

**CITY OF ROME
TANNERY ROAD LANDFILL
2001 ANNUAL**

Prepared for:

City of Rome
City Hall 198 N. Washington Street
Rome, New York 13440

Prepared by:

Delaware Engineering, P.C.
28 Madison Avenue Extension
Albany, New York 12203

March 2001

TABLE OF CONTENTS

1.0 INTRODUCTION.....	3
2.0 GROUND WATER AND LEACHTE ANALYTICAL DATA	3
3.0 GROUND WATER ELEVATION DATA.....	4
4.0 SITE INSPECTIONS.....	4
4.1 WEEKLY SITE INSPECTIONS	4
4.2 MONTHLY INSPECTIONS.....	4
5.0 GROUND WATER / LEACHATE PUMPING SYSTEM	5
6.0 RECOMMENDATIONS.....	5

List of Appendices

- Appendix A Analytical Data Summary Tables
- Appendix B Laboratory Reporting Sheets
- Appendix C Summary 2001 Ground Water Elevation Data
- Appendix D Monthly Inspection Forms
- Appendix E Monthly Leachate Volume Pumping Data Summary

List of Drawings

- March 2001 Ground Water Contour Map
- June 2001 Ground Water Contour Map
- September 2001 Ground Water Contour Map
- December 2001 Ground Water Contour Map

1.0 INTRODUCTION

This document presents the 2001 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 February 2001 through January 2002.

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

- The results of all ground water and leachate quality analytical data.
- The amount of ground water/leachate collected from the recovery wells.
- Water level monitoring and ground water contour maps for March, June, September and December 2001.
- Monthly Inspection Data.
- Significant maintenance or repair issues and their resolution and any deviations from the approved O&M procedures.

2.0 GROUND WATER AND LEACHATE ANALYTICAL DATA

Ground water samples were collected in March, June, September and December from monitoring wells MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-7D and groundwater/leachate well MW-12. The June, March and September samples were analyzed for the NYSDEC Part 360 Routine parameters. The samples collected in December 2001 were analyzed for the Part 360 baseline parameters. Ground water sample collection was performed following the procedures specified in the NYSDEC approved O&M manual.

Analytical results have been previously submitted to the NYSDEC in the quarterly monitoring reports. Tables summarizing the analytical data for each quarter are provided in Appendix A. Concentrations which exceed the New York State ground water standard are presented in a bold font. Laboratory reporting sheets are presented in Appendix B.

The ground water analytical data from 2001 demonstrates that ground water in the vicinity of monitoring wells MW-3S, MW-4S and MW-7D continue to exhibit elevated concentrations of landfill related constituents. Ground water from monitoring well MW-3S consistently exhibits concentrations of ammonia, sodium, and total dissolved solids (TDS) that are above both the NYSDEC ground water standards and upgradient MW-9S concentrations. Ground water from

monitoring well MW-7D consistently exhibits ammonia, and TDS concentrations and monitoring well MW-4S ammonia values that are above ground water standards and upgradient MW-9S concentrations. The MW-7D December 2001 baseline ground water volatile organic sample exhibited chlorobenzene, benzene and xylene concentrations that were above the respective ground water standards.

3.0 GROUND WATER ELEVATION DATA

Consistent with the O&M plan, ground water elevation data were measured monthly from monitoring wells MW-1S, MW-2S, MW-3S, MW-4S, MW-5S, MW-7S, MW-9S, piezometer PZ-1 and leachate well MW-12. Because of obstructions in leachate wells MW-10 and MW-11, ground water elevations were not measured at either of these locations. Reconstruction of monitoring wells MW-10 and MW-11 was completed in October 2001 and the measuring point elevation (top of inner casing, feet above mean sea level) was surveyed in February 2001. Water levels have been taken since completion of construction. Summaries of the 2001 ground water elevation data are provided in Appendix C. Ground water contour maps for March, June, September and December 2001 are provided in the attached map pockets.

The ground water elevation data demonstrate that from January through April and from September through December, water level elevations in monitoring wells MW-2S, MW-3S, MW-4S and MW-5S are consistently higher than the MW-12 landfill leachate monitoring well, indicating a possible inward gradient.

The ground water elevations in monitoring wells MW-1S, MW-7S and piezometer PZ-1 are consistently lower than landfill leachate well MW-12. The data indicate that there is no inward gradient toward the landfill from the area east of the landfill. The MW-1S ground water data indicate that the landfill has not had an impact on ground water quality in the vicinity of MW-1S.

4.0 SITE INSPECTIONS

4.1 Weekly Site Inspections

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

4.2 Monthly Inspections

Delaware Engineering performed monthly 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. In March, June, September and December, ground water samples were collected and submitted for analysis as discussed in Section 2.0. The annual gas vent inspection and hydrogen sulfide measurements were conducted on August 30, 2001. Copies of the completed inspection forms are provided in Appendix D.

During most of 2001, obstructions in leachate monitoring wells MW-10 and MW-11 prevented the collection of ground water elevation data. As Previously stated construction of MW-10 and MW-11 was completed in October 2001 with the exception of a survey (feet above mean sea level). Starting in March of 2002 ground water samples will be collected from monitoring well MW-10. Recovery well RW-4, which was not operational in 2001, has been repaired and it is anticipated that the well will be operational beginning in early 2002.

5.0 GROUND WATER / LEACHATE PUMPING SYSTEM

For each recovery well, readings from the flow totalizers in the meter pit were recorded during the monthly inspections. Leachate flows for each recovery well for the period between January 12, 2001 to January 16, 2002 are presented below. Monthly summaries of the flow data are provided in Appendix E.

RW-1	596,400 gallons
RW-2	1,179,900 gallons
RW-3	297,500 gallons
RW-4	0 gallons

6.0 RECOMMENDATIONS

As discussed in Section 3.0, ground water from monitoring wells MW-3S, MW-4S and MW-7S have consistently exhibited ammonia, sodium and TDS value concentrations that exceed both the NYSDEC ground water standards and upgradient MW-9S concentrations. Ground water quality adjacent to the landfill has been adequately characterized. The landfill has been capped and leachate is actively pumped from the waste mass via the on-site recovery wells. Ground water quality is not expected to significantly change on a quarterly basis. Therefore, annual collection and analysis of ground water from the on-site ground water monitoring wells for the Part 360 baseline parameters would provide adequate ground water monitoring. Ground water elevation data will continue to be obtained on a monthly basis.

APPENDIX A

ANALYTICAL DATA SUMMARY TABLES

Table 1
March 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

Sample Location	MW-1S	MW-3S	MW-4S	X-1	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Leachate Indicators (mg/L)									
Ammonia-Nitrogen	0.073	130	7.4	46	1.3	46	0.28	200	2
Total Kjeldahl Nitrogen	0.62	150	8.2	51	1.8	52	1	210	NS
Biochemical Oxygen Demand (BOD ₅)	NA	NA	NA	NA	NA	NA	NA	NA	NS
Total Phenols	<0.002	0.0025	<0.002	0.0057	<0.002	0.0026	<0.002	0.02	0.001
Sulfate	6.7	33	11	34	42	35	4.2	2.3	250
Chloride	2.9	220	7.1	75	5	74	3.4	320	250
Bromide	<0.1	1.2	<0.1	0.95	<0.1	0.93	<0.1	4.2	2 (GV)
Nitrate-Nitrogen	0.15	<0.1	<0.1	<0.1	<0.1	0.13	<0.1	0.17	10
Chemical Oxygen Demand	36	350	110	140	37	140	96	360	NS
Total Alkalinity	1.4	1200	57	480	200	430	230	1300	NS
Total Organic Carbon	16	120	42	51	13	49	35	130	NS
Total Dissolved Solids	14	1500	170	670	300	670	360	1800	500
Total Hardness	10	320	31	270	200	280	1200	620	NS
Total Metals (mg/L)									
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium	1.9	87	7.7	68	64	70	300	110	NS
Iron	8.8	34	4.9	40	15	41	110	58	0.3
Lead	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.042	<0.01	0.025
Magnesium	1.3	25	3	24	10	25	100	82	35 (GV)
Manganese	0.11	1.1	0.3	0.78	2.6	0.8	5	0.35	0.3
Potassium	1.1	170	16	45	8.8	43	14	190	NS
Sodium	1.2	320	7.4	54	3.8	54	55	340	20
Field Parameters									
pH (units)	6.18	6.42	5.81		6.26	6.2	7.2	6.56	6.5-8.5
Conductivity (umhos/cm)	23	3,130	204		456	1,350	419	4,080	NS
Turbidity (NTU)	316	35	29		35	97	>999	150	5
Temperature (C)	3.9	5	5.3		6	8.9	6.1	11.7	NS

Notes:

- 1) Results in **bold** typeface indicate that the result exceeds the applicable standard. See Table 2 for a summary of these results.
- 2) NS indicates No Standard.
- 3) GV indicates that the standard listed is a Guidance Value.

Table 1
June 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

Sample Location	MW-1S	MW-3S	MW-4S	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Leachate Indicators (mg/L)								
Ammonia-Nitrogen	<0.03	110	9.8	0.34	40	0.3	190	2
Total Kjeldahl Nitrogen	0.62	130	12	0.67	43	1.3	190	NS
Biochemical Oxygen Demand (BOD ₅)	<4	24	12	<4	13	<4	5.5	NS
Total Phenols	<0.002	0.0032	0.003	<0.002	0.0034	<0.002	0.024	0.001
Sulfate	6.8	32	17	34	47	2.9	2.8	250
Chloride	2.4	210	8.7	2.9	62	3.2	330	250
Bromide	<0.1	1.1	0.12	<0.1	0.74	0.17	3.9	2 (GV)
Nitrate-Nitrogen	0.15	0.15	<0.1	0.22	<0.1	0.18	0.26	10
Chemical Oxygen Demand	26	180	98	5.2	120	120	170	NS
Total Alkalinity	2	1200	91	50	470	260	1700	NS
Total Organic Carbon	11	130	43	7.2	44	30	130	NS
Total Dissolved Solids	56	1500	200	120	570	380	1700	500
Total Hardness	8.6	360	40	78	270	300	620	NS
Total Metals (mg/L)								
Boron	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	2.3	1
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium	1.7	99	9.6	23	66	88	100	NS
Iron	5.6	34	6.6	10	42	21	56	0.3
Lead	<0.01	<0.01	<0.01	<0.01	0.013	0.012	<0.01	0.025
Magnesium	1	28	3.9	5.1	25	19	86	35 (GV)
Manganese	0.093	1.2	0.37	0.37	0.76	1.1	0.35	0.3
Potassium	<1	170	24	24	39	4.2	210	NS
Sodium	<1	370	13	13	56	48	450	20
Field Parameters								
pH (units)	4.95	6.3	5.7	6.5	5.96	6.94	6.54	6.5-8.5
Conductivity (umhos/cm)	34	2,870	247	163	1,200	365	4	NS
Turbidity (NTU)	186	31	24	42	112	704	432	5
Temperature (C)	14.7	14	15.6	14.6	12.7	11.9	18.4	NS

Notes:

- 1) Results in **bold** typeface indicate that the result exceeds the applicable standard. See Table 2 for a summary of these results.
- 2) NS indicates No Standard.
- 3) GV indicates that the standard listed is a Guidance Value.

Table 1
September 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

Sample Location	MW-1S	MW-3S	MW-4S	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Leachate Indicators (mg/L)								
Ammonia-Nitrogen	0.089	95	32	1.4	47	0.39	240	2
Total Kjeldahl Nitrogen	0.6	100	34	1.6	50	1	230	NS
Biochemical Oxygen Demand (BOD ₅)	<4	16	25	4.7	14	4.2	40	NS
Total Phenols	<0.002	0.0022	0.0024	<0.002	0.0039	<0.002	0.021	0.001
Sulfate	17	66	49	53	45	3.1	3	250
Chloride	3.8	110	43	6	46	3.6	460	250
Bromide	<0.1	0.5	0.24	0.13	0.75	0.12	3.9	2 (GV)
Nitrate-Nitrogen	0.16	<0.1	<0.1	<0.1	<0.1	<0.1	0.16	10
Chemical Oxygen Demand	34	410	160	43	120	72	31	NS
Total Alkalinity	12	930	170	190	430	240	1800	NS
Total Organic Carbon	13	84	61	13	43	29	140	NS
Total Dissolved Solids	190	1100	300	240	480	240	1700	500
Total Hardness	20	290	56	230	260	420	660	NS
Total Metals (mg/L)								
Boron	<0.5	1.3	0.65	<0.5	0.83	<0.5	2.8	1
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Calcium	5.7	82	14	72	64	120	120	NS
Iron	7.8	26	6.9	15	39	30	65	0.3
Lead	<0.01	<0.01	<0.01	<0.01	0.014	0.012	<0.01	0.025
Magnesium	1.5	20	4.9	12	25	29	90	35 (GV)
Manganese	0.19	0.95	0.48	2.5	0.76	1.5	0.45	0.3
Potassium	1.2	140	33	9.4	41	7.2	200	NS
Sodium	7.5	220	46	4.8	59	33	400	20
Field Parameters								
pH (units)	5.89	6.68	6.07	6.75	6.39	6.65	6.75	6.5-8.5
Conductivity (umhos/cm)	62	2,150	555	433	1,090	390	4,100	NS
Turbidity (NTU)	88	56	19	68	152	241	315	5
Temperature (C)	14.8	12.5	12.7	11.6	11.2	11.4	14.1	NS

Notes:

- 1) Results in **bold** typeface indicate that the result exceeds the applicable standard. See Table 2 for a summary of these results.
- 2) NS indicates No Standard.
- 3) GV indicates that the standard listed is a Guidance Value.

Table 1
December 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

Sample Location	MW-1S	MW-3S	MW-4S	X-1	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Leachate Indicators (mg/L)									
Total Cyanide	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.2
Ammonia-Nitrogen	<0.03	130	3.1	41	0.43	39	0.21	270	2
Total Kjeldahl Nitrogen	0.23	120	4.6	42	0.62	39	0.7	250	NS
Biochemical Oxygen Demand (BOD ₅)	<4	12	<10	<10	<4	<20	<4	25	NS
Total Phenols	<0.002	0.0034	<0.002	0.0029	<0.002	0.0042	<0.002	0.02	0.001
Chloride	2.5	150	5.6	58	3.2	56	3.3	330	250
Bromide	<0.1	0.79	<0.1	0.9	<0.1	0.64	<0.1	4.3	2 (GV)
Sulfate	6.2	79	27	53	36	52	8.6	<1	250
Nitrate-Nitrogen	<0.1	<0.1	<0.1	0.15	<0.1	<0.1	0.17	<0.1	10
Chemical Oxygen Demand	14	230	88	120	23	120	75	240	NS
Total Alkalinity	1.9	860	23	400	68	390	210	1800	NS
Chromium Hexavalent	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05
Total Organic Carbon	11.3	90	33	46	9.6	47	32	120	NS
Total Dissolved Solids	<4	1200	180	640	200	650	430	2000	500
Color (PCU)	50	750	300	1200	75	850	600	750	15
Total Hardness	9.8	260	42	260	110	250	390	580	NS
Total Metals (mg/L)									
Boron	<0.5	1.6	<0.5	1	<0.5	<0.5	<0.5	3	1
Potassium	<1	150	14	36	5.6	37	4.6	220	NS
Sodium	1.2	250	5.7	51	1.4	50	43	280	20
Iron	3.2	30	6.6	40	6.1	40	24	54	0.3
Manganese	0.07	0.91	0.38	0.72	1.4	0.7	1.5	0.4	0.3
Magnesium	<1	20	4	23	6	22	28	80	35 (GV)
Lead	<1	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.018	0.025
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.005
Aluminum	5	1	1.1	1.7	0.41	1.2	12	1.8	NS
Calcium	2.2	73	10	66	35	65	110	100	NS
Antimony	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003
Arsenic	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	0.013	0.025

Table 1
December 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

	Sample Location	MW-1S	MW-3S	MW-4S	X-1	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Beryllium		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.003(GV)
Barium		<0.2	0.61	<0.2	0.43	<0.2	0.43	<0.2	0.4	1
Chromium		<0.01	0.015	<0.01	<0.01	<0.01	<0.01	0.02	0.012	0.05
Copper		<0.01	<0.01	<0.01	<0.01	<0.01	0.022	0.036	<0.01	0.2
Nickel		<0.01	0.019	<0.01	<0.01	<0.01	<0.01	0.027	0.031	0.1
Selenium		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Silver		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05
Thallium		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	0.0005(GV)
Zinc		0.04	0.025	0.012	0.042	0.013	0.036	0.063	0.071	2(GV)
Cobalt		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	NS
Vanadium		<0.01	0.042	<0.01	0.014	<0.01	0.013	0.023	0.02	NS
Mercury		<0.0002	0.00698	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00027	0.0007
Field Parameters										
pH (units)		6.23	6.71	6.07		6.84	6.31	7.39	6.65	6.5-8.5
Conductivity (umhos/cm)		37	2,680	177		227	1,290	408	5,090	NS
Turbidity (NTU)		90	42	18		36	53	466	125	5
Temperature (C)		6.7	7.6	7.7		7.7	10.1	8.2	11.9	NS
Volatiles (ug/L)										
Acetone		<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
Acrylonitrile		<20	<20	<20	<20	<20	<20	<20	<20	5
Benzene		<5	<5	<5	16	<5	17	<5	33	1
Bromochloromethane		<5	<5	<5	<5	<5	<5	<5	<5	5
Bromodichloromethane		<5	<5	<5	<5	<5	<5	<5	<5	50(GV)
Bromoform		<5	<5	<5	<5	<5	<5	<5	<5	50(GV)
Bromomethane		<5	<5	<5	<5	<5	<5	<5	<5	5
2-Butanone (MEK)		<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
Carbon disulfide		<5	<5	<5	<5	<5	<5	<5	<5	60 (GV)
Carbon tetrachloride		<5	<5	<5	<5	<5	<5	<5	<5	5
Chlorobenzene		<5	<5	<5	5.9	<5	5.8	<5	<5	5

Table 1
December 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

	Sample Location	MW-1S	MW-3S	MW-4S	X-1	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Chloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Chloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Chloroform	<5	<5	<5	<5	<5	<5	<5	<5	<5	7
Dibromochloromethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.04
1,2-Dibromoethane (EDB)	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Dibromomethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,2-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	3
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	3
trans-1,4-Dichloro-2-butene	<50	<50	<50	<50	<50	<50	<50	<50	<50	5
1,1-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.6
1,1-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
cis-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
trans-1,2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,2-Dichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5	1
cis-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
trans-1,3-Dichloropropene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Ethyl benzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
2-Hexanone	<10	<10	<10	<10	<10	<10	<10	<10	<10	50(GV)
Iodomethane	<20	<20	<20	<20	<20	<20	<20	<20	<20	50
Methylene chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	5
4-Methyl-2-pentanone	<10	<10	<10	<10	<10	<10	<10	<10	<10	5
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,1,1,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,1,2,2-Tetrachloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
1,1,1-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	1
1,1,2-Trichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Trichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	5

Table 1
December 2001 Ground Water Analytical Data
Tannery Road Landfill
Rome, New York

Sample Location	MW-1S	MW-3S	MW-4S	X-1	MW-5S	MW-7D	MW-9S	MW-12	NYSDEC Ground Water Standard/GV
Trichlorofluoromethane	<5	<5	<5	<5	<5	<5	<5	<5	5
1,2,3-Trichloropropane	<5	<5	<5	<5	<5	<5	<5	<5	0.04
Vinyl acetate	<20	<20	<20	<20	<20	<20	<20	<20	NS
Vinyl Chloride	<5	<5	<5	<5	<5	<5	<5	<5	2
Xylenes (Total)	<5	<5	<5	140	<5	130	<5	26	5*

Notes:

- 1) Results in bold typeface indicate that the result exceeds the applicable standard. See Table 2 for a summary of these results.
- 2) NS indicates No Standard.
- 3) GV indicates that the standard listed is a Guidance Value.
- 4) N/A indicates not analyzed.

APPENDIX B

LABORATORY REPORTING SHEETS



LSL

Laboratory Analysis Report

For

Delaware Engineering

LSL Project Number: 0102406

Diane Segaric QC 4/4/01

Reviewed By

Date

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

Life Science Laboratories, Inc.

LSL Central Lab
5854 Butternut Drive
East Syracuse, NY 13057
Tel. (315) 445-1105
Fax (315) 445-1301
NYS DOH ELAP #10248

LSL North Lab
131 St. Lawrence Avenue
Waddington, NY 13694
Tel. (315) 388-4476
Fax (315) 388-4061
NYS DOH ELAP #10900

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:

LSL Project No.: 0102406

Authorization:

Report Date: 4/4/01

Sample ID: X-1

Source: Tannery Road Landfill

LSL Sample ID: 0102406-001

Sample Matrix: NPW

Date Sampled: 3/19/2001

Parameter(s)

Results Units

Analysis Date and Time

(1) EPA 200.7 Total Metals

Cadmium	<0.01 mg/l	3/22/01
Calcium	68 mg/l	3/22/01
Iron	40 mg/l	3/22/01
Lead	<0.01 mg/l	3/22/01
Magnesium	24 mg/l	3/22/01
Manganese	0.78 mg/l	3/22/01
Potassium	45 mg/l	3/23/01
Sodium	54 mg/l	3/22/01
Boron	1.1 mg/l	3/22/01

(1) EPA 350.1 Ammonia

Ammonia as N	46 mg/l	3/30/01
--------------	---------	---------

(1) EPA 351.2 TKN as N

Total Kjeldahl Nitrogen	51 mg/l	3/29/01
-------------------------	---------	---------

(1) EPA 405.1 BOD-5*

Biochemical Oxygen Demand, 5 Day

*Not analyzed due to laboratory error.

(1) EPA 420.1 Recoverable Phenolics LL

Phenolics, Total Recoverable	0.0057 mg/l	3/27/01
------------------------------	-------------	---------

(1) EPA Method 300.0 A

Sulfate	34 mg/l	3/20/01
Chloride	75 mg/l	3/20/01
Bromide	0.95 mg/l	3/20/01
Nitrate as N	<0.1 mg/l	3/20/01 15:01

(1) HACH 8000 COD

Chemical Oxygen Demand	140	3/22/01
------------------------	-----	---------

(1) SM 18 2320B, Alkalinity as CaCO₃

Alkalinity	480 mg/l	3/31/01
------------	----------	---------

(1) SM 19 5310C TOC

Total Organic Carbon	51 mg/l	3/23/01
----------------------	---------	---------

(1) SM-2540C Total Dissolved Solids

Total Dissolved Solids @ 180 C	670 mg/l	3/20/01
--------------------------------	----------	---------

(1) SM19 2340B,Total Hardness as CaCO₃

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:	LSL Project No.: 0102406	
Authorization:	Report Date: 4/4/01	
Hardness, Total	270 mg/l	3/22/01
Calcium	68 mg/l	3/22/01
Magnesium	24 mg/l	3/22/01

Sample ID: MW-1S

Source: Tannery Road Landfill

LSL Sample ID: 0102406-002

Sample Matrix: NPW

Date Sampled: 3/19/2001

	Parameter(s)	Results	Units	Analysis Date and Time
(1)	EPA 200.7 Total Metals			
	Cadmium	<0.01	mg/l	3/22/01
	Calcium	1.9	mg/l	3/22/01
	Iron	8.8	mg/l	3/22/01
	Lead	<0.01	mg/l	3/22/01
	Magnesium	1.3	mg/l	3/22/01
	Manganese	0.11	mg/l	3/22/01
	Potassium	1.1	mg/l	3/22/01
	Sodium	1.2	mg/l	3/22/01
	Boron	<0.5	mg/l	3/22/01
(1)	EPA 350.1 Ammonia			
	Ammonia as N	0.073	mg/l	3/30/01
(1)	EPA 351.2 TKN as N*			
	Total Kjeldahl Nitrogen	0.62	mg/l	3/29/01
	<i>*The result reported for this sample has been corrected for the concentration found in the blank.</i>			
(1)	EPA 405.1 BOD-5*			
	Biochemical Oxygen Demand, 5 Day			
	<i>*Not analyzed due to laboratory error.</i>			
(1)	EPA 420.1 Recoverable Phenolics LL			
	Phenolics, Total Recoverable	<0.002	mg/l	3/27/01
(1)	EPA Method 300.0 A			
	Sulfate	6.7	mg/l	3/20/01
	Chloride	2.9	mg/l	3/20/01
	Bromide	<0.1	mg/l	3/20/01
	Nitrate as N	0.15	mg/l	3/20/01 15:18
(1)	HACH 8000 COD			
	Chemical Oxygen Demand	36		3/22/01
(1)	SM 18 2320B, Alkalinity as CaCO ₃			
	Alkalinity	1.4	mg/l	3/31/01
(1)	SM 19 5310C TOC			

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:

LSL Project No.: 0102406

Authorization:

Report Date: 4/4/01

Total Organic Carbon	16 mg/l	3/23/01
(1) SM-2540C Total Dissolved Solids Total Dissolved Solids @ 180 C	14 mg/l	3/20/01
(1) SM19 2340B, Total Hardness as CaCO ₃ Hardness, Total	10 mg/l	3/22/01
Calcium	1.9 mg/l	3/22/01
Magnesium	1.3 mg/l	3/22/01

Sample ID: MW-3S

Source: Tannery Road Landfill

LSL Sample ID: 0102406-003

Sample Matrix: NPW

Date Sampled: 3/19/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	3/22/01
Calcium	87	mg/l	3/22/01
Iron	34	mg/l	3/22/01
Lead	<0.01	mg/l	3/22/01
Magnesium	25	mg/l	3/22/01
Manganese	1.1	mg/l	3/22/01
Potassium	170	mg/l	3/23/01
Sodium	320	mg/l	3/22/01
Boron	1.9	mg/l	3/22/01
(1) EPA 350.1 Ammonia Ammonia as N	130	mg/l	3/30/01
(1) EPA 351.2 TKN as N Total Kjeldahl Nitrogen	150	mg/l	3/29/01
(1) EPA 405.1 BOD-5*			
Biochemical Oxygen Demand, 5 Day			
*Not analyzed due to laboratory error.			
(1) EPA 420.1 Recoverable Phenolics LL Phenolics, Total Recoverable	0.0025	mg/l	3/27/01
(1) EPA Method 300.0 A			
Sulfate	33	mg/l	3/20/01
Chloride	220	mg/l	3/21/01
Bromide	1.2	mg/l	3/20/01
Nitrate as N	<0.1	mg/l	3/20/01
(1) HACH 8000 COD Chemical Oxygen Demand	350		15:36 3/22/01

Life Science Laboratories, Inc.

Page 4 of 10

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:	LSL Project No.:	0102406
Authorization:	Report Date:	4/4/01
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	1200 mg/l	3/31/01
(1) SM 19 5310C TOC		
Total Organic Carbon	120 mg/l	3/23/01
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	1500 mg/l	3/20/01
(1) SM19 2340B, Total Hardness as CaCO ₃		
Hardness, Total	320 mg/l	3/22/01
Calcium	87 mg/l	3/22/01
Magnesium	25 mg/l	3/22/01

Sample ID: MW-4S

Source: Tannery Road Landfill

LSL Sample ID: 0102406-004

Sample Matrix: NPW

Date Sampled: 3/19/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01 mg/l		3/22/01
Calcium	7.7 mg/l		3/22/01
Iron	4.9 mg/l		3/22/01
Lead	<0.01 mg/l		3/22/01
Magnesium	3.0 mg/l		3/22/01
Manganese	0.30 mg/l		3/22/01
Potassium	16 mg/l		3/22/01
Sodium	7.4 mg/l		3/22/01
Boron	<0.5 mg/l		3/22/01
(1) EPA 350.1 Ammonia			
Ammonia as N	7.4 mg/l		3/30/01
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	8.2 mg/l		3/29/01
(1) EPA 405.1 BOD-5*			
Biochemical Oxygen Demand, 5 Day			
*Not analyzed due to laboratory error.			
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002 mg/l		3/30/01
(1) EPA Method 300.0 A			
Sulfate	11 mg/l		3/20/01
Chloride	7.1 mg/l		3/20/01
Bromide	<0.1 mg/l		3/20/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:	LSL Project No.:	0102406	
Authorization:	Report Date:	4/4/01	
Nitrate as N	<0.1 mg/l	3/20/01	15:54
(1) HACH 8000 COD			
Chemical Oxygen Demand	110	3/22/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	57 mg/l	3/31/01	
(1) SM 19 5310C TOC			
Total Organic Carbon	42 mg/l	3/23/01	
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	170 mg/l	3/20/01	
(1) SM19 2340B,Total Hardness as CaCO ₃			
Hardness, Total	31 mg/l	3/22/01	
Calcium	7.7 mg/l	3/22/01	
Magnesium	3.0 mg/l	3/22/01	

Sample ID: MW-5S

Source: Tannery Road Landfill

LSL Sample ID: 0102406-005

Sample Matrix: NPW

Date Sampled: 3/19/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01 mg/l		3/22/01
Calcium	64 mg/l		3/22/01
Iron	15 mg/l		3/22/01
Lead	<0.01 mg/l		3/22/01
Magnesium	10 mg/l		3/22/01
Manganese	2.6 mg/l		3/22/01
Potassium	8.8 mg/l		3/22/01
Sodium	3.8 mg/l		3/22/01
Boron	<0.5 mg/l		3/22/01
(1) EPA 350.1 Ammonia			
Ammonia as N	1.3 mg/l		3/30/01
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	1.8 mg/l		3/29/01
(1) EPA 405.1 BOD-5*			
Biochemical Oxygen Demand, 5 Day			
*Not analyzed due to laboratory error.			
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002 mg/l		3/30/01
(1) EPA Method 300.0 A			

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335

Project No.:	LSL Project No.: 0102406	
Authorization:	Report Date: 4/4/01	
Sulfate	42 mg/l	3/20/01
Chloride	5.0 mg/l	3/20/01
Bromide	<0.1 mg/l	3/20/01
Nitrate as N	<0.1 mg/l	3/20/01 16:11
(1) HACH 8000 COD		
Chemical Oxygen Demand	37	3/22/01
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	200 mg/l	3/31/01
(1) SM 19 5310C TOC		
Total Organic Carbon	13 mg/l	3/23/01
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	300 mg/l	3/20/01
(1) SM19 2340B,Total Hardness as CaCO ₃		
Hardness, Total	200 mg/l	3/22/01
Calcium	64 mg/l	3/22/01
Magnesium	10 mg/l	3/22/01

Sample ID: MW-7D

Source: Tannery Road Landfill

LSL Sample ID: 0102406-006

Date Sampled: 3/19/2001

Sample Matrix: NPW

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01 mg/l		3/22/01
Calcium	70 mg/l		3/22/01
Iron	41 mg/l		3/22/01
Lead	<0.01 mg/l		3/22/01
Magnesium	25 mg/l		3/22/01
Manganese	0.80 mg/l		3/22/01
Potassium	43 mg/l		3/23/01
Sodium	54 mg/l		3/22/01
Boron	1.2 mg/l		3/22/01
(1) EPA 350.1 Ammonia			
Ammonia as N	46 mg/l		3/30/01
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	52 mg/l		3/29/01
(1) EPA 405.1 BOD-5*			
Biochemical Oxygen Demand, 5 Day			

*Not analyzed due to laboratory error.

-- LABORATORY ANALYSIS REPORT --

**Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203**

**Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335**

Project No.:

LSL Project No.: 0102406

Authorization:

Report Date: 4/4/01

(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	0.0026 mg/l	3/30/01	
(1) EPA Method 300.0 A			
Sulfate	35 mg/l	3/20/01	
Chloride	74 mg/l	3/20/01	
Bromide	0.93 mg/l	3/20/01	
Nitrate as N	0.13 mg/l	3/20/01	16:29
(1) HACH 8000 COD			
Chemical Oxygen Demand	140	3/22/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	430 mg/l	3/31/01	
(1) SM 19 5310C TOC			
Total Organic Carbon	49 mg/l	3/23/01	
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	670 mg/l	3/20/01	
(1) SM19 2340B, Total Hardness as CaCO ₃			
Hardness, Total	280 mg/l	3/22/01	
Calcium	70 mg/l	3/22/01	
Magnesium	25 mg/l	3/22/01	

Sample ID: MW-9S

Source: Tannery Road Landfill

LSL Sample ID: 0102406-007

Sample Matrix: NPW

Date Sampled: 3/19/2001

	<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals				
Cadmium	<0.01 mg/l		3/22/01	
Calcium	300 mg/l		3/22/01	
Iron	110 mg/l		3/22/01	
Lead	0.042 mg/l		3/22/01	
Magnesium	100 mg/l		3/22/01	
Manganese	5.0 mg/l		3/22/01	
Potassium	14 mg/l		3/22/01	
Sodium	55 mg/l		3/22/01	
Boron	<0.5 mg/l		3/22/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	0.28 mg/l		3/30/01	
(1) EPA 351.2 TKN as N*				
Total Kjeldahl Nitrogen	1.0 mg/l		3/29/01	

Life Science Laboratories, Inc.

Page 8 of 10

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900

-- LABORATORY ANALYSIS REPORT --

**Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203**

**Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335**

Project No.:

LSL Project No.: 0102406

Authorization:

Report Date: 4/4/01

**The result reported for this sample has been corrected for the concentration found in the blank.*

(1) EPA 405.1 BOD-5*

Biochemical Oxygen Demand, 5 Day

**Not analyzed due to laboratory error.*

(1) EPA 420.1 Recoverable Phenolics LL

Phenolics, Total Recoverable

<0.002 mg/l 3/30/01

(1) EPA Method 300.0 A

Sulfate

4.2 mg/l 3/20/01

Chloride

3.4 mg/l 3/20/01

Bromide

<0.1 mg/l 3/20/01

Nitrate as N

<0.1 mg/l 3/20/01 16:46

(1) HACH 8000 COD

Chemical Oxygen Demand

96 3/22/01

(1) SM 18 2320B, Alkalinity as CaCO₃

Alkalinity

230 mg/l 3/31/01

(1) SM 19 5310C TOC

Total Organic Carbon

35 mg/l 3/23/01

(1) SM-2540C Total Dissolved Solids

Total Dissolved Solids @ 180 C

360 mg/l 3/20/01

(1) SM19 2340B,Total Hardness as CaCO₃

Hardness, Total

1200 mg/l 3/22/01

Calcium

300 mg/l 3/22/01

Magnesium

100 mg/l 3/22/01

Sample ID: MW-12

Source: Tannery Road Landfill

LSL Sample ID: 0102406-008

Sample Matrix: NPW

Date Sampled: 3/19/2001

Parameter(s)

Results Units

Analysis Date and Time

(1) EPA 200.7 Total Metals

Cadmium

<0.01 mg/l 3/22/01

Calcium

110 mg/l 3/22/01

Iron

58 mg/l 3/22/01

Lead

<0.01 mg/l 3/22/01

Magnesium

82 mg/l 3/22/01

Manganese

0.35 mg/l 3/22/01

Potassium

190 mg/l 3/23/01

Sodium

340 mg/l 3/22/01

Boron

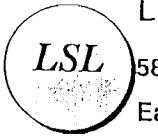
3.1 mg/l 3/22/01

-- LABORATORY ANALYSIS REPORT --

**Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203**

**Attn: Ed Fahrenkopf
Phone: (518) 452-1290
FAX: (518) 452-1335**

Project No.:	LSL Project No.:	0102406
Authorization:	Report Date:	
(1) EPA 350.1 Ammonia Ammonia as N	200 mg/l	3/30/01
(1) EPA 351.2 TKN as N Total Kjeldahl Nitrogen	210 mg/l	3/29/01
(1) EPA 405.1 BOD-5* Biochemical Oxygen Demand, 5 Day		
	*Not analyzed due to laboratory error.	
(1) EPA 420.1 Recoverable Phenolics LL Phenolics, Total Recoverable	0.020 mg/l	3/30/01
(1) EPA Method 300.0 A Sulfate	2.3 mg/l	3/20/01
	Chloride	320 mg/l
	Bromide	4.2 mg/l
	Nitrate as N	0.17 mg/l
(1) HACH 8000 COD Chemical Oxygen Demand	360	3/22/01
(1) SM 18 2320B, Alkalinity as CaCO ₃ Alkalinity	1300 mg/l	3/31/01
(1) SM 19 5310C TOC Total Organic Carbon	130 mg/l	3/23/01
(1) SM-2540C Total Dissolved Solids Total Dissolved Solids @ 180 C	1800 mg/l	3/20/01
(1) SM19 2340B, Total Hardness as CaCO ₃ Hardness, Total	620 mg/l	3/22/01
	Calcium	110 mg/l
	Magnesium	82 mg/l



Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

Phone # (315) 445-1105

Telefax # (315) 445-1301

Chain of Custody Record

Notes and Hazard identifications:

Part 360

ROUTINE (new - 93)

110

CONTAINERS REC
THIS CDC

Custody Transfers		Date	Time
Sampled By:	Brent Zimmer	3/19/2001	4:09
Relinquished By:	Brent Zimmer	3/19/2001	5:00
Relinquished By:	Received for Lab By:	ED	03-19-01 03:00 PM
Shipment Method:	Samples Received Intact:	Y	N



LSL

**Ed Fahrenkopf
Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203**

**Phone: (518) 452-1290
FAX: (518) 452-1335**

Laboratory Analysis Report For Delaware Engineering

Project Number: 01-177

LSL Project Number: 0107291

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

Life Science Laboratories, Inc.

LSL Central Lab

5854 Butternut Drive
East Syracuse, NY 13057
Tel. (315) 445-1105
Fax (315) 445-1301
NYS DOH ELAP #10248

LSL North Lab

131 St. Lawrence Avenue
Waddington, NY 13694
Tel. (315) 388-4476
Fax (315) 388-4061
NYS DOH ELAP #10900

LSL Finger Lakes Lab

16 N. Main St., PO Box 424
Wayland, NY 14572
Tel. (716) 728-3320
Fax (716) 728-2711
NYS DOH ELAP #11667

This report was reviewed by:

adeczak OAO

Life Science Laboratories, Inc.

Date: 7-12-01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.: 01-177

LSL Project No.: 0107291

Authorization:

Report Date: 7/11/01

Sample ID: MW-1S

Source: Tannery Road Landfill

LSL Sample ID: 0107291-001

Sample Matrix: NPW

Date Sampled: 6/25/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	6/29/01
Calcium	1.7	mg/l	6/29/01
Iron	5.6	mg/l	6/29/01
Lead	<0.01	mg/l	6/29/01
Magnesium	1.0	mg/l	6/29/01
Manganese	0.093	mg/l	6/29/01
Potassium	<1	mg/l	6/29/01
Sodium	<1	mg/l	6/29/01
Boron	<0.5	mg/l	6/29/01
(1) EPA 350.1 Ammonia			
Ammonia as N	<0.03	mg/l	7/10/01
(1) EPA 351.2 TKN as N*			
Total Kjeldahl Nitrogen	0.62	mg/l	7/10/01
*The result reported for this sample has been corrected for the concentration found in the blank.			
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<4	mg/l	6/27/01 9:25
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002	mg/l	7/9/01
(1) EPA Method 300.0 A			
Sulfate	6.8	mg/l	6/27/01
Chloride	2.4	mg/l	6/27/01
Bromide	<0.1	mg/l	6/27/01
Nitrate as N	0.15	mg/l	6/27/01 9:27
(1) HACH 8000 COD			
Chemical Oxygen Demand	26	mg/l	7/3/01
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	2.0	mg/l	7/2/01
(1) SM 19 5310C TOC			
Total Organic Carbon	11	mg/l	7/2/01
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	56	mg/l	6/28/01
(1) SM19 2340B, Total Hardness as CaCO ₃			
Hardness, Total	8.6	mg/l	6/29/01
Calcium	1.7	mg/l	6/29/01
Magnesium	1.0	mg/l	6/29/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: 01-177

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0107291

Report Date: 7/11/01

Sample ID: MW-3S

Source: Tannery Road Landfill

Sample Matrix: NPW

LSL Sample ID: 0107291-002

Date Sampled: 6/25/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	6/29/01	
Calcium	99	mg/l	6/29/01	
Iron	34	mg/l	6/29/01	
Lead	<0.01	mg/l	6/29/01	
Magnesium	28	mg/l	6/29/01	
Manganese	1.2	mg/l	6/29/01	
Potassium	170	mg/l	7/9/01	
Sodium	370	mg/l	6/29/01	
Boron	1.2	mg/l	6/29/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	110	mg/l	7/10/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	130	mg/l	7/10/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	24	mg/l	6/27/01	9:33
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.0032	mg/l	7/9/01	
(1) EPA Method 300.0 A				
Sulfate	32	mg/l	6/27/01	
Chloride	210	mg/l	7/9/01	
Bromide	1.1	mg/l	6/27/01	
Nitrate as N	0.15	mg/l	6/27/01	9:44
(1) HACH 8000 COD				
Chemical Oxygen Demand	180	mg/l	7/3/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	1200	mg/l	7/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	130	mg/l	7/5/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	1500	mg/l	6/28/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	360	mg/l	6/29/01	
Calcium	99	mg/l	6/29/01	
Magnesium	28	mg/l	6/29/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.: 01-177

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0107291

Report Date: 7/11/01

Sample ID: MW-4S

Source: Tannery Road Landfill

Sample Matrix: NPW

LSL Sample ID: 0107291-003

Date Sampled: 6/25/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	6/29/01
Calcium	9.6	mg/l	6/29/01
Iron	6.6	mg/l	6/29/01
Lead	<0.01	mg/l	6/29/01
Magnesium	3.9	mg/l	6/29/01
Manganese	0.37	mg/l	6/29/01
Potassium	24	mg/l	6/29/01
Sodium	13	mg/l	6/29/01
Boron	<0.5	mg/l	6/29/01
(1) EPA 350.1 Ammonia			
Ammonia as N	9.8	mg/l	7/10/01
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	12	mg/l	7/10/01
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	12	mg/l	6/27/01 9:38
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	0.0030	mg/l	7/9/01
(1) EPA Method 300.0 A			
Sulfate	17	mg/l	6/27/01
Chloride	8.7	mg/l	6/27/01
Bromide	0.12	mg/l	6/27/01
Nitrate as N	<0.1	mg/l	6/27/01 10:02
(1) HACH 8000 COD			
Chemical Oxygen Demand	98	mg/l	7/3/01
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	91	mg/l	7/2/01
(1) SM 19 5310C TOC			
Total Organic Carbon	43	mg/l	7/2/01
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	200	mg/l	6/28/01
(1) SM19 2340B, Total Hardness as CaCO ₃			
Hardness, Total	40	mg/l	6/29/01
Calcium	9.6	mg/l	6/29/01
Magnesium	3.9	mg/l	6/29/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: 01-177

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0107291

Report Date: 7/11/01

Sample ID: MW-5S

Source: Tannery Road Landfill

Sample Matrix: NPW

LSL Sample ID: 0107291-004

Date Sampled: 6/25/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	6/29/01
Calcium	23	mg/l	6/29/01
Iron	10	mg/l	6/29/01
Lead	<0.01	mg/l	6/29/01
Magnesium	5.1	mg/l	6/29/01
Manganese	0.37	mg/l	6/29/01
Potassium	24	mg/l	6/29/01
Sodium	13	mg/l	6/29/01
Boron	<0.5	mg/l	6/29/01
(1) EPA 350.1 Ammonia			
Ammonia as N	0.34	mg/l	7/10/01
(1) EPA 351.2 TKN as N*			
Total Kjeldahl Nitrogen	0.67	mg/l	7/10/01
*The result reported for this sample has been corrected for the concentration found in the blank.			
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<4	mg/l	6/27/01 9:40
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002	mg/l	7/9/01
(1) EPA Method 300.0 A			
Sulfate	34	mg/l	6/27/01
Chloride	2.9	mg/l	6/27/01
Bromide	<0.1	mg/l	6/27/01
Nitrate as N	0.22	mg/l	6/27/01 10:20
(1) HACH 8000 COD			
Chemical Oxygen Demand	5.2	mg/l	7/3/01
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	50	mg/l	7/2/01
(1) SM 19 5310C TOC			
Total Organic Carbon	7.2	mg/l	7/2/01
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	120	mg/l	6/28/01
(1) SM19 2340B, Total Hardness as CaCO ₃			
Hardness, Total	78	mg/l	6/29/01
Calcium	23	mg/l	6/29/01
Magnesium	5.1	mg/l	6/29/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0107291

Report Date: 7/11/01

Project No.: 01-177

Authorization:

Sample ID: MW-7D

Source: Tannery Road Landfill

LSL Sample ID: 0107291-005

Sample Matrix: NPW

Date Sampled: 6/25/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	6/29/01	
Calcium	66	mg/l	6/29/01	
Iron	42	mg/l	6/29/01	
Lead	0.013	mg/l	6/29/01	
Magnesium	25	mg/l	6/29/01	
Manganese	0.76	mg/l	6/29/01	
Potassium	39	mg/l	7/9/01	
Sodium	56	mg/l	6/29/01	
Boron	<0.5	mg/l	6/29/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	40	mg/l	7/10/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	43	mg/l	7/10/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	13	mg/l	6/27/01	9:44
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.0034	mg/l	7/9/01	
(1) EPA Method 300.0 A				
Sulfate	47	mg/l	6/27/01	
Chloride	62	mg/l	6/27/01	
Bromide	0.74	mg/l	6/27/01	
Nitrate as N	<0.1	mg/l	6/27/01	10:37
(1) HACH 8000 COD				
Chemical Oxygen Demand	120	mg/l	7/3/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	470	mg/l	7/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	44	mg/l	7/2/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	570	mg/l	6/28/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	270	mg/l	6/29/01	
Calcium	66	mg/l	6/29/01	
Magnesium	25	mg/l	6/29/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: 01-177

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0107291

Report Date: 7/11/01

Sample ID: MW-9S

Source: Tannery Road Landfill

Sample Matrix: NPW

LSL Sample ID: 0107291-006

Date Sampled: 6/25/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	6/29/01	
Calcium	88	mg/l	6/29/01	
Iron	21	mg/l	6/29/01	
Lead	0.012	mg/l	6/29/01	
Magnesium	19	mg/l	6/29/01	
Manganese	1.1	mg/l	6/29/01	
Potassium	4.2	mg/l	6/29/01	
Sodium	48	mg/l	6/29/01	
Boron	<0.5	mg/l	6/29/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	0.30	mg/l	7/10/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	1.3	mg/l	7/10/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	<4	mg/l	6/27/01	9:46
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	<0.002	mg/l	7/9/01	
(1) EPA Method 300.0 A				
Sulfate	2.9	mg/l	6/27/01	
Chloride	3.2	mg/l	6/27/01	
Bromide	0.17	mg/l	6/27/01	
Nitrate as N	0.18	mg/l	6/27/01	10:55
(1) HACH 8000 COD				
Chemical Oxygen Demand	120	mg/l	7/3/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	260	mg/l	7/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	30	mg/l	7/2/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	380	mg/l	6/28/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	300	mg/l	6/29/01	
Calcium	88	mg/l	6/29/01	
Magnesium	19	mg/l	6/29/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: 01-177

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0107291

Report Date: 7/11/01

Sample ID: MW-12

Source: Tannery Road Landfill

Sample Matrix: NPW

LSL Sample ID: 0107291-007

Date Sampled: 6/25/2001

Parameter(s)

Results Units Analysis Date and Time

(1) EPA 200.7 Total Metals

Cadmium	<0.01	mg/l	6/29/01
Calcium	100	mg/l	6/29/01
Iron	56	mg/l	6/29/01
Lead	<0.01	mg/l	6/29/01
Magnesium	86	mg/l	6/29/01
Manganese	0.35	mg/l	6/29/01
Potassium	210	mg/l	7/9/01
Sodium	450	mg/l	6/29/01
Boron	2.3	mg/l	6/29/01

(1) EPA 350.1 Ammonia

Ammonia as N	190	mg/l	7/10/01
--------------	-----	------	---------

(1) EPA 351.2 TKN as N

Total Kjeldahl Nitrogen	190	mg/l	7/10/01
-------------------------	-----	------	---------

(1) EPA 405.1 BOD-5

Biochemical Oxygen Demand, 5 Day	5.5	mg/l	6/27/01	9:48
----------------------------------	-----	------	---------	------

(1) EPA 420.1 Recoverable Phenolics LL

Phenolics, Total Recoverable	0.024	mg/l	7/9/01
------------------------------	-------	------	--------

(1) EPA Method 300.0 A

Sulfate	2.8	mg/l	6/27/01
Chloride	330	mg/l	7/9/01
Bromide	3.9	mg/l	6/27/01
Nitrate as N	0.26	mg/l	6/27/01

11:12

(1) HACH 8000 COD

Chemical Oxygen Demand	170	mg/l	7/3/01
------------------------	-----	------	--------

(1) SM 18 2320B, Alkalinity as CaCO₃

Alkalinity	1700	mg/l	7/2/01
------------	------	------	--------

(1) SM 19 5310C TOC

Total Organic Carbon	130	mg/l	7/5/01
----------------------	-----	------	--------

(1) SM-2540C Total Dissolved Solids

Total Dissolved Solids @ 180 C	1700	mg/l	6/28/01
--------------------------------	------	------	---------

(1) SM19 2340B,Total Hardness as CaCO₃

Hardness, Total	620	mg/l	6/29/01
Calcium	100	mg/l	6/29/01
Magnesium	86	mg/l	6/29/01

The logo consists of the letters "LSL" in a bold, serif font, enclosed within a thick black circle.

Ed Fahrenkopf
Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

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

Laboratory Analysis Report For Delaware Engineering

Project Number: Routine(New)

LSL Project Number: 0112021

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

Life Science Laboratories, Inc.

LSL Central Lab

5854 Butternut Drive
East Syracuse, NY 13057
Tel. (315) 445-1105
Fax (315) 445-1301
NYS DOH ELAP #10248

LSL North Lab

131 St. Lawrence Avenue
Waddington, NY 13694
Tel. (315) 388-4476
Fax (315) 388-4061
NYS DOH ELAP #10900

LSL Finger Lakes Lab

16 N. Main St., PO Box 424
Wayland, NY 14572
Tel. (716) 728-3320
Fax (716) 728-2711
NYS DOH ELAP #11667

This report was reviewed by:


Lee S. H. QAO
Life Science Laboratories, Inc.

Date: 10-12-01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: Routine(New)

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-7D

Source:

LSL Sample ID: 0112021-001

Sample Matrix: NPW

Date Sampled: 9/27/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	10/1/01	
Calcium	64	mg/l	10/1/01	
Iron	39	mg/l	10/1/01	
Lead	0.014	mg/l	10/1/01	
Magnesium	25	mg/l	10/1/01	
Manganese	0.76	mg/l	10/1/01	
Potassium	41	mg/l	10/2/01	
Sodium	59	mg/l	10/1/01	
Boron	0.83	mg/l	10/1/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	47	mg/l	10/9/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	50	mg/l	10/8/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	14	mg/l	9/28/01	12:18
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.0039	mg/l	10/12/01	
(1) EPA Method 300.0 A				
Sulfate	45	mg/l	9/29/01	
Chloride	46	mg/l	9/28/01	
Bromide	0.75	mg/l	9/29/01	
Nitrate as N	<0.1	mg/l	9/29/01	0.53
(1) HACH 8000 COD				
Chemical Oxygen Demand	120	mg/l	10/2/01	
(1) SM 18 2320B; Alkalinity as CaCO ₃				
Alkalinity	430	mg/l	10/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	43	mg/l	10/9/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	480	mg/l	10/1/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	260	mg/l	10/1/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: Routine(New)

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-1S

Source:

Sample Matrix: NPW

LSL Sample ID: 0112021-002

Date Sampled: 9/27/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	10/1/01
Calcium	5.7	mg/l	10/1/01
Iron	7.8	mg/l	10/1/01
Lead	<0.01	mg/l	10/1/01
Magnesium	1.5	mg/l	10/1/01
Manganese	0.19	mg/l	10/1/01
Potassium	1.2	mg/l	10/1/01
Sodium	7.5	mg/l	10/1/01
Boron	<0.5	mg/l	10/1/01
(1) EPA 350.1 Ammonia			
Ammonia as N	0.089	mg/l	10/9/01
(1) EPA 351.2 TKN as N*			
Total Kjeldahl Nitrogen	0.60	mg/l	10/8/01
*The result reported for this sample has been corrected for the concentration found in the blank.			
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<4	mg/l	9/28/01 12:29
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002	mg/l	10/12/01
(1) EPA Method 300.0 A			
Sulfate	17	mg/l	9/29/01
Chloride	3.8	mg/l	9/29/01
Bromide	<0.1	mg/l	9/29/01
Nitrate as N	0.16	mg/l	9/29/01 1:46
(1) HACH 8000 COD			
Chemical Oxygen Demand	34	mg/l	10/2/01
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	12	mg/l	10/2/01
(1) SM 19 5310C TOC			
Total Organic Carbon	13	mg/l	10/9/01
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	190	mg/l	10/1/01
(1) SM19 2340B,Total Hardness as CaCO ₃			
Hardness, Total	20	mg/l	10/1/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: Routine(New)

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-12

Source:

Sample Matrix: NPW

LSL Sample ID: 0112021-003

Date Sampled: 9/27/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	10/1/01	
Calcium	120	mg/l	10/1/01	
Iron	65	mg/l	10/1/01	
Lead	<0.01	mg/l	10/1/01	
Magnesium	90	mg/l	10/1/01	
Manganese	0.45	mg/l	10/1/01	
Potassium	200	mg/l	10/2/01	
Sodium	400	mg/l	10/1/01	
Boron	2.8	mg/l	10/1/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	240	mg/l	10/9/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	230	mg/l	10/8/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	40	mg/l	9/28/01	13:12
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.021	mg/l	10/12/01	
(1) EPA Method 300.0 A				
Sulfate	3.0	mg/l	9/29/01	
Chloride	460	mg/l	10/10/01	
Bromide	3.9	mg/l	9/29/01	
Nitrate as N	0.16	mg/l	9/29/01	2:04
(1) HACH 8000 COD				
Chemical Oxygen Demand	31	mg/l	10/2/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	1800	mg/l	10/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	140	mg/l	10/9/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	1700	mg/l	10/1/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	660	mg/l	10/1/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.: Routine(New)

LSL Project No.: 0112021

Authorization:

Report Date: 10/12/01

Sample ID: MW-3S

Source:

LSL Sample ID: 0112021-004

Sample Matrix: NPW

Date Sampled: 9/27/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	10/1/01	
Calcium	82	mg/l	10/1/01	
Iron	26	mg/l	10/1/01	
Lead	<0.01	mg/l	10/1/01	
Magnesium	20	mg/l	10/1/01	
Manganese	0.95	mg/l	10/1/01	
Potassium	140	mg/l	10/2/01	
Sodium	220	mg/l	10/1/01	
Boron	1.3	mg/l	10/1/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	95	mg/l	10/9/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	100	mg/l	10/8/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	16	mg/l	9/28/01	13:14
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.0022	mg/l	10/12/01	
(1) EPA Method 300.0 A				
Sulfate	66	mg/l	9/29/01	
Chloride	110	mg/l	10/10/01	
Bromide	0.50	mg/l	9/29/01	
Nitrate as N	<0.1	mg/l	9/29/01	2:21
(1) HACH 8000 COD				
Chemical Oxygen Demand	410	mg/l	10/2/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	930	mg/l	10/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	84	mg/l	10/9/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	1100	mg/l	10/1/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	290	mg/l	10/1/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: Routine(New)

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-9S

Source:

Sample Matrix: NPW

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Cadmium	<0.01	mg/l	10/1/01
Calcium	120	mg/l	10/1/01
Iron	30	mg/l	10/1/01
Lead	0.012	mg/l	10/1/01
Magnesium	29	mg/l	10/1/01
Manganese	1.5	mg/l	10/1/01
Potassium	7.2	mg/l	10/1/01
Sodium	33	mg/l	10/1/01
Boron	<0.5	mg/l	10/1/01
(1) EPA 350.1 Ammonia			
Ammonia as N	0.39	mg/l	10/9/01
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	1.0	mg/l	10/8/01
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	4.2	mg/l	9/28/01 13:16
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002	mg/l	10/12/01
(1) EPA Method 300.0 A			
Sulfate	3.1	mg/l	9/29/01
Chloride	3.6	mg/l	9/29/01
Bromide	0.12	mg/l	9/29/01
Nitrate as N	<0.1	mg/l	9/29/01 2:39
(1) HACH 8000 COD			
Chemical Oxygen Demand	72	mg/l	10/2/01
(1) SM 18 2320B, Alkalinity as CaCO ₃			
Alkalinity	240	mg/l	10/2/01
(1) SM 19 5310C TOC			
Total Organic Carbon	29	mg/l	10/9/01
(1) SM-2540C Total Dissolved Solids			
Total Dissolved Solids @ 180 C	240	mg/l	10/1/01
(1) SM19 2340B,Total Hardness as CaCO ₃			
Hardness, Total	420	mg/l	10/1/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.: Routine(New)

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-5S

Source:

LSSL Sample ID: 0112021-006

Sample Matrix: NPW

Date Sampled: 9/27/2001

Parameter(s)	Results	Units	Analysis Date and Time	
(1) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	10/1/01	
Calcium	72	mg/l	10/1/01	
Iron	15	mg/l	10/1/01	
Lead	<0.01	mg/l	10/1/01	
Magnesium	12	mg/l	10/1/01	
Manganese	2.5	mg/l	10/1/01	
Potassium	9.4	mg/l	10/1/01	
Sodium	4.8	mg/l	10/1/01	
Boron	<0.5	mg/l	10/1/01	
(1) EPA 350.1 Ammonia				
Ammonia as N	1.4	mg/l	10/9/01	
(1) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	1.6	mg/l	10/8/01	
(1) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	4.7	mg/l	9/28/01	12:31
(1) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	<0.002	mg/l	10/12/01	
(1) EPA Method 300.0 A				
Sulfate	53	mg/l	9/29/01	
Chloride	6.0	mg/l	9/29/01	
Bromide	0.13	mg/l	9/29/01	
Nitrate as N	<0.1	mg/l	9/29/01	2:56
(1) HACH 8000 COD				
Chemical Oxygen Demand	43	mg/l	10/2/01	
(1) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	190	mg/l	10/2/01	
(1) SM 19 5310C TOC				
Total Organic Carbon	13	mg/l	10/9/01	
(1) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	240	mg/l	10/1/01	
(1) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	230	mg/l	10/1/01	

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.: Routine(New)

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0112021

Report Date: 10/12/01

Sample ID: MW-4S

Source:

LSL Sample ID: 0112021-007

Sample Matrix: NPW

Date Sampled: 9/27/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>	
(7) EPA 200.7 Total Metals				
Cadmium	<0.01	mg/l	10/1/01	
Calcium	14	mg/l	10/1/01	
Iron	6.9	mg/l	10/1/01	
Lead	<0.01	mg/l	10/1/01	
Magnesium	4.9	mg/l	10/1/01	
Manganese	0.48	mg/l	10/1/01	
Potassium	33	mg/l	10/1/01	
Sodium	46	mg/l	10/1/01	
Boron	0.65	mg/l	10/1/01	
(7) EPA 350.1 Ammonia				
Ammonia as N	32	mg/l	10/9/01	
(7) EPA 351.2 TKN as N				
Total Kjeldahl Nitrogen	34	mg/l	10/8/01	
(7) EPA 405.1 BOD-5				
Biochemical Oxygen Demand, 5 Day	25	mg/l	9/28/01	13:21
(7) EPA 420.1 Recoverable Phenolics LL				
Phenolics, Total Recoverable	0.0024	mg/l	10/12/01	
(7) EPA Method 300.0 A				
Sulfate	49	mg/l	9/29/01	
Chloride	43	mg/l	9/29/01	
Bromide	0.24	mg/l	9/29/01	
Nitrate as N	<0.1	mg/l	9/29/01	3:14
(7) HACH 8000 COD				
Chemical Oxygen Demand	160	mg/l	10/2/01	
(7) SM 18 2320B, Alkalinity as CaCO ₃				
Alkalinity	170	mg/l	10/2/01	
(7) SM 19 5310C TOC				
Total Organic Carbon	61	mg/l	10/9/01	
(7) SM-2540C Total Dissolved Solids				
Total Dissolved Solids @ 180 C	300	mg/l	10/1/01	
(7) SM19 2340B,Total Hardness as CaCO ₃				
Hardness, Total	56	mg/l	10/1/01	



LSL

JAN 16 2002

Ed Fahrenkopf
Delaware Engineering
28 Madison Ave. Extension
Albany, NY 12203

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

Laboratory Analysis Report For Delaware Engineering

LSL Project Number: 0116196

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

Life Science Laboratories, Inc.

LSL Central Lab

5854 Butternut Drive
East Syracuse, NY 13057
Tel. (315) 445-1105
Fax (315) 445-1301
NYS DOH ELAP #10248

LSL North Lab

131 St. Lawrence Avenue
Waddington, NY 13694
Tel. (315) 388-4476
Fax (315) 388-4061
NYS DOH ELAP #10900

LSL Finger Lakes Lab

16 N. Main St., PO Box 424
Wayland, NY 14572
Tel. (716) 728-3320
Fax (716) 728-2711
NYS DOH ELAP #11667

This report was reviewed by: Wendy Waters QC
Life Science Laboratories, Inc.

Date: 1/11/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Sample ID: MW-1S

Source: Tannery Road

LSL Sample ID: 0116196-001

Sample Matrix: NPW

Date Sampled: 12/26/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals			
Boron	<0.5	mg/l	1/2/02
Potassium	<1	mg/l	1/2/02
Sodium	1.2	mg/l	1/2/02
Iron	3.2	mg/l	1/2/02
Manganese	0.070	mg/l	1/2/02
Magnesium	<1	mg/l	1/2/02
Lead	<1	mg/l	1/2/02
Cadmium	<0.01	mg/l	1/2/02
Aluminum	5.0	mg/l	1/2/02
Calcium	2.2	mg/l	1/2/02
Antimony	<0.01	mg/l	1/2/02
Arsenic	<0.01	mg/l	1/2/02
Beryllium	<0.01	mg/l	1/2/02
Barium	<0.2	mg/l	1/2/02
Chromium	<0.01	mg/l	1/2/02
Copper	<0.01	mg/l	1/2/02
Nickel	<0.01	mg/l	1/2/02
Selenium	<0.01	mg/l	1/2/02
Silver	<0.01	mg/l	1/2/02
Thallium	<0.01	mg/l	1/2/02
Zinc	0.040	mg/l	1/2/02
Cobalt	<0.01	mg/l	1/2/02
Vanadium	<0.01	mg/l	1/2/02
(1) EPA 245.1 Mercury			
Mercury	<0.0002	mg/l	1/9/02
(1) EPA 335.2 Total Cyanide			
Cyanide, Total	<0.01	mg/l	1/3/02
(1) EPA 350.1 Ammonia			
Ammonia as N	<0.03	mg/l	1/9/02
(1) EPA 351.2 TKN as N*			
Total Kjeldahl Nitrogen	0.23	mg/l	1/8/02
*The result reported for this sample has been corrected for the concentration found in the blank.			
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<4	mg/l	12/28/01 10:46
(1) EPA 420.1 Recoverable Phenolics LL			

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.:

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0116196

Report Date: 1/10/02

Phenolics, Total Recoverable	<0.002 mg/l	1/7/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	<5 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02
2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	<5 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	2.5 mg/l	12/27/01
Bromide	<0.1 mg/l	12/27/01
Sulfate	6.2 mg/l	12/27/01
Nitrate as N	<0.1 mg/l	12/27/01 21:35
(1) HACH 8000 COD		
Chemical Oxygen Demand	14 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	1.9 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		
Total Organic Carbon	11.3 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	<4 mg/l	12/31/01
(1) SM18 2120B, Color		
Color	50 Units	12/27/01 11:45
(1) SM19 2340B, Total Hardness as CaCO ₃		
Hardness, Total	9.8 mg/l	1/2/02

Sample ID: MW-12

Source: Tannery Road

LSL Sample ID: 0116196-002

Sample Matrix: NPW

Date Sampled: 12/26/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals			
Boron	3.0 mg/l		1/2/02
Potassium	220 mg/l		1/7/02
Sodium	280 mg/l		1/7/02
Iron	54 mg/l		1/2/02
Manganese	0.40 mg/l		1/2/02
Magnesium	80 mg/l		1/2/02
Lead	0.018 mg/l		1/2/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Cadmium	<0.01 mg/l	1/2/02
Aluminum	1.8 mg/l	1/2/02
Calcium	100 mg/l	1/2/02
Antimony	<0.01 mg/l	1/2/02
Arsenic	0.013 mg/l	1/2/02
Beryllium	<0.01 mg/l	1/2/02
Barium	0.40 mg/l	1/2/02
Chromium	0.012 mg/l	1/2/02
Copper	<0.01 mg/l	1/2/02
Nickel	0.031 mg/l	1/2/02
Selenium	<0.01 mg/l	1/2/02
Silver	<0.01 mg/l	1/2/02
(#) Thallium	<0.1 mg/l	1/2/02
<i>(#) Elevated detection limit due to matrix interference.</i>		
Zinc	0.071 mg/l	1/2/02
Cobalt	0.012 mg/l	1/2/02
Vanadium	0.020 mg/l	1/2/02
(1) EPA 245.1 Mercury		
Mercury	0.00027 mg/l	1/9/02
(1) EPA 335.2 Total Cyanide		
Cyanide, Total	<0.01 mg/l	1/3/02
(1) EPA 350.1 Ammonia		
Ammonia as N	270 mg/l	1/9/02
(1) EPA 351.2 TKN as N		
Total Kjeldahl Nitrogen	250 mg/l	1/8/02
(1) EPA 405.1 BOD-5		
Biochemical Oxygen Demand, 5 Day	25 mg/l	12/28/01 10:54
(1) EPA 420.1 Recoverable Phenolics LL		
Phenolics, Total Recoverable	0.020 mg/l	1/7/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	33 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02
2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0116196

Report Date: 1/10/02

Project No.:

Authorization:

Chlorobenzene	<5 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	26 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	330 mg/l	1/4/02
Bromide	4.3 mg/l	12/27/01

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Sulfate	<1 mg/l	12/27/01	
Nitrate as N	<0.1 mg/l	12/27/01	22:27
(1) HACH 8000 COD Chemical Oxygen Demand	240 mg/l	1/9/02	
(1) SM 18 2320B, Alkalinity as CaCO ₃ Alkalinity	1800 mg/l	1/2/02	
(1) SM 18 3500C Hexavalent Chromium Chromium, Hexavalent	<0.01 mg/l	12/27/01	10:05
(1) SM 19 5310C TOC Total Organic Carbon	120 mg/l	1/4/02	
(1) SM-2540C Total Dissolved Solids Total Dissolved Solids @ 180 C	2000 mg/l	12/27/01	
(1) SM18 2120B, Color Color	750 Units	12/27/01	11:45
(1) SM19 2340B,Total Hardness as CaCO ₃ Hardness, Total	580 mg/l	1/2/02	

Sample ID: MW-9S

LSL Sample ID: 0116196-003

Source: Tannery Road

Date Sampled: 12/26/2001

Sample Matrix: NPW

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 200.7 Total Metals			
Boron	<0.5 mg/l		1/2/02
Potassium	4.6 mg/l		1/2/02
Sodium	43 mg/l		1/2/02
Iron	24 mg/l		1/2/02
Manganese	1.5 mg/l		1/2/02
Magnesium	28 mg/l		1/2/02
Lead	0.011 mg/l		1/2/02
Cadmium	<0.01 mg/l		1/2/02
Aluminum	12 mg/l		1/2/02
Calcium	110 mg/l		1/2/02
Antimony	<0.01 mg/l		1/2/02
Arsenic	0.016 mg/l		1/2/02
Beryllium	<0.01 mg/l		1/2/02
Barium	<0.2 mg/l		1/2/02
Chromium	0.020 mg/l		1/2/02
Copper	0.036 mg/l		1/2/02
Nickel	0.027 mg/l		1/2/02
Selenium	<0.01 mg/l		1/2/02
Silver	<0.01 mg/l		1/2/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0116196

Report Date: 1/10/02

Project No.:

Authorization:

Thallium	<0.01 mg/l	1/2/02
Zinc	0.063 mg/l	1/2/02
Cobalt	<0.01 mg/l	1/2/02
Vanadium	0.023 mg/l	1/2/02
(1) EPA 245.1 Mercury Mercury	<0.0002 mg/l	1/9/02
(1) EPA 335.2 Total Cyanide Cyanide, Total	<0.01 mg/l	1/3/02
(1) EPA 350.1 Ammonia Ammonia as N	0.21 mg/l	1/9/02
(1) EPA 351.2 TKN as N Total Kjeldahl Nitrogen	0.70 mg/l	1/8/02
(1) EPA 405.1 BOD-5 Biochemical Oxygen Demand, 5 Day	<4 mg/l	12/28/01 10:57
(1) EPA 420.1 Recoverable Phenolics LL Phenolics, Total Recoverable	<0.002 mg/l	1/7/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	<5 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02
2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	<5 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	3.3 mg/l	12/27/01
Bromide	<0.1 mg/l	12/27/01
Sulfate	8.6 mg/l	12/27/01
Nitrate as N	0.17 mg/l	12/27/01 22:45
(1) HACH 8000 COD		
Chemical Oxygen Demand	75 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	210 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		
Total Organic Carbon	32 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	430 mg/l	12/27/01
(1) SM18 2120B, Color		

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.:

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0116196

Report Date: 1/10/02

Color	600	Units	12/27/01	11:45
(1) SM19 2340B, Total Hardness as CaCO ₃				

Hardness, Total 390 mg/l 1/2/02

Sample ID: MW-3S

Source: Tannery Road

LSL Sample ID: 0116196-004

Sample Matrix: NPW

Date Sampled: 12/26/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Boron	1.6	mg/l	1/2/02
Potassium	150	mg/l	1/7/02
Sodium	250	mg/l	1/2/02
Iron	30	mg/l	1/2/02
Manganese	0.91	mg/l	1/2/02
Magnesium	20	mg/l	1/2/02
Lead	<0.01	mg/l	1/2/02
Cadmium	<0.01	mg/l	1/2/02
Aluminum	1.0	mg/l	1/2/02
Calcium	73	mg/l	1/2/02
Antimony	<0.01	mg/l	1/2/02
Arsenic	<0.01	mg/l	1/2/02
Beryllium	<0.01	mg/l	1/2/02
Barium	0.61	mg/l	1/2/02
Chromium	0.015	mg/l	1/2/02
Copper	<0.01	mg/l	1/2/02
Nickel	0.019	mg/l	1/2/02
Selenium	<0.01	mg/l	1/2/02
Silver	<0.01	mg/l	1/2/02
Thallium	<0.01	mg/l	1/2/02
Zinc	0.025	mg/l	1/2/02
Cobalt	<0.01	mg/l	1/2/02
Vanadium	0.042	mg/l	1/2/02
(1) EPA 245.1 Mercury			
Mercury	0.00698	mg/l	1/9/02
(1) EPA 335.2 Total Cyanide			
Cyanide, Total	<0.01	mg/l	1/3/02
(1) EPA 350.1 Ammonia			
Ammonia as N	130	mg/l	1/9/02
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	120	mg/l	1/8/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

(1) EPA 405.1 BOD-5

Biochemical Oxygen Demand, 5 Day 12 mg/l 12/28/01 11:01

(1) EPA 420.1 Recoverable Phenolics LL

Phenolics, Total Recoverable 0.0034 mg/l 1/7/02

(1) EPA 8260B TCL Volatiles (Modified)

Acetone <10 ug/l 1/4/02

Acrylonitrile <20 ug/l 1/4/02

Benzene <5 ug/l 1/4/02

Bromochloromethane <5 ug/l 1/4/02

Bromodichloromethane <5 ug/l 1/4/02

Bromoform <5 ug/l 1/4/02

Bromomethane <5 ug/l 1/4/02

2-Butanone (MEK) <10 ug/l 1/4/02

Carbon disulfide <5 ug/l 1/4/02

Carbon tetrachloride <5 ug/l 1/4/02

Chlorobenzene <5 ug/l 1/4/02

Chloroethane <5 ug/l 1/4/02

Chloromethane <5 ug/l 1/4/02

Chloroform <5 ug/l 1/4/02

Dibromochloromethane <5 ug/l 1/4/02

1,2-Dibromo-3-chloropropane <5 ug/l 1/4/02

1,2-Dibromoethane(EDB) <5 ug/l 1/4/02

Dibromomethane <5 ug/l 1/4/02

1,2-Dichlorobenzene <5 ug/l 1/4/02

1,4-Dichlorobenzene <5 ug/l 1/4/02

trans-1,4-Dichloro-2-butene <50 ug/l 1/4/02

1,1-Dichloroethane <5 ug/l 1/4/02

1,2-Dichloroethane <5 ug/l 1/4/02

1,1-Dichloroethene <5 ug/l 1/4/02

cis-1,2-Dichloroethene <5 ug/l 1/4/02

trans-1,2-Dichloroethene <5 ug/l 1/4/02

1,2-Dichloropropane <5 ug/l 1/4/02

cis-1,3-Dichloropropene <5 ug/l 1/4/02

trans-1,3-Dichloropropene <5 ug/l 1/4/02

Ethyl benzene <5 ug/l 1/4/02

2-Hexanone <10 ug/l 1/4/02

Iodomethane (Methyl iodide) <20 ug/l 1/4/02

Methylene chloride <10 ug/l 1/4/02

4-Methyl-2-pentanone (MIBK) <10 ug/l 1/4/02

Styrene <5 ug/l 1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	150 mg/l	1/4/02
Bromide	0.79 mg/l	12/27/01
Sulfate	79 mg/l	12/27/01
Nitrate as N	<0.1 mg/l	12/27/01 23:03
(1) HACH 8000 COD		
Chemical Oxygen Demand	230 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	860 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		
Total Organic Carbon	90 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	1200 mg/l	12/27/01
(1) SM18 2120B, Color		
Color	750 Units	12/27/01 11:45
(1) SM19 2340B, Total Hardness as CaCO ₃		
Hardness, Total	260 mg/l	1/2/02

Sample ID: MW-4S

Source: Tannery Road

LSL Sample ID: 0116196-005

Sample Matrix: NPW

Date Sampled: 12/26/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Boron	<0.5 mg/l		1/2/02
Potassium	14 mg/l		1/2/02
Sodium	5.7 mg/l		1/2/02
Iron	6.6 mg/l		1/2/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.:

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0116196

Report Date: 1/10/02

Manganese	0.38 mg/l	1/2/02
Magnesium	4.0 mg/l	1/2/02
Lead	<0.01 mg/l	1/2/02
Cadmium	<0.01 mg/l	1/2/02
Aluminum	1.1 mg/l	1/2/02
Calcium	10 mg/l	1/2/02
Antimony	<0.01 mg/l	1/2/02
Arsenic	<0.01 mg/l	1/2/02
Beryllium	<0.01 mg/l	1/2/02
Barium	<0.2 mg/l	1/2/02
Chromium	<0.01 mg/l	1/2/02
Copper	<0.01 mg/l	1/2/02
Nickel	<0.01 mg/l	1/2/02
Selenium	<0.01 mg/l	1/2/02
Silver	<0.01 mg/l	1/2/02
Thallium	<0.01 mg/l	1/2/02
Zinc	0.012 mg/l	1/2/02
Cobalt	<0.01 mg/l	1/2/02
Vanadium	<0.01 mg/l	1/2/02
(1) EPA 245.1 Mercury		
Mercury	<0.0002 mg/l	1/9/02
(1) EPA 335.2 Total Cyanide		
Cyanide, Total	<0.01 mg/l	1/9/02
(1) EPA 350.1 Ammonia		
Ammonia as N	3.1 mg/l	1/9/02
(1) EPA 351.2 TKN as N		
Total Kjeldahl Nitrogen	4.6 mg/l	1/8/02
(1) EPA 405.1 BOD-5		
Biochemical Oxygen Demand, 5 Day	<10 mg/l	12/28/01 11:05
(‡) This result should be considered an estimate due to low oxygen depletion.		
(1) EPA 420.1 Recoverable Phenolics LL		
Phenolics, Total Recoverable	<0.002 mg/l	1/10/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	<5 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.:

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0116196

Report Date: 1/10/02

2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	<5 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Nickel	<0.01 mg/l	1/2/02
Selenium	<0.01 mg/l	1/2/02
Silver	<0.01 mg/l	1/2/02
Thallium	<0.01 mg/l	1/2/02
Zinc	0.036 mg/l	1/2/02
Cobalt	<0.01 mg/l	1/2/02
Vanadium	0.013 mg/l	1/2/02
(1) EPA 245.1 Mercury Mercury	<0.0002 mg/l	1/9/02
(1) EPA 335.2 Total Cyanide Cyanide, Total	<0.01 mg/l	1/9/02
(1) EPA 350.1 Ammonia Ammonia as N	39 mg/l	1/9/02
(1) EPA 351.2 TKN as N Total Kjeldahl Nitrogen	39 mg/l	1/8/02
(1) EPA 405.1 BOD-5 Biochemical Oxygen Demand, 5 Day	<20 mg/l	12/28/01 11:10
<i>(#) This result should be considered an estimate due to low oxygen depletion.</i>		
(1) EPA 420.1 Recoverable Phenolics LL Phenolics, Total Recoverable	0.0042 mg/l	1/10/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	17 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02
2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	5.8 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	130 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	56 mg/l	12/28/01
Bromide	0.64 mg/l	12/28/01
Sulfate	52 mg/l	12/28/01
Nitrate as N	<0.1 mg/l	12/28/01 0:13
(1) HACH 8000 COD		
Chemical Oxygen Demand	120 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	390 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.:

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0116196

Report Date: 1/10/02

Total Organic Carbon	47 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids Total Dissolved Solids @ 180 C	650 mg/l	12/27/01
(1) SM18 2120B, Color Color	850 Units	12/27/01 11:45
(1) SM19 2340B, Total Hardness as CaCO3 Hardness, Total	250 mg/l	1/2/02

Sample ID: MW-5S

Source: Tannery Road

LSL Sample ID: 0116196-007

Sample Matrix: NPW

Date Sampled: 12/26/2001

Parameter(s)	Results	Units	Analysis Date and Time
(1) EPA 200.7 Total Metals			
Boron	<0.5	mg/l	1/2/02
Potassium	5.6	mg/l	1/2/02
Sodium	1.4	mg/l	1/2/02
Iron	6.1	mg/l	1/2/02
Manganese	1.4	mg/l	1/2/02
Magnesium	6.0	mg/l	1/2/02
Lead	<0.01	mg/l	1/2/02
Cadmium	<0.01	mg/l	1/2/02
Aluminum	0.41	mg/l	1/2/02
Calcium	35	mg/l	1/2/02
Antimony	<0.01	mg/l	1/2/02
Arsenic	<0.01	mg/l	1/2/02
Beryllium	<0.01	mg/l	1/2/02
Barium	<0.2	mg/l	1/2/02
Chromium	<0.01	mg/l	1/2/02
Copper	<0.01	mg/l	1/2/02
Nickel	<0.01	mg/l	1/2/02
Selenium	<0.01	mg/l	1/2/02
Silver	<0.01	mg/l	1/2/02
Thallium	<0.01	mg/l	1/2/02
Zinc	0.013	mg/l	1/2/02
Cobalt	<0.01	mg/l	1/2/02
Vanadium	<0.01	mg/l	1/2/02
(1) EPA 245.1 Mercury			
Mercury	<0.0002	mg/l	1/9/02
(1) EPA 335.2 Total Cyanide			
Cyanide, Total	<0.01	mg/l	1/9/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

(1) EPA 350.1 Ammonia			
Ammonia as N	0.43 mg/l		1/9/02
(1) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	0.62 mg/l		1/8/02
(1) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<4 mg/l	12/28/01	11:12
(1) EPA 420.1 Recoverable Phenolics LL			
Phenolics, Total Recoverable	<0.002 mg/l		1/10/02
(1) EPA 8260B TCL Volatiles (Modified)			
Acetone	<10 ug/l		1/4/02
Acrylonitrile	<20 ug/l		1/4/02
Benzene	<5 ug/l		1/4/02
Bromochloromethane	<5 ug/l		1/4/02
Bromodichloromethane	<5 ug/l		1/4/02
Bromoform	<5 ug/l		1/4/02
Bromomethane	<5 ug/l		1/4/02
2-Butanone (MEK)	<10 ug/l		1/4/02
Carbon disulfide	<5 ug/l		1/4/02
Carbon tetrachloride	<5 ug/l		1/4/02
Chlorobenzene	<5 ug/l		1/4/02
Chloroethane	<5 ug/l		1/4/02
Chloromethane	<5 ug/l		1/4/02
Chloroform	<5 ug/l		1/4/02
Dibromochloromethane	<5 ug/l		1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l		1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l		1/4/02
Dibromomethane	<5 ug/l		1/4/02
1,2-Dichlorobenzene	<5 ug/l		1/4/02
1,4-Dichlorobenzene	<5 ug/l		1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l		1/4/02
1,1-Dichloroethane	<5 ug/l		1/4/02
1,2-Dichloroethane	<5 ug/l		1/4/02
1,1-Dichloroethene	<5 ug/l		1/4/02
cis-1,2-Dichloroethene	<5 ug/l		1/4/02
trans-1,2-Dichloroethene	<5 ug/l		1/4/02
1,2-Dichloropropane	<5 ug/l		1/4/02
cis-1,3-Dichloropropene	<5 ug/l		1/4/02
trans-1,3-Dichloropropene	<5 ug/l		1/4/02
Ethyl benzene	<5 ug/l		1/4/02
2-Hexanone	<10 ug/l		1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	3.2 mg/l	12/28/01
Bromide	<0.1 mg/l	12/28/01
Sulfate	36 mg/l	12/28/01
Nitrate as N	<0.1 mg/l	12/28/01 0:31
(1) HACH 8000 COD		
Chemical Oxygen Demand	23 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	68 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		
Total Organic Carbon	9.6 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	200 mg/l	12/27/01
(1) SM18 2120B, Color		
Color	75 Units	12/27/01 11:45
(1) SM19 2340B, Total Hardness as CaCO ₃		
Hardness, Total	110 mg/l	1/2/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Project No.:

Phone Number: (518) 452-1290

Authorization:

LSL Project No.: 0116196

Report Date: 1/10/02

Sample ID: X-1

Source: Tannery Road

LSL Sample ID: 0116196-008

Sample Matrix: NPW

Date Sampled: 12/26/2001

Parameter(s)	Results	Units	Analysis Date and Time
(7) EPA 200.7 Total Metals			
Boron	1.0	mg/l	1/2/02
Potassium	36	mg/l	1/7/02
Sodium	51	mg/l	1/2/02
Iron	40	mg/l	1/2/02
Manganese	0.72	mg/l	1/2/02
Magnesium	23	mg/l	1/2/02
Lead	<0.01	mg/l	1/2/02
Cadmium	<0.01	mg/l	1/2/02
Aluminum	1.7	mg/l	1/2/02
Calcium	66	mg/l	1/2/02
Antimony	<0.01	mg/l	1/2/02
Arsenic	<0.01	mg/l	1/2/02
Beryllium	<0.01	mg/l	1/2/02
Barium	0.43	mg/l	1/2/02
Chromium	<0.01	mg/l	1/2/02
Copper	<0.01	mg/l	1/2/02
Nickel	<0.01	mg/l	1/2/02
Selenium	<0.01	mg/l	1/2/02
Silver	<0.01	mg/l	1/2/02
Thallium	<0.01	mg/l	1/2/02
Zinc	0.042	mg/l	1/2/02
Cobalt	<0.01	mg/l	1/2/02
Vanadium	0.014	mg/l	1/2/02
(7) EPA 245.1 Mercury			
Mercury	<0.0002	mg/l	1/9/02
(7) EPA 335.2 Total Cyanide			
Cyanide, Total	<0.01	mg/l	1/9/02
(7) EPA 350.1 Ammonia			
Ammonia as N	41	mg/l	1/9/02
(7) EPA 351.2 TKN as N			
Total Kjeldahl Nitrogen	42	mg/l	1/8/02
(7) EPA 405.1 BOD-5			
Biochemical Oxygen Demand, 5 Day	<10	mg/l	12/28/01 11:17

(%) This result should be considered an estimate due to low oxygen depletion.

(7) EPA 420.1 Recoverable Phenolics LL

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Project No.:

Authorization:

Ed Fahrenkopf

Phone Number: (518) 452-1290

LSL Project No.: 0116196

Report Date: 1/10/02

Phenolics, Total Recoverable	0.0029 mg/l	1/10/02
(1) EPA 8260B TCL Volatiles (Modified)		
Acetone	<10 ug/l	1/4/02
Acrylonitrile	<20 ug/l	1/4/02
Benzene	16 ug/l	1/4/02
Bromochloromethane	<5 ug/l	1/4/02
Bromodichloromethane	<5 ug/l	1/4/02
Bromoform	<5 ug/l	1/4/02
Bromomethane	<5 ug/l	1/4/02
2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	5.9 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	140 ug/l	1/4/02
(1) EPA Method 300.0 A		
Chloride	58 mg/l	12/28/01
Bromide	0.90 mg/l	12/28/01
Sulfate	53 mg/l	12/28/01
Nitrate as N	0.15 mg/l	12/28/01 0:48
(1) HACH 8000 COD		
Chemical Oxygen Demand	120 mg/l	1/9/02
(1) SM 18 2320B, Alkalinity as CaCO ₃		
Alkalinity	400 mg/l	1/2/02
(1) SM 18 3500C Hexavalent Chromium		
Chromium, Hexavalent	<0.01 mg/l	12/27/01 10:05
(1) SM 19 5310C TOC		
Total Organic Carbon	46 mg/l	1/4/02
(1) SM-2540C Total Dissolved Solids		
Total Dissolved Solids @ 180 C	640 mg/l	12/27/01
(1) SM18 2120B, Color		
Color	1200 Units	12/27/01 11:45
(1) SM19 2340B, Total Hardness as CaCO ₃		
Hardness, Total	260 mg/l	1/2/02

Sample ID: Trip Blank

Source: Tannery Road

LSL Sample ID: 0116196-009

Sample Matrix: TB

Date Sampled: 12/26/2001

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date and Time</i>
(1) EPA 8260B TCL Volatiles (Modified)			
Acetone	<10 ug/l		1/4/02
Acrylonitrile	<20 ug/l		1/4/02
Benzene	<5 ug/l		1/4/02
Bromochloromethane	<5 ug/l		1/4/02
Bromodichloromethane	<5 ug/l		1/4/02
Bromoform	<5 ug/l		1/4/02
Bromomethane	<5 ug/l		1/4/02

Life Science Laboratories, Inc.

Page 23 of 25

Analysis performed at NYS DOH ELAP Number: (1) 10248, (2) 10900, (3) 11667

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02

2-Butanone (MEK)	<10 ug/l	1/4/02
Carbon disulfide	<5 ug/l	1/4/02
Carbon tetrachloride	<5 ug/l	1/4/02
Chlorobenzene	<5 ug/l	1/4/02
Chloroethane	<5 ug/l	1/4/02
Chloromethane	<5 ug/l	1/4/02
Chloroform	<5 ug/l	1/4/02
Dibromochloromethane	<5 ug/l	1/4/02
1,2-Dibromo-3-chloropropane	<5 ug/l	1/4/02
1,2-Dibromoethane(EDB)	<5 ug/l	1/4/02
Dibromomethane	<5 ug/l	1/4/02
1,2-Dichlorobenzene	<5 ug/l	1/4/02
1,4-Dichlorobenzene	<5 ug/l	1/4/02
trans-1,4-Dichloro-2-butene	<50 ug/l	1/4/02
1,1-Dichloroethane	<5 ug/l	1/4/02
1,2-Dichloroethane	<5 ug/l	1/4/02
1,1-Dichloroethene	<5 ug/l	1/4/02
cis-1,2-Dichloroethene	<5 ug/l	1/4/02
trans-1,2-Dichloroethene	<5 ug/l	1/4/02
1,2-Dichloropropane	<5 ug/l	1/4/02
cis-1,3-Dichloropropene	<5 ug/l	1/4/02
trans-1,3-Dichloropropene	<5 ug/l	1/4/02
Ethyl benzene	<5 ug/l	1/4/02
2-Hexanone	<10 ug/l	1/4/02
Iodomethane (Methyl iodide)	<20 ug/l	1/4/02
Methylene chloride	<10 ug/l	1/4/02
4-Methyl-2-pentanone (MIBK)	<10 ug/l	1/4/02
Styrene	<5 ug/l	1/4/02
1,1,1,2-Tetrachloroethane	<5 ug/l	1/4/02
1,1,2,2-Tetrachloroethane	<5 ug/l	1/4/02
Tetrachloroethene	<5 ug/l	1/4/02
Toluene	<5 ug/l	1/4/02
1,1,1-Trichloroethane	<5 ug/l	1/4/02
1,1,2-Trichloroethane	<5 ug/l	1/4/02
Trichloroethene	<5 ug/l	1/4/02
Trichlorofluoromethane (Freon 11)	<5 ug/l	1/4/02
1,2,3-Trichloropropane	<5 ug/l	1/4/02
Vinyl acetate	<20 ug/l	1/4/02
Vinyl chloride	<5 ug/l	1/4/02
Xylenes (Total)	<5 ug/l	1/4/02

-- LABORATORY ANALYSIS REPORT --

Delaware Engineering

Ed Fahrenkopf

Phone Number: (518) 452-1290

Project No.:

LSL Project No.: 0116196

Authorization:

Report Date: 1/10/02



Life Science Laboratories, Inc.

5854 Butternut Drive
East Syracuse, NY 13057

Phone # (315) 445-1105

Telefax # (315) 445-1301

Client: Delaware Engineering **Phone #** 518 452-1290
Address: 28 Madison Ave Ext **Telefax #** 518 452-1335
Albany N.Y. Fax# 12203

Authorization

Notes and Hazard identifications:

Custody Transfers

Date Time

BASELINE (new - 93)

* Client confirmed times are pm
few

Sampled by:

Brent Zimmerman

12/26/01 4:40

Being
Distinguished By

Brief Zimmer

10/24/01 7:40
11/1/01 5:30

Distinguished By

[Signature]

Received for Lab By

12/27/01 0910

Shipment Method:

Samples Received Intact:

Y

33

APPENDIX C

SUMMARY 2001 GROUND WATER ELEVATION DATA

Table 4A
Water Level Elevation Data, Comparisons to MW-12
Tannery Road Landfill
Rome, New York

WELL	MEASURING POINT	DEPTH TO WATER (FT.)												
		1/12/2001	2/14/2001	3/19/2001	4/30/2001	5/21/2001	6/25/2001	8/6/2001	8/30/2001	9/27/2001	10/16/2001	11/28/2001	12/26/2001	1/16/2002
MW-1S	449.59	5.54	4.97	4.91	5.2	6.56	6.49	Dry	Dry	10	6.9	5.02	4.88	5.23
MW-2S	459.44	7.43	6.04	6.33	7.19	8.36	6	9.37	9.8	7.29	8.06	7.45	6.38	7.82
MW-3S	456.4	3.84	Frozen	3.48	3.91	4.7	3.52	5.62	6.18	3.7	4.11	3.89	3.59	3.66
MW-4S	456.19	4.18	3.65	3.86	3.97	4.73	3.82	6.2	6.89	4.6	4.76	4.45	3.87	4.17
MW-5S	457.15	4.92	4.23	4.42	4.9	5.78	6.73	7.23	8.16	6.18	6.66	4.92	4.52	4.81
MW-7S	452.25	9.22	8.28	8.52	7.37	8.11	7.68	10.61	11.38	10.8	10.63	9.54	8.63	9.33
MW-9S	456.38	3.91	3.78	3.73	4	4.77	3.69	6.09	6.75	3.99	4.23	3.99	3.89	3.93
MW-10	486.3	Well Damaged												34.85
MW-11	502.4	Well Damaged												51.68
MW-12	483.11	32.18	31.84	32.04	31.6	31.71	31.71	32.13	32.31	32.5	32.44	32.34	32.18	32.45
PZ-1	454.37	7.25	5.86	6.16	6.32	7.73	6.06	6.31	9.96	8.49	8.78	7.45	6.19	6.93

WELL	WATER LEVEL ELEVATION (FT.)												
	1/12/2001	2/14/2001	3/19/2001	4/30/2001	5/21/2001	6/25/2001	8/6/2001	8/30/2001	9/27/2001	10/16/2001	11/28/2001	12/26/2001	1/16/2002
MW-1S	444.05	444.62	444.68	444.39	443.03	443.1	Dry	Dry	439.59	442.69	444.57	444.71	444.36
MW-2S	452.01	453.4	453.11	452.25	451.08	453.44	450.07	449.64	452.15	451.38	451.99	453.06	451.62
MW-3S	452.56	Frozen	452.92	452.49	451.7	452.88	450.78	450.22	452.7	452.29	452.51	452.81	452.74
MW-4S	452.01	452.54	452.33	452.22	451.46	452.37	449.99	449.3	451.59	451.43	451.74	452.32	452.02
MW-5S	452.23	452.92	452.73	452.25	451.37	450.42	449.92	448.99	450.97	450.49	452.23	452.63	452.34
MW-7S	443.03	443.97	443.73	444.88	444.14	444.57	441.64	440.87	441.45	441.62	442.71	443.62	442.92
MW-9S	452.47	452.6	452.65	448.25	451.61	452.69	450.29	449.63	452.39	452.15	452.39	452.49	452.45
MW-10	Well Damaged												451.45
MW-11	Well Damaged												450.72
MW-12	450.93	451.27	451.07	451.51	451.4	451.4	450.98	450.8	450.61	450.67	450.77	450.93	450.66
PZ-1	447.12	448.51	448.21	448.05	446.64	448.31	448.06	444.41	445.88	445.59	446.92	448.18	447.44

WELL	WATER LEVEL ELEVATION DIFFERENCE (FT.) RELATIVE TO MW-12												
	1/12/2001	2/14/2001	3/19/2001	4/30/2001	5/21/2001	6/25/2001	8/6/2001	8/30/2001	9/27/2001	10/16/2001	11/28/2001	12/26/2001	1/16/2002
MW-1S	6.88	6.65	6.39	7.12	8.37	8.3	Dry	Dry	11.02	7.98	6.2	6.22	6.3
MW-2S	-1.08	-2.13	-2.04	-0.74	0.32	-2.04	0.91	1.16	-1.54	-0.71	-1.22	-2.13	-0.96
MW-3S	-1.63	Frozen	-1.85	-0.98	-0.3	-1.48	0.2	0.58	-2.09	-1.62	-1.74	-1.88	-2.08
MW-4S	-1.08	-1.27	-1.26	-0.71	-0.06	-0.97	0.99	1.5	-0.98	-0.76	-0.97	-1.39	-1.36
MW-5S	-1.3	-1.65	-1.66	-0.74	0.03	0.98	1.06	1.81	-0.36	0.18	-1.46	-1.7	-1.68
MW-7S	7.9	7.3	7.34	6.63	7.26	6.83	9.34	9.93	9.16	9.05	8.06	7.31	7.74
MW-9S	-1.54	-1.33	-1.58	3.26	-0.21	-1.29	0.69	1.17	-1.78	-1.48	-1.62	-1.56	-1.79
MW-10	Well Damaged												-0.78
MW-11	Well Damaged												-0.05
MW-12	0	0	0	0	0	0	0	0	0	0	0	0	0
PZ-1	3.81	2.76	2.86	3.46	4.76	3.09	2.92	6.39	4.73	5.08	3.85	2.75	3.22

Elevation - Feet above mean sea level

APPENDIX D

MONTHLY INSPECTION FORMS

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 1/2/01 9:00

Inspector: Brent Zimmer
Weather: Sunny

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
General Site Condition:		
Gates - condition and locks for inner & outer gates:	OK	
Access Road - surface/paving/snow	OK	
Access Road - surface/paving/snow	OK	
Overall appearance (trash/litter)	OK	
Pump Station at Tannery Road:	Condition: OK	
Pump #1 Hours: <u>020244</u>	Pump #2 Hours: <u>019006</u>	
Leachate Collection System:		
Panel - note conditions and any alarms: OK		
Autodialer - test	OK	<u>Not tested</u>
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>2545245</u>	RW-3 <u>2810257</u>	
RW-2 <u>2889038</u>	RW-4 <u>442657</u>	
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	RW-3 <u>401</u>	
Totalizers (in meter pit)		
RW-1 <u>25400</u>	RW-3 <u>09080</u>	
RW-2 <u>40889</u>	RW-4 <u>04698</u>	
Hour Meters		
RW-1 <u>0712019</u>	RW-3 <u>123425</u>	
RW-2 <u>2073488</u>	RW-4 <u>068852</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps NO	If YES, describe: _____	
Western seep condition: <u>Good</u>		
North seep condition: <u>Good</u>		
Gas vents - general condition	OK	
- Unusual odors, list vents/describe. <u>None</u>		
Flares ignited	OK	
Perimeter fence	OK	
Erosion/animal burrows NO	If YES, describe: _____	

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

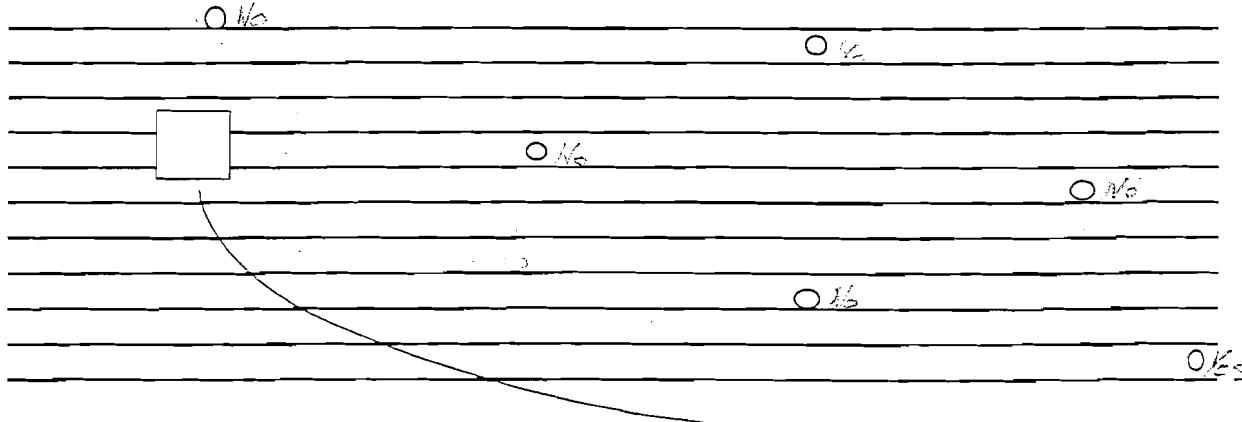
Page 2 of 2

Date & Time: 1/26/01 9:30 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	<u>5.54</u>	<u>444.06</u>	<u>estimated (Water level would not read could see ripples in water)</u>
MW - 2S	459.44	<u>7.43</u>	<u>452.01</u>	<u>Good</u>
MW - 3S	456.4	<u>3.84</u>	<u>452.56</u>	<u>Good</u>
MW - 4S	456.19	<u>4.18</u>	<u>452.01</u>	<u>Good</u>
MW - 5S	457.15	<u>4.92</u>	<u>452.23</u>	<u>Good</u>
MW - 7S	452.25	<u>9.22</u>	<u>443.03</u>	<u>Good</u>
MW - 9S	456.38	<u>3.91</u>	<u>452.47</u>	<u>Good</u>
MW - 10	488.29		<u>Obstruction</u>	
MW - 11	503.95		<u>Obstruction</u>	
MW - 12	483.11	<u>32.18</u>	<u>450.93</u>	<u>Good</u>
PZ - 1	454.37	<u>7.26</u>	<u>447.12</u>	<u>Good</u>

NOTES: O No Ignited Flares: Yes/No



TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 2/14/2001 10:00

Inspector: Brent Zimmer
Weather: Overcast

GENERAL INSPECTION - To Be Completed Monthly

Notes Problems

General Site Condition:

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

OK
OK
OK
OK

Pump Station at Tannery Road:

Pump #1 Hours: 21053

Condition: OK

Pump #2 Hours: 19174

Leachate Collection System:

Panel - note conditions and any alarms: OK

Alarm

Autodialer - test

OK

Totalizers (on Panel display at Tannery Rd)

RW-1 2601392

RW-3 2831587

RW-2 3100223

RW-4 442657

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

Call

RW-3

Totalizers (in meter pit)

RW-1 25962

RW-3 09293

RW-2 42001

RW-4 04699

Hour Meters

RW-1 72739

RW-3 127301

RW-2 75216

RW-4 28852

Landfill Cover Inspection

Leachate seeps Any new seeps NO

If YES, describe: _____

Good

Western seep condition:

Good

North seep condition:

Good

Gas vents - general condition

OK

- Unusual odors, list vents/describe.

NONE

Flares ignited

OK

4 OFF 3 ON Details on page 2

Perimeter fence

OK

Erosion/animal burrows

NO

If YES, describe: _____

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 2/14/2001 10:00 Inspector: Brent Zimmer

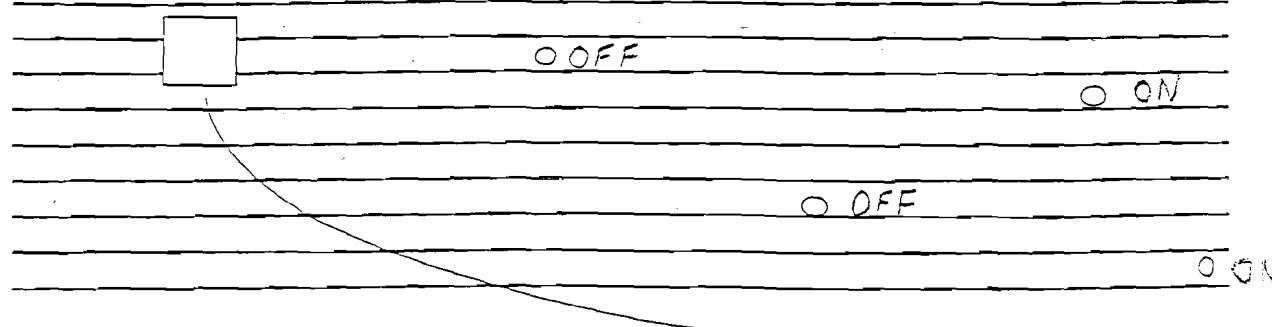
Monitoring Well Water Level Data

<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	<u>4.97</u>	<u>444.62</u>	<u>Good</u>
MW - 2S	459.44	<u>6.04</u>	<u>453.40</u>	<u>Good</u>
MW - 3S	456.4	<u>Frozen</u>	<u>—</u>	<u>Good</u>
MW - 4S	456.19	<u>3.65</u>	<u>452.54</u>	<u>Good</u>
MW - 5S	457.15	<u>4.23</u>	<u>452.92</u>	<u>Good</u>
MW - 7S	452.25	<u>8.28</u>	<u>443.97</u>	<u>Good</u>
MW - 9S	456.38	<u>3.78</u>	<u>452.60</u>	<u>Good</u>
MW - 10	488.29	<u>Obstruction</u>		
MW - 11	503.95	<u>Obstruction</u>		
MW - 12	483.11	<u>31.84</u>	<u>451.27</u>	<u>Good</u>
PZ - 1	454.37	<u>5.86</u>	<u>448.51</u>	<u>Good</u>

NOTES: ON Ignited Flares: Yes/No

OFF

OFF



TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 3/19/2001 10:00

Inspector: Brent Zimmer
Weather: Sunny

100%
FEB 2001

GENERAL INSPECTION - To Be Completed Monthly

		Notes	Problems
<u>General Site Condition:</u>			
Gates - condition and locks for inner & outer gates:	OK		
Access Road - surface/paving/snow	OK		
Access Road - surface/paving/snow	OK		
Overall appearance (trash/litter)	OK		
<u>Pump Station at Tannery Road:</u>	Condition:	OK	
Pump #1 Hours: <u>21572</u>	Pump #2 Hours:	<u>19604</u>	
<u>Leachate Collection System:</u>			
Panel - note conditions and any alarms:	OK		
Autodialer - test	OK	<u>Not Performed</u>	
Totalizers (on Panel display at Tannery Rd)			
RW-1 <u>2657661</u>	RW-3 <u>2831537</u>		
RW-2 <u>3213335</u>	RW-4 <u>442657</u>		
<u>Panel/Wells on Landfill</u>			
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	RW-3	RW-4
Totalizers (in meter pit)		Call	
RW-1 <u>26524</u>	RW-3 <u>09293</u>		
RW-2 <u>43132</u>	RW-4 <u>04699</u>		
Hour Meters			
RW-1 <u>74262</u>	RW-3 <u>135222</u>		
RW-2 <u>76973</u>	RW-4 <u>28852</u>		
<u>Landfill Cover Inspection</u>			
Leachate seeps Any new seeps	NO	If YES, describe:	
Western seep condition:		<u>Good</u>	
North seep condition:		<u>Good</u>	
Gas vents - general condition		OK	
- Unusual odors, list vents/describe.		<u>None</u>	
Flares ignited	OK	<u>None ignited</u>	
Perimeter fence	OK		
Erosion/animal burrows	NO	If YES, describe:	

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 3/18/2001 10:00 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	<u>4.91</u>	<u>444.68</u>	<u>Good</u>
MW - 2S	459.44	<u>6.33</u>	<u>453.11</u>	<u>Good</u>
MW - 3S	456.4	<u>3.48</u>	<u>452.92</u>	<u>Good</u>
MW - 4S	456.19	<u>3.86</u>	<u>452.33</u>	<u>Good</u>
MW - 5S	457.15	<u>4.42</u>	<u>452.73</u>	<u>Good</u>
MW - 7S	452.25	<u>8.52</u>	<u>443.73</u>	<u>Good</u>
MW - 9S	456.38	<u>3.73</u>	<u>452.65</u>	<u>Good</u>
MW - 10	488.29	<u>Obstruction</u>		
MW - 11	503.95	<u>Obstruction</u>		
MW - 12	483.11	<u>32.04</u>	<u>451.07</u>	<u>Good</u>
PZ - 1	454.37	<u>6.16</u>	<u>448.21</u>	<u>Good</u>

NOTES: No Ignited Flares: Yes/No

No

No



No

No

No

No

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 4/30/01 1030

Inspector:

Weather:

Ed Fahrenkopf
Sunny, light wind 65°F

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
<u>General Site Condition:</u>		
Gates - condition and locks for inner & outer gates:	OK	✓
Access Road - surface/paving/snow	OK	✓
Overall appearance (trash/litter)	OK	✓
OK	✓	
<u>Pump Station at Tannery Road:</u>	Condition:	OK ✓
Pump #1 Hours: <u>2228.7</u>	Pump #2 Hours: <u>2020.3</u>	
<u>Leachate Collection System:</u>		
Panel - note conditions and any alarms:	OK	RW-3 Alarm is on
Autodialer - test	OK	
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>2730154</u>	RW-3 <u>2831587</u>	
RW-2 <u>3357145</u>	RW-4 <u>442657</u>	
<u>Panel/Wells on Landfill</u>		
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 <u>27249</u>	RW-3 <u>09293</u>	
RW-2 <u>44570</u>	RW-4 <u>04699</u>	
Hour Meters		
RW-1 <u>76214</u>	RW-3 <u>145298</u>	
RW-2 <u>79199</u>	RW-4 <u>28852</u>	
<u>Landfill Cover Inspection</u>		
Leachate seeps Any new seeps	NO	If YES, describe: _____
Western seep condition:		<u>Good some leachate at surface</u>
North seep condition:		<u>Good</u>
Gas vents - general condition	OK	
Unusual odors, list vents/describe.	<u>None</u>	
Flares ignited	OK	
Perimeter fence	OK	
Erosion/animal burrows	<u>NO</u>	If YES, describe: _____

Note: Mangate east side of landfill is ~~broken~~ damaged and off the hinges
Mangate south side of landfill near MW-5 is damaged and off hinges

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 4/30/01¹⁰³⁰ Inspector:

Ed Fahrenkopf

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>5.20</u>	_____	<u>OK</u>
MW - 2S	459.44	<u>7.19</u>	_____	<u>OK</u>
MW - 3S	456.4	<u>3.91</u>	_____	<u>OK</u>
MW - 4S	456.19	<u>3.97</u>	_____	<u>OK</u>
MW - 5S	457.15	<u>4.90</u>	_____	<u>OK</u>
MW - 7S	452.25	<u>7.37</u>	_____	<u>OK</u>
MW - 9S	456.38	<u>4.00</u>	_____	<u>OK</u>
MW - 10	488.29	_____	_____	<u>obstruction</u>
MW - 11	503.95	_____	_____	<u>obstruction</u>
MW - 12	483.11	<u>31.60</u>	_____	<u>OK</u>
PZ - 1	454.37	<u>6.32</u>	_____	<u>OK</u>

NOTES: _____

yes

no

no

yes

yes

no

yes

b

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 5/21/01

Inspector: EET
Weather: Cloudy light wind 55°

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
General Site Condition:		
Gates - condition and locks for inner & outer gates:	OK	<u>OK</u>
Access Road - surface/paving/snow	OK	<u>OK</u>
Overall appearance (trash/litter)	OK	<u>OK</u>
Pump Station at Tannery Road:		Condition: OK
Pump #1 Hours: <u>2254.6</u>	Pump #2 Hours: <u>2044.4</u>	
Leachate Collection System:		
Panel - note conditions and any alarms:	OK	<u>RW-3 ALARM ON</u>
Autodialer - test	OK	
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>1766425</u>	RW-3 <u>2831587</u>	
RW-2 <u>3427740</u>	RW-4 <u>442657</u>	
Panel/Wells on Landfill		
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>OK</u>
Meter Pit - open lid, check heater, leaks, etc.	OK	<u>OK</u>
Panel note conditions and any alarms:	OK	<u>RW-3 Light on</u>
Totalizers (in meter pit)		
RW-1 <u>27612</u>	RW-3 <u>09293</u>	
RW-2 <u>45276</u>	RW-4 <u>04699</u>	
Hour Meters		
RW-1 <u>7720.7</u>	RW-3 <u>15035.8</u>	
RW-2 <u>8029.9</u>	RW-4 <u>2885.2</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps	NO	If YES, describe: _____ <u>present - staining</u>
Western seep condition:		<u>staining present</u>
North seep condition:		
Gas vents - general condition		OK <u>no odors</u>
- Unusual odors, list vents/describe.		
Flares ignited	OK	
Perimeter fence <u>man gates broken</u>	OK	
Erosion/animal burrows <u>NO</u>		If YES, describe: _____

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

Page 2 of 2

Date & Time: 5/21/01 Inspector: 66P

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>6.56</u>	<u>443.03</u>	<u>OK</u>
MW - 2S	459.44	<u>8.36</u>	<u>451.08</u>	<u>OK</u>
MW - 3S	456.4	<u>7.70</u>	<u>451.7</u>	<u>OK</u>
MW - 4S	456.19	<u>4.73</u>	<u>451.46</u>	<u>OK</u>
MW - 5S	457.15	<u>5.78</u>	<u>451.34</u>	<u>OK</u>
MW - 7S	452.25	<u>8.11</u>	<u>444.14</u>	<u>OK</u>
MW - 9S	456.38	<u>4.77</u>	<u>451.61</u>	<u>OK</u>
MW - 10	488.29			<u>obstructed</u>
MW - 11	503.95			<u>obstructed</u>
MW - 12	483.11	<u>31.71</u>	<u>451.4</u>	<u>OK</u>
PZ - 1*	^{66P} 454.37 452	<u>7.73</u>	444.27 ^{66P} <u>446.64</u>	<u>OK</u>

* PZ-1 elevation needs to be surveyed, elevation is estimated.

NOTES:

↑ N • yes • yes

• no • yes

• no • yes

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 6/25/01

Inspector: E.F.
Weather: Sunny 65° F

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
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: <u>2308.3</u>	Pump #2 Hours: <u>2086.5</u>	
Leachate Collection System:		
Panel - note conditions and any alarms:	OK	✓
Autodialer - test	OK	—
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>2824354</u>	RW-3 <u>2873934</u>	
RW-2 <u>3541725</u>	RW-4 <u>942657</u>	
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 <u>2819100</u>	RW-3 <u>0968700</u>	
RW-2 <u>4041800</u>	RW-4 <u>0469800</u>	
Hour Meters		
RW-1 <u>78787</u>	RW-3 <u>152297</u>	
RW-2 <u>83075</u>	RW-4 <u>28852</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps <u>NO</u>	If YES, describe: _____	
Western seep condition:	_____	
North seep condition:	_____	
Gas vents - general condition	<u>OK</u> _____	
- Unusual odors, list vents/describe.	_____	
Flares ignited <u>4 of 7</u>	OK _____	
Perimeter fence <u>A few gates off hinges</u>	OK _____	
Erosion/animal burrows <u>NO</u>	If YES, describe: _____	

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 6/25/01 Inspector: ECAF

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>6.49</u>	<u>443.1</u>	
MW - 2S	459.44	<u>6.0</u>	<u>453.44</u>	
MW - 3S	456.4	<u>3.52</u>	<u>452.88</u>	
MW - 4S	456.19	<u>3.82</u>	<u>452.37</u>	
MW - 5S	457.15	<u>6.73</u>	<u>450.42</u>	
MW - 7S	452.25	<u>7.68</u>	<u>444.57</u>	
MW - 9S	456.38	<u>3.69</u>	<u>452.69</u>	
MW - 10	488.29	<u>Obstro.</u>		
MW - 11	503.95	<u>obstr.</u>		
MW - 12	483.11	<u>31.71</u> <u>12.91</u>	<u>469.2</u>	<u>451.4</u>
PZ - 1	454.37	<u>6.06</u>	<u>448.31</u>	<u>ECAF</u>

NOTES: _____

_____ NO
YES YES
YES NO

NO YES

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 8/6/01

Inspector:

ECP

Weather:

Mostly Sunny Humid 80°F

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
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: <u>023694</u>	Pump #2 Hours: <u>021367</u>	
Leachate Collection System:		
Panel - note conditions and any alarms:	OK	✓
Autodialer - test	OK	NA
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>2893990</u>	RW-3 <u>2913584</u>	
RW-2 <u>3649101</u>	RW-4 <u>442659</u>	
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	<u>Alarm RW3</u>
Totalizers (in meter pit)		
RW-1 <u>2888700</u>	RW-3 <u>1017300</u>	
RW-2 <u>4779000</u>	RW-4 <u>469900</u>	
Hour Meters		
RW-1 <u>80679</u>	RW-3 <u>153754</u>	
RW-2 <u>84881</u>	RW-4 <u>28782</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps <u>NO</u>	If YES, describe: <u>none observed</u>	
Western seep condition:	<u>Dry</u>	
North seep condition:	<u>dry</u>	
Gas vents - general condition	OK	✓
- Unusual odors, list vents/describe.		
Flares ignited <u>not all of them (one not ignited)</u>	OK	
Perimeter fence <u>OK except manholes</u>	OK	
Erosion/animal burrows <u>NO</u>	If YES, describe:	

Slight HS odor

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

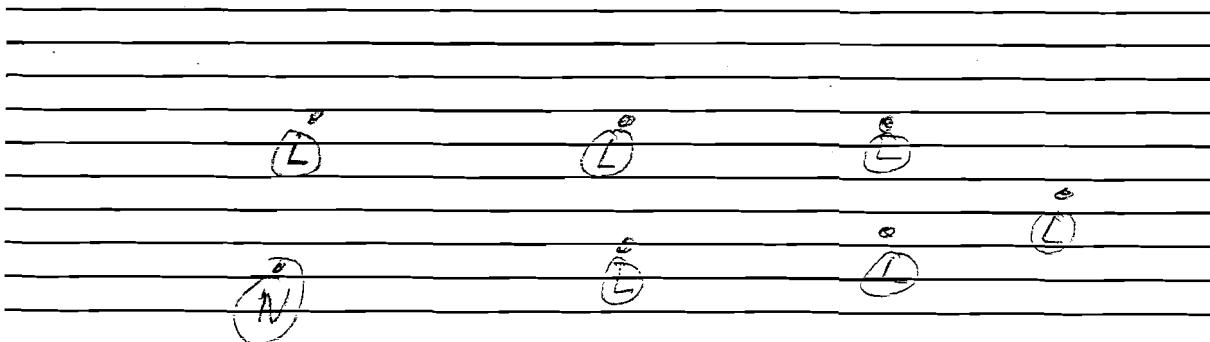
Date & Time: 8/6/01 Inspector: CCF

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>dry at 11.0 ft</u>		
MW - 2S	459.44	<u>9.37</u>	<u>450.07</u>	
MW - 3S	456.4	<u>5.62</u>	<u>450.78</u>	
MW - 4S	456.19	<u>6.20</u>	<u>449.99</u>	
MW - 5S	457.15	<u>7.23</u>	<u>449.92</u>	
MW - 7S	452.25	<u>10.61</u>	<u>441.64</u>	
MW - 9S	456.38	<u>6.09</u>	<u>450.29</u>	
MW - 10	488.29	<u>obst.</u>	<u>-</u>	<u>obstructed</u>
MW - 11	503.95	<u>obst.</u>	<u>-</u>	<u>obstructed</u>
MW - 12	483.11	<u>32.13</u>	<u>450.98</u>	
PZ - 1	454.37	<u>6.31</u>	<u>448.06</u>	

Note MW-10 p.27 wl

NOTES: _____



TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: August 30, 2001

Inspector:
Weather:

ECF
cloudy 80°F

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
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: <u>2397.9</u>	Pump #2 Hours:	<u>2159.9</u>
Leachate Collection System:		
Panel - note conditions and any alarms:	OK	✓ RW-4
Autodialer - test	OK	—
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>2931437</u>	RW-3 <u>2945561</u>	
RW-2 <u>3751665</u>	RW-4 <u>442659</u>	
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 <u>2926200</u>	RW-3 <u>1043300</u>	
RW-2 <u>4851500</u>	RW-4 <u>469900</u>	
Hour Meters		
RW-1 <u>81693</u>	RW-3 <u>154525</u>	
RW-2 <u>85286</u>	RW-4 <u>29952</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps	NO	If YES, describe: <u>NO</u>
Western seep condition:		<u>dry</u>
North seep condition:		<u>dry</u>
Gas vents - general condition		OK
- Unusual odors, list vents/describe.		
Flares ignited	OK	
Perimeter fence	OK	
Erosion/animal burrows <u>(NO)</u>	If YES, describe:	<u>except man gates off hinges</u>
		<u>One small burrow north side of landfill</u>
		<u>Near gas vent 32</u>

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

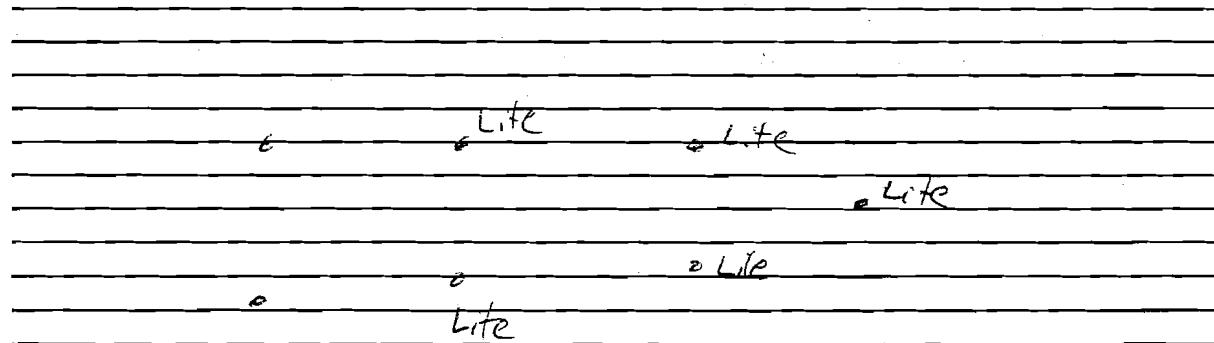
Page 2 of 2

Date & Time: 8/30/01 Inspector: EOT

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>Dry</u>	<u>Dry</u>	
MW - 2S	459.44	<u>9.80</u>	<u>449.64</u>	
MW - 3S	456.4	<u>6.18</u>	<u>450.22</u>	
MW - 4S	456.19	<u>6.89</u>	<u>449.30</u>	
MW - 5S	457.15	<u>8.16</u>	<u>448.99</u>	
MW - 7S	452.25	<u>11.38</u>	<u>440.87</u>	
MW - 9S	456.38	<u>6.75</u>	<u>449.63</u>	
MW - 10	488.29	<u>obstruction</u>	<u>—</u>	
MW - 11	503.95	<u>obstruction</u>	<u>—</u>	
MW - 12	483.11	<u>32.31</u>	<u>450.80</u>	
PZ - 1	454.37	<u>9.96</u>	<u>444.41</u>	

NOTES: Flares



TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date: 8/30/01 Inspector: Eef
Weather: Partly Sunny 80°F

ANNUAL GAS VENT INSPECTION (To be completed each Fall)

Gas Vent Number	H ₂ S (ppm)	Detectable Odors		General Vent Condition Notes/Comments
		Yes	No	
1	0	✓		Methane > 1.55
2	0	✓		Methane 3.0
3	0	✓		Methane 3.15
4	1	✓		Methane 3.25
5	0	✓		Methane 4.7
6	3	✓		Methane 4.0
7	-			Flare
8	-			Flare
9	0	✓		Methane 3.9
10	-			Flare
11	-			Flare
12	-			Flare
13	-			Flare
14	0	✓		Methane 3.55
15	-			Flare
16	0	✓		Methane 2.55
17	0	✓		Methane 2.85
18	0	✓		Methane >5.0
19	0	✓		Methane > 7.5.0
20	0	✓		Methane >5.0
21	0	✓		Methane >5.0
22	0	✓		Methane >5.0
23	0	✓		Methane >5.0
24	0	✓		Methane >5.0
25	0	✓		Methane >5.0

Methane units = %

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date: 8/30/01
Weather: Sunny 85°F

Inspector: Elie

ANNUAL GAS VENT INSPECTION (To be completed each Fall)

Gas Vent Number	H ₂ S (ppm)	Detectable Odors		General Vent Condition Notes/Comments
		Yes	No	
26	1	✓		Methane > 5.0
27	0	✓		Methane 1.3
28	0	✓		Methane > 5.0
29	0	✓		Methane > 5.0
30	0	✓		Methane > 5.0
31	0	✓		Methane > 5.0
32	0	✓		Methane > 5.0
33	0	✓		Methane 1.4
34	0	✓		Methane 1.4
35	0	✓		Methane > 5.0
36	0	✓		Methane > 5.0
37	0	✓		Methane > 5.0
38	5	✓		Methane > 5.0
39	0	✓		Methane 2.5
40	0	✓		Methane > 5.0
41	3	✓		Methane > 5.0
42	2	✓		Methane > 5.0
43	3	✓		Methane > 5.0
44	0	✓		Methane > 5.0
45	0	✓		Methane > 5.0
46	0	✓		Methane 0.8

Methane units = %

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 9/27/01

Inspector: Eef

Weather: Cloudy 50° 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: 024869

Pump #2 Hours: 021829

Leachate Collection System:

Panel - note conditions and any alarms: OK ✓

Autodialer - test

OK —

Totalizers (on Panel display at Tannery Rd)

RW-1 2972123

RW-3 2973924

RW-2 3830176

RW-4 442659

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 2968000

RW-3 1071500

RW-2 4930200

RW-4 0469900

Hour Meters

RW-1 082803

RW-3 155358

RW-2 086480

RW-4 28852

Landfill Cover Inspection

Leachate seeps Any new seeps NO

If YES, describe: _____

OK none observed

OK none observed

Gas vents - general condition

OK _____

- Unusual odors, list vents/describe.

Flares ignited all but one

OK —

Perimeter fence

OK —

Erosion/animal burrows NO

If YES, describe: _____

mangate on south side broken

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 9/27/01 Inspector: EGF

Monitoring Well Water Level Data

<u>WELL No</u>	Measure Pt Elev.	Depth to Water (ft)	Groundwater Elevation (ft)	Well Condition
MW - 1S	449.59	<u>10.0</u>	<u>439.59</u>	
MW - 2S	459.44	<u>7.29</u>	<u>452.15</u>	
MW - 3S	456.4	<u>3.70</u>	<u>452.7</u>	
MW - 4S	456.19	<u>4.60</u>	<u>451.59</u>	
MW - 5S	457.15	<u>6.18</u>	<u>450.97</u>	
MW - 7S	452.25	<u>10.8</u>	<u>441.45</u>	
MW - 9S	456.38	<u>3.99</u>	<u>452.39</u>	
MW - 10	488.29	<u>Obstr.</u>		
MW - 11	503.95	<u>Obstr.</u>		
MW - 12	483.11	<u>32.5</u>	<u>450.61</u>	
PZ - 1	454.37	<u>8.49</u>	<u>445.88</u>	

NOTES:

*Flores ok OK not one
 0 0 0 ~~OK~~
 OK OK OK
 0 6 0 ~~OK~~
 Maintenance personnel on-site working on Flores*

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 10/16/2001 11:37

Inspector: Brent Zimmer

Weather: Sunny

GENERAL INSPECTION - To Be Completed Monthly

Notes Problems

General Site Condition:

Gates - condition and locks for inner & outer gates:

OK _____

Access Road - surface/paving/snow

OK _____

Access Road - surface/paving/snow

OK _____

Overall appearance (trash/litter)

OK _____

Pump Station at Tannery Road:

Condition: OK _____

Pump #1 Hours: 2513.1 Pump #2 Hours: 2203.8

Leachate Collection System:

Panel - note conditions and any alarms: OK _____

OK Not performed _____

Autodialer - test

Totalizers (on Panel display at Tannery Rd)

RW-1 3001226 RW-3 2993437

RW-2 3886862 RW-4 442659

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 RW-3 Coll

Totalizers (in meter pit)

RW-1 2996000 RW-3 1081200

RW-2 4986700 RW-4 468900

Hour Meters

RW-1 8359.4 RW-3 15593.2

RW-2 8732.8 RW-4 2885.2

Landfill Cover Inspection

Leachate seeps Any new seeps NO If YES, describe: _____

OK _____

Western seep condition: sk _____

North seep condition: sk _____

Gas vents - general condition

OK _____

- Unusual odors, list vents/describe. None

Flares ignited

OK 264 5 ON

Perimeter fence

OK _____

Erosion/animal burrows NO If YES, describe: _____

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 10/16/001 Inspector: Brent Zimmer

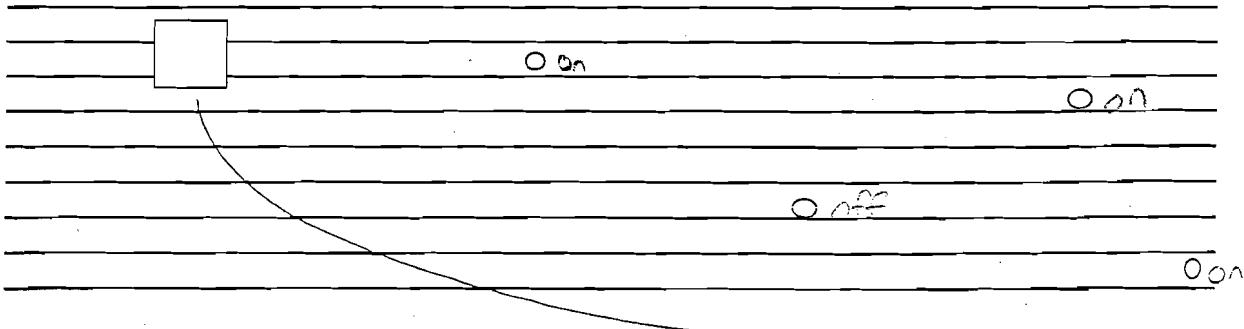
Monitoring Well Water Level Data

<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	<u>6.90</u>	<u>442.69</u>	<u>Good</u>
MW - 2S	459.44	<u>8.06</u>	<u>451.38</u>	<u>Good</u>
MW - 3S	456.4	<u>4.11</u>	<u>452.29</u>	<u>Good (missing float)</u>
MW - 4S	456.19	<u>4.76</u>	<u>451.43</u>	<u>Good</u>
MW - 5S	457.15	<u>6.66</u>	<u>450.49</u>	<u>Good</u>
MW - 7S	452.25	<u>10.63</u>	<u>441.62</u>	<u>Good</u>
MW - 9S	456.38	<u>4.23</u>	<u>452.15</u>	<u>Good</u>
MW - 10	^{486.30} 488.29	<u>34.85</u>	<u>451.45</u>	<u>New Well (Total Depth 45.45)</u>
MW - 11	^{502.40} 503.95	<u>51.68</u>	<u>450.72</u>	<u>New Well (Total Depth 61.68)</u>
MW - 12	483.11	<u>32.44</u>	<u>450.67</u>	<u>Good</u>
PZ - 1	454.37	<u>8.78</u>	<u>445.59</u>	<u>Good</u>

NOTES: ON O Ignited Flares: Yes/No

ONO

OFF



TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 11/28/01

Inspector: ECP
Weather:

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
General Site Condition:		
Gates - condition and locks for inner & outer gates:	OK	X
Access Road - surface/paving/snow	OK	X
Overall appearance (trash/litter)	OK	X
Pump Station at Tannery Road:		Condition:
Pump #1 Hours: <u>25453</u>	Pump #2 Hours: <u>22549</u>	
Leachate Collection System:		
Panel - note conditions and any alarms:	OK	OK
Autodialer - test	OK	not performed
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>3066334</u>	RW-3 <u>3043433</u>	
RW-2 <u>4017677</u>	RW-4 <u>442659</u>	
Panel/Wells on Landfill		
Manholes along road - general condition, erosion, overflows	OK	OK
Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity	OK	OK
Meter Pit - open lid, check heater, leaks, etc.	OK	OK
Panel note conditions and any alarms:	OK	RW-3 call
Totalizers (in meter pit)		
RW-1 <u>3060500</u>	RW-3 <u>1141200</u>	
RW-2 <u>5117000</u>	RW-4 <u>469900</u>	
Hour Meters		
RW-1 <u>8537.4</u>	RW-3 <u>16253.1</u>	
RW-2 <u>8925.3</u>	RW-4 <u>2885.2</u>	
Landfill Cover Inspection		
Leachate seeps Any new seeps	NO	If YES, describe:
Western seep condition:	OK	
North seep condition:	OK	
Gas vents - general condition	OK	OK
- Unusual odors, list vents/describe.		none
Flares ignited	OK	page 2
Perimeter fence	OK	OK except manholes
Erosion/animal burrows	NO	If YES, describe:

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

Page 2 of 2

Date & Time: 11/28/01 Inspector: Elliott

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>5.02</u>	<u>444.57</u>	<u>Good</u>
MW - 2S	459.44	<u>7.45</u>	<u>451.99</u>	<u>/</u>
MW - 3S	456.4	<u>3.89</u>	<u>452.51</u>	<u>/</u>
MW - 4S	456.19	<u>4.45</u>	<u>451.74</u>	<u>/</u>
MW - 5S	457.15	<u>7.92</u>	<u>452.23</u>	<u>/</u>
MW - 7S	452.25	<u>9.54</u>	<u>442.71</u>	<u>/</u>
MW - 9S	456.38	<u>3.99</u>	<u>452.31</u>	<u>↓</u>
MW - 10	488.29	<u>34.63</u>	<u>451.67</u>	<u>well not surveyed</u>
MW - 11	502.40	<u>51.61</u>	<u>450.79</u>	<u>well not surveyed</u>
MW - 12	483.11	<u>32.34</u>	<u>450.44</u>	<u>Good</u>
PZ - 1	454.37	<u>7.45</u>	<u>446.92</u>	<u>Good</u>

NOTES:

yes

one

0 yes

1

yes

0 no

0 no

0 yes

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 12/26/2001 9:37

Inspector: Brent Zimmer
Weather: Sunny / cool

GENERAL INSPECTION - To Be Completed Monthly

		Notes Problems
<u>General Site Condition:</u>		
Gates - condition and locks for inner & outer gates:	OK	
Access Road - surface/paving/snow	OK	
Access Road - surface/paving/snow	OK	
Overall appearance (trash/litter)	OK	
<u>Pump Station at Tannery Road:</u>	Condition: <u>OK</u>	
Pump #1 Hours: <u>2617.5</u>	Pump #2 Hours: <u>2289.4</u>	
<u>Leachate Collection System:</u>		
Panel - note conditions and any alarms:	OK	
Autodialer - test	OK	<u>Not Performed</u>
Totalizers (on Panel display at Tannery Rd)		
RW-1 <u>3109740</u>	RW-3 <u>3077464</u>	
RW-2 <u>4103788</u>	RW-4 <u>442659</u>	
<u>Panel/Wells on Landfill</u>		
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	<u>Water in bottom pit</u>
Panel note conditions and any alarms:	OK	<u>RW 3 call RW 4 running</u>
Totalizers (in meter pit)		
RW-1 <u>31045</u>	RW-3 <u>11753</u>	
RW-2 <u>52038</u>	RW-4 <u>4699</u>	
Hour Meters		
RW-1 <u>86560</u>	RW-3 <u>16716.7</u>	
RW-2 <u>9056.4</u>	RW-4 <u>2885.2</u>	
<u>Landfill Cover Inspection</u>		
Leachate seeps Any new seeps	NO	If YES, describe: _____
Western seep condition:		
North seep condition:		<u>Erosion in Ridge Rep</u>
Gas vents - general condition		
- Unusual odors, list vents/describe.	OK	
Flares ignited	OK	<u>Page 2</u>
Perimeter fence	OK	
Erosion/animal burrows	NO	If YES, describe: _____

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 12/26/01 9:30 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	<u>4.88</u>	<u>444.71</u>	<u>Good</u>
MW - 2S	459.44	<u>6.35</u>	<u>453.06</u>	<u>Good</u>
MW - 3S	456.4	<u>3.59</u>	<u>452.81</u>	<u>Good</u>
MW - 4S	456.19	<u>3.87</u>	<u>452.32</u>	<u>Good</u>
MW - 5S	457.15	<u>4.52</u>	<u>452.63</u>	<u>Good</u>
MW - 7S	452.25	<u>8.63</u>	<u>443.62</u>	<u>Good</u>
MW - 9S	456.38	<u>3.89</u>	<u>452.49</u>	<u>Good</u>
MW - 10	<u>486.30</u> <u>488.29</u>	<u>24.57</u>	<u>451.73</u>	<u>Needs Back filling</u>
MW - 11	<u>502.40</u> <u>503.95</u>	<u>51.50</u>	<u>450.90</u>	<u>↓</u>
MW - 12	483.11	<u>32.18</u>	<u>450.93</u>	<u>Good</u>
PZ - 1	454.37	<u>6.12</u>	<u>448.18</u>	<u>Good</u>

NOTES:

Yes

Ignited Flares: Yes/No

No

Yes



Yes

No

No

Yes

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 1 of 2

Date & Time: 1/16/2002 9:09

Inspector: Brent Zimmer
Weather: Sunny 2° snow

GENERAL INSPECTION - To Be Completed Monthly

<u>General Site Condition:</u>	Notes Problems
Gates - condition and locks for inner & outer gates:	<u>OK</u> _____
Access Road - surface/paving/snow	<u>OK</u> <u>Snow</u> _____
Access Road - surface/paving/snow	<u>OK</u> _____
Overall appearance (trash/litter)	<u>OK</u> _____
 <u>Pump Station at Tannery Road:</u>	
Condition:	<u>OK</u> _____
Pump #1 Hours: <u>2645.3</u>	Pump #2 Hours: <u>2314.7</u> _____
 <u>Leachate Collection System:</u>	
Panel - note conditions and any alarms: <u>OK</u>	_____
Autodialer - test	<u>OK</u> _____
Totalizers (on Panel display at Tannery Rd)	
RW-1 <u>3141681</u>	RW-3 <u>3107725</u> _____
RW-2 <u>4168990</u>	RW-4 <u>442659</u> _____
 <u>Panel/Wells on Landfill</u>	
Manholes along road - general condition, erosion, overflows	<u>OK</u> _____
Pump Well No's 1, 2, 3 & 4 - Well head condition/integrity	<u>OK</u> _____
Meter Pit - open lid, check heater, leaks, etc.	<u>OK</u> _____
Panel note conditions and any alarms: <u>OK</u>	<u>RW-3 call</u> _____
Totalizers (in meter pit)	
RW-1 <u>3136400</u>	RW-3 <u>1205500</u> _____
RW-2 <u>5268800</u>	RW-4 <u>469900</u> _____
Hour Meters	
RW-1 <u>8742.5</u>	RW-3 <u>17214.0</u> _____
RW-2 <u>9154.1</u>	RW-4 <u>23825.2</u> _____
 <u>Landfill Cover Inspection</u>	
Leachate seeps Any new seeps <u>NO</u>	If YES, describe: _____ <u>Good</u> _____
Western seep condition:	<u>Good</u> _____
North seep condition:	<u>Good</u> _____
Gas vents - general condition	<u>OK</u> _____
- Unusual odors, list vents/describe.	<u>None</u> _____
Flares ignited	<u>OK</u> <u>None</u> _____
Perimeter fence	<u>OK</u> _____
Erosion/animal burrows <u>NO</u>	If YES, describe: _____

TANNERY ROAD LANDFILL, ROME, NY
INSPECTION CHECKLIST

Page 2 of 2

Date & Time: 1/16/2023 9:12 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	<u>5.23</u>	<u>444.36</u>	<u>Good</u>
MW - 2S	459.44	<u>7.32</u>	<u>451.62</u>	<u>Good</u>
MW - 3S	456.4	<u>3.66</u>	<u>452.74</u>	<u>Good</u>
MW - 4S	456.19	<u>4.17</u>	<u>452.02</u>	<u>Good</u>
MW - 5S	457.15	<u>4.81</u>	<u>452.34</u>	<u>Good</u>
MW - 7S	452.25	<u>9.33</u>	<u>442.92</u>	<u>Good</u>
MW - 9S	456.38	<u>3.93</u>	<u>452.45</u>	<u>Good</u>
MW - 10	488.29	<u>35.02</u>	<u>451.28</u>	<u>Needs Backfilling</u>
MW - 11	502.40 503.95	<u>51.83</u>	<u>450.57</u>	<u>↓</u>
MW - 12	483.11	<u>32.45</u>	<u>450.66</u>	<u>Good</u>
PZ - 1	454.37	<u>6.93</u>	<u>447.44</u>	<u>Good</u>

NOTES: No Ignited Flares: Yes/No

No

No



No

No

No

No

APPENDIX E

QUARTERLY LEACHATE FLOW DATA SUMMARIES

Table 5
Operational Data Summary
Tannery Road Landfill
Rome, New York

Pump Station at Tannery Road														
Hour Meters	1/12/2001	2/14/2001	3/19/2001	4/30/2001	5/21/2001	6/25/2001	8/6/2001	8/30/2001	9/27/2001	10/16/2001	11/28/2001	12/26/2001	1/16/2002	Total Hours Operated
Pump #1	20244	21058	21572	22287	22576	23083	23694	23979	24869	25131	25753	26175	26483	6239
Pump #2	19006	19174	19604	20203	20444	20865	21367	21599	21829	22038	22549	22894	23147	4141

