethane	18	10		µg/L	1	12/8/2014 4:18:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 4:18:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 4:18:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,2,3-Trichloropropane	< 5	5	S-	µg/L	1	12/8/2014 4:18:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Benzene	7	5		µg/L	1	12/8/2014 4:18:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Chlorobenzene	10	5		µg/L	1	12/8/2014 4:18:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** LMW-10  
**Collection Date:** 12/4/2014 9:50:00 AM  
**Lab Sample ID:** 141204076-004  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
m,p-Xylene	48	5		µg/L	1	12/8/2014 4:18:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,4-Dichlorobenzene	7	5		µg/L	1	12/8/2014 4:18:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 4:18:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 4:18:00 PM
Surr: 1,2-Dichloroethane-d4	94.7	80.7-117		%REC	1	12/8/2014 4:18:00 PM
Surr: 4-Bromofluorobenzene	97.0	80.2-127		%REC	1	12/8/2014 4:18:00 PM
Surr: Toluene-d8	90.9	79.9-122		%REC	1	12/8/2014 4:18:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	830	10		mg/L CaCO <sub>3</sub>	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						
Nitrogen, Ammonia (As N)	109	10		mg/L	100	12/19/2014 12:27:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						
Biochemical Oxygen Demand	20	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						
Chemical Oxygen Demand	117	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						
( Prep: Method - 12/8/2014 )						Analyst: KB
Cyanide	< 0.01	0.01		mg/L	1	12/9/2014 2:29:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						
( Prep: Method - 12/17/2014 )						Analyst: KB
Phenolics, Total Recoverable	0.010	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						
						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT:	Delaware Engineering	Client Sample ID:	LMW-10
Work Order:	141204076	Collection Date:	12/4/2014 9:50:00 AM
Reference:	/	Lab Sample ID:	141204076-004
PO#:		Matrix:	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	650	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	104	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	38.2	1.0		mg/L	1	12/23/2014 5:12:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering      **Client Sample ID:** MW-4S  
**Work Order:** 141204076      **Collection Date:** 12/4/2014 10:30:00 AM  
**Reference:** /      **Lab Sample ID:** 141204076-005  
**PO#:**      **Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	39	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Aluminum	2.03	0.100		mg/L	1	12/18/2014 6:33:41 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:33:41 PM
Arsenic	0.006	0.005		mg/L	1	12/18/2014 6:33:41 PM
Barium	0.013	0.010		mg/L	1	12/18/2014 6:33:41 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:33:41 PM
Boron	< 0.050	0.050		mg/L	1	12/18/2014 6:33:41 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:33:41 PM
Calcium	11.5	0.050		mg/L	1	12/18/2014 6:33:41 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:33:41 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:33:41 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:33:41 PM
Iron	3.89	0.050		mg/L	1	12/18/2014 6:33:41 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:33:41 PM
Magnesium	2.40	0.050		mg/L	1	12/18/2014 6:33:41 PM
Manganese	0.263	0.020		mg/L	1	12/18/2014 6:33:41 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:33:41 PM
Potassium	0.671	0.050		mg/L	1	12/18/2014 6:33:41 PM
Selenium	0.012	0.005		mg/L	1	12/18/2014 6:33:41 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:33:41 PM
Sodium	0.766	0.050		mg/L	1	12/18/2014 6:33:41 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:33:41 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:33:41 PM
Zinc	0.013	0.010		mg/L	1	12/18/2014 6:33:41 PM
<b>MERCURY - EPA 245.1</b>						<b>Analyst: TM</b>
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						<b>Analyst: CS</b>
Chloride	1.16	1.00		mg/L	1	12/5/2014 5:40:40 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 5:40:40 PM
Nitrate, Nitrogen (As N)	0.08	0.02		mg/L	1	12/5/2014 5:40:40 PM
Sulfate	1.61	1.00		mg/L	1	12/5/2014 5:40:40 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT: Delaware Engineering  
 Work Order: 141204076  
 Reference: /  
 PO#:

Client Sample ID: MW-4S  
 Collection Date: 12/4/2014 10:30:00 AM  
 Lab Sample ID: 141204076-005  
 Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
Chloromethane	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 4:39:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 4:39:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 4:39:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2,3-Trichloropropene	< 5	5	S-	µg/L	1	12/8/2014 4:39:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Benzene	<.5	5		µg/L	1	12/8/2014 4:39:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-4S  
**Collection Date:** 12/4/2014 10:30:00 AM  
**Lab Sample ID:** 141204076-005  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 4:39:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 4:39:00 PM
Surr: 1,2-Dichloroethane-d4	100	80.7-117		%REC	1	12/8/2014 4:39:00 PM
Surr: 4-Bromofluorobenzene	102	80.2-127		%REC	1	12/8/2014 4:39:00 PM
Surr: Toluene-d8	90.3	79.9-122		%REC	1	12/8/2014 4:39:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						Analyst: PL
Alkalinity, Total (As CaCO <sub>3</sub> )	26	2		mg/L CaCO <sub>3</sub>	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						Analyst: RK
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	1	12/17/2014 3:10:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						Analyst: SH
Biochemical Oxygen Demand	2 J	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						Analyst: SH
Chemical Oxygen Demand	113	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						Analyst: KB
( Prep: Method - 12/8/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/9/2014 2:31:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						Analyst: KB
( Prep: Method - 12/17/2014 )						
Phenolics, Total Recoverable	0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT:	Delaware Engineering	Client Sample ID:	MW-4S
Work Order:	141204076	Collection Date:	12/4/2014 10:30:00 AM
Reference:	/	Lab Sample ID:	141204076-005
PO#:		Matrix:	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	80	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	1.4	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	41.6	1.0		mg/L	1	12/23/2014 5:29:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering      **Client Sample ID:** MW-3S  
**Work Order:** 141204076      **Collection Date:** 12/4/2014 11:15:00 AM  
**Reference:** /      **Lab Sample ID:** 141204076-006  
**PO#:**      **Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	215	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Aluminum	< 0.100	0.100		mg/L	1	12/18/2014 6:46:40 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:46:40 PM
Arsenic	0.006	0.005		mg/L	1	12/18/2014 6:46:40 PM
Barium	0.043	0.010		mg/L	1	12/18/2014 6:46:40 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Boron	0.092	0.050		mg/L	1	12/18/2014 6:46:40 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Calcium	65.1	0.050		mg/L	1	12/18/2014 6:46:40 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:46:40 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Iron	21.9	0.050		mg/L	1	12/18/2014 6:46:40 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Magnesium	12.6	0.050		mg/L	1	12/18/2014 6:46:40 PM
Manganese	0.859	0.020		mg/L	1	12/18/2014 6:46:40 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:46:40 PM
Potassium	5.31	0.050		mg/L	1	12/18/2014 6:46:40 PM
Selenium	< 0.005	0.005		mg/L	1	12/18/2014 6:46:40 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:46:40 PM
Sodium	0.464	0.050		mg/L	1	12/18/2014 6:46:40 PM
Thallium	0.011	0.010		mg/L	1	12/18/2014 6:46:40 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:46:40 PM
Zinc	< 0.010	0.010		mg/L	1	12/18/2014 6:46:40 PM
<b>MERCURY - EPA 245.1</b>						<b>Analyst: TM</b>
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						<b>Analyst: CS</b>
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 5:51:47 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 5:51:47 PM
Nitrate, Nitrogen (As N)	0.10	0.02		mg/L	1	12/5/2014 5:51:47 PM
Sulfate	2.11	1.00		mg/L	1	12/5/2014 5:51:47 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT: Delaware Engineering  
 Work Order: 141204076  
 Reference: /  
 PO#:

Client Sample ID: MW-3S  
 Collection Date: 12/4/2014 11:15:00 AM  
 Lab Sample ID: 141204076-006  
 Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
Chloromethane	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 5:01:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 5:01:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 5:01:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2,3-Trichloropropene	< 5	5	S-	µg/L	1	12/8/2014 5:01:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Benzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-3S  
**Collection Date:** 12/4/2014 11:15:00 AM  
**Lab Sample ID:** 141204076-006  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						<b>Analyst: SJ</b>
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:01:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 5:01:00 PM
Surr: 1,2-Dichloroethane-d4	98.2	80.7-117	%REC		1	12/8/2014 5:01:00 PM
Surr: 4-Bromofluorobenzene	97.4	80.2-127	%REC		1	12/8/2014 5:01:00 PM
Surr: Toluene-d8	89.8	79.9-122	%REC		1	12/8/2014 5:01:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						<b>Analyst: PL</b>
Alkalinity, Total (As CaCO <sub>3</sub> )	200	10		mg/L CaCO <sub>3</sub>	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						<b>Analyst: RK</b>
Nitrogen, Ammonia (As N)	0.3	0.1		mg/L	1	12/17/2014 3:12:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						<b>Analyst: SH</b>
Biochemical Oxygen Demand	6	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						<b>Analyst: SH</b>
Chemical Oxygen Demand	38	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						<b>Analyst: KB</b>
( Prep: Method - 12/11/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/11/2014 4:13:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						<b>Analyst: KB</b>
( Prep: Method - 12/17/2014 )						
Phenolics, Total Recoverable	< 0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						<b>Analyst: CS</b>

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-3S  
**Collection Date:** 12/4/2014 11:15:00 AM  
**Lab Sample ID:** 141204076-006  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	155	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	11.3	1.0		mg/L	1	12/23/2014 5:47:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-2D  
**Collection Date:** 12/4/2014 12:00:00 PM  
**Lab Sample ID:** 141204076-007  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Total Hardness (As CaCO <sub>3</sub> )	61	5		mg/L CaCO <sub>3</sub>	1	12/18/2014
<b>ICP METALS - EPA 200.7</b>						<b>Analyst: SM</b>
( Prep: SW3010A - 12/5/2014 )						
Aluminum	< 0.100	0.100		mg/L	1	12/18/2014 6:53:05 PM
Antimony	< 0.060	0.060		mg/L	1	12/18/2014 6:53:05 PM
Arsenic	0.008	0.005		mg/L	1	12/18/2014 6:53:05 PM
Barium	0.076	0.010		mg/L	1	12/18/2014 6:53:05 PM
Beryllium	< 0.005	0.005		mg/L	1	12/18/2014 6:53:05 PM
Boron	< 0.050	0.050		mg/L	1	12/18/2014 6:53:05 PM
Cadmium	< 0.005	0.005		mg/L	1	12/18/2014 6:53:05 PM
Calcium	19.9	0.050		mg/L	1	12/18/2014 6:53:05 PM
Chromium	< 0.005	0.005		mg/L	1	12/18/2014 6:53:05 PM
Cobalt	< 0.050	0.050		mg/L	1	12/18/2014 6:53:05 PM
Copper	< 0.005	0.005		mg/L	1	12/18/2014 6:53:05 PM
Iron	1.77	0.050		mg/L	1	12/18/2014 6:53:05 PM
Lead	< 0.005	0.005		mg/L	1	12/18/2014 6:53:05 PM
Magnesium	2.71	0.050		mg/L	1	12/18/2014 6:53:05 PM
Manganese	0.240	0.020		mg/L	1	12/18/2014 6:53:05 PM
Nickel	< 0.020	0.020		mg/L	1	12/18/2014 6:53:05 PM
Potassium	3.66	0.050		mg/L	1	12/18/2014 6:53:05 PM
Selenium	0.007	0.005		mg/L	1	12/18/2014 6:53:05 PM
Silver	< 0.010	0.010		mg/L	1	12/18/2014 6:53:05 PM
Sodium	0.835	0.050		mg/L	1	12/18/2014 6:53:05 PM
Thallium	< 0.010	0.010		mg/L	1	12/18/2014 6:53:05 PM
Vanadium	< 0.020	0.020		mg/L	1	12/18/2014 6:53:05 PM
Zinc	< 0.010	0.010		mg/L	1	12/18/2014 6:53:05 PM
<b>MERCURY - EPA 245.1</b>						<b>Analyst: TM</b>
( Prep: E245.1 - 12/8/2014 )						
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						<b>Analyst: CS</b>
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 6:02:53 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 6:02:53 PM
Nitrate, Nitrogen (As N)	0.27	0.02		mg/L	1	12/5/2014 6:02:53 PM
Sulfate	7.14	1.00		mg/L	1	12/5/2014 6:02:53 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

CLIENT: Delaware Engineering  
 Work Order: 141204076  
 Reference: /  
 PO#:

Client Sample ID: MW-2D  
 Collection Date: 12/4/2014 12:00:00 PM  
 Lab Sample ID: 141204076-007  
 Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Analyst: SJ
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>							
Chloromethane	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 5:22:00 PM	
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Chloroethane	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Methylene chloride	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Acetone	< 10	10	S-	µg/L	1	12/8/2014 5:22:00 PM	
Iodomethane	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 5:22:00 PM	
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Bromoform	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Chloroform	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
2-Butanone	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,2,3-Trichloropropane	< 5	5	S-	µg/L	1	12/8/2014 5:22:00 PM	
Dibromomethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Trichloroethene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Benzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Bromoform	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
2-Hexanone	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 5:22:00 PM	
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Toluene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM	

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-2D  
**Collection Date:** 12/4/2014 12:00:00 PM  
**Lab Sample ID:** 141204076-007  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 5:22:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:22:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 5:22:00 PM
Surr: 1,2-Dichloroethane-d4	93.2	80.7-117		%REC	1	12/8/2014 5:22:00 PM
Surr: 4-Bromofluorobenzene	97.6	80.2-127		%REC	1	12/8/2014 5:22:00 PM
Surr: Toluene-d8	90.7	79.9-122		%REC	1	12/8/2014 5:22:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						Analyst: PL
Alkalinity, Total (As CaCO <sub>3</sub> )	60	2		mg/L CaCO <sub>3</sub>	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						Analyst: RK
Nitrogen, Ammonia (As N)	0.2	0.1		mg/L	1	12/17/2014 3:14:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						Analyst: SH
Biochemical Oxygen Demand	4	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						Analyst: SH
Chemical Oxygen Demand	26	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						Analyst: KB
( Prep: Method - 12/11/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/11/2014 4:15:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						Analyst: KB
( Prep: Method - 12/17/2014 )						
Phenolics, Total Recoverable	0.002	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-2D  
**Collection Date:** 12/4/2014 12:00:00 PM  
**Lab Sample ID:** 141204076-007  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						<b>Analyst: CS</b>
TDS (Residue, Filterable)	30	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						<b>Analyst: TS</b>
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						<b>Analyst: RK</b>
Total Organic Carbon	7.5	1.0		mg/L	1	12/23/2014 6:03:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						<b>Analyst: KB</b>
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						<b>Analyst: TS</b>
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-9S  
**Collection Date:** 12/4/2014 1:00:00 PM  
**Lab Sample ID:** 141204076-008  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>HARDNESS - SM 2340B</b> ( Prep: SW3010A - 12/5/2014 )						Analyst: SM
Total Hardness (As CaCO <sub>3</sub> )	116	5		mg/L CaCO <sub>3</sub>	1	12/19/2014
<b>ICP METALS - EPA 200.7</b> ( Prep: SW3010A - 12/5/2014 )						Analyst: SM
Aluminum	0.194	0.100		mg/L	1	12/19/2014 12:25:18 PM
Antimony	< 0.060	0.060		mg/L	1	12/19/2014 12:25:18 PM
Arsenic	< 0.005	0.005		mg/L	1	12/19/2014 12:25:18 PM
Barium	0.066	0.010		mg/L	1	12/19/2014 12:25:18 PM
Beryllium	< 0.005	0.005		mg/L	1	12/19/2014 12:25:18 PM
Boron	< 0.050	0.050		mg/L	1	12/19/2014 12:25:18 PM
Cadmium	< 0.005	0.005		mg/L	1	12/19/2014 12:25:18 PM
Calcium	40.4	0.050		mg/L	1	12/19/2014 12:25:18 PM
Chromium	< 0.005	0.005		mg/L	1	12/19/2014 12:25:18 PM
Cobalt	< 0.050	0.050		mg/L	1	12/19/2014 12:25:18 PM
Copper	0.020	0.005		mg/L	1	12/19/2014 12:25:18 PM
Iron	0.614	0.050		mg/L	1	12/19/2014 12:25:18 PM
Lead	0.021	0.005		mg/L	1	12/19/2014 12:25:18 PM
Magnesium	3.76	0.050		mg/L	1	12/19/2014 12:25:18 PM
Manganese	0.179	0.020		mg/L	1	12/19/2014 12:25:18 PM
Nickel	< 0.020	0.020		mg/L	1	12/19/2014 12:25:18 PM
Potassium	3.39	0.050		mg/L	1	12/19/2014 12:25:18 PM
Selenium	< 0.005	0.005		mg/L	1	12/19/2014 12:25:18 PM
Silver	< 0.010	0.010		mg/L	1	12/19/2014 12:25:18 PM
Sodium	52.5	0.500		mg/L	10	12/19/2014 12:36:01 PM
Thallium	< 0.010	0.010		mg/L	1	12/19/2014 12:25:18 PM
Vanadium	< 0.020	0.020		mg/L	1	12/19/2014 12:25:18 PM
Zinc	< 0.010	0.010		mg/L	1	12/19/2014 12:25:18 PM
<b>MERCURY - EPA 245.1</b> ( Prep: E245.1 - 12/8/2014 )						Analyst: TM
Mercury	< 0.0002	0.0002		mg/L	1	12/8/2014
<b>ANIONS BY ION CHROMATOGRAPHY - EPA 300.0</b>						Analyst: CS
Chloride	< 1.00	1.00		mg/L	1	12/5/2014 6:13:57 PM
Bromide	< 1.00	1.00		mg/L	1	12/5/2014 6:13:57 PM
Nitrate, Nitrogen (As N)	0.13	0.02		mg/L	1	12/5/2014 6:13:57 PM
Sulfate	3.74	1.00		mg/L	1	12/5/2014 6:13:57 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-9S  
**Collection Date:** 12/4/2014 1:00:00 PM  
**Lab Sample ID:** 141204076-008  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
Chloromethane	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Bromomethane	< 10	10	S-	µg/L	1	12/8/2014 5:43:00 PM
Vinyl chloride	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Chloroethane	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Methylene chloride	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Acetone	< 10	10	S-	µg/L	1	12/8/2014 5:43:00 PM
Iodomethane	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Acrylonitrile	< 25	25		µg/L	1	12/8/2014 5:43:00 PM
Trichlorofluoromethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Carbon disulfide	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,1-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,1-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
trans-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
2,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
cis-1,2-Dichloroethene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Bromochloromethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Chloroform	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2-Dichloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
2-Butanone	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
1,1,1-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Carbon tetrachloride	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Vinyl acetate	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Bromodichloromethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2-Dichloropropane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
cis-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2,3-Trichloropropane	< 5	5	S-	µg/L	1	12/8/2014 5:43:00 PM
Dibromomethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Trichloroethene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Dibromochloromethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,1,2-Trichloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Benzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
trans-1,3-Dichloropropene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Bromoform	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
2-Hexanone	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
4-Methyl-2-pentanone	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Tetrachloroethene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,1,2,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2-Dibromoethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Toluene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Chlorobenzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering  
**Work Order:** 141204076  
**Reference:** /  
**PO#:**

**Client Sample ID:** MW-9S  
**Collection Date:** 12/4/2014 1:00:00 PM  
**Lab Sample ID:** 141204076-008  
**Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>BASELINE VOLATILES EPA 8260C - (SW5030C PREP)</b>						Analyst: SJ
1,1,1,2-Tetrachloroethane	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Ethylbenzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
Styrene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
o-Xylene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
m,p-Xylene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
trans-1,4-Dichloro-2-butene	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
1,3-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,4-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2-Dichlorobenzene	< 5	5		µg/L	1	12/8/2014 5:43:00 PM
1,2-Dibromo-3-chloropropane	< 10	10		µg/L	1	12/8/2014 5:43:00 PM
Surr: 1,2-Dichloroethane-d4	93.6	80.7-117		%REC	1	12/8/2014 5:43:00 PM
Surr: 4-Bromofluorobenzene	101	80.2-127		%REC	1	12/8/2014 5:43:00 PM
Surr: Toluene-d8	91.8	79.9-122		%REC	1	12/8/2014 5:43:00 PM
<b>ALKALINITY TO PH 4.5 -SM 2320B</b>						Analyst: PL
Alkalinity, Total (As CaCO <sub>3</sub> )	230	10		mg/L CaCO <sub>3</sub>	1	12/16/2014
<b>AMMONIA (NON-DISTILLED) - EPA 350.1</b>						Analyst: RK
Nitrogen, Ammonia (As N)	< 0.1	0.1		mg/L	1	12/17/2014 3:16:00 PM
<b>BOD, 5 DAY, 20°C - SM 5210B</b>						Analyst: SH
Biochemical Oxygen Demand	3.6 J	4	B	mg/L	1	12/5/2014 5:50:00 PM
<b>CHEMICAL OXYGEN DEMAND - EPA 410.4</b>						Analyst: SH
Chemical Oxygen Demand	49	5		mg/L	1	12/11/2014
<b>CYANIDE, TOTAL - EPA 335.4</b>						Analyst: KB
( Prep: Method - 12/11/2014 )						
Cyanide	< 0.01	0.01		mg/L	1	12/11/2014 4:17:00 PM
<b>PHENOLS, TOTAL - EPA 420.1</b>						Analyst: KB
( Prep: Method - 12/17/2014 )						
Phenolics, Total Recoverable	0.003	0.002		mg/L	1	12/28/2014
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS

**Adirondack Environmental Services, Inc**

Date: 29-Dec-14

**CLIENT:** Delaware Engineering      **Client Sample ID:** MW-9S  
**Work Order:** 141204076      **Collection Date:** 12/4/2014 1:00:00 PM  
**Reference:** /      **Lab Sample ID:** 141204076-008  
**PO#:**      **Matrix:** GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>TOTAL DISSOLVED SOLIDS - SM 2540C</b>						Analyst: CS
TDS (Residue, Filterable)	220	5		mg/L	1	12/10/2014
<b>TKN (INCLUDES PREP) - SM 4500 N C</b>						Analyst: TS
Nitrogen, Kjeldahl, Total	< 1.0	1.0		mg/L	1	12/17/2014
<b>TOTAL ORGANIC CARBON - SM 5310C</b>						Analyst: RK
Total Organic Carbon	21.2	1.0		mg/L	1	12/23/2014 6:20:00 AM
<b>COLOR (PLATINUM-COBALT) - SM 2120B</b>						Analyst: KB
Color	> 70	5		cpu	1	12/4/2014 7:30:00 PM
<b>HEXAVALENT CHROMIUM - SM3500-CR D</b>						Analyst: TS
Chromium, Hexavalent	< 0.02	0.02		mg/L	1	12/4/2014 6:55:00 PM



314 North Pearl Street  
Albany, New York 12207  
518-434-4546/434-0891 FAX

## **CHAIN OF CUSTODY RECORD**

**AES Work Order #**

141204076

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Shipment Arrived Via: FedEx UPS Client AES Other: _____					CC Report To / Special Instructions/Remarks: <i>(EDD) deliverable + email when available</i>		
Turnaround Time Request: <input type="checkbox"/> 1 Day <input type="checkbox"/> 3 Day <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 2 Day <input type="checkbox"/> 5 Day							
Note: Samples received after 3:30 pm are considered next business day <i>EDD Deliverable</i>							
Relinquished by: (Signature) <i>EDD Deliverable</i>					Received by: (Signature)	Date/Time	
Relinquished by: (Signature)					Received by: (Signature)	Date/Time	
Relinquished by: (Signature)					Received for Laboratory by: <i>J. m</i>	Date/Time <i>12/4/14 3:01</i>	
TEMPERATURE Ambient or <input checked="" type="radio"/> Chilled		AES Bottles <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		PROPERLY PRESERVED <input checked="" type="radio"/> Y <input type="checkbox"/> N		RECEIVED WITHIN HOLDING TIMES <input checked="" type="radio"/> Y <input type="checkbox"/> N	
Notes: _____		Notes: _____		Notes: _____		Notes: _____	

**WHITE - Lab Copy**

**YELDW - Sampler Copy**

**PINK - Generator Copy**

## Adirondack Environmental Services, Inc.



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## **TERMS, CONDITIONS & LIMITATIONS**

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

- (a) Neither **Adirondack Environmental Services, Inc.**, nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.**'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.
- (b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.
- (c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.
- (d) In no event shall **Adirondack Environmental Services, Inc.**, its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- (e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**
- (f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.
- (g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.