

APPENDIX N

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/2/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.92</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.44</u> 1/100 ft
Well ID # <u>MW-1</u>	Land Surface Elevation <u>598.18</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.7 to 14.7</u> 1/100 ft
Weather Conditions <u>sunny, light breeze</u>	
Air Temperature <u>90-95</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.74</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.20</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>9.54</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.56</u> gal	
3 Casing Volumes = <u>4.67</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Dup
250ml Poly	TSS	2	none	Dup

FIELD ANALYSES

Flow Rate (ml/min)	150	175	175	200	200	200		
Time (Military)	14:15	14:20	14:25	14:30	14:35	14:40		
Depth to Groundwater Below Top of Casing (ft)	7.50	7.55	7.57	7.57	7.58	7.59		
Drawdown (ft)	-0.30	-0.35	-0.37	-0.37	-0.38	-0.39		
pH (S.U.)	7.05	7.04	7.06	7.06	7.07	7.08		
Sp. Cond. (mS/cm)	1.876	1.885	1.906	1.902	1.902	1.903		
Turbidity (NTUs)	7.00	2.03	1.45	1.30	1.34	1.20		
Dissolved Oxygen (mg/L)	0.61	0.44	0.32	0.31	0.26	0.23		
Water Temperature (°C)	17.14	16.89	16.38	15.56	16.42	16.32		
ORP (mV)	28.5	13.2	4.4	-3.7	-3.5	-6.0		

Physical appearance at start	Color <u>clear with iron bacteria</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 14:10. Set tubing intake at center of screen. Start sampling at 14:45. Sample ID: A02MW1-U/F. Duplicate sample ID: A02MW51-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/7/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.78</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.17</u> 1/100 ft
Well ID # <u>MW-2</u>	Land Surface Elevation <u>596.96</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.2 to 14.2</u> 1/100 ft
Weather Conditions <u>cloudy, humid</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.00</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.68</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>7.32</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.19</u> gal	
3 Casing Volumes = <u>3.58</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	175	100	100	150	175		
Time (Military)	8:50	8:55	9:00	9:05	9:10	9:15		
Depth to Groundwater Below Top of Casing (ft)	8.70	8.71	8.70	8.71	8.73	8.73		
Drawdown (ft)	-0.02	-0.03	-0.02	-0.03	-0.05	-0.05		
pH (S.U.)	8.17	8.86	8.90	8.93	8.92	8.95		
Sp. Cond. (mS/cm)	0.562	0.561	0.559	0.554	0.554	0.552		
Turbidity (NTUs)	0.65	1.50	1.00	1.09	0.14	0.24		
Dissolved Oxygen (mg/L)	0.68	0.40	0.59	0.34	0.30	0.29		
Water Temperature (°C)	15.50	15.65	15.87	15.96	15.85	15.56		
ORP (mV)	-197.0	-184.8	-184.6	-187.0	-187.7	-19.9		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (faint sulfur)</u>		Odor <u>yes (sulfur)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 8:45. Set tubing intake at center of screen. Start sampling at 9:20. Sample ID: A02MW2-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/7/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.03</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.49</u> 1/100 ft
Well ID # <u>MW-3</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
_____ Upgradient _____ Downgradient	Screened Interval (below land surface) <u>9.1 to 14.1</u> 1/100 ft
Weather Conditions <u>cloudy, raining (at times downpour at others steady rain)</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.04</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>6.30</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>9.74</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.59</u> gal	
3 Casing Volumes = <u>4.76</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	250	275	275	250-275		
Time (Military)	14:10	14:15	14:20	14:25	14:30	14:35		
Depth to Groundwater Below Top of Casing (ft)	6.34	6.34	6.34	6.34	6.34	6.34		
Drawdown (ft)	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04		
pH (S.U.)	7.93	7.98	8.00	8.06	8.10	8.14		
Sp. Cond. (mS/cm)	0.729	0.730	0.732	0.731	0.731	0.731		
Turbidity (NTUs)	clear	clear	clear	clear	clear	clear		
Dissolved Oxygen (mg/L)	0.21	0.18	0.17	0.16	0.18	0.17		
Water Temperature (°C)	14.10	14.13	14.11	14.03	14.01	13.95		
ORP (mV)	21.2	19.1	18.9	19.0	17.1	16.2		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 13:50. Set tubing intake at center of screen. Start sampling at 14:45. Sample ID: A02MW3-U/F. Unable to collect turbidity readings due to equipment malfunction cause by humid conditions.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/8/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.52</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.95</u> 1/100 ft
Well ID # <u>MW-4</u>	Land Surface Elevation <u>597.70</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9 to 14</u> 1/100 ft
Weather Conditions <u>sunny, breezy</u>	
Air Temperature <u>80-85</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.41</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>5.78</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.63</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.73</u> gal	
3 Casing Volumes = <u>5.20</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	225	225	
Time (Military)	14:50	14:55	15:00	15:05	15:10	15:15	15:20	
Depth to Groundwater Below Top of Casing (ft)	6.30	6.08	6.10	6.10	6.11	6.15	6.15	
Drawdown (ft)	-0.52	-0.30	-0.32	-0.32	-0.33	-0.37	-0.37	
pH (S.U.)	7.26	7.25	7.75	7.68	7.69	7.56	7.56	
Sp. Cond. (mS/cm)	0.584	0.698	0.593	0.587	0.585	0.577	0.577	
Turbidity (NTUs)	1.85	1.70	1.09	1.00	0.91	0.71	0.58	
Dissolved Oxygen (mg/L)	0.90	0.32	0.25	0.22	0.22	0.19	0.18	
Water Temperature (°C)	18.19	17.30	16.97	16.90	16.70	16.70	16.71	
ORP (mV)	-29.3	-52.2	17.9	38.2	47.2	48.8	49.6	

Physical appearance at start	Color <u>Clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (sulfur)</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 14:45. Set tubing intake at center of screen. Start sampling at 15:25. Sample ID: A02MW4-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/9/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.52</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.92</u> 1/100 ft
Well ID # <u>MW-5</u>	Land Surface Elevation <u>596.68</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 15</u> 1/100 ft
Weather Conditions <u>cloudy/partly sunny</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>17.45</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>5.73</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.72</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.91</u> gal	
3 Casing Volumes = <u>5.73</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	300	250	200	190	190	490	200	200
Time (Military)	9:05	9:10	9:15	9:20	9:25	9:30	9:35	9:40
Depth to Groundwater Below Top of Casing (ft)	5.78	5.78	5.78	5.79	5.80	5.80	5.80	5.80
Drawdown (ft)	-0.05	-0.05	-0.05	-0.06	-0.07	-0.07	-0.07	-0.07
pH (S.U.)	8.65	8.71	8.06	7.86	7.72	7.65	7.50	7.61
Sp. Cond. (mS/cm)	0.765	0.764	0.764	0.766	0.764	0.761	0.758	0.756
Turbidity (NTUs)	1.10	0.33	0.37	0.34	0.35	0.29	0.34	0.4
Dissolved Oxygen (mg/L)	0.61	0.30	0.28	0.26	0.21	0.26	0.25	0.25
Water Temperature (°C)	12.75	12.73	12.89	12.86	12.81	12.84	12.78	12.79
ORP (mV)	-40.2	-27.4	-39.9	-46.1	-49.0	-50.9	-53.0	-50.1

Physical appearance at start	Color <u>clear w/ dark particles</u>	Physical appearance at sampling	Color <u>clear w/ dark particles</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 9:00. Small amount of iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 10:00. Sample ID: A02MW5-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/9/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.52</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.92</u> 1/100 ft
Well ID # <u>MW-5</u>	Land Surface Elevation <u>596.68</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>10 to 15</u> 1/100 ft

Weather Conditions cloudy/partly sunny

Air Temperature 75 ° F

Total Depth (TWD) Below Top of Casing = 17.45 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 5.73 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 11.72 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 1.91 gal

3 Casing Volumes = 5.73 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	190	190	200				
Time (Military)	9:45	9:50	9:55				
Depth to Groundwater Below Top of Casing (ft)	5.80	5.80	5.80				
Drawdown (ft)	-0.07	-0.07	-0.07				
pH (S.U.)	7.34	7.34	7.32				
Sp. Cond. (mS/cm)	0.750	0.748	0.745				
Turbidity (NTUs)	0.30	0.46	0.33				
Dissolved Oxygen (mg/L)	0.21	0.20	0.17				
Water Temperature (°C)	12.86	12.80	12.84				
ORP (mV)	-55.9	-55.8	-57.7				

Physical appearance at start	Color <u>clear w/ dark particles</u>	Physical appearance at sampling	Color <u>clear w/ dark particles</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 9:00. Small amount of iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 10:00. Sample ID: A02MW5-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/2/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.68</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.07</u> 1/100 ft
Well ID # <u>MW-06</u>	Land Surface Elevation <u>597.59</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft

Weather Conditions sunny, light breeze

Air Temperature 90 ° F

Total Depth (TWD) Below Top of Casing = 19.01 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 7.75 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 11.26 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 1.84 gal

3 Casing Volumes = 5.51 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	200	195	205	225	225		
Time (Military)	11:15	11:20	11:25	11:30	11:35	11:40		
Depth to Groundwater Below Top of Casing (ft)	7.89	7.94	7.93	7.94	7.96	7.96		
Drawdown (ft)	-0.14	-0.19	-0.18	-0.19	-0.21	-0.21		
pH (S.U.)	7.05	7.07	7.08	7.07	7.07	7.08		
Sp. Cond. (mS/cm)	0.924	0.924	0.923	0.926	0.922	0.921		
Turbidity (NTUs)	2.04	1.12	2.40	1.30	1.07	1.40		
Dissolved Oxygen (mg/L)	1.85	0.38	0.28	0.24	0.24	0.23		
Water Temperature (°C)	16.28	15.19	15.39	15.18	15.26	15.3		
ORP (mV)	49.4	37.5	31.9	25.1	22.8	19.8		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 11:10. Set tubing intake at center of screen. Start sampling at 11:45. Sample ID: A02MW06-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/20/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.37</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.71</u> 1/100 ft
Well ID # <u>MW-08</u>	Land Surface Elevation <u>598.31</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>65-70</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.45</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.45</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.70</u> gal	
3 Casing Volumes = <u>5.11</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	6	HNO3	MS/MSD
250ml Poly	TSS	3	none	MS/MSD

FIELD ANALYSES

Flow Rate (ml/min)	175	20	125	125	100	125	110	100
Time (Military)	9:05	9:10	9:15	9:20	9:25	9:30	9:35	9:40
Depth to Groundwater Below Top of Casing (ft)	9.81	9.83	9.84	9.86	9.82	9.84	9.84	9.83
Drawdown (ft)	-0.36	-0.38	-0.39	-0.41	-0.37	-0.39	-0.39	-0.38
pH (S.U.)	7.06	7.02	7.01	7.06	7.09	7.09	7.11	7.1
Sp. Cond. (mS/cm)	1.525	1.517	1.512	1.506	1.494	1.481	1.472	1.468
Turbidity (NTUs)	1.64	1.65	1.52	1.55	1.30	1.21	1.08	1.06
Dissolved Oxygen (mg/L)	0.58	0.45	0.39	0.32	0.35	0.26	0.02	0.26
Water Temperature (°C)	14.32	14.24	14.20	14.21	14.26	14.24	14.28	14.29
ORP (mV)	-66.0	-68.3	-69.6	-70.6	-65.1	-70.9	-73.5	-70.6

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (possibly sulfur)</u>		Odor <u>yes (faint sulfur)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 9:00. Set tubing intake at center of screen. Start sampling at 9:45. Sample ID: A02MW08-U/F. MS/MSD taken at this well.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/7/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.70</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.01</u> 1/100 ft
Well ID # <u>MW-09</u>	Land Surface Elevation <u>596.49</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>cloudy, humid</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.14</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.78</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.36</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.69</u> gal	
3 Casing Volumes = <u>5.07</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	175	180	200	200	225		
Time (Military)	10:40	10:45	10:50	10:55	11:00	11:05		
Depth to Groundwater Below Top of Casing (ft)	8.80	8.80	8.81	8.82	8.82	8.82		
Drawdown (ft)	-0.02	-0.02	-0.03	-0.04	-0.04	-0.04		
pH (S.U.)	7.19	7.21	7.93	8.17	8.32	8.42		
Sp. Cond. (mS/cm)	1.045	1.011	0.768	0.668	0.614	0.595		
Turbidity (NTUs)	9.20	8.07	4.00	2.60	1.30	1.30		
Dissolved Oxygen (mg/L)	0.55	0.44	0.28	0.24	0.21	0.20		
Water Temperature (°C)	16.97	15.84	16.16	15.87	15.77	15.71		
ORP (mV)	-159.8	-161.4	-150.9	-147.8	-138.9	-143.1		

Physical appearance at start Color clear with black floating particles Physical appearance at sampling Color clear with black floating particles
 Odor no Odor no
 Sheen/Free Product no sheen/no product Sheen/Free Product no sheen/no product

COMMENTS/OBSERVATIONS

Start pump at 14:15. Set tubing intake at center of screen. Start sampling at 14:55. Sample ID: A0MW09-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/20/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.79</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.22</u> 1/100 ft
Well ID # <u>MW-11</u>	Land Surface Elevation <u>596.77</u> 1/100 ft
Upgradient <input type="checkbox"/> Downgradient <input type="checkbox"/>	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>cloudy, light rain</u>	
Air Temperature <u>70</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.99</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.63</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.36</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.85</u> gal	
3 Casing Volumes = <u>5.56</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	1	none	

FIELD ANALYSES								
Flow Rate (ml/min)	175	180	150	150	150	200	180	170
Time (Military)	13:25	13:30	13:35	13:40	13:45	13:50	13:55	14:00
Depth to Groundwater Below Top of Casing (ft)	10.02	10.10	10.03	10.03	10.03	10.10	10.05	10.08
Drawdown (ft)	-0.39	-0.47	-0.40	-0.40	-0.40	-0.47	-0.42	-0.45
pH (S.U.)	7.29	7.26	7.28	7.29	7.31	7.33	7.36	7.38
Sp. Cond. (mS/cm)	1.245	1.243	1.231	1.214	1.190	1.165	1.139	1.121
Turbidity (NTUs)	0.68	1.20	2.50	2.45	2.00	1.80	1.50	1.37
Dissolved Oxygen (mg/L)	0.55	0.39	0.36	0.33	0.31	0.33	0.31	0.29
Water Temperature (°C)	15.49	15.60	15.99	16.03	16.03	16.02	16.07	16.04
ORP (mV)	-41.4	-43.8	-39.6	-50.1	-51.9	-76.0	-93.2	-94.7

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>	Odor <u>yes (unidentified)</u>	Odor <u>yes (unidentified)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>			

COMMENTS/OBSERVATIONS PID Well: 36.0; PID Air: 3.3. Start pump at 13.20. Set tubing intake at center of screen. Start sampling at 14:10. Sample ID: A02MW11-U/F. Field Blank: A02MWF003-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/20/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.79</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.22</u> 1/100 ft
Well ID # <u>MW-11</u>	Land Surface Elevation <u>596.77</u> 1/100 ft
Upgradient <input type="checkbox"/> Downgradient <input type="checkbox"/>	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>cloudy, light rain</u>	
Air Temperature <u>70</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.99</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.63</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.36</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.85</u> gal	
3 Casing Volumes = <u>5.56</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	190						
Time (Military)	14:05						
Depth to Groundwater Below Top of Casing (ft)	10.08						
Drawdown (ft)	-0.45						
pH (S.U.)	7.39						
Sp. Cond. (mS/cm)	1.115						
Turbidity (NTUs)	1.26						
Dissolved Oxygen (mg/L)	0.29						
Water Temperature (°C)	16.04						
ORP (mV)	-94.9						

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (unidentified)</u>		Odor <u>yes (unidentified)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 36.0; PID Air: 3.3. Start pump at 13.20. Set tubing intake at center of screen. Start sampling at 14:10. Sample ID: A02MW11-U/F. Field Blank: A02MWF003-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/6/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>603.47</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>603.69</u> 1/100 ft
Well ID # <u>MW-13D</u>	Land Surface Elevation <u>600.15</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>Cloudy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.40</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.68</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.72</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.75</u> gal	
3 Casing Volumes = <u>5.24</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	6	HNO3	MS/MSD
250ml Poly	TSS	3	none	MS/MSD

FIELD ANALYSES

	200	225	250	180	200	190	200	
Flow Rate (ml/min)	200	225	250	180	200	190	200	
Time (Military)	10:10	10:15	10:20	10:25	10:30	10:35	10:40	
Depth to Groundwater Below Top of Casing (ft)	8.90	8.94	8.98	8.98	8.94	8.96	8.98	
Drawdown (ft)	-0.22	-0.26	-0.30	-0.30	-0.26	-0.28	-0.30	
pH (S.U.)	7.42	7.41	7.41	7.41	7.42	7.42	7.43	
Sp. Cond. (mS/cm)	1.341	1.335	1.335	1.335	1.333	1.333	1.332	
Turbidity (NTUs)	0.70	0.70	0.70	0.80	0.68	1.00	0.50	
Dissolved Oxygen (mg/L)	0.67	0.34	0.27	0.27	0.26	0.22	0.23	
Water Temperature (°C)	17.00	16.48	16.61	16.57	17.01	17.02	16.89	
ORP (mV)	-19.4	-26.2	-27.2	-31.6	-31.8	-34.0	-34.9	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 10:05. Set tubing intake at center of screen. Start sampling at 10:45. Sample ID: A03MW13D-U/F +MS/MSD. USACE split taken.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/1/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>602.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>602.59</u> 1/100 ft
Well ID # <u>MW-14</u>	Land Surface Elevation <u>598.90</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>6 to 15.95</u> 1/100 ft
Weather Conditions <u>sunny, light breeze</u>	
Air Temperature <u>70-75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.61</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.28</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.33</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.85</u> gal	
3 Casing Volumes = <u>5.54</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	175	175	175	175	175	175	
Time (Military)	8:25	8:30	8:35	8:40	8:45	8:50	8:55	
Depth to Groundwater Below Top of Casing (ft)	8.41	8.41	8.42	8.42	8.43	8.43	8.44	
Drawdown (ft)	-0.13	-0.13	-0.14	-0.14	-0.15	-0.15	-0.16	
pH (S.U.)	7.44	7.4	7.38	7.4	7.38	7.38	7.39	
Sp. Cond. (mS/cm)	1.158	1.168	1.185	1.188	1.189	1.189	1.188	
Turbidity (NTUs)	239	116	22	8.2	6	4.2	2	
Dissolved Oxygen (mg/L)	0.73	0.41	0.39	0.40	0.38	0.28	0.29	
Water Temperature (°C)	16.34	16.66	16.68	16.66	16.74	16.86	16.95	
ORP (mV)	-53.2	-62.0	-61.2	-65.3	-64.3	-68.7	70.3.	

Physical appearance at start	Color <u>light grey</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 8:20. Set tubing intake at center of screen. Start sampling at 9:00. Sample ID: A03MW14-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>608.09</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>608.29</u> 1/100 ft
Well ID # <u>MW-15</u>	Land Surface Elevation <u>604.42</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>partly cloudy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>23.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>12.50</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.00</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.79</u> gal	
3 Casing Volumes = <u>5.38</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	250	200	200	175	200	175	175	200
Time (Military)	9:20	9:25	9:30	9:35	9:40	9:45	9:50	9:55
Depth to Groundwater Below Top of Casing (ft)	12.72	12.72	12.72	12.73	12.73	12.73	12.73	12.74
Drawdown (ft)	-0.22	-0.22	-0.22	-0.23	-0.23	-0.23	-0.23	-0.24
pH (S.U.)	11.12	11.25	11.28	11.20	11.12	11.08	11.05	11.01
Sp. Cond. (mS/cm)	0.704	0.703	0.704	0.705	0.705	0.706	0.706	0.707
Turbidity (NTUs)	9.63	12.33	10.72	8.09	5.52	5.54	5.24	5.02
Dissolved Oxygen (mg/L)	0.78	1.53	1.68	1.40	1.34	1.32	1.39	1.26
Water Temperature (°C)	15.16	15.46	15.57	15.53	15.74	15.75	15.95	15.69
ORP (mV)	-125.4	-130.7	-143.9	-145.8	-150.7	-153.5	-153.2	-152.2

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.4; PID AIR: 0.04. Start pump at 9:15. Set tubing intake at center of screen. Start sampling at 10:00. Sample ID: A03MW15-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/1/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>604.37</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>604.79</u> 1/100 ft
Well ID # <u>MW-16</u>	Land Surface Elevation <u>601.41</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.10</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.46</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.64</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.73</u> gal	
3 Casing Volumes = <u>5.20</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	150	180	180	180	180	180	180
Time (Military)	10:15	10:20	10:25	10:30	10:35	10:40	10:45
Depth to Groundwater Below Top of Casing (ft)	9.47	9.47	9.47	9.47	9.47	9.47	9.47
Drawdown (ft)	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
pH (S.U.)	7.38	7.36	7.35	7.34	7.33	7.33	7.33
Sp. Cond. (mS/cm)	1.307	1.301	1.300	1.301	1.300	1.298	1.300
Turbidity (NTUs)	1.90	1.03	0.75	0.80	1.07	0.85	0.85
Dissolved Oxygen (mg/L)	0.75	0.46	0.37	0.33	0.29	0.26	0.23
Water Temperature (°C)	17.52	17.11	16.95	16.93	16.88	16.92	16.72
ORP (mV)	-93.8	-92.3	-90.6	-91.9	-90.3	-88.6	-88.0

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 10:10. Set tubing intake at center of screen. Start sampling at 10:50. Sample ID: A03MW16-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>7/31/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>606.97</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>607.15</u> 1/100 ft
Well ID # <u>MW-17</u>	Land Surface Elevation <u>603.79</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>7 to 16.76</u> 1/100 ft

Weather Conditions sunny, light breeze

Air Temperature 85 ° F

Total Depth (TWD) Below Top of Casing = 20.08 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 9.60 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 10.48 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 1.71 gal

3 Casing Volumes = 5.12 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	100	75	75	100	100	95	80	
Time (Military)	14:20	14:25	14:30	14:35	14:40	14:45	14:50	
Depth to Groundwater Below Top of Casing (ft)	10.00	10.03	10.02	10.08	10.11	10.08	10.02	
Drawdown (ft)	-0.40	-0.43	-0.42	-0.48	-0.51	-0.48	-0.42	
pH (S.U.)	7.54	7.34	7.36	7.3	7.3	7.33	7.31	
Sp. Cond. (mS/cm)	2.203	2.177	2.177	2.202	2.191	2.164	2.163	
Turbidity (NTUs)	7.25	8.00	4.50	7.50	6.70	5.00	5.00	
Dissolved Oxygen (mg/L)	1.13	0.69	0.60	0.60	0.49	0.44	0.45	
Water Temperature (°C)	18.52	19.13	19.38	17.68	17.54	18.49	19.43	
ORP (mV)	-42.4	-41.1	-36.8	-31.7	-29.3	-35.6	-35.7	

Physical appearance at start	Color <u>clear w/ iron bacteria</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 14:15. Set tubing intake at center of screen. Start sampling at 14:55. Sample ID: A03MW17-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>602.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>602.62</u> 1/100 ft
Well ID # <u>MW-18</u>	Land Surface Elevation <u>599.48</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>5 to 14</u> 1/100 ft
Weather Conditions <u>cloudy, breezy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>17.73</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.39</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>9.34</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.52</u> gal	
3 Casing Volumes = <u>4.57</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	250	175	200	190	200	200	200	200
Time (Military)	8:30	8:35	8:40	8:45	8:50	8:55	9:00	9:05
Depth to Groundwater Below Top of Casing (ft)	8.68	8.67	8.72	8.70	8.72	8.72	8.73	8.72
Drawdown (ft)	-0.29	-0.28	-0.33	-0.31	-0.33	-0.33	-0.34	-0.33
pH (S.U.)	7.76	7.38	7.54	7.48	7.33	7.46	7.45	7.44
Sp. Cond. (mS/cm)	1.295	1.292	1.311	1.320	1.324	1.324	1.324	1.324
Turbidity (NTUs)	2.27	0.91	0.57	0.35	0.43	0.35	0.33	0.35
Dissolved Oxygen (mg/L)	0.91	0.48	0.30	0.24	0.23	0.20	0.20	0.18
Water Temperature (°C)	17.13	16.91	16.77	17.76	16.66	16.66	16.61	16.59
ORP (mV)	-10.4	18.0	42.0	25.2	16.2	52.2	53.7	51.3

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.02; PID AIR: 0.01. Start pump at 8:25. Set tubing intake at center of screen. Start sampling at 9:10. Sample ID: A04BMW18-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/6/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.84</u> 1/100 ft
Well ID # <u>MW-19</u>	Land Surface Elevation <u>598.29</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>10 to 20.02</u> 1/100 ft

Weather Conditions sunny

Air Temperature 80 ° F

Total Depth (TWD) Below Top of Casing = 23.26 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 9.58 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 13.68 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 2.23 gal

3 Casing Volumes = 6.69 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	150	175	200	200	200	200	200
Time (Military)	14:15	14:20	14:25	14:30	14:35	14:40	14:45
Depth to Groundwater Below Top of Casing (ft)	9.75	9.75	9.80	9.80	9.80	9.80	9.80
Drawdown (ft)	-0.17	-0.17	-0.22	-0.22	-0.22	-0.22	-0.22
pH (S.U.)	7.45	7.23	7.14	7.18	7.18	7.19	7.20
Sp. Cond. (mS/cm)	0.931	0.933	0.929	0.927	0.928	0.930	0.932
Turbidity (NTUs)	1.35	0.89	0.71	0.80	0.50	0.92	0.28
Dissolved Oxygen (mg/L)	2.46	1.52	1.48	1.73	1.80	1.79	1.83
Water Temperature (°C)	18.19	18.03	17.71	17.74	17.66	17.67	17.58
ORP (mV)	48.6	-11.5	-29.7	-37.6	-42.5	-48.6	-50.7

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 14:10. Set tubing intake at center of screen. Start sampling at 14:55. Sample ID: A04BMW19-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/1/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>603.62</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>603.78</u> 1/100 ft
Well ID # <u>MW-20</u>	Land Surface Elevation <u>600.50</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>85-90</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.20</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.55</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.65</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.74</u> gal	
3 Casing Volumes = <u>5.21</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	150	150	100	100	100	125	125	
Time (Military)	13:25	13:30	13:35	13:40	13:45	13:50	13:55	
Depth to Groundwater Below Top of Casing (ft)	10.05	10.21	10.10	10.13	10.20	10.24	10.28	
Drawdown (ft)	-0.50	-0.66	-0.55	-0.58	-0.65	-0.69	-0.73	
pH (S.U.)	7.15	7.15	7.15	7.15	7.15	7.17	7.16	
Sp. Cond. (mS/cm)	1.001	0.980	0.954	0.929	0.907	0.927	0.941	
Turbidity (NTUs)	3.52	1.50	1.34	2.12	1.53	1.20	1.34	
Dissolved Oxygen (mg/L)	1.51	0.65	0.58	0.61	0.75	1.00	0.98	
Water Temperature (°C)	18.60	18.47	19.13	18.51	18.56	18.82	18.63	
ORP (mV)	-10.2	-19.0	-21.8	-22.3	-22.1	-23.7	-25.7	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 13:20. Set tubing intake at center of screen. Start sampling at 14:00. Sample ID: A04AMW020-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>608.46</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>608.67</u> 1/100 ft
Well ID # <u>MW-21</u>	Land Surface Elevation <u>605.41</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>11 to 21</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>21.00</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>13.57</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>7.43</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.21</u> gal	
3 Casing Volumes = <u>3.63</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	DUP
250ml Poly	TSS	2	none	DUP

FIELD ANALYSES

Flow Rate (ml/min)	200	200	150	150	150	151	152	153
Time (Military)	11:50	11:55	12:00	12:05	12:10	12:15	12:20	12:25
Depth to Groundwater Below Top of Casing (ft)	14.07	14.21	14.12	14.12	14.15	14.15	14.17	14.17
Drawdown (ft)	-0.50	-0.64	-0.55	-0.55	-0.58	-0.58	-0.60	-0.60
pH (S.U.)	7.22	7.28	7.27	7.40	7.41	7.36	7.36	7.41
Sp. Cond. (mS/cm)	1.723	1.793	1.811	1.879	1.881	1.867	1.850	1.849
Turbidity (NTUs)	0.60	0.35	0.45	0.35	0.28	0.35	0.34	0.3
Dissolved Oxygen (mg/L)	0.47	0.37	0.32	0.33	0.30	0.26	0.23	0.21
Water Temperature (°C)	15.25	15.24	15.64	15.81	15.66	15.73	15.52	15.63
ORP (mV)	33.2	57.7	44.7	59.0	59.4	58.5	57.8	57.8

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID WELL: 0.08; PID AIR: 0.08. Start pump at 11:45. Set tubing intake at center of screen. Start sampling at 12:30. Sample ID: A04AMW21-U/F. Duplicate sample ID: A04AMW71-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/8/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.35</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.73</u> 1/100 ft
Well ID # <u>MW-22</u>	Land Surface Elevation <u>598.09</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>sunny, humid, windy</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.19</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.55</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.64</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.06</u> gal	
3 Casing Volumes = <u>6.18</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	175	190	200	200	
Time (Military)	8:55	9:00	9:05	9:10	9:15	9:20	9:25	
Depth to Groundwater Below Top of Casing (ft)	7.72	7.74	7.76	7.72	7.75	7.75	7.76	
Drawdown (ft)	-0.17	-0.19	-0.21	-0.17	-0.20	-0.20	-0.21	
pH (S.U.)	7.17	7.61	7.69	7.63	7.59	7.31	7.27	
Sp. Cond. (mS/cm)	0.606	0.604	0.604	0.604	0.606	0.606	0.608	
Turbidity (NTUs)	3.82	0.24	0.60	0.65	0.62	0.45	0.44	
Dissolved Oxygen (mg/L)	0.59	0.41	0.25	0.20	0.22	0.20	0.20	
Water Temperature (°C)	18.03	17.84	17.53	17.76	17.65	17.60	17.50	
ORP (mV)	0.6	27.3	35.2	44.7	44.9	20.2	16.1	

Physical appearance at start	Color <u>clear w/ iron bacteria particles</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 8:50. Set tubing intake at center of screen. Start sampling at 9:30. Sample ID: A04AMW22-U/F. (1) Start of screened interval is estimated.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/10/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.50</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.95</u> 1/100 ft
Well ID # <u>MW-23</u>	Land Surface Elevation <u>597.58</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>partly sunny, breezy</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.60</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>6.52</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.08</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.13</u> gal	
3 Casing Volumes = <u>6.40</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	2	none	

FIELD ANALYSES

Flow Rate (ml/min)	125	225	225	200	200	200	200	200
Time (Military)	9:35	9:40	9:45	9:50	9:55	10:00	10:05	10:10
Depth to Groundwater Below Top of Casing (ft)	6.58	6.60	6.60	6.60	6.60	6.60	6.60	6.60
Drawdown (ft)	-0.06	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
pH (S.U.)	7.09	7.09	7.11	7.13	7.14	7.14	7.14	7.14
Sp. Cond. (mS/cm)	0.546	0.553	0.572	0.593	0.603	0.613	0.616	0.619
Turbidity (NTUs)	6.70	4.18	2.35	2.98	1.50	1.02	0.90	0.92
Dissolved Oxygen (mg/L)	0.66	0.52	0.49	0.35	0.36	0.32	0.30	0.3
Water Temperature (°C)	16.35	16.48	16.64	16.73	16.74	16.76	16.73	16.72
ORP (mV)	35.5	36.1	28.4	2.0	-4.6	-11.9	-13.3	-15.5

Physical appearance at start	Color <u>clear w/ small particles</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 9:30. Set tubing intake at center of screen. Start sampling at 10:15. Sample ID: A04AMW23-U/F. USACE split taken.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/8/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>597.27</u> 1/100 ft
Well ID # <u>MW-24</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6.43 to 16.43⁽¹⁾</u> 1/100 ft
Weather Conditions <u>sunny, windy</u>	
Air Temperature <u>80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.67</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>3.85</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.82</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.09</u> gal	
3 Casing Volumes = <u>6.27</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	150	180	125	125	150	125	150	150
Time (Military)	11:15	11:20	11:25	11:30	11:35	11:40	12:05	12:10
Depth to Groundwater Below Top of Casing (ft)	3.86	3.88	3.88	3.89	3.89	3.89	3.89	3.89
Drawdown (ft)	-0.01	-0.03	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04
pH (S.U.)	7.29	8.15	7.26	7.27	8.03	8.28	7.24	7.27
Sp. Cond. (mS/cm)	0.491	0.487	0.485	0.486	0.488	0.487	0.487	0.486
Turbidity (NTUs)	0.68	0.71	0.82	0.71	0.74	0.68	1.06	0.75
Dissolved Oxygen (mg/L)	1.78	0.69	0.59	0.50	0.46	0.43	0.36	0.31
Water Temperature (°C)	20.68	20.28	20.64	20.80	20.74	20.67	20.68	20.47
ORP (mV)	-123.6	-90.9	-119.5	-123.1	-	-89.6	-134.5	-139.6

Physical appearance at start Color clear with black floating particles Physical appearance at sampling Color clear
 Odor yes (possible sulfur) Odor no

Sheen/Free Product no sheen/no product Sheen/Free Product no sheen/no product

COMMENTS/OBSERVATIONS Well under slight pressure when opened. Start pump at 11:10. A little rust colored iron bacteria at start of pumping. Restart pump at 11:45 (time gap) because battery died. Set tubing intake at center of screen. Start sampling at 12:20. Sample ID: A04DMW24-U/F. (1) Start of screened interval is estimated.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/8/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>597.27</u> 1/100 ft
Well ID # <u>MW-24</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>6.43 to 16.43⁽¹⁾</u> 1/100 ft
Weather Conditions <u>sunny, windy</u>	
Air Temperature <u>80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.67</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>3.85</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.82</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.09</u> gal	
3 Casing Volumes = <u>6.27</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175					
Time (Military)	12:15					
Depth to Groundwater Below Top of Casing (ft)	3.89					
Drawdown (ft)	-0.04					
pH (S.U.)	7.31					
Sp. Cond. (mS/cm)	0.486					
Turbidity (NTUs)	0.68					
Dissolved Oxygen (mg/L)	0.37					
Water Temperature (°C)	20.27					
ORP (mV)	-143.7					

Physical appearance at start Color clear with black floating particles Physical appearance at sampling Color clear
 Odor yes (possible sulfur) Odor no
 Sheen/Free Product no sheen/no product Sheen/Free Product no sheen/no product

COMMENTS/OBSERVATIONS Well under slight pressure when opened. Start pump at 11:10. A little rust colored iron bacteria at start of pumping. Restart pump at 11:45 (time gap) because battery died. Set tubing intake at center of screen. Start sampling at 12:20. Sample ID: A04DMW24-U/F. (1) Start of screened interval is estimated.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/9/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>596.93</u> 1/100 ft
Well ID # <u>MW-26</u>	Land Surface Elevation <u>596.93</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>cloudy, sprinkles</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>3.07</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.83</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.25</u> gal	
3 Casing Volumes = <u>6.76</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	200	200	200	190	190	190	190
Time (Military)	13:00	13:05	13:10	13:15	13:20	13:25	13:30	13:35
Depth to Groundwater Below Top of Casing (ft)	3.18	3.19	3.19	3.19	3.20	3.20	3.20	3.2
Drawdown (ft)	-0.11	-0.12	-0.12	-0.12	-0.13	-0.13	-0.13	-0.13
pH (S.U.)	7.06	7.42	7.45	7.47	7.45	7.41	7.38	7.37
Sp. Cond. (mS/cm)	4.512	4.452	4.237	4.065	3.908	3.864	3.772	3.686
Turbidity (NTUs)	2.40	4.41	4.63	3.22	4.01	3.57	2.21	1.8
Dissolved Oxygen (mg/L)	0.54	0.27	0.22	0.21	0.21	0.24	0.24	0.26
Water Temperature (°C)	17.91	17.49	17.22	17.27	17.40	17.34	17.29	17.27
ORP (mV)	-8.0	29.6	44.3	58.7	61.5	62.7	59.7	57.5

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 12:55. Small amount of iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 13:50. Sample ID: A04BMW26-U/F. USACE split taken. (1) Start of screened interval is estimated.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/9/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>596.93</u> 1/100 ft
Well ID # <u>MW-26</u>	Land Surface Elevation <u>596.93</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>cloudy, sprinkles</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>3.07</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.83</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.25</u> gal	
3 Casing Volumes = <u>6.76</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	190	190					
Time (Military)	13:40	13:45					
Depth to Groundwater Below Top of Casing (ft)	3.20	3.20					
Drawdown (ft)	-0.13	-0.13					
pH (S.U.)	7.35	7.33					
Sp. Cond. (mS/cm)	3.636	3.545					
Turbidity (NTUs)	1.50	1.25					
Dissolved Oxygen (mg/L)	0.27	0.29					
Water Temperature (°C)	17.23	17.32					
ORP (mV)	57.0	53.9					

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 12:55. Small amount of iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 13:50. Sample ID: A04BMW26-U/F. USACE split taken. (1) Start of screened interval is estimated.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/17/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>613.29</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>613.50</u> 1/100 ft
Well ID # <u>MW-600D</u>	Land Surface Elevation <u>610.54</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>13 to 23</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>75-80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>24.79</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>12.68</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.11</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.97</u> gal	
3 Casing Volumes = <u>5.92</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	125	200	190	200	190	190	
Time (Military)	14:30	14:35	14:40	14:45	14:50	14:55	15:00	
Depth to Groundwater Below Top of Casing (ft)	12.75	12.75	12.78	12.78	12.79	12.79	12.80	
Drawdown (ft)	-0.07	-0.07	-0.10	-0.10	-0.11	-0.11	-0.12	
pH (S.U.)	6.81	6.75	6.75	6.79	6.89	7.03	6.99	
Sp. Cond. (mS/cm)	12.71	12.85	12.82	12.83	12.85	12.75	12.76	
Turbidity (NTUs)	10.03	8.95	4.85	2.20	2.00	1.92	1.10	
Dissolved Oxygen (mg/L)	0.55	0.37	0.31	0.27	0.22	0.22	0.19	
Water Temperature (°C)	15.64	15.43	15.05	14.66	14.60	14.60	14.52	
ORP (mV)	29.2	33.5	36.0	43.8	68.8	114.0	116.0	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 1.7; PID Air: 0.3. Start pump at 14:25. Set tubing intake at center of screen. Start sampling at 15:05. Sample ID: A05BMW600D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>604.85</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>605.22</u> 1/100 ft
Well ID # <u>MW-601D</u>	Land Surface Elevation <u>602.42</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.5 to 19.5</u> 1/100 ft
Weather Conditions <u>cloudy, breezy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.58</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.95</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.63</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.90</u> gal	
3 Casing Volumes = <u>5.69</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	190	175	190	190	195	195	180	200
Time (Military)	10:40	10:45	10:50	10:55	11:00	11:05	11:10	11:15
Depth to Groundwater Below Top of Casing (ft)	11.00	11.02	11.03	11.04	11.04	11.05	11.05	11.06
Drawdown (ft)	-0.05	-0.07	-0.08	-0.09	-0.09	-0.10	-0.10	-0.11
pH (S.U.)	8.50	8.46	8.09	8.47	8.69	8.57	8.56	8.62
Sp. Cond. (mS/cm)	1.719	1.688	1.649	1.468	1.389	1.468	1.443	1.307
Turbidity (NTUs)	9.36	5.08	2.36	1.10	1.00	2.54	2.02	1.84
Dissolved Oxygen (mg/L)	0.62	0.46	0.34	0.29	0.27	0.22	0.22	0.22
Water Temperature (°C)	17.35	17.41	17.45	17.59	17.37	17.35	17.76	17.53
ORP (mV)	-60.6	-61.9	-65.1	-59.7	-45.9	-44.9	-49.6	-35.2

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (potential sulfur)</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID WELL: 2.4; PID AIR: 1.0. Start pump at 10:35. Set tubing intake at center of screen. Start sampling at 11:40. Sample ID: A04AMW601D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>604.85</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>605.22</u> 1/100 ft
Well ID # <u>MW-601D</u>	Land Surface Elevation <u>602.42</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.5 to 19.5</u> 1/100 ft
Weather Conditions <u>cloudy, breezy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.58</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.95</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.63</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.90</u> gal	
3 Casing Volumes = <u>5.69</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	795	175	175			
Time (Military)	11:20	11:25	11:30	11:35			
Depth to Groundwater Below Top of Casing (ft)	11.06	11.06	11.05	11.05			
Drawdown (ft)	-0.11	-0.11	-0.10	-0.10			
pH (S.U.)	8.54	7.91	7.92	8.38			
Sp. Cond. (mS/cm)	1.273	1.259	1.244	1.240			
Turbidity (NTUs)	1.05	1.08	1.06	1.05			
Dissolved Oxygen (mg/L)	0.20	0.22	0.22	0.23			
Water Temperature (°C)	17.48	17.64	17.73	17.43			
ORP (mV)	-30.1	-78.0	-79.6	-29.3			

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (potential sulfur)</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID WELL: 2.4; PID AIR: 1.0. Start pump at 10:35. Set tubing intake at center of screen. Start sampling at 11:40. Sample ID: A04AMW601D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>605.005</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>604.295</u> 1/100 ft
Well ID # <u>MW-602D</u>	Land Surface Elevation <u>601.135</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>sunny, slight breeze</u>	
Air Temperature <u>80-85</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.10</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.16</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.94</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.95</u> gal	
3 Casing Volumes = <u>5.84</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	175	190	225	200	200	200	200
Time (Military)	14:10	14:15	14:20	14:25	14:30	14:35	14:40	14:45
Depth to Groundwater Below Top of Casing (ft)	10.20	10.21	10.22	10.23	10.23	10.23	10.23	10.23
Drawdown (ft)	-0.04	-0.05	-0.06	-0.07	-0.07	-0.07	-0.07	-0.07
pH (S.U.)	7.39	8.02	7.95	7.89	7.66	7.57	7.86	7.64
Sp. Cond. (mS/cm)	2.146	2.130	2.111	2.079	2.052	1.988	1.969	1.949
Turbidity (NTUs)	1.31	1.74	1.54	1.57	1.58	1.21	1.02	0.70
Dissolved Oxygen (mg/L)	0.63	0.38	0.27	0.22	0.20	0.17	0.16	0.20
Water Temperature (°C)	17.42	16.77	16.74	16.72	16.51	16.54	16.72	16.94
ORP (mV)	-55.0	16.9	16.9	19.4	-8.6	-18.7	21.7	-7

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (faint sulfer)</u>		Odor <u>yes (faint sulfer)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 2.7; PID AIR: 0.9. Start pump at 14:05. Set tubing intake at center of screen. Start sampling at 15:00. Sample ID: A04AMW602D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>605.005</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>604.295</u> 1/100 ft
Well ID # <u>MW-602D</u>	Land Surface Elevation <u>601.135</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>sunny, slight breeze</u>	
Air Temperature <u>80-85</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.10</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.16</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.94</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.95</u> gal	
3 Casing Volumes = <u>5.84</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	175	175					
Time (Military)	14:50	14:55					
Depth to Groundwater Below Top of Casing (ft)	10.22	10.22					
Drawdown (ft)	-0.06	-0.06					
pH (S.U.)	7.54	7.56					
Sp. Cond. (mS/cm)	1.926	1.923					
Turbidity (NTUs)	0.85	0.67					
Dissolved Oxygen (mg/L)	0.17	0.17					
Water Temperature (°C)	16.82	16.73					
ORP (mV)	-13.7	-14.3					

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (faint sulfur)</u>		Odor <u>yes (faint sulfur)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 2.7; PID AIR: 0.9. Start pump at 14:05. Set tubing intake at center of screen. Start sampling at 15:00. Sample ID: A04AMW602D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/17/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.43</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.62</u> 1/100 ft
Well ID # <u>MW-603D</u>	Land Surface Elevation <u>597.69</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>9.5 to 19.5</u> 1/100 ft

Weather Conditions sunny

Air Temperature 80 ° F

Total Depth (TWD) Below Top of Casing = 22.65 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 7.46 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 15.19 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 2.48 gal

3 Casing Volumes = 7.43 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	150	200	160	175	125	125	175
Time (Military)	10:15	10:20	10:25	10:30	10:35	10:40	10:45	10:50
Depth to Groundwater Below Top of Casing (ft)	7.71	7.64	6.69	6.64	6.65	6.62	6.62	6.66
Drawdown (ft)	-0.25	-0.18	0.77	0.82	0.81	0.84	0.84	0.80
pH (S.U.)	7.69	7.73	7.72	7.72	7.43	7.67	7.66	7.66
Sp. Cond. (mS/cm)	1.374	1.371	1.366	1.367	1.359	1.350	1.348	0.341
Turbidity (NTUs)	1.85	2.02	3.08	1.64	1.42	1.42	1.03	0.94
Dissolved Oxygen (mg/L)	0.30	0.23	0.20	0.18	0.17	0.17	0.16	0.17
Water Temperature (°C)	15.84	16.12	15.76	15.93	15.73	15.91	16.20	15.83
ORP (mV)	26.6	37.0	36.6	39.2	1.6	35.0	40.9	41.4

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.02; PID Air: 0.02. Start pump at 10:10. Set tubing intake at center of screen. Start sampling at 10:55. Sample ID: A04AMW603D-U/F. USACE split taken.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>595.98</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>596.25</u> 1/100 ft
Well ID # <u>MW-604D</u>	Land Surface Elevation <u>596.25</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>8.2 to 18.2</u> 1/100 ft

Weather Conditions sunny

Air Temperature 75 ° F

Total Depth (TWD) Below Top of Casing = 18.08 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 5.81 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 12.27 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 2.00 gal

3 Casing Volumes = 6.00 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	325	225	200	200	200	200	200
Time (Military)	10:40	10:45	10:50	10:55	11:00	11:05	11:10
Depth to Groundwater Below Top of Casing (ft)	6.02	6.00	6.01	6.01	6.01	6.01	6.01
Drawdown (ft)	-0.21	-0.19	-0.20	-0.20	-0.20	-0.20	-0.20
pH (S.U.)	7.30	7.42	7.45	7.35	7.36	7.36	7.36
Sp. Cond. (mS/cm)	1.309	1.307	1.329	1.322	1.312	1.308	1.303
Turbidity (NTUs)	0.77	1.45	1.10	0.90	0.60	0.55	0.45
Dissolved Oxygen (mg/L)	0.38	0.37	0.28	0.25	0.22	0.22	0.18
Water Temperature (°C)	16.96	16.90	16.95	17.01	17.15	17.13	17.10
ORP (mV)	49.6	54.6	59.6	44.8	36.6	32.7	30.3

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 10:35. Set tubing intake at center of screen. Start sampling at 11:15. Sample ID: A04DMW604D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.11</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.24</u> 1/100 ft
Well ID # <u>MW-605D</u>	Land Surface Elevation <u>598.50</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>partly cloudy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>18.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>4.03</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>14.47</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.36</u> gal	
3 Casing Volumes = <u>7.08</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	225	225	175	175	175	200	200	200
Time (Military)	8:45	8:50	8:55	9:00	9:05	9:10	9:15	9:20
Depth to Groundwater Below Top of Casing (ft)	4.11	4.12	4.09	4.09	4.09	4.09	4.09	4.09
Drawdown (ft)	-0.08	-0.09	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
pH (S.U.)	7.22	7.75	7.69	7.62	7.58	7.30	7.31	7.58
Sp. Cond. (mS/cm)	1.005	1.001	1.000	0.996	0.992	0.987	0.984	0.981
Turbidity (NTUs)	3.32	2.70	2.10	0.85	0.74	0.58	0.50	0.42
Dissolved Oxygen (mg/L)	0.57	0.43	0.35	0.45	0.40	0.36	0.36	0.34
Water Temperature (°C)	16.97	17.02	17.34	17.48	17.48	17.55	17.61	17.54
ORP (mV)	2.9	32.8	36.5	34.5	31.8	2.9	-1.2	24.3

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 8:40. Set tubing intake at center of screen. Start sampling at 9:40. Sample ID: A04BMW605D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.11</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.24</u> 1/100 ft
Well ID # <u>MW-605D</u>	Land Surface Elevation <u>598.50</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>partly cloudy</u>	
Air Temperature <u>75</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>18.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>4.03</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>14.47</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.36</u> gal	
3 Casing Volumes = <u>7.08</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200				
Time (Military)	9:25	9:30	9:35				
Depth to Groundwater Below Top of Casing (ft)	4.09	4.10	4.10				
Drawdown (ft)	-0.06	-0.07	-0.07				
pH (S.U.)	7.40	7.32	7.31				
Sp. Cond. (mS/cm)	0.978	0.976	0.974				
Turbidity (NTUs)	0.38	0.35	0.43				
Dissolved Oxygen (mg/L)	0.31	0.30	0.27				
Water Temperature (°C)	17.58	17.58	17.61				
ORP (mV)	12.3	3.0	0.2				

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 8:40. Set tubing intake at center of screen. Start sampling at 9:40. Sample ID: A04BMW605D-U/F.

ROUND 1 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>8/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.38</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.67</u> 1/100 ft
Well ID # <u>MW-607D</u>	Land Surface Elevation <u>597.93</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>7.4 to 17.4</u> 1/100 ft
Weather Conditions <u>partly cloudy</u>	
Air Temperature <u>80</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.78</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.49</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.29</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.84</u> gal	
3 Casing Volumes = <u>5.52</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	100	175	175	200	
Time (Military)	16:15	16:20	16:25	16:30	16:35	16:40	16:45	
Depth to Groundwater Below Top of Casing (ft)	8.59	8.63	8.66	8.63	8.66	8.66	8.66	
Drawdown (ft)	-0.10	-0.14	-0.17	-0.14	-0.17	-0.17	-0.17	
pH (S.U.)	7.38	7.97	9.06	9.02	9.12	9.13	8.95	
Sp. Cond. (mS/cm)	1.423	1.407	1.400	1.394	1.395	1.391	1.387	
Turbidity (NTUs)	1.10	1.08	0.92	1.14	0.76	0.46	0.42	
Dissolved Oxygen (mg/L)	0.60	0.37	0.28	0.27	0.21	0.18	0.17	
Water Temperature (°C)	15.42	15.10	15.20	15.56	15.62	15.64	15.66	
ORP (mV)	-115.8	-103.6	-69.8	-70.0	-83.2	-96.6	-97.5	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (sulfur)</u>		Odor <u>yes (sulfur)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 1.4; PID Air: 0.8. Start pump at 14:10. Set tubing intake at center of screen. Start sampling at 16:50. Sample ID: A03MW607D-U/F. Ran field/equipment blank after this well 8/16/2007 at 10:30. Field Blank: A03MWF002-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.92</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.44</u> 1/100 ft
Well ID # <u>MW-1</u>	Land Surface Elevation <u>598.18</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.7 to 14.7</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.74</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>6.98</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>9.76</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.59</u> gal	
3 Casing Volumes = <u>4.77</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200	
Time (Military)	9:30	9:35	9:40	9:45	9:50	9:55	10:00
Depth to Groundwater Below Top of Casing (ft)	7.30	7.34	7.35	7.35	7.36	7.35	7.36
Drawdown (ft)	-0.32	-0.36	-0.37	-0.37	-0.38	-0.37	-0.38
pH (S.U.)	6.90	6.92	6.92	6.93	6.92	6.92	6.93
Sp. Cond. (mS/cm)	1.703	1.747	1.76	1.773	1.786	1.797	1.81
Turbidity (NTUs)	26.40	31.40	31.40	3.56	2.02	1.20	1.18
Dissolved Oxygen (mg/L)	0.88	0.61	0.68	0.74	0.42	0.42	0.41
Water Temperature (°C)	13.38	13.43	13.45	13.49	13.54	13.53	13.53
ORP (mV)	-22.3	-28.3	-26.4	-22.9	-22.6	-23.1	-23.4

Physical appearance at start	Color <u>slightly orange</u>	Physical appearance at sampling	Color <u>clear with orange</u> floating particles
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 9:25. Orange iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 10:05. Sample ID: A02MW1-U/F. Filled 3 sample bottles for NYDEC.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.78</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.17</u> 1/100 ft
Well ID # <u>MW-2</u>	Land Surface Elevation <u>596.96</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.2 to 14.2</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>60</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.00</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.65</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>7.35</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.20</u> gal	
3 Casing Volumes = <u>3.59</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	275	175	200	200	195	190	200	200
Time (Military)	13:40	13:45	13:50	13:55	14:00	14:05	14:10	14:15
Depth to Groundwater Below Top of Casing (ft)	8.68	8.65	8.66	8.68	8.66	8.66	8.66	8.66
Drawdown (ft)	-0.03	0.00	-0.01	-0.03	-0.01	-0.01	-0.01	-0.01
pH (S.U.)	7.32	7.38	7.43	7.45	7.45	7.44	7.44	7.44
Sp. Cond. (mS/cm)	0.622	0.611	0.599	0.588	0.578	0.576	0.574	0.573
Turbidity (NTUs)	1.40	1.32	0.85	0.99	0.90	0.86	0.81	0.81
Dissolved Oxygen (mg/L)	0.84	0.50	0.64	0.81	0.78	0.56	0.48	0.43
Water Temperature (°C)	14.47	14.50	14.42	14.48	14.48	14.49	14.47	14.53
ORP (mV)	-164.2	-200.4	-195.4	-188.9	-190.2	-199.9	-204.8	-203.5

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 13:35. Set tubing intake at center of screen. Start sampling at 14:20. Sample ID: A02MW2-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.03</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.49</u> 1/100 ft
Well ID # <u>MW-3</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.1 to 14.1</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.04</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>5.85</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.19</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.66</u> gal	
3 Casing Volumes = <u>4.98</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	210	200	200	200	200	200
Time (Military)	16:55	17:00	17:05	17:10	17:15	17:20	17:25	17:30
Depth to Groundwater Below Top of Casing (ft)	5.88	5.89	5.90	5.90	5.90	5.90	5.90	5.90
Drawdown (ft)	-0.03	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
pH (S.U.)	6.95	6.89	6.87	6.87	6.87	6.88	6.87	6.86
Sp. Cond. (mS/cm)	0.734	0.739	0.742	0.745	0.746	0.747	0.748	0.747
Turbidity (NTUs)	24.30	17.03	12.19	10.06	9.96	7.00	6.91	6.9
Dissolved Oxygen (mg/L)	0.56	0.30	0.36	0.20	0.17	0.17	0.17	0.16
Water Temperature (°C)	13.56	13.56	13.56	13.55	13.55	13.55	13.54	13.55
ORP (mV)	-77.5	-84.9	-87.5	-88.6	-89.4	-90.4	-90.6	-91.2

Physical appearance at start	Color <u>pale yellow</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 16:50. Set tubing intake at center of screen. Start sampling at 17:35. Sample ID: A02MW3-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.52</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>599.95</u> 1/100 ft
Well ID # <u>MW-4</u>	Land Surface Elevation <u>597.70</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9 to 14</u> 1/100 ft
Weather Conditions <u>cool, partly sunny</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.41</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>5.95</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.46</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.70</u> gal	
3 Casing Volumes = <u>5.11</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Dup
250ml Poly	TSS	2	none	Dup

FIELD ANALYSES

Flow Rate (ml/min)	250	190	200	200	200		
Time (Military)	11:15	11:20	11:25	11:30	11:35		
Depth to Groundwater Below Top of Casing (ft)	6.20	6.17	6.18	6.19	6.20		
Drawdown (ft)	-0.25	-0.22	-0.23	-0.24	-0.25		
pH (S.U.)	7.25	7.31	7.28	7.31	7.30		
Sp. Cond. (mS/cm)	0.660	0.658	0.659	0.657	0.652		
Turbidity (NTUs)	2.58	1.26	0.80	0.79	0.69		
Dissolved Oxygen (mg/L)	0.61	0.45	0.35	0.32	0.31		
Water Temperature (°C)	13.03	13.14	13.21	13.21	13.24		
ORP (mV)	43.8	31.6	27.2	22.1	19.3		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (sulfur)</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 1.9; PID Air: 0.0. Start pump at 11:10. Set tubing intake at center of screen. Start sampling at 11:40. Sample ID: A02MW4-U/F. Duplicate sample collected: A02MW54U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.52</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.92</u> 1/100 ft
Well ID # <u>MW-5</u>	Land Surface Elevation <u>596.68</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 15</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>17.45</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>5.74</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.71</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.91</u> gal	
3 Casing Volumes = <u>5.73</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

	275	210	200	200	200	200	200	200
Flow Rate (ml/min)	275	210	200	200	200	200	200	200
Time (Military)	15:50	15:55	16:00	16:05	16:10	16:15	16:20	16:25
Depth to Groundwater Below Top of Casing (ft)	5.78	5.78	5.80	5.81	5.83	5.84	5.83	5.84
Drawdown (ft)	-0.04	-0.04	-0.06	-0.07	-0.09	-0.10	-0.09	-0.10
pH (S.U.)	7.02	6.97	6.97	6.97	6.96	6.96	6.96	6.95
Sp. Cond. (mS/cm)	0.717	0.710	0.708	0.704	0.700	0.699	0.699	0.700
Turbidity (NTUs)	7.06	7.00	6.24	4.20	4.18	2.50	2.43	2.31
Dissolved Oxygen (mg/L)	0.66	0.49	0.29	0.28	0.30	0.18	0.18	0.17
Water Temperature (°C)	12.59	12.57	12.50	12.48	12.47	12.47	12.47	12.47
ORP (mV)	-82.4	-97.4	-98.7	-99.8	-99.1	-96.7	-94.9	-94.4

Physical appearance at start	Color <u>pale yellow with floating particles</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes</u>		Odor <u>yes (faint)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 15:45. Small amount of orange iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 16:30. Sample ID: A02MW5-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.68</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.07</u> 1/100 ft
Well ID # <u>MW-06</u>	Land Surface Elevation <u>597.59</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>cloudy with sprinkles</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.01</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.40</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.61</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.89</u> gal	
3 Casing Volumes = <u>5.68</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	190	200	200	200	200		
Time (Military)	8:45	8:50	8:55	9:00	9:05	9:10		
Depth to Groundwater Below Top of Casing (ft)	7.52	7.53	7.54	7.54	7.54	7.54		
Drawdown (ft)	-0.12	-0.13	-0.14	-0.14	-0.14	-0.14		
pH (S.U.)	6.88	6.87	6.85	6.85	6.85	6.85		
Sp. Cond. (mS/cm)	1.048	1.051	1.05	1.046	1.044	1.042		
Turbidity (NTUs)	9.00	6.05	4.90	3.88	3.65	3.40		
Dissolved Oxygen (mg/L)	0.65	0.55	0.47	0.45	0.45	0.45		
Water Temperature (°C)	13.47	13.46	13.39	13.34	13.34	13.35		
ORP (mV)	18.9	-5.7	-19.3	-18.4	-20.1	-19.7		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 8:40. Set tubing intake at center of screen. Start sampling at 9:20. Sample ID: A02MW6-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.37</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.71</u> 1/100 ft
Well ID # <u>MW-08</u>	Land Surface Elevation <u>598.31</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>Sprinkles</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.04</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.86</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.77</u> gal	
3 Casing Volumes = <u>5.31</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	210	200	190	175	200	170	190	170
Time (Military)	10:30	10:35	10:40	10:45	10:50	10:55	11:00	11:05
Depth to Groundwater Below Top of Casing (ft)	9.36	9.41	9.43	9.46	9.53	9.45	9.49	9.45
Drawdown (ft)	-0.32	-0.37	-0.39	-0.42	-0.49	-0.41	-0.45	-0.41
pH (S.U.)	6.91	6.89	6.89	6.89	6.89	6.89	6.89	6.89
Sp. Cond. (mS/cm)	1.550	1.559	1.565	1.559	1.557	1.558	1.556	1.556
Turbidity (NTUs)	3.80	2.55	2.46	1.92	1.74	1.41	1.17	1.15
Dissolved Oxygen (mg/L)	0.50	0.26	0.28	0.23	0.15	0.17	0.17	0.17
Water Temperature (°C)	13.76	13.72	13.66	13.70	13.73	13.67	13.72	13.7
ORP (mV)	-120.9	-134.1	-143.0	-146.6	-150.9	-153.9	-154.8	-157.2

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes (possible slight chemical odor)</u>		Odor <u>yes (faint odor)</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 10:25. Set tubing intake at center of screen. Start sampling at 11:10. Sample ID: A02MW08-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.70</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.01</u> 1/100 ft
Well ID # <u>MW-09</u>	Land Surface Elevation <u>596.49</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>cloudy with sprinkles</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.14</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.77</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.37</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.69</u> gal	
3 Casing Volumes = <u>5.07</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200	200	200
Time (Military)	12:25	12:30	12:35	12:40	12:45	12:50	12:55	13:00
Depth to Groundwater Below Top of Casing (ft)	8.80	8.78	8.78	8.78	8.78	8.78	8.78	8.78
Drawdown (ft)	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
pH (S.U.)	7.17	7.11	7.07	7.07	7.07	7.07	7.06	7.06
Sp. Cond. (mS/cm)	0.890	0.850	0.744	0.723	0.716	0.705	0.696	0.69
Turbidity (NTUs)	36.20	36.00	15.76	10.90	8.32	6.20	4.66	4.60
Dissolved Oxygen (mg/L)	2.08	1.02	0.41	0.34	0.29	0.23	0.24	0.20
Water Temperature (°C)	13.10	13.05	13.12	13.12	13.14	13.08	13.07	13.07
ORP (mV)	-137.1	-139.1	-135.5	-144.0	-147.9	-152.6	-153.9	-157.6

Physical appearance at start	Color <u>cloudy with black particles</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 12:20. Set tubing intake at center of screen. Start sampling at 13:05. Sample ID: A0MW09-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>599.79</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.22</u> 1/100 ft
Well ID # <u>MW-11</u>	Land Surface Elevation <u>596.77</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>60</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.99</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.55</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.44</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.86</u> gal	
3 Casing Volumes = <u>5.59</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	200	210	210	210	200	200	
Time (Military)	14:35	14:40	14:45	14:50	14:55	15:00	
Depth to Groundwater Below Top of Casing (ft)	9.86	9.87	9.85	9.86	9.87	9.86	
Drawdown (ft)	-0.31	-0.32	-0.30	-0.31	-0.32	-0.31	
pH (S.U.)	6.99	7.08	7.07	6.95	6.89	6.89	
Sp. Cond. (mS/cm)	1.257	1.262	1.263	1.261	1.258	1.255	
Turbidity (NTUs)	6.10	3.36	3.26	2.04	1.60	1.51	
Dissolved Oxygen (mg/L)	0.78	0.37	0.26	0.18	0.16	0.17	
Water Temperature (°C)	14.71	14.66	14.65	14.66	14.68	14.64	
ORP (mV)	-55.4	-69.4	-69.1	-84.3	-93.2	-94.8	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>yes</u>		Odor <u>yes</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 14:30. Set tubing intake at center of screen. Start sampling at 15:05. Sample ID: A02MW11-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/16/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>603.47</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>603.69</u> 1/100 ft
Well ID # <u>MW-13D</u>	Land Surface Elevation <u>600.15</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft

Weather Conditions cloudy

Air Temperature 35 ° F

Total Depth (TWD) Below Top of Casing = 19.40 1/100 ft

Depth to Groundwater (DGW) Below Top of Casing = 9.15 1/100 ft

Length of Water Column (LWC) = TWD - DGW = 10.25 1/100 ft

1 Casing Volume (OCV) = LWC x 0.163 = 1.67 gal

3 Casing Volumes = 5.01 gal

Method of Well Evacuation Peristaltic Pump

Method of Sample Collection Peristaltic Pump/Teflon Tubing

Total Volume of Water Removed N/A liter

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	275	200	250	200	200		
Time (Military)	10:10	10:15	10:20	10:25	10:30		
Depth to Groundwater Below Top of Casing (ft)	9.40	9.37	9.40	9.40	9.40		
Drawdown (ft)	-0.25	-0.22	-0.25	-0.25	-0.25		
pH (S.U.)	7.32	7.30	7.29	7.26	7.28		
Sp. Cond. (mS/cm)	1.276	1.264	1.259	1.249	1.250		
Turbidity (NTUs)	3.63	2.47	1.44	1.40	1.33		
Dissolved Oxygen (mg/L)	0.57	0.48	0.41	0.37	0.39		
Water Temperature (°C)	12.12	12.20	11.86	12.05	12.06		
ORP (mV)	-20.1	-24.5	-28.8	-27.7	-32.0		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 10:05. Set tubing intake at center of screen. Start sampling at 10:35. Sample ID: A03MW13D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/12/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>602.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>602.59</u> 1/100 ft
Well ID # <u>MW-14</u>	Land Surface Elevation <u>598.90</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 15.95</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>45</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.61</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.44</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.17</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.82</u> gal	
3 Casing Volumes = <u>5.46</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	210	200	187	200	200	200	200
Time (Military)	16:55	17:00	17:05	17:10	17:15	17:20	17:25
Depth to Groundwater Below Top of Casing (ft)	8.61	8.62	8.61	8.61	8.61	8.61	8.61
Drawdown (ft)	-0.17	-0.18	-0.17	-0.17	-0.17	-0.17	-0.17
pH (S.U.)	7.24	7.23	7.21	7.21	7.21	7.21	7.19
Sp. Cond. (mS/cm)	1.404	1.401	1.399	1.399	1.399	1.395	1.392
Turbidity (NTUs)	300	76.4	22.3	13.0	11.0	8.0	3.5
Dissolved Oxygen (mg/L)	1.9	0.99	0.68	0.61	0.53	0.56	0.48
Water Temperature (°C)	13.33	13.45	13.42	13.41	13.43	13.43	13.31
ORP (mV)	-48.5	-63.1	-61.2	-63.0	-67.8	-65.8	-68.3

Physical appearance at start	Color <u>tan</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 16:50. Set tubing intake at center of screen. Start sampling at 17:30. Sample ID: A03MW14-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>608.09</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>608.29</u> 1/100 ft
Well ID # <u>MW-15</u>	Land Surface Elevation <u>604.42</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>clear skies</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>23.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>13.15</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.35</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.69</u> gal	
3 Casing Volumes = <u>5.06</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES								
Flow Rate (ml/min)	210	150	100	100	100	175	100	75
Time (Military)	8:40	8:45	8:50	8:55	9:00	9:10	9:25	9:30
Depth to Groundwater Below Top of Casing (ft)	13.29	13.90	14.20	14.39	14.55	14.70	14.34	14.59
Drawdown (ft)	-0.14	-0.75	-1.05	-1.24	-1.40	-1.55	-1.19	-1.44
pH (S.U.)	9.20	9.25	9.31	9.33	9.32	9.20	9.18	9.16
Sp. Cond. (mS/cm)	0.821	0.817	0.818	0.835	0.850	0.919	0.965	0.983
Turbidity (NTUs)	41.50	30.00	28.80	30.00	36.70	53.50	63.50	63.00
Dissolved Oxygen (mg/L)	0.85	0.54	0.54	0.51	0.46	0.57	2.11	1.23
Water Temperature (°C)	13.47	13.44	12.74	12.80	12.85	13.17	12.73	12.7
ORP (mV)	-76.6	-86.7	-101.9	-124.7	-136.8	-138.1	-119.0	-137.2

Physical appearance at start	Color <u>tan</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID AIR: 0.0. Start pump at 8:35. at 9:00 changed pump; at 9:15 switched pump back. DGW at 9:20 = 14.08. Set tubing intake at center of screen. Start sampling at 10:10. Sample ID: A03MW15-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>608.09</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>608.29</u> 1/100 ft
Well ID # <u>MW-15</u>	Land Surface Elevation <u>604.42</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>clear skies</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>23.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>13.15</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.35</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.69</u> gal	
3 Casing Volumes = <u>5.06</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

	100	50	50	50	50	50		
Flow Rate (ml/min)	100	50	50	50	50	50		
Time (Military)	9:35	9:40	9:45	9:50	9:55	10:00		
Depth to Groundwater Below Top of Casing (ft)	14.65	14.69	14.63	14.61	14.68	14.71		
Drawdown (ft)	-1.50	-1.54	-1.48	-1.46	-1.53	-1.56		
pH (S.U.)	9.01	8.97	8.82	8.74	8.71	8.67		
Sp. Cond. (mS/cm)	1.080	1.111	1.208	1.282	1.294	1.337		
Turbidity (NTUs)	52.80	61.40	59.80	45.00	44.00	44.00		
Dissolved Oxygen (mg/L)	0.74	0.74	0.68	0.58	0.52	0.50		
Water Temperature (°C)	12.77	12.65	12.41	12.50	12.68	12.73		
ORP (mV)	-148.9	-150.8	-147.4	-145.6	-144.6	-142.3		

Physical appearance at start	Color <u>tan</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID AIR: 0.0. Start pump at 8:35. at 9:00 changed pump; at 9:15 switched pump back. DGW at 9:20 = 14.08. Set tubing intake at center of screen. Start sampling at 10:10. Sample ID: A03MW15-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/12/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>604.37</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>604.79</u> 1/100 ft
Well ID # <u>MW-16</u>	Land Surface Elevation <u>601.41</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.10</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.60</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.50</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.71</u> gal	
3 Casing Volumes = <u>5.13</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	250	160	180	180	180		
Time (Military)	15:20	15:25	15:30	15:35	15:40		
Depth to Groundwater Below Top of Casing (ft)	9.64	9.63	9.63	9.63	9.63		
Drawdown (ft)	-0.04	-0.03	-0.03	-0.03	-0.03		
pH (S.U.)	7.08	7.03	7.02	7.02	7.01		
Sp. Cond. (mS/cm)	1.497	1.495	1.493	1.492	1.492		
Turbidity (NTUs)	5.46	3.47	1.51	1.50	0.98		
Dissolved Oxygen (mg/L)	0.60	0.65	0.92	0.52	0.49		
Water Temperature (°C)	13.64	13.57	13.59	13.64	13.64		
ORP (mV)	18.9	7.9	4.7	-2.4	-3.6		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.4; PID Air: 0.4. Start pump at 15:15. Set tubing intake at center of screen. Start sampling at 15:50. Sample ID: A03MW16-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/12/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>606.97</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>607.15</u> 1/100 ft
Well ID # <u>MW-17</u>	Land Surface Elevation <u>603.79</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 16.76</u> 1/100 ft
Weather Conditions <u>cloudy with sprinkles</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.08</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.02</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.06</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.64</u> gal	
3 Casing Volumes = <u>4.92</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	150	140	100	80	100	100	
Time (Military)	14:15	14:20	14:25	14:30	14:35	14:40	
Depth to Groundwater Below Top of Casing (ft)	10.37	10.43	10.46	10.41	10.43	10.42	
Drawdown (ft)	-0.35	-0.41	-0.44	-0.39	-0.41	-0.40	
pH (S.U.)	7.1	7.14	7.14	7.16	7.15	7.17	
Sp. Cond. (mS/cm)	2.52	2.511	2.514	2.515	2.509	2.515	
Turbidity (NTUs)	28.40	18.80	15.10	13.20	10.00	9.80	
Dissolved Oxygen (mg/L)	1.81	1.21	1.15	1.67	1.23	0.89	
Water Temperature (°C)	13.60	13.61	13.58	13.66	13.55	13.49	
ORP (mV)	-67.2	-70.4	-67.5	-72.3	-72.8	-72.9	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 14:10. Set tubing intake at center of screen. Start sampling at 14:45. Sample ID: A03MW17-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>602.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>602.62</u> 1/100 ft
Well ID # <u>MW-18</u>	Land Surface Elevation <u>599.48</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>5 to 14</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>17.73</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.45</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>9.28</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.51</u> gal	
3 Casing Volumes = <u>4.54</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	250	200	200	200	200	200	
Time (Military)	16:25	16:30	16:35	16:40	16:45	16:50	
Depth to Groundwater Below Top of Casing (ft)	8.84	8.78	8.80	8.79	8.79	8.79	
Drawdown (ft)	-0.39	-0.33	-0.35	-0.34	-0.34	-0.34	
pH (S.U.)	7.01	7.00	7.02	7.04	7.01	7.00	
Sp. Cond. (mS/cm)	1.050	1.070	1.082	1.084	1.088	1.094	
Turbidity (NTUs)	29.40	12.31	11.43	9.61	9.04	8.18	
Dissolved Oxygen (mg/L)	1.21	0.93	0.63	0.55	0.51	0.45	
Water Temperature (°C)	12.75	12.73	12.80	12.75	12.75	12.74	
ORP (mV)	47.9	38.5	33.0	30.2	31.6	31.2	

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID AIR: 0.0. Start pump at 16:20. Set tubing intake at center of screen. Start sampling at 16:55. Sample ID: A04BMW18-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.36</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.84</u> 1/100 ft
Well ID # <u>MW-19</u>	Land Surface Elevation <u>598.29</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>10 to 20.02</u> 1/100 ft
Weather Conditions <u>cool, partly cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>23.26</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.55</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.71</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.07</u> gal	
3 Casing Volumes = <u>6.22</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200	200	200	200	200	200	
Time (Military)	9:05	9:10	9:15	9:20	9:25	9:30	9:35
Depth to Groundwater Below Top of Casing (ft)	10.07	10.71	10.71	10.70	10.72	10.72	10.72
Drawdown (ft)	0.48	-0.16	-0.16	-0.15	-0.17	-0.17	-0.17
pH (S.U.)	6.97	6.97	6.99	6.97	6.98	6.97	6.97
Sp. Cond. (mS/cm)	0.986	0.986	0.987	0.989	0.989	0.993	0.992
Turbidity (NTUs)	2.60	1.20	0.82	0.49	0.48	0.46	0.45
Dissolved Oxygen (mg/L)	2.05	1.83	1.73	1.97	1.91	1.86	1.88
Water Temperature (°C)	13.89	14.24	14.36	14.41	14.50	14.37	14.48
ORP (mV)	25.8	30.0	30.5	31.6	32.9	36.1	na

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

PID Well: 0.0; PID Air: 0.0. Start pump at 9:00. Set tubing intake at center of screen. Start sampling at 9:40. Sample ID: A04BMW19-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>603.62</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>603.78</u> 1/100 ft
Well ID # <u>MW-20</u>	Land Surface Elevation <u>600.50</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17</u> 1/100 ft
Weather Conditions <u>clear</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.20</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.38</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.82</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.76</u> gal	
3 Casing Volumes = <u>5.29</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	Dup
250ml Poly	TSS	1	none	Dup

FIELD ANALYSES							
Flow Rate (ml/min)	220	200	200	175	175		
Time (Military)	17:05	17:10	17:15	17:20	17:25		
Depth to Groundwater Below Top of Casing (ft)	9.85	9.89	9.96	9.90	9.89		
Drawdown (ft)	-0.47	-0.51	-0.58	-0.52	-0.51		
pH (S.U.)	7.17	7.09	7.07	7.07	7.06		
Sp. Cond. (mS/cm)	1.002	0.962	0.937	0.933	0.935		
Turbidity (NTUs)	17.00	5.72	1.87	1.75	1.74		
Dissolved Oxygen (mg/L)	1.54	1.08	1.24	1.17	0.99		
Water Temperature (°C)	13.23	13.40	13.41	13.37	13.32		
ORP (mV)	58.9	56.5	55.7	55.4	55.6		

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 17:00. Set tubing intake at center of screen. Start sampling at 17:35. Sample ID: A04AMW20-U/F. Duplicate sample collected: A04AMW70U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>608.46</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>608.67</u> 1/100 ft
Well ID # <u>MW-21</u>	Land Surface Elevation <u>605.41</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>11 to 21</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>21.00</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>13.77</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>7.23</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.18</u> gal	
3 Casing Volumes = <u>3.54</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	6	HNO3	MS/MSD
250ml Poly	TSS	3	none	MS/MSD

FIELD ANALYSES							
Flow Rate (ml/min)	200	200	200	200	200	200	
Time (Military)	14:10	14:15	14:20	14:25	14:30	14:35	
Depth to Groundwater Below Top of Casing (ft)	14.28	14.31	14.34	14.33	14.33	14.35	
Drawdown (ft)	-0.51	-0.54	-0.57	-0.56	-0.56	-0.58	
pH (S.U.)	7.31	7.25	7.26	7.27	7.22	7.33	
Sp. Cond. (mS/cm)	1.988	2.026	2.035	2.050	2.052	2.064	
Turbidity (NTUs)	24.20	10.40	5.92	3.64	3.06	2.15	
Dissolved Oxygen (mg/L)	1.29	0.72	0.78	0.42	0.37	0.33	
Water Temperature (°C)	13.98	14.10	14.03	13.74	14.00	13.76	
ORP (mV)	-93.8	-95.2	-97.4	-102.3	-105.6	-114.8	
Physical appearance at start	Color <u>clear</u>			Physical appearance at sampling			Color <u>clear</u>
	Odor <u>no</u>						Odor <u>no</u>
Sheen/Free Product	<u>no sheen/no product</u>			Sheen/Free Product			<u>no sheen/no product</u>

COMMENTS/OBSERVATIONS Start pump at 14:05. Set tubing intake at center of screen. Start sampling at 14:40. Sample ID: A04AMW21-U/F. MS/MSD collected at this well.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.35</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.73</u> 1/100 ft
Well ID # <u>MW-22</u>	Land Surface Elevation <u>598.09</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>light wind, cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.19</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.40</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.79</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.08</u> gal	
3 Casing Volumes = <u>6.25</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	280	210	225	225	220	220	220	200
Time (Military)	13:19	13:24	13:29	13:34	13:39	13:44	13:49	14:00
Depth to Groundwater Below Top of Casing (ft)	7.58	7.52	7.52	7.52	7.51	7.53	7.53	7.51
Drawdown (ft)	-0.18	-0.12	-0.12	-0.12	-0.11	-0.13	-0.13	-0.11
pH (S.U.)	6.91	6.92	6.92	6.83	6.90	6.87	6.89	6.88
Sp. Cond. (mS/cm)	0.677	0.678	0.677	0.675	0.671	0.669	0.668	0.665
Turbidity (NTUs)	31.16	16.05	12.26	12.14	13.30	8.39	10.64	3.97
Dissolved Oxygen (mg/L)	0.96	0.56	0.34	0.30	0.26	0.24	0.18	0.21
Water Temperature (°C)	13.60	13.59	13.49	13.55	13.48	13.54	13.61	13.4
ORP (mV)	-118.0	-119.2	-120.6	-120.3	-121.3	-122.4	-123.5	-123.4

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS

Start pump at 13:14. Set tubing intake at center of screen. Start sampling at 14:30. Sample ID: A04AMW22-U/F. (1) Start of screened interval is estimated.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>601.35</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>601.73</u> 1/100 ft
Well ID # <u>MW-22</u>	Land Surface Elevation <u>598.09</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>light wind, cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.19</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.40</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.79</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.08</u> gal	
3 Casing Volumes = <u>6.25</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	200	200	200	200			
Time (Military)	14:05	14:10	14:15	14:20			
Depth to Groundwater Below Top of Casing (ft)	7.51	7.51	7.50	7.50			
Drawdown (ft)	-0.11	-0.11	-0.10	-0.10			
pH (S.U.)	6.90	6.89	6.89	6.89			
Sp. Cond. (mS/cm)	0.665	0.663	0.662	0.662			
Turbidity (NTUs)	2.68	1.42	1.39	1.39			
Dissolved Oxygen (mg/L)	0.21	0.20	0.20	0.20			
Water Temperature (°C)	13.35	13.30	13.34	13.34			
ORP (mV)	-126.6	-122.4	-122.6	-122.5			

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS Start pump at 13:14. Set tubing intake at center of screen. Start sampling at 14:30. Sample ID: A04AMW22-U/F. (1) Start of screened interval is estimated.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.50</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.95</u> 1/100 ft
Well ID # <u>MW-23</u>	Land Surface Elevation <u>597.58</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6 to 16</u> 1/100 ft
Weather Conditions <u>cool, partly cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.60</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>6.40</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.20</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.15</u> gal	
3 Casing Volumes = <u>6.45</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	6	HNO3	MS/MSD
250ml Poly	TSS	3	none	MS/MSD

	250	210	200	190	200	200	200	200
Flow Rate (ml/min)	250	210	200	190	200	200	200	200
Time (Military)	10:10	10:15	10:20	10:25	10:30	10:35	10:40	10:45
Depth to Groundwater Below Top of Casing (ft)	6.45	6.48	3.48	6348.00	6.48	6.49	6.49	6.49
Drawdown (ft)	-0.05	-0.08	2.92	-6341.60	-0.08	-0.09	-0.09	-0.09
pH (S.U.)	7.15	7.09	7.05	7.04	7.01	7.00	7.00	7.00
Sp. Cond. (mS/cm)	0.608	0.599	0.605	0.609	0.611	0.612	0.612	0.612
Turbidity (NTUs)	8.44	4.78	2.43	2.04	2.00	1.40	1.40	1.39
Dissolved Oxygen (mg/L)	0.66	0.53	0.46	0.52	0.71	0.66	0.47	0.42
Water Temperature (°C)	13.09	13.12	13.01	12.82	12.80	13.01	13.03	13.04
ORP (mV)	44.1	36.1	27.9	17.1	9.5	0.1	-5.6	-8.9

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.7; PID Air: 0.0. Start pump at 10:05. Note: Air bubbles in hose. Set tubing intake at center of screen. Start sampling at 10:50. Sample ID: A04AMW23-U/F. MS/MSD collected at this well.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>597.27</u> 1/100 ft
Well ID # <u>MW-24</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6.43 to 16.43⁽¹⁾</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>45</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.67</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>4.17</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.50</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.04</u> gal	
3 Casing Volumes = <u>6.11</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	210	250	200	200	200	200	200
Time (Military)	7:45	7:50	7:55	8:00	8:05	8:10	8:20
Depth to Groundwater Below Top of Casing (ft)	4.19	4.20	4.20	4.20	4.21	4.21	4.21
Drawdown (ft)	-0.02	-0.03	-0.03	-0.03	-0.04	-0.04	-0.04
pH (S.U.)	7.20	7.17	7.17	7.18	7.19	7.19	7.19
Sp. Cond. (mS/cm)	0.631	0.628	0.628	0.626	0.626	0.625	0.625
Turbidity (NTUs)	1.64	1.30	0.80	0.81	0.70	0.81	0.67
Dissolved Oxygen (mg/L)	0.58	0.42	0.44	0.59	0.92	0.52	0.31
Water Temperature (°C)	14.94	14.95	14.92	15.00	14.99	14.96	14.98
ORP (mV)	-140.6	-143.5	-146.4	-144.3	-146.6	-148.5	-149

Physical appearance at start	Color <u>clear with black floating particles</u>	Physical appearance at sampling	Color <u>clear with black floating particles</u>
	Odor <u>chemical or petrc</u>		Odor <u>yes</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 7:40. Set tubing intake at center of screen. Start sampling at 8:30. Sample ID: A04DMW24-U/F. Field Blank A04DMWFB-004. (1) Start of screened interval is estimated.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>597.27</u> 1/100 ft
Well ID # <u>MW-24</u>	Land Surface Elevation <u>597.27</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>6.43 to 16.43⁽¹⁾</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>45</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.67</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>4.17</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.50</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.04</u> gal	
3 Casing Volumes = <u>6.11</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	4	HNO3	Field Blank
250ml Poly	TSS	1	none	

FIELD ANALYSES

Flow Rate (ml/min)	200					
Time (Military)	8:25					
Depth to Groundwater Below Top of Casing (ft)	4.21					
Drawdown (ft)	-0.04					
pH (S.U.)	7.20					
Sp. Cond. (mS/cm)	0.628					
Turbidity (NTUs)	0.61					
Dissolved Oxygen (mg/L)	0.24					
Water Temperature (°C)	15.01					
ORP (mV)	-159.2					

Physical appearance at start	Color <u>clear with black floating particles</u>	Physical appearance at sampling	Color <u>clear with black floating particles</u>
	Odor <u>chemical or petrc</u>		Odor <u>yes</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 7:40. Set tubing intake at center of screen. Start sampling at 8:30. Sample ID: A04DMW24-U/F. Field Blank A04DMWFB-004. (1) Start of screened interval is estimated.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/16/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>N/A</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>596.93</u> 1/100 ft
Well ID # <u>MW-26</u>	Land Surface Elevation <u>596.93</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>7 to 17⁽¹⁾</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>35</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>16.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>3.80</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.10</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.14</u> gal	
3 Casing Volumes = <u>6.41</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

	240	200	200	200	200	210	200	
Flow Rate (ml/min)	240	200	200	200	200	210	200	
Time (Military)	8:55	9:00	9:05	9:10	9:15	9:20	9:25	
Depth to Groundwater Below Top of Casing (ft)	3.90	3.90	3.90	3.90	3.90	3.90	3.90	
Drawdown (ft)	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	
pH (S.U.)	7.15	7.12	7.12	7.11	7.10	7.10	7.09	
Sp. Cond. (mS/cm)	2.449	2.478	2.475	2.450	2.430	2.422	2.418	
Turbidity (NTUs)	28.70	14.00	8.00	4.50	2.50	2.08	1.81	
Dissolved Oxygen (mg/L)	0.34	0.30	0.30	0.38	0.26	0.25	0.25	
Water Temperature (°C)	13.62	13.71	13.66	13.68	13.69	13.68	13.58	
ORP (mV)	-6.8	-10.7	-21.6	-25.5	-25.7	-26.2	-26.3	

Physical appearance at start	Color <u>orange</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.1; PID Air: 0.1. Start pump at 8:50. Rust colored iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 9:30. Sample ID: A04BMW26-U/F. (1) Start of screened interval is estimated.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>613.29</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>613.50</u> 1/100 ft
Well ID # <u>MW-600D</u>	Land Surface Elevation <u>610.54</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>13 to 23</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>24.79</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>11.55</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>13.24</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.16</u> gal	
3 Casing Volumes = <u>6.47</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

	200	190	200	200	190	200		
Flow Rate (ml/min)	200	190	200	200	190	200		
Time (Military)	15:25	15:30	15:35	15:40	15:45	15:50		
Depth to Groundwater Below Top of Casing (ft)	11.65	11.65	11.66	11.68	11.68	11.69		
Drawdown (ft)	-0.10	-0.10	-0.11	-0.13	-0.13	-0.14		
pH (S.U.)	6.60	6.59	6.59	6.58	6.58	6.57		
Sp. Cond. (mS/cm)	15.43	15.62	15.68	15.77	15.82	15.87		
Turbidity (NTUs)	7.86	7.61	2.18	1.55	1.30	1.30		
Dissolved Oxygen (mg/L)	0.47	0.68	0.04	0.30	0.29	0.26		
Water Temperature (°C)	13.66	13.51	13.48	13.23	13.20	13.15		
ORP (mV)	-0.5	-1.8	-1.7	-0.6	4.8	7.2		

Physical appearance at start	Color <u>rust colored</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 15:20. A large amount of iron bacteria at start of pumping. Set tubing intake at center of screen. Start sampling at 16:00. Sample ID: A05BMW600D-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>604.85</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>605.22</u> 1/100 ft
Well ID # <u>MW-601D</u>	Land Surface Elevation <u>602.42</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>9.5 to 19.5</u> 1/100 ft
Weather Conditions <u>cool</u>	
Air Temperature <u>45</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.58</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>10.80</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.78</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.92</u> gal	
3 Casing Volumes = <u>5.76</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	250	150	160	175	175	175	175
Time (Military)	18:00	18:05	18:10	18:15	18:20	18:25	18:30
Depth to Groundwater Below Top of Casing (ft)	10.89	10.90	10.90	10.91	10.90	10.90	10.90
Drawdown (ft)	-0.09	-0.10	-0.10	-0.11	-0.10	-0.10	-0.10
pH (S.U.)	7.02	7.06	7.10	7.12	7.15	7.16	7.16
Sp. Cond. (mS/cm)	1.909	1.872	1.830	1.810	1.800	1.789	1.786
Turbidity (NTUs)	8.30	5.54	5.61	1.84	1.76	1.71	1.64
Dissolved Oxygen (mg/L)	0.49	0.37	0.34	0.41	0.27	0.25	0.27
Water Temperature (°C)	13.99	13.80	13.74	13.76	13.71	13.69	13.67
ORP (mV)	-150.4	-155.9	-159.2	-160.6	-159.7	-158.1	-158.1
Physical appearance at start	Color <u>clear</u>			Physical appearance at sampling			Color <u>clear</u>
	Odor <u>yes (slight)</u>						Odor <u>no</u>
Sheen/Free Product	<u>no sheen/no product</u>			Sheen/Free Product			<u>no sheen/no product</u>

COMMENTS/OBSERVATIONS PID WELL: 0.1; PID AIR: 0.0. Start pump at 17:55. Set tubing intake at center of screen. Start sampling at 18:35. Sample ID: A04AMW601D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>605.005</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>604.295</u> 1/100 ft
Well ID # <u>MW-602D</u>	Land Surface Elevation <u>601.135</u> 1/100 ft
Upgradient <u> </u> Downgradient <u> </u>	Screened Interval (below land surface) <u>10 to 20</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.10</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>9.95</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.15</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.98</u> gal	
3 Casing Volumes = <u>5.94</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	300	200	200	200	200	200	200
Time (Military)	14:50	14:55	15:00	15:05	15:10	15:15	15:20
Depth to Groundwater Below Top of Casing (ft)	10.05	10.02	10.01	10.02	10.02	10.02	10.02
Drawdown (ft)	-0.10	-0.07	-0.06	-0.07	-0.07	-0.07	-0.07
pH (S.U.)	7.00	7.01	7.01	7.01	7.01	7.00	7.03
Sp. Cond. (mS/cm)	1.819	1.764	1.681	1.652	1.624	1.590	1.564
Turbidity (NTUs)	28.10	21.00	12.70	9.17	6.85	5.43	5.14
Dissolved Oxygen (mg/L)	0.36	0.33	0.32	0.33	0.26	0.25	0.24
Water Temperature (°C)	13.94	13.75	13.63	13.60	13.57	13.56	13.64
ORP (mV)	-47.1	-48.6	-47.6	-46.4	-46.5	-45.2	-43.4

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.1; PID AIR: 0.0. Start pump at 14:45. Set tubing intake at center of screen. Start sampling at 15:25. Sample ID: A04AMW602D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/14/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.43</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.62</u> 1/100 ft
Well ID # <u>MW-603D</u>	Land Surface Elevation <u>597.69</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>9.5 to 19.5</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>55</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>22.65</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.14</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>15.51</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.53</u> gal	
3 Casing Volumes = <u>7.58</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	250	200	200	200	200	200	
Time (Military)	7:55	8:00	8:05	8:10	8:15	8:20	8:25
Depth to Groundwater Below Top of Casing (ft)	7.33	7.32	7.32	7.31	7.31	7.31	7.31
Drawdown (ft)	-0.19	-0.18	-0.18	-0.17	-0.17	-0.17	-0.17
pH (S.U.)	7.02	7.04	7.05	7.05	7.06	7.05	7.05
Sp. Cond. (mS/cm)	1.067	1.062	1.060	1.059	1.060	1.065	1.068
Turbidity (NTUs)	16.29	10.84	7.66	5.65	4.09	4.06	4.02
Dissolved Oxygen (mg/L)	0.79	0.78	0.92	0.35	0.31	0.26	0.25
Water Temperature (°C)	13.66	13.67	13.68	13.67	13.65	13.64	13.64
ORP (mV)	89.8	40.1	17.9	9.1	1.7	-8.4	-14.4

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>
	Odor <u>no</u>		Odor <u>no</u>
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>	

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 7:50. Set tubing intake at center of screen. Start sampling at 8:30. Sample ID: A04AMW603D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/15/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>595.98</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>596.25</u> 1/100 ft
Well ID # <u>MW-604D</u>	Land Surface Elevation <u>596.25</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>8.2 to 18.2</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>40</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>18.08</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.62</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>10.46</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.70</u> gal	
3 Casing Volumes = <u>5.11</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	275	180	200	200	200	200	
Time (Military)	17:20	17:25	17:30	17:35	17:40	17:45	
Depth to Groundwater Below Top of Casing (ft)	7.83	7.80	7.80	7.80	7.78	7.81	
Drawdown (ft)	-0.21	-0.18	-0.18	-0.18	-0.16	-0.19	
pH (S.U.)	7.21	7.19	7.19	7.17	7.16	7.15	
Sp. Cond. (mS/cm)	1.572	1.572	1.584	1.595	1.599	1.603	
Turbidity (NTUs)	15.95	6.44	3.62	1.84	1.60	1.39	
Dissolved Oxygen (mg/L)	0.66	0.43	0.35	0.30	0.36	0.28	
Water Temperature (°C)	13.50	13.61	13.64	13.73	13.70	13.89	
ORP (mV)	50.8	44.0	42.1	38.5	37.5	37.9	
Physical appearance at start	Color <u>cloudy</u>			Physical appearance at sampling			Color <u>clear</u>
	Odor <u>no</u>						Odor <u>no</u>
Sheen/Free Product	<u>no sheen/no product</u>			Sheen/Free Product			<u>no sheen/no product</u>

COMMENTS/OBSERVATIONS PID Well: 0.7; PID Air: 0.0. Start pump at 17:15. Set tubing intake at center of screen. Start sampling at 17:50. Sample ID: A04DMW604D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/16/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>598.11</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>598.24</u> 1/100 ft
Well ID # <u>MW-605D</u>	Land Surface Elevation <u>598.50</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>8 to 18</u> 1/100 ft
Weather Conditions <u>cloudy</u>	
Air Temperature <u>35</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>18.50</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>4.12</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>14.38</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.34</u> gal	
3 Casing Volumes = <u>7.03</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES

	400	200	200	200	200	200	200	200
Flow Rate (ml/min)	400	200	200	200	200	200	200	200
Time (Military)	7:50	7:55	8:00	8:05	8:10	8:15	8:20	8:25
Depth to Groundwater Below Top of Casing (ft)	4.19	4.20	4.19	4.20	4.20	4.20	4.20	4.20
Drawdown (ft)	-0.07	-0.08	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08
pH (S.U.)	7.09	7.10	7.09	7.09	7.09	7.09	7.06	7.09
Sp. Cond. (mS/cm)	1.091	1.086	1.085	1.080	1.077	1.073	1.069	1.068
Turbidity (NTUs)	22.30	21.20	18.04	16.03	14.07	10.07	9.69	9.55
Dissolved Oxygen (mg/L)	1.28	0.89	0.47	0.34	0.28	0.25	0.25	0.25
Water Temperature (°C)	14.09	14.05	13.97	14.11	14.14	14.10	14.00	14
ORP (mV)	34.0	2.6	-0.4	-9.2	-15.0	-19.6	-16.4	-15.5

Physical appearance at start	Color <u>clear</u>	Physical appearance at sampling	Color <u>clear</u>	
	Odor <u>no</u>		Odor <u>no</u>	
Sheen/Free Product <u>no sheen/no product</u>		Sheen/Free Product <u>no sheen/no product</u>		

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.0. Start pump at 7:45. Set tubing intake at center of screen. Start sampling at 8:30. Sample ID: A04BMW605D-U/F

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/16/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>602.21</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>602.50</u> 1/100 ft
Well ID # <u>MW-606DR</u>	Land Surface Elevation <u>599.49</u> 1/100 ft
<u> </u> Upgradient <u> </u> Downgradient	Screened Interval (below land surface) <u>12 to 22</u> 1/100 ft
Weather Conditions <u>partly sunny</u>	
Air Temperature <u>35</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>20.90</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>8.31</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>12.59</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>2.05</u> gal	
3 Casing Volumes = <u>6.16</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

FIELD ANALYSES							
Flow Rate (ml/min)	300	300	250	150	200	190	200
Time (Military)	11:25	11:30	11:35	11:40	11:45	11:50	11:55
Depth to Groundwater Below Top of Casing (ft)	8.80	8.84	8.77	8.65	8.65	8.65	8.65
Drawdown (ft)	-0.49	-0.53	-0.46	-0.34	-0.34	-0.34	-0.34
pH (S.U.)	7.26	7.18	7.16	7.14	7.13	7.15	7.16
Sp. Cond. (mS/cm)	1.923	2.064	2.199	2.249	2.199	2.178	2.167
Turbidity (NTUs)	54.50	36.00	21.00	21.50	15.20	14.20	13.20
Dissolved Oxygen (mg/L)	1.24	0.69	0.78	0.60	0.56	0.53	0.56
Water Temperature (°C)	11.96	12.31	12.06	11.31	11.56	11.58	11.67
ORP (mV)	-69.2	-70.2	-71.1	-67.6	-70.6	-75.9	-76.9
Physical appearance at start	Color <u>slightly cloudy</u>			Physical appearance at sampling			Color <u>clear</u>
	Odor <u>no</u>						Odor <u>no</u>
Sheen/Free Product	<u>no sheen/no product</u>			Sheen/Free Product			<u>no sheen/no product</u>

COMMENTS/OBSERVATIONS PID Well: 0.0; PID Air: 0.1. Start pump at 11:20. Set tubing intake at center of screen. Start sampling at 12:05. Sample ID: A03MW606DR-U/F.

ROUND 2 GROUNDWATER SAMPLING LOG

Date (mo/day/yr) <u>11/13/2007</u>	Casing Diameter <u>2</u> inches
Field Personnel <u>[REDACTED]</u>	Casing Material <u>PVC</u>
Site Name <u>Guterl Steel FUSRAP Site, Lockport, New York</u>	Inner Casing Elevation <u>600.38</u> 1/100 ft
Earth Tech Job # <u>100657</u>	Outer Casing Elevation <u>600.67</u> 1/100 ft
Well ID # <u>MW-607D</u>	Land Surface Elevation <u>597.93</u> 1/100 ft
Upgradient _____ Downgradient _____	Screened Interval (below land surface) <u>7.4 to 17.4</u> 1/100 ft
Weather Conditions <u>sunny</u>	
Air Temperature <u>50</u> ° F	
Total Depth (TWD) Below Top of Casing = <u>19.78</u> 1/100 ft	
Depth to Groundwater (DGW) Below Top of Casing = <u>7.90</u> 1/100 ft	
Length of Water Column (LWC) = TWD - DGW = <u>11.88</u> 1/100 ft	
1 Casing Volume (OCV) = LWC x <u>0.163</u> = <u>1.94</u> gal	
3 Casing Volumes = <u>5.81</u> gal	
Method of Well Evacuation <u>Peristaltic Pump</u>	
Method of Sample Collection <u>Peristaltic Pump/Teflon Tubing</u>	
Total Volume of Water Removed <u>N/A</u> liter	

Container	Analysis (Method)	# Bottles	Preservative	QA/QC
4L Poly	U-234, U-235, U-238, Th-232, Ra-226, Ra-228, Gross alpha and beta	2	HNO3	
250ml Poly	TSS	1	none	

	110	110	160	160	180	160	180	
Flow Rate (ml/min)	110	110	160	160	180	160	180	
Time (Military)	10:30	10:35	10:40	10:45	10:50	10:55	11:00	
Depth to Groundwater Below Top of Casing (ft)	8.06	8.04	8.11	8.21	8.23	8.22	8.24	
Drawdown (ft)	-0.16	-0.14	-0.21	-0.31	-0.33	-0.32	-0.34	
pH (S.U.)	6.95	6.96	6.92	6.92	6.93	6.94	6.91	
Sp. Cond. (mS/cm)	1.731	1.730	1.725	1.721	1.720	1.719	1.716	
Turbidity (NTUs)	40.00	17.01	13.46	10.68	10.22	9.40	9.18	
Dissolved Oxygen (mg/L)	0.57	0.47	0.31	0.55	0.38	0.24	0.21	
Water Temperature (°C)	13.18	12.98	12.96	13.16	13.21	13.21	13.20	
ORP (mV)	-152.7	-163.9	-165.9	-169.7	-176.9	-181.0	-186.0	

Physical appearance at start Color <u>clear</u>	Physical appearance at sampling Color <u>clear</u>
Odor <u>yes (chemical or sulfur)</u>	Odor <u>yes</u>
Sheen/Free Product <u>no sheen/no product</u>	Sheen/Free Product <u>no sheen/no product</u>

COMMENTS/OBSERVATIONS Start pump at 10:25. Set tubing intake at center of screen. Start sampling at 11:10. Sample ID: A03MW607D-U/F.