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April 15, 2011

Ms. Karen A. Cahill
Project Manager
NYS Dept of Environmental Conservation
615 Erie Boulevard West
Syracuse, NY 13204-2400

Subject: Roth Steel Consent Order D7-1015-11-04
Revised Interim Data Submittal

Dear Karen:

Thank you very much for your February 15, 2011 comments and suggestions on the initial draft of the Interim Data Submittal, dated November 2, 2010. The draft submittal was prepared to transmit data generated in 2010 from field activities conducted at the Roth Steel Facility (located on Hiawatha Boulevard in Syracuse, New York) ahead of a more comprehensive report to be completed later in 2011. The field work was undertaken in June and July 2010 in accordance with the Petroleum Investigation Work Plan Addendum dated May 12, 2010, that was approved by the New York State Department of Environmental Conservation (NYSDEC).

In response to your comments on the draft submittal, we have revised the package and included the additional information that you have requested. The field, soil and groundwater data are included in Tables 1, 2 and 3, respectively, and sample locations are shown on Figure 1. As requested, and in general accordance with NYSDEC Policy CP-51, the soil analytical results were compared to both Part 375 unrestricted use soil cleanup objectives (SCOs) and the protection of groundwater SCOs. The groundwater data were compared to the New York State Groundwater Effluent Limitations (Class GA) maximum allowable concentrations. The additional information included with this document is a data usability summary report (DUSR), soil boring/well construction logs and groundwater sampling logs, as requested. The analytical laboratory data packages and draft groundwater flow maps were previously provided to you on March 2, 2011.

As also requested, Figure 1 shows locations where polychlorinated biphenyl (PCB) and metals concentrations in soil and groundwater exceed the protection of groundwater soil SCOs and the groundwater standards, respectively. This figure also includes data that were collected by Passero in 2007, also per your request. Please note that the quality of the Passero data is unknown (e.g. turbidity levels in the groundwater samples etc.) and the sample locations shown on the figure are approximate.

Upcoming work on the project includes the activities noted below. Details of these activities would be refined as new data are collected and evaluated (e.g. clarifying groundwater flow direction and subsequent collection of data from confirmed down gradient groundwater monitoring wells) and in consultation with your Department. As always, we would also apprise you in advance of any future sampling activities as soon as a schedule is established.

- Surveying of newly installed Monitoring well MW-14, replacement well MW-8A and repaired well MW-6.
- Collection of groundwater levels from all wells during the latter part of April, 2011.
- Preparation of a groundwater contour map to reflect the data collected in April, 2011.

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- Installation of another down gradient monitoring well, following review of the latest groundwater flow data and in consultation with the NYSDEC.
- Development of the newly installed well followed by sampling of the monitoring wells for laboratory analysis.
- Resampling of six soil locations towards the north of the Site in the vicinity of the railroad spur.
- Sampling of soil in, and adjacent to, the ponded area.
- Performance of any additional sampling as may be agreed to with NYSDEC, following further review of the attached data and data from subsequent activities.

As always, we appreciate your ongoing assistance and input on this project. Please contact me with any questions.

Yours sincerely,



Kendrick Jaglal, P.E.
Project Manager

Cc: Thomas M. Vigneault, PE. - NYSDEC
Barbara A. McGinn, Esq. - NYSDEC
George C. Stanton, Roth Steel - Roth Steel Corporation
Douglas H. Zamelis, Esq. - The Law Office of Douglas H. Zamelis

TABLE 2
Roth Steel Site - Syracuse, NY
July 2010 Soil Sampling Results

DRAFT

Location	Soil Cleanup Objectives		B46 Dup	B46	B41	B48	B40	B47	B38	B42	B39	B45	B43	MW-12	MW-12	B37	B37	B44	MW-10	MW-10	MW-13	MW-11	MW-11	B37		
	Interval	Unrestr	prot GW	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(4 - 6)	(8 - 10)	(0 - 2)	(5 - 7)	(0 - 1)	(6 - 8)	(0 - 2)	(2 - 4)	(0 - 2)	(10 - 12)	(2 - 4)	
PCBs (mg/kg)																										
Aroclor 1016				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Aroclor 1221				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Aroclor 1232				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Aroclor 1242				23 J	17 J	31 J	1.8 J	0.042	2.1 NJ	1	0.22	10 J	0.12	0.31 J	U	0.05 NJ	0.42	0.071	5.2	0.19	4.9	0.56	0.4 J	U	U	
Aroclor 1248				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Aroclor 1254				8.1	5.9	7.3 J	1.4 J	0.017 J	U	0.34	0.15	3.4	0.049	0.12	0.86 NJ	U	0.1	U	1.2	0.11	0.88	0.051	0.14 J	U	U	
Aroclor 1260				3.7 J	2.5 J	UJ	U	U	U	0.25 J	0.14 J	1.8	U	U	2.9	0.18	U	U	U	0.12	U	U	0.51 NJ	U	3.4	
Aroclor 1262				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0.036	U	
Aroclor 1268				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Total PCBs	0.1	3.2	35.11	25.4	38.3 J	3.2	0.042	2.1	1.9	0.51	15.2	0.169	0.43	3.76	0.23	0.52	0.271	6.4	0.42	5.78	0.611	1.05	0.036	3.4		
GLYCOLS (mg/kg)																										
Diethylene glycol				U	U	UJ	U	U	U	U	U	U	U	180	U	U	U	U	U	U	U	U	8.8	U	U	
Ethylene Glycol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Propylene glycol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
SEMIVOCs (mg/kg)																										
2,4,5-Trichlorophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2,4,6-Trichlorophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2,4-Dichlorophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2,4-Dimethylphenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2,4-Dinitrophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2,4-Dinitrotoluene				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2,6-Dinitrotoluene				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-Chloronaphthalene				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-Chlorophenol				U	U	UJ	U	U	U	U	U	U	R	U	U	U	U	U	U	U	U	U	U	R	U	
2-Methylnaphthalene				0.8 J	0.69 J	0.74 J	0.32 J	0.024 J	0.12 J	0.15 J	U	0.18 J	0.099 J	U	0.1 J	0.0091 J	2.3 J	0.17 J	U	0.15 J	1.8 J	U	U	0.06 J	0.26 J	
2-Methylphenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
2-Nitroaniline				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
2-Nitrophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
3,3'-Dichlorobenzidine				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
3-Nitroaniline				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4,6-Dinitro-2-methylphenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
4-Bromophenyl phenyl ether				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Chloro-3-methylphenol				U	U	UJ	U	U	U	U	U	R	U	U	U	U	U	U	U	U	U	U	U	R	U	
4-Chloroaniline				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Chlorophenyl phenyl ether				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Methylphenol				U	U	3.1 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
4-Nitroaniline				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
4-Nitrophenol				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	U	
Acenaphthene	20	98	0.3 J	U	0.18 J	0.33 J	U	U	U	U	UJ	U	U	U	0.04 J	U	U	U	0.13 J	U	U	2.6	0.24 J	0.3 J		
Acenaphthylene	100	107	0.29 J	U	0.14 J	0.18 J	U	U	U	U	U	U	U	U	U	U	0.2 J	U	0.13 J	U	0.077 J	2.4	0.11 J	1.4 J		
Acetophenone				0.36 J	U	0.35 J	U	0.028 J	0.046 J	U	0.16 J	U	U	U	U	U	U	U	U	0.33 J	U	U	U	U		
Anthracene	100	1000	0.67 J	0.74 J	0.39 J	0.84 J	U	0.044 J	U	U	0.24 J	0.13 J	0.046 J	0.099 J	0.041 J	0.22 J	0.38 J	U	0.64 J	0.18 J	0.066 J	3	0.55	2		
Atrazine				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Benzaldehyde				U	U	UJ	U	U	U	0.4	1.1	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Benzo[a]anthracene	1	1	2.2 J	2.3 J	1.2 J	2.6	0.017 J	0.17 J	0.51 J	0.59 J	0.71 J	0.3 J	0.26 J	0.4 J	0.2 J	0.57 J	1.3 J	0.11 J	3.5	U	0.75 J	5	1.2	4.7		
Benzo[a]pyrene	1	22	2 J	1.9 J	0.93 J	2.3	0.0099 J	0.13 J	0.41 J	0.38 J	0.69 J	0.22 J	0.25 J	0.29 J	0.12 J	0.41 J	1.2 J	0.079 J	3.1	0.49 J	0.7 J	3.8	0.91	3.7		
Benzo[b]fluoranthene	1	1.7	1.8 J	2.2 J	1.1 J	2.7	U	U	0.49 J	U	0.71 J	0.22 J	0.3 J	0.4 J	0.16 J	0.48 J	1.2 J	0.085 J	3.7	U	1.1 J	4.5	0.97	3.5		
Benzo[g,h,i]perylene	100	1000	1.7 J	1.5 J	0.77 J	1.4 J	0.0091 J	0.12 J	0.24 J	U	0.51 J	0.13 J	0.26 J	0.22 J	0.15 J	0.25 J	0.74 J	0.05 J	1.8 J	0.63 J	0.59 J	2.5	0.65	2.5		
Benzo[k]fluoranthene	0.8	1.7	1 J	0.81 J	0.43 J	0.84 J	U	U	0.17 J	U	0.31 J	0.14 J	0.13 J	0.18 J	0.054 J	0.17 J	0.47 J	0.052 J	1.4 J	U	0.43 J	U	0.26 J	1.5 J		
Biphenyl				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bis(2-chloroethoxy)methane				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bis(2-chloroethyl)ether				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bis(2-chloroisopropyl) ether				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Bis(2-ethylhexyl) phthalate				74	57	52 J	13	0.83	5.5	3.2 J	U	11 J	2.8	0.79 J	18	U	2.9	U	1.4	5.1	790	U	3.5	0.38	1.3	
Butyl benzyl phthalate				8.1	7.6 J	2.5 J	1.2 J	U	1.3	U	U	5.9 J	0.28 J	0.43 J	1.2	U	U	U	0.59	U	U	U	U	U	U	
Caprolactam				U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	0.95	U	U	U	U	U	U	
Carbazole				0.37 J	U	0.21 J	0.33 J	U	U	U	U	0.11 J	0.048 J	0.044 J	U	U	0.093 J	U	0.23 J	U	U	0.15 J	0.16 J	0.55 J		
Chrysene	1	1	2.2 J	2 J	1.2 J	2.8	0.016 J	0.18 J	0.47 J	U	0.74 J	0.28 J	0.31 J	0.42 J	0.27	0.52 J	1.2 J	0.1 J	3.5	U	0.81 J	5.5	1.2	4.3		
Dibenz[a,h]anthracene	0.33	1000	U	U	UJ	0.41 J	U	U	U	U	0.14 J	0.048 J</														

TABLE 2
Roth Steel Site - Syracuse, NY
July 2010 Soil Sampling Results

Location	Soil Cleanup Objectives		B46 Dup	B46	B41	B48	B40	B47	B38	B42	B39	B45	B43	MW-12	MW-12	B37	B37	B44	MW-10	MW-10	MW-13	MW-11	MW-11	B37		
	Interval	Unrestr	prot GW	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(0 - 1)	(4 - 6)	(8 - 10)	(0 - 2)	(5 - 7)	(0 - 1)	(6 - 8)	(0 - 2)	(2 - 4)	(0 - 2)	(10 - 12)	(2 - 4)	
Tetrachloroethene	1.3	1.3	U	U	UJ	U	U	U	U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U		
Toluene	0.7	0.7	0.017 J	0.0093 J	0.25 J	U	0.011	U	U	U	0.033 J	U	U	U	U	1.1	U	U	U	U	U	U	U	U		
trans-1,2-Dichloroethene	0.19	0.19	U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
trans-1,3-Dichloropropene			U	U	UJ	U	U	U	U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U		
Trichloroethene	0.47	0.47	U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
Trichlorofluoromethane			U	U	0.035 J	U	0.028 J	U	0.0038 J	U	0.11 J	0.0025 J	U	U	U	0.57	U	U	U	U	U	U	U	UJ		
Vinyl chloride	0.02	0.02	U	U	0.02 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
Xylenes, total	0.26	1.6	0.11 J	0.065 J	0.43 J	0.0075 J	0.013	0.0026 J	0.0053 J	U	0.099 J	0.0025 J	U	0.015	U	9.8	U	U	U	U	U	U	U	U		
METALS (mg/kg)																										
Aluminum			R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
Antimony			15.8 J	13.0 J	21.1 J	6.8 J	1.0 J	1.3 J	19.1 J	1.4 J	9.3 J	UJ	2.5 J	3.0 J	1.8 J	2.9 J	12.8 J	7.9 J	33.7 J	4.2 J	0.7	0.9 J	0.9 J	4.8 J		
Arsenic	13	16	9.5	8.6	8.2 J	6.1	2.7	3.4	4.8	3.8	8.9	3.2	6.0	11.4	6.0	3.0	16.1	4.7	8.4	5.9	5.2	3.2	3.2 J	10.9 J		
Barium	350	820	466 J	417 J	660 J	430 J	114 J	140 J	148 J	154 J	406 J	53.7 J	211 J	315 J	765 J	86.8 J	564 J	194 J	272 J	201 J	87.4 J	43.6 J	37.3 J	481 J		
Beryllium	7.2	47	0.233 J	0.193 J	0.306 J	0.210 J	0.396	0.310	0.282	0.311	0.198 J	0.343	0.358	0.484	0.154 J	0.287	0.468	0.285	0.235 J	0.302	0.642	0.365	0.411	0.309		
Cadmium	2.5	7.5	32.7	32.2	27.4 J	7.80	0.789	1.90	4.94	2.66	22.9	0.492	3.49	10.6	1.34	1.91	3.64	3.83	4.07	10.1	0.740	0.587	0.217 J	4.34		
Calcium			123000	84700	171000 J	105000	322000	257000	206000	206000	127000	293000	176000	12500	91100	246000	111000	188000	49400	198000	135000	238000	264000	46800		
Chromium	1	19	102	87.5	120 J	101	16.7	69.8	43.2	22.6	98.8	23.6	34.6	56.9	28.8	35.2	44.3	78.0	104	47.1	6.85	11.9	7.18	52.1		
Cobalt			20.7	14.6	18.1 J	8.58	3.25	4.21	5.72	4.93	17.3	3.04	5.77	12.7	1.92	4.39	8.39	6.00	7.31	9.03	5.45	4.40	2.44	8.11		
Copper	50	1720	735 J	1070 J	819 J	1290 J	26.8 J	141 J	194 J	99.6 J	513 J	24.0 J	1230 J	278 J	51.0 J	131 J	473 J	554 J	4840 J	363 J	41.0 J	29.6 J	10.2 J	506 J		
Iron			71200	83600	57600 J	81100	10300	17300	34700	18600	94900	7330	20300	55600	13300	46400	38100	32900	32100	68600	6780	9220	5420	23900		
Lead	63	450	1050 J	1050 J	1370 J	645 J	42.0 J	167 J	873 J	275 J	1130 J	28.5 J	120 J	662 J	165 J	212 J	650 J	357 J	4650 J	335 J	41.4 J	64.5 J	15.5 J	639 J		
Magnesium			11300 J	9530 J	21500 J	8660 J	56800 J	27700 J	30900 J	26600 J	24600 J	19400 J	22600 J	2490 J	6150 J	33500 J	39100 J	21300 J	3530 J	20500 J	7660 J	37700 J	28000 J	10800 J		
Manganese	1600	2000	584 J	586 J	665 J	785 J	201 J	246 J	399 J	362 J	663 J	222 J	333 J	347 J	165 J	386 J	553 J	371 J	251 J	427 J	231 J	282 J	180 J	330 J		
Mercury	0.18	0.73	3.77	2.64	6.77 J	1.33	0.0613	0.314	0.913	0.255	2.39	0.0348	0.0469	0.280	11.7	0.229	0.395	0.144	5.74	1.06	3.88	0.111	0.178	0.600		
Nickel	30	130	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
Potassium			777	597	929 J	632	1030	749	764	874	580	765	800	1080	474	580	1120	505	593	719	959	1440	251	986		
Selenium	3.9	4	UJ	UJ	UJ	UJ	UJ	UJ	0.4	UJ	UJ	UJ	0.9 J	0.8 J	UJ	UJ	1.2 J	UJ	0.5 J	5.9 J	UJ	UJ	UJ	0.6 J		
Silver	2	8.3	3.01 J	97.6 J	4.40 J	1.57 J	U	1.28 J	0.797 J	0.648 J	1.53 J	U	0.733 J	1.01 J	U	0.779 J	1.36 J	0.774 J	1.40 J	1.64 J	U	U	U	1.43 J		
Sodium			1180 J	1110 J	1860 J	898 J	305 J	623 J	440 J	342 J	733 J	158 J	299 J	1510 J	929 J	336 J	838	603 J	1130 J	592 J	567 J	230 J	1160 J	946 J		
Thallium			U	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
Vanadium			20.7	23.2	24.6 J	16.3	13.0	14.0	13.1	20.3	23.8	30.1	98.6	29.6	4.52	9.19	12.3	11.2	15.8	12.1	19.9	9.45	8.24	18.7		
Zinc	109	2480	7060	8910	12800 J	2290	235	6920	1440	837	4270	185	1110	900	889	979	1470	2420	3230	3010	49.1	165	41.5	891		

Notes:

U = The material was analyzed for but not detected at or above the reporting limit. The

J = The associated numerical value is an estimated quantity.

NJ = The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

R = The data are unusable. The sample results are rejected due to serious deficiencies in the ability to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Shaded value - compound detected at concentration greater than the Unrestricted SCO concentration.

Shaded value - compound detected at concentration greater than the Protection of Groundwater SCO concentration.

NYSDEC Subpart 375-6, Remedial Program Soil Cleanup Objectives, December 14, 2006.

TABLE 3
Roth Steel Site - Syracuse, NY
July 2010 Groundwater Sampling Results

DRAFT

CHEMICAL	TOGS 1.1.1 ¹	MW-12	MW-3	MW-10	PW-1 (Pond water)	MW-13	MW-1	MW-6	MW-4	MW-4	MW-2	MW-7	MW-8	MW-9	MW-11
PCBS (ug/L)															
Aroclor 1016		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242		0.57	U	U	0.17 J	U	U	U	U	U	U	0.73	U	U	U
Aroclor 1248		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254		4.4	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1260		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1262		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1268		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total PCBs	0.09	4.97	U	U	0.17 J	U	U	U	U	U	U	0.73	U	U	U
GLYCOLS (mg/L)															
Diethylene glycol		U	U	U	U	UJ	U	U	U	U	U	UJ	U	U	U
Ethylene Glycol	0.05	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Propylene glycol		U	U	U	U	U	U	U	U	U	U	U	U	U	U
SVOCs (ug/L)															
2,2'-Oxybis(1-Chloropropane)		U	U	U	U	UJ	U	U	U	U	U	U	U	U	U
2,4,5-Trichlorophenol		2.3 J	U	U	U	U	U	U	U	U	U	U	U	U	U
2,4,6-Trichlorophenol		1.3 J	U	U	U	U	U	U	U	U	U	U	U	U	U
2,4-Dichlorophenol		4.4 J	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U
2,4-Dimethylphenol		26	5.6	27	U	UJ	UJ	3.6 J	0.78 J	1.0 J	UJ	UJ	UJ	UJ	4.4 J
2,4-Dinitrophenol		UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
2,4-Dinitrotoluene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2,6-Dinitrotoluene	5	U	U	U	U	UJ	U	U	U	U	U	U	U	U	U
2-Chloronaphthalene	10	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Chlorophenol		U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U
2-Methylnaphthalene		3.6 J	0.63 J	2.6 J	U	U	U	U	U	U	U	U	U	1.2	4.4 J
2-Methylphenol		15	9.7	16	U	U	U	5.4	0.62 J	0.68 J	U	U	U	U	3.5 J
2-Nitroaniline	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Nitrophenol		U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U
3,3'-Dichlorobenzidine	5	U	UJ	U	U	UJ	U	U	U	U	U	U	U	U	U
3-Nitroaniline	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol		UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
4-Bromophenyl phenyl ether		U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Chloro-3-methylphenol		U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Chloroaniline	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Chlorophenyl phenyl ether		U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methylphenol		56	23	34	U	U	U	10	5.0 J	4.7 J	U	U	U	1.6 J	9.3 J
4-Nitroaniline	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Nitrophenol		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Acenaphthene	20	U	1.2 J	1.2 J	U	U	U	U	U	U	U	U	U	1.0 J	4.9 J
Acenaphthylene		U	5.2	U	U	UJ	U	U	U	U	U	U	U	U	0.87 J
Acetophenone		3.9 J	3.2 J	5.1	5.4	U	U	U	0.72 J	0.82 J	U	U	U	U	U
Anthracene	50	0.48 J	0.56 J	0.55 J	U	U	U	U	0.72 J	0.59 J	U	U	U	0.72 J	1.9 J
Atrazine	7.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzaldehyde		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzo[a]anthracene	0.002	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzo[a]pyrene	ND	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzo[b]fluoranthene	0.002	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzo[g,h,i]perylene		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzo[k]fluoranthene	0.002	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Biphenyl		U	U	U	U	U	U	U	U	U	U	U	U	U	0.88 J
Bis(2-chloroethoxy)methane	5	U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U
Bis(2-chloroethyl)ether	1	U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U

TABLE 3
Roth Steel Site - Syracuse, NY
July 2010 Groundwater Sampling Results

DRAFT

CHEMICAL	TOGS 1.1.1 ¹	MW-12	MW-3	MW-10	PW-1 (Pond water)	MW-13	MW-1	MW-6	MW-4	MW-4	MW-2	MW-7	MW-8	MW-9	MW-11
Bis(2-ethylhexyl) phthalate	5	4.5 J	U	U	2.3 J	U	U	U	U	U	U	U	U	U	U
Butyl benzyl phthalate	50	2.7 J	U	U	U	U	U	U	U	U	U	U	U	U	U
Caprolactam		U	UJ	U	U	U	U	U	U	U	U	U	U	U	U
Carbazole		U	1.2 J	1.2 J	U	U J	U	0.44 J	U J	0.73 J	U	U	U	3.2 J	11
Chrysene	0.002	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Dibenz[a,h]anthracene		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Dibenzofuran		U	U	0.58 J	U	UJ	U	U	U	U	U	U	U	1.3 J	3.4 J
Diethyl phthalate	50	1.8 J	U	0.93 J	1.8 J	UJ	U	U	U	U	U	U	U	U	U
Dimethyl phthalate	50	U	U	U	U	UJ	U	5.0	U	U	U	U	U	U	U
Di-n-butyl phthalate	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Di-n-octyl phthalate		U	U	U	U	1.3 J	U	U	U	U	U	U	U	U	U
Fluoranthene	50	0.82 J	0.77 J	0.45 J	U	0.50 J	U	0.46 J	0.53 J	0.61 J	U	0.44 J	U	U	1.7 J
Fluorene	50	0.69 J	1.3 J	1.0 J	U	0.38 J	U	U	0.59 J	U	U	U	U	2.8 J	4.6 J
Hexachlorobenzene	0.04	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hexachlorobutadiene	0.5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Hexachlorocyclopentadiene	5	U	UJ	U	U	U	U	U	U	U	U	U	U	U	U
Hexachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Indeno[1,2,3-cd]pyrene	0.002	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Isophorone	50	U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	U
Naphthalene	10	7.5	2.7 J	5.2	U	1.2 J	0.83 J	5.3	1.0 J	1.1 J	U	U	U	2.4 J	30
Nitrobenzene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U
N-Nitrosodi-n-propylamine		U	U	U	U	UJ	U	U	U	U	U	U	U	U	U
N-Nitrosodiphenylamine	50	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Pentachlorophenol	2	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Phenanthrene	50	0.94 J	2.5 J	1.6 J	U	1.2 J	0.46 J	1.4 J	2.3 J	2.0 J	0.45 J	U	U	13	9.2
Phenol	*	3.6 J	8.3	14	U	U	U	4.0 J	8.9	9.3	U	U	U	U	4.0 J
Pyrene	50	0.37 J	0.55 J	U	U	U	U	U	0.42 J	0.46 J	U	U	U	U	1.2 J
VOCs (ug/L)															
1,1,1-Trichloroethane	5	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichlorotrifluoroethane		U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dibromo-3-chloropropane	0.04	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
1,2-Dibromoethane (EDB)		U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	0.6	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene, Total		U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	1	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene		U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene		U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone (MEK)		U	42	170	14	U	U	U	13	13	U	U	U	4.5 J	3.6 J
2-Hexanone	50	U	U	3.1 J	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone (MIBK)		55	12	57	3.2 J	U	U	U	U	U	U	U	U	U	U
Acetone	50	17	96	220	120	4.5 J	7.0 J	16	42	44	16	6.7 J	U	18	19
Benzene	1	13	90	7.5	U	0.61 J	0.85 J	2.3	2.0	1.9	0.58 J	0.79 J	U	U	0.96 J
Bromodichloromethane	50	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
Bromoform	50	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	UJ
Bromomethane	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide		2.6 J	UJ	UJ	1.5 J	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	0.82 J	U
Carbon Tetrachloride	5	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chlorodibromomethane		UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U

TABLE 3
Roth Steel Site - Syracuse, NY
July 2010 Groundwater Sampling Results

DRAFT

CHEMICAL	TOGS 1.1.1 ¹	MW-12	MW-3	MW-10	PW-1 (Pond water)	MW-13	MW-1	MW-6	MW-4	MW-4	MW-2	MW-7	MW-8	MW-9	MW-11
Chloroethane	5	U	U	U	U	0.61 J	U	U	U	U	U	U	U	U	U
Chloroform	7	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane		UJ	UJ	UJ	UJ	U	U	U	U	U	U	0.66 J	U	U	U
cis-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	0.4	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Cyclohexane		U	1.9	0.55 J	U	U	U	1.4	1.1	1.0	3.2	2.2	U	U	0.58 J
Dichlorodifluoromethane	5	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5	13	5.0	6.4	U	U	0.98 J	U	2.6	2.6	U	U	U	U	U
Isopropylbenzene	5	1.0	U	U	U	U	U	U	0.85 J	0.86 J	U	U	U	U	U
Methyl Acetate		U	U	U	U	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ	UJ
Methyl tert-Butyl Ether	10	22	13	38	U	9.6	1.7	9.5	26	27	17	0.58 J	2.6	2.5	3.8
Methylcyclohexane		0.85 J	0.60 J	U	U	U	U	U	1.6	1.6	1.3	1.8	U	U	U
Methylene Chloride	5	0.99 J	52	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	930	9.0	U	2.9	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	5	46	71	12	0.95 J	U	U	1.4	11	11	U	U	U	U	U
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	0.4	UJ	UJ	UJ	UJ	U	U	U	U	U	U	U	U	U	U
Trichloroethene	5	U	U	U	U	U	U	U	0.55 J	U	U	U	U	U	U
Trichlorofluoromethane	5	U	U	U	1.4	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	4.9	1.4	U	U	U	U	U	9.5	10	U	U	U	U	U
Xylenes, total	5	59	29	20	U	U	U	2.7	15	15	U	U	U	U	U
Metals (mg/L)															
Aluminum	2	1.23 J	U	0.0970 J	0.17 J	0.456 J	0.2	0.2	0.137 J	0.08 J	0.222 J	2.2 J	U	U	0.227 J
Antimony	0.006	U	U	0.0076 J	0.01 J	U	U	0.02	U	U	U	U	U	U	U
Arsenic	0.05	0.01 J	U	0.0154	U	U	U	0.01	U	U	U	U	0.0079 J	U	U
Barium	2	1.23	1.94	1.7600	0.54	0.0496	1.09	0.245	0.223	0.231	1.67	3.15	0.0408	0.108	0.576
Beryllium	0.003	U	U	0.0003 J	U	U	0.0004 J	0.0003 J	0.0003 J	0.0004 J	U	0.0003 J	U	0.0003 J	U
Cadmium	0.01	0.0016	U	U	0.0006 J	U	U	U	U	U	U	0.0064	U	U	U
Calcium		16.20	191	532.00	64.70	39.5	351	567	740	780	59.8	166	65.3	668	110
Chromium	0.1	0.0065	U	0.0040	0.0013 J	U	U	0.0021 J	U	U	0.0016 J	0.0154	U	U	U
Cobalt		0.0011 J	U	0.0040	0.0008 J	U	U	U	U	0.0006 J	0.0015 J	0.003 J	U	U	U
Copper	1	0.0354	U	0.0032 J	0.0180	0.0045 J	0.0023 J	0.0044 J	0.0023 J	0.0023 J	0.0056 J	0.243	0.0029 J	0.0024 J	0.0047 J
Iron	0.6	2.5000 J	1.13 J	0.0700 J	1.32 J	0.246 J	1.99 J	U	0.035 J	0.023 J	9.22 J	16.9 J	0.096 J	0.042 J	2.03 J
Lead	0.05	0.1020	U	0.0072	0.0342	0.0049 J	U	U	U	U	0.0056	0.239	U	U	0.0115
Magnesium	35	9.1800	122	68.50	45.7	13.3	555	U	0.552	0.27	19.6	112	55.1	0.098 J	19.4
Manganese	1	0.0258	0.0775	0.0035	0.08	0.0209	0.315	0.0008 J	0.0003 J	0.0002 J	0.0501	0.239	0.0264	0.0004 J	0.0707
Mercury	0.0014	0.0002	0.0002	0.0001 J	U	0.0006	0.0001 J	0.0003	U	U	0.0001 J	0.0007	0.0001 J	0.0009	U
Nickel	0.2	0.0169	0.0045 J	0.0241	0.02	0.0062 J	0.0104	0.0013 J	0.0141	0.0143	0.0061 J	0.0422	0.0039 J	0.0018 J	0.0062 J
Potassium		79.10	51.6	90.90	67.20	30.1	59.2	30.6	35.1	36.7	53.6	40.8	30.3	33.3	49.1
Selenium	0.02	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Silver	0.1	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sodium		549 J	229 J	696 J	392 J	251 J	180 J	214 J	225 J	234 J	228 J	209 J	203 J	264 J	287 J
Thallium	0.0005	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Vanadium		0.0029 J	U	U	U	0.002 J	U	0.0028 J	U	U	0.0024 J	0.006	U	U	0.0012 J
Zinc	5	0.3000 J	0.0062 J	0.0076 J	0.241 J	0.0178 J	0.0189 J	U	0.0062 J	0.0045 J	0.0141 J	1.3 J	0.0024 J	0.0044 J	0.0113 J

Notes: U = The material was analyzed for but not detected at, or above, the reporting limit. The associated numerical value is the sample quantitation limit.

J = The associated numerical value is an estimated quantity.

Shaded value - Compound detected at a concentration in exceedance of the guidance or standard value.

Note 1 - Guidance or Standard Values - NYSDEC, Division of Water, TOGS (1.1.1) [NYSDEC, 1998, with addenda through 2004].

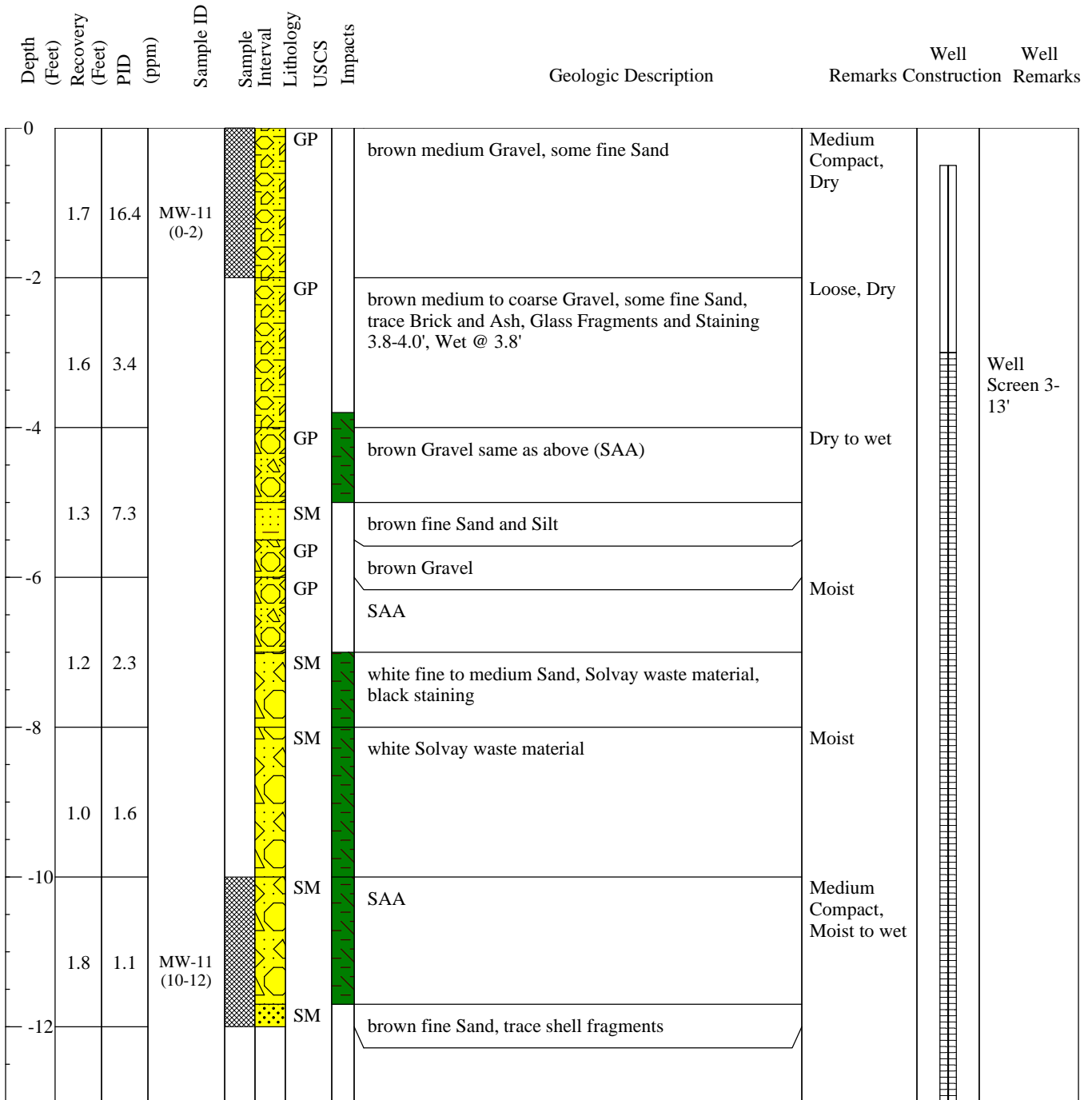
Project Name: Roth Steel Facility Client/Project Number: Roth Steel/60156356 Date Started/Date Completed: 6/22/2010 Boring Location: North central part of the Site Drilling Company: Parratt Wolff	Sampling Method: Hollow Stem Auger PVC Elevation (ft/msl, NAVD 88): 372.90 Ground Elevation (ft/msl, NAVD 88): 371.25 Total Depth: 12 Feet Logged By: Keith Stahle
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Depth (Feet)	Recovery (Feet)	PID	(ppm)	Sample ID	Sample Interval	Lithology	USCS	Impacts	Geologic Description	Well Construction	Well Remarks
0									GP brown medium Gravel, some fine to medium Sand, Fill Material, trace brick and ash	Medium Compaction, Dry	
1.3	35.0			MW-10 (0-2)							
-2									GP brown; same as above (SAA) large rock fragment in tip of spoon	Wet @ 3.5'	Well Screen 2-12'
0.4	19.3										
-4									GP brown; SAA Gravel, dark brown stain from 5.5-6.0'	Loose, Wet	
1.5	4.9										
-6									GP brown Gravel; some brick fragments and cinders throughout	Loose, Wet	
0.8	1.8			MW-10 (6-8)							
-8									GP brown; SAA	Wet	
0.4	1.3										
-10									GP white Solvay waste material	Moist, Medium Compaction	
1.8	1.4										
-12											

 Staining or visual impacts observed

Comments: MW-10 sampled for VOCs, SVOCs, PCBs, Glycols, TAL Metals, and Mercury

Project Name: Roth Steel Facility Client/Project Number: Roth Steel/60156356 Date Started/Date Completed: 6/22/2010 Boring Location: South central part of the Site Drilling Company: Parratt Wolff	Sampling Method: Hollow Stem Auger PVC Elevation (ft/msl, NAVD 88): 373.52 Ground Elevation (ft/msl, NAVD 88): 371.69 Total Depth: 13 Feet Logged By: Keith Stahle
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Staining or visual impacts observed

Comments: MW-11 sampled for VOCs, SVOCs, PCBs, Glycols, TAL Metals, and Mercury

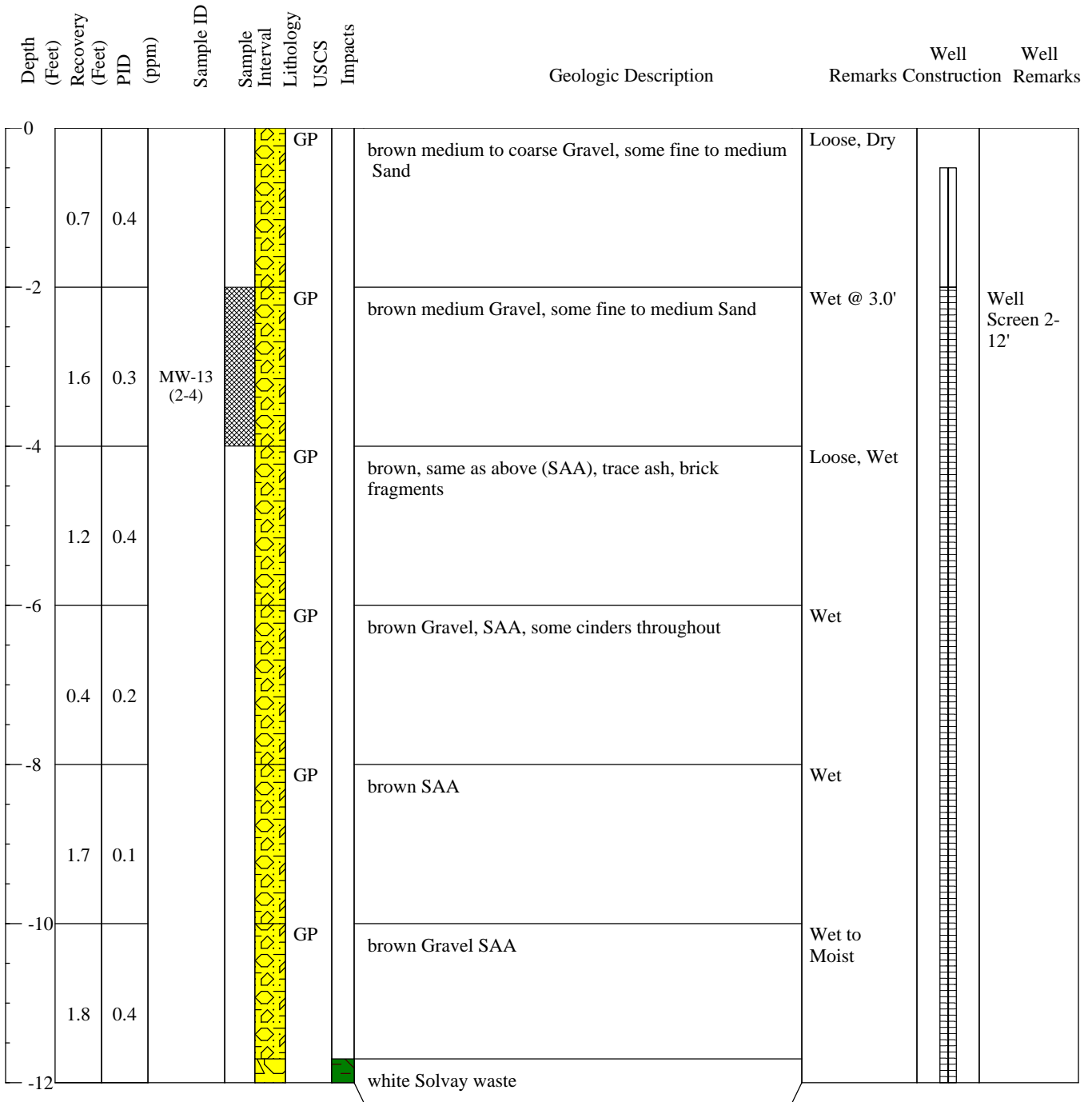
Project Name: Roth Steel Facility Client/Project Number: Roth Steel/60156356 Date Started/Date Completed: 6/23/2010 Boring Location: Central part of the Site Drilling Company: Parratt Wolff	Sampling Method: Hollow Stem Auger PVC Elevation (ft/msl, NAVD 88): 372.83 Ground Elevation (ft/msl, NAVD 88): 371.00 Total Depth: 12 Feet Logged By: Keith Stahle
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Depth (Feet)	Recovery (Feet)	PID	(ppm)	Sample ID	Sample Interval	Lithology	USCS	Impacts	Geologic Description	Well Construction	Well Remarks
0									brown coarse Gravel, some medium Sand, some metal debris, large rock in tip of spoon		
0.5	2.0										
-2									brown Fill, Gravel, Sand, organics, metal debris		
0.3	1.5										
-4									brown, fine Sand, trace medium Gravel		
1.8	6.6			MW-12 (4-6)							
-6									brown fine to medium Sand, some medium Gravel, trace cinders		
1.5	6.4										
-8									brown medium Sand, black stain		
2.0	2.4			MW-12 (8-10)							
-10									white Solvay waste		
									white Solvay waste		
1.5	0.8										
-12											

 Staining or visual impacts observed

Comments: MW-12 sampled for VOCs, SVOCs, PCBs, Glycols, TAL Metals, and Mercury

Project Name: Roth Steel Facility Client/Project Number: Roth Steel/60156356 Date Started/Date Completed: 6/22/2010 Boring Location: Northwest part of the Site Drilling Company: Parratt Wolff	Sampling Method: Hollow Stem Auger PVC Elevation (ft/msl, NAVD 88): 374.06 Ground Elevation (ft/msl, NAVD 88): 371.98 Total Depth: 12 Feet Logged By: Keith Stahle
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 Staining or visual impacts observed

Comments: MW-13 sampled for VOCs, SVOCs, PCBs, Glycols, TAL Metals, and Mercury

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-1 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-1 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	17.61	feet			
2. D = Casing Diameter (I.D.):	0.17	feet			
3. W = Depth to Water:	5.48	feet			
4. C = Column of Water in Well:	12.13	feet			
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	1.98	gal			
6. 3(V) = Target Purge Volume	5.93	gal			

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings							
		24 hr	1720	1725	1730	1733	1735	1740	1745
Time	24 hr		1720	1725	1730	1733	1735	1740	1745
Water Level (0.33)	feet		5.85	5.85	5.85	5.82	5.82	5.83	5.83
Volume Purged	gal		0.00	<0.25	<0.25	0.30	0.50	0.75	0.90
Flow Rate	mL / min		100	100	100	100	100	100	100
Turbidity (+/- 10% or < 50)	NTU		5.12	4.58	4.10	4.58	5.51	6.27	5.53
Dissolved Oxygen (+/- 10%)	%		49.90	40.80	33.40	23.50	14.10	13.90	13.70
Dissolved Oxygen (+/- 10%)	mg/L		4.21	3.52	2.87	2.05	1.24	1.23	1.23
Eh / ORP (+/- 10)	MeV		39.3	50.7	60.1	56.1	-10.4	-13.3	-18.2
Specific Conductivity	mS/cm^c		1.645	1.784	2.365	3.339	4.864	5.189	5.203
Conductivity (+/- 3%)	µmho / cm		1.583	1.702	2.242	3.122	4.492	4.699	4.792
pH (+/- 0.1)	pH unit		8.16	8.05	7.86	7.65	7.40	7.37	7.36
Temp (+/- 0.5)	C		23.02	22.40	21.97	21.43	20.72	20.55	20.53
Color	Visual		clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory		none	none	none	none	none	none	none

Comments: Started purge @ 1720
Sampled well @ 1745

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-2 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-2 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>17</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>7.55</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.45</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.54</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.62</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	935	940	945	950	955	1000	
Water Level (0.33)	feet	7.56	7.56	7.56	7.54	7.54	7.54	
Volume Purged	gal	0.00	<0.25	0.25	0.40	0.60	0.80	
Flow Rate	mL / min	100	100	100	100	100	100	
Turbidity (+/- 10% or < 50)	NTU	44.30	28.70	25.60	23.80	17.80	15.90	
Dissolved Oxygen (+/- 10%)	%	14.80	10.20	7.60	7.00	7.40	7.20	
Dissolved Oxygen (+/- 10%)	mg/L	1.41	0.97	0.72	0.67	0.71	0.71	
Eh / ORP (+/- 10)	MeV	-54.9	-85	-100.5	-102.4	-105.1	-105.2	
Specific Conductivity	mS/cm^c	1.69	1.687	1.688	1.686	1.679	1.673	
Conductivity (+/- 3%)	µmho / cm	1.441	1.44	1.43	1.432	1.432	1.424	
pH (+/- 0.1)	pH unit	8.77	8.49	8.22	8.12	8.08	8.02	
Temp (+/- 0.5)	C	17.50	17.32	17.25	17.13	17.08	17.07	
Color	Visual	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	

Comments: Started purge @ 935
Sampled well @ 1000

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-3 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-3 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	17.83	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	0.17	feet		1-inch	0.08
3. W = Depth to Water:	5.59	feet		2-inch	0.17
4. C = Column of Water in Well:	12.24	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	2.00	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	5.99	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1213	1218	1223	1228	1233	1238	1243
Water Level (0.33)	feet	6.00	6.15	6.18	6.20	6.24	6.24	6.24
Volume Purged	gal	0.00	<0.25	<0.25	0.25	0.40	0.60	0.75
Flow Rate	mL / min	100	100	100	100	100	100	100
Turbidity (+/- 10% or < 50)	NTU	29.6	20.7	20.3	14.6	10.2	8.5	7.2
Dissolved Oxygen (+/- 10%)	%	16.30	13.70	10.20	10.80	9.40	9.80	7.50
Dissolved Oxygen (+/- 10%)	mg/L	1.35	1.20	0.95	0.99	0.87	0.91	0.69
Eh / ORP (+/- 10)	MeV	-54.8	-76.1	-102.6	-141.6	-168.5	-199.6	-214
Specific Conductivity	mS/cm^c	3.793	3.716	3.656	3.531	3.45	3.374	3.273
Conductivity (+/- 3%)	µmho / cm	3.488	3.345	3.269	3.13	3.051	2.987	2.874
pH (+/- 0.1)	pH unit	7.87	7.78	7.77	7.89	8.06	8.23	8.53
Temp (+/- 0.5)	C	20.17	19.78	19.43	19.03	18.92	18.98	18.61
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none	none	none	none

Comments: Started purge @ 1210
Sampled well @ 1255

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-3 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-3 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>17.83</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>5.59</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>12.24</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>2.00</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>5.99</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings					
Time	24 hr	1248	1253				
Water Level (0.33)	feet	6.24	6.24				
Volume Purged	gal	0.90	1.00				
Flow Rate	mL / min	100	100				
Turbidity (+/- 10% or < 50)	NTU	8.2	7.9				
Dissolved Oxygen (+/- 10%)	%	7.10	6.90				
Dissolved Oxygen (+/- 10%)	mg/L	0.72	0.69				
Eh / ORP (+/- 10)	MeV	-217	-219.1				
Specific Conductivity	mS/cm^c	3.223	3.219				
Conductivity (+/- 3%)	µmho / cm	2.82	2.821				
pH (+/- 0.1)	pH unit	8.73	8.71				
Temp (+/- 0.5)	C	18.38	18.44				
Color	Visual	clear	clear				
Odor	Olfactory	none	none				

Comments: Started purge @ 1210
Sampled well @ 1255

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-4 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-4 QA/QC Collected? Duplicate

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>16.99</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>6.48</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>10.51</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.71</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>5.14</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	758	803	808	813	818	823	828
Water Level (0.33)	feet	6.60	6.60	6.60	6.61	6.61	6.60	6.6
Volume Purged	gal	0.00	<0.25	0.25	0.40	0.60	0.75	0.95
Flow Rate	mL / min	100	100	100	150	150	150	150
Turbidity (+/- 10% or < 50)	NTU	13.70	5.92	6.12	7.13	4.75	3.86	2.17
Dissolved Oxygen (+/- 10%)	%	15.60	8.80	8.10	7.30	5.90	5.50	5.00
Dissolved Oxygen (+/- 10%)	mg/L	1.39	0.86	0.80	0.72	0.59	0.55	0.51
Eh / ORP (+/- 10)	MeV	-42.6	-50.6	-58.2	-68.2	-73.8	-79.7	-82.6
Specific Conductivity	mS/cm^c	7.804	7.595	8.006	8.008	7.996	7.969	7.969
Conductivity (+/- 3%)	µmho / cm	6.376	6.451	6.452	6.415	6.381	6.352	6.349
pH (+/- 0.1)	pH unit	12.34	12.39	12.41	12.43	12.44	12.44	12.44
Temp (+/- 0.5)	C	15.37	14.96	14.83	14.56	14.41	14.39	14.30
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none	none	none	none

Comments: Started purge @ 758
Sampled well @ 828

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-6 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-6 QA/QC Collected? Duplicate

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>17.24</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>6.37</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>10.87</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.77</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>5.32</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	650	655	700	705	710	715	
Water Level (0.33)	feet	6.40	6.40	6.40	6.40	6.40	6.40	
Volume Purged	gal	0.00	<0.25	0.25	0.40	0.60	0.80	
Flow Rate	mL / min	100	100	100	100	100	100	
Turbidity (+/- 10% or < 50)	NTU	3.56	1.19	1.01	1.34	1.73	0.77	
Dissolved Oxygen (+/- 10%)	%	26.00	17.70	15.00	14.20	14.40	14.10	
Dissolved Oxygen (+/- 10%)	mg/L	2.59	1.73	1.49	1.44	1.50	1.44	
Eh / ORP (+/- 10)	MeV	12.8	1.8	-3.9	-6.8	-9.9	-13.3	
Specific Conductivity	mS/cm^c	5.366	5.488	5.526	5.542	5.57	5.589	
Conductivity (+/- 3%)	µmho / cm	4.413	4.469	4.48	4.489	4.483	4.489	
pH (+/- 0.1)	pH unit	11.95	12.05	12.07	12.08	12.11	12.12	
Temp (+/- 0.5)	C	15.72	15.24	15.11	15.03	14.99	14.99	
Color	Visual	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	

Comments: Started purge @ 650
Sampled well @ 715

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-7 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-7 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>15.1</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>6.01</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.09</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.48</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.45</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1049	1054	1059	1104	1109	1114	1119
Water Level (0.33)	feet	6.05	6.08	6.08	6.08	6.08	6.08	6.08
Volume Purged	gal	0	70.25	0.25	0.4	0.6	0.8	1.0
Flow Rate	mL / min	100	100	100	100	100	100	100
Turbidity (+/- 10% or < 50)	NTU	663	490	478	520	506	429	346
Dissolved Oxygen (+/- 10%)	%	15.3	12.9	13.5	14.1	14.2	14.3	14.7
Dissolved Oxygen (+/- 10%)	mg/L	1.35	1.18	1.19	1.30	1.26	1.29	1.30
Eh / ORP (+/- 10)	MeV	-1.9	-40.8	-68.0	-75.3	-85.0	-85.1	-88.6
Specific Conductivity	mS/cm^c	2.798	2.787	2.782	2.772	2.771	2.769	2.749
Conductivity (+/- 3%)	µmho / cm	2.560	2.518	2.520	2.526	2.531	2.536	2.543
pH (+/- 0.1)	pH unit	7.51	7.30	7.21	7.17	7.16	7.14	7.12
Temp (+/- 0.5)	C	20.61	19.93	20.10	20.35	20.37	20.41	20.49
Color	Visual	cloudy	cloudy	cloudy	cloudy	cloudy	cloudy	cloudy
Odor	Olfactory	strong	strong	strong	strong	none	none	none

Comments: Started purge @ 1049
Sampled well @ 1129

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-7 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-7 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>15.1</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>6.01</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.09</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.48</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.45</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings					
Time	24 hr	1124	1129				
Water Level (0.33)	feet	6.08	6.08				
Volume Purged	gal	1.2	1.4				
Flow Rate	mL / min	100	100				
Turbidity (+/- 10% or < 50)	NTU	302	299				
Dissolved Oxygen (+/- 10%)	%	14.9	14.4				
Dissolved Oxygen (+/- 10%)	mg/L	1.36	1.39				
Eh / ORP (+/- 10)	MeV	-89.4	-93.2				
Specific Conductivity	mS/cm^c	2.739	2.738				
Conductivity (+/- 3%)	µmho / cm	2.534	2.525				
pH (+/- 0.1)	pH unit	7.4	7.11				
Temp (+/- 0.5)	C	20.55	20.49				
Color	Visual	cloudy	cloudy				
Odor	Olfactory	none	none				

Comments: Started purge @ 1049
Sampled well @ 1129

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-8 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-8 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>15.15</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>10.77</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>4.38</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>0.71</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>2.14</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1245	1250	1255	1300	1305	1310	1315
Water Level (0.33)	feet	10.82	10.85	10.85	10.85	10.85	10.85	10.85
Volume Purged	gal	0	70.25	70.25	0.25	0.4	0.6	0.75
Flow Rate	mL / min	100	100	100	100	100	100	100
Turbidity (+/- 10% or < 50)	NTU	12.7	10.3	18.6	4.05	3.07	1.99	1.91
Dissolved Oxygen (+/- 10%)	%	38.4	31.6	27.3	24.0	21.9	20.9	20.3
Dissolved Oxygen (+/- 10%)	mg/L	3.47	2.90	2.49	2.18	1.99	1.99	1.91
Eh / ORP (+/- 10)	MeV	-159.2	-193.2	-216.7	-230.6	-239.9	-237.1	-246.8
Specific Conductivity	mS/cm^c	1.646	1.641	1.636	1.631	1.631	1.628	1.625
Conductivity (+/- 3%)	µmho / cm	1.461	1.457	1.456	1.459	1.454	1.449	1.443
pH (+/- 0.1)	pH unit	7.82	7.81	7.79	7.77	7.70	7.65	7.66
Temp (+/- 0.5)	C	19.12	19.15	19.29	19.48	19.33	19.22	19.18
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	sulfur	sulfur	sulfur	sulfur	sulfur	sulfur	none

Comments: Started purge @ 1245
Sampled well @ 1315

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-9 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-9 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>15.08</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>10.82</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>4.26</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>0.69</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>2.08</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1355	1400	1405	1410	1415	1420	1425
Water Level (0.33)	feet	11.00	11.03	11.09	11.11	11.12	11.12	11.12
Volume Purged	gal	0	70.25	0.25	0.35	0.5	0.6	0.7
Flow Rate	mL / min	100	100	100	100	100	100	100
Turbidity (+/- 10% or < 50)	NTU	18.4	17.0	10.99	11.4	11.5	4.58	4.44
Dissolved Oxygen (+/- 10%)	%	51.5	43.2	30.4	23.1	16.1	13.8	12.5
Dissolved Oxygen (+/- 10%)	mg/L	4.55	3.84	2.73	2.09	1.46	1.26	1.13
Eh / ORP (+/- 10)	MeV	-158.9	-162.6	-166.0	-165.8	-165.3	-165.4	-165.6
Specific Conductivity	mS/cm^c	6.395	6.409	6.447	6.446	6.435	6.435	6.434
Conductivity (+/- 3%)	µmho / cm	5.833	5.73	5.718	5.681	5.678	5.679	5.680
pH (+/- 0.1)	pH unit	11.94	11.94	11.94	11.96	11.97	11.97	11.96
Temp (+/- 0.5)	C	19.75	19.40	19.03	18.78	18.83	18.81	18.86
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	sulfur	sulfur	sulfur	none	none	none

Comments: Started purge @ 1355
Sampled well @ 1430

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-9 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-9 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>15.08</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>10.82</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>4.26</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>0.69</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>2.08</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings					
Time	24 hr	1430					
Water Level (0.33)	feet	11.12					
Volume Purged	gal	0.8					
Flow Rate	mL / min	100					
Turbidity (+/- 10% or < 50)	NTU	4.92					
Dissolved Oxygen (+/- 10%)	%	12.8					
Dissolved Oxygen (+/- 10%)	mg/L	1.17					
Eh / ORP (+/- 10)	MeV	-165.8					
Specific Conductivity	mS/cm^c	6.433					
Conductivity (+/- 3%)	µmho / cm	5.680					
pH (+/- 0.1)	pH unit	11.96					
Temp (+/- 0.5)	C	18.85					
Color	Visual	clear					
Odor	Olfactory	none					

Comments: Started purge @ 1355
Sampled well @ 1430

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-10 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-10 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>13.92</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>4.41</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.51</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.55</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.65</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1429	1434	1439	1444	1449	1454	
Water Level (0.33)	feet	4.47	4.47	4.47	4.47	4.47	4.47	
Volume Purged	gal	0	>0.25	0.25	0.5	0.65	0.85	
Flow Rate	mL / min	100	100	100	100	100	100	
Turbidity (+/- 10% or < 50)	NTU	59.9	55.2	39.8	30.5	19.4	16.9	
Dissolved Oxygen (+/- 10%)	%	13.8	13.5	10.6	9.3	9.3	9.6	
Dissolved Oxygen (+/- 10%)	mg/L	1.24	1.26	1.00	0.84	0.88	0.88	
Eh / ORP (+/- 10)	MeV	-104.9	-150.1	-165	-176.9	-180.1	-183.2	
Specific Conductivity	mS/cm^c	6.135	6.043	6.078	6.096	6.098	6.100	
Conductivity (+/- 3%)	µmho / cm	5.437	5.205	5.175	5.183	5.186	5.280	
pH (+/- 0.1)	pH unit	8.71	8.71	8.74	8.77	8.79	8.80	
Temp (+/- 0.5)	C	19.12	17.66	17.22	17.72	17.80	17.83	
Color	Visual	clear	clear	clear	clear	clear	clear	
Odor	Olfactory	none	none	none	none	none	none	

Comments: Started purge @ 1427
Sampled well @ 1455

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-11 Date: July 14, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-11 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>14.96</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>5.12</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.84</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.60</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.81</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1522	1527	1532	1537	1542	1547	1552
Water Level (0.33)	feet	5.12	5.13	5.15	5.15	5.15	5.14	5.14
Volume Purged	gal	0	>0.25	>0.25	0.25	0.5	0.75	1.0
Flow Rate	mL / min	100	100	100	100	150	150	150
Turbidity (+/- 10% or < 50)	NTU	68.8	47.6	42.8	35.9	35.7	32.6	33.0
Dissolved Oxygen (+/- 10%)	%	60.8	60.0	56.5	57.8	47.5	48.7	47.6
Dissolved Oxygen (+/- 10%)	mg/L	5.69	5.41	5.36	5.36	4.62	4.69	4.65
Eh / ORP (+/- 10)	MeV	-38.4	-42.9	-48.5	-52.1	-58.5	-62.1	-62.9
Specific Conductivity	mS/cm^c	1.821	1.760	1.755	1.761	1.767	1.768	1.767
Conductivity (+/- 3%)	µmho / cm	1.596	1.568	1.567	1.570	1.579	1.579	1.577
pH (+/- 0.1)	pH unit	10.52	10.25	10.17	10.18	10.18	10.15	10.15
Temp (+/- 0.5)	C	18.51	19.28	19.38	19.32	19.32	19.39	19.40
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none	none	none	none

Comments: Started purge @ 1522
Sampled well @ 1552

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-12 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-12 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>13.75</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>4.32</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.43</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.54</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.61</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	959	1004	1009	1014	1019	1024	1029
Water Level (0.33)	feet	4.32	4.32	4.32	4.32	4.32	4.32	4.32
Volume Purged	gal	0	<0.25	0.25	0.5	0.75	1.25	1.5
Flow Rate	mL / min	100	100	100	250	300	300	300
Turbidity (+/- 10% or < 50)	NTU	433	426	413	339	240	134	107.6
Dissolved Oxygen (+/- 10%)	%	14.1	10.8	7.1	6.6	5.6	5.6	7.0
Dissolved Oxygen (+/- 10%)	mg/L	0.855	0.94	0.62	0.58	0.50	0.50	0.63
Eh / ORP (+/- 10)	MeV	91.2	69.3	74.7	82.6	97.9	107.7	111.6
Specific Conductivity	mS/cm^c	2.652	2.541	2.520	2.510	2.509	2.518	2.528
Conductivity (+/- 3%)	µmho / cm	2.533	2.388	2.345	2.329	2.308	2.308	2.296
pH (+/- 0.1)	pH unit	8.93	9.02	9.04	9.04	9.03	9.01	9.01
Temp (+/- 0.5)	C	22.53	21.81	21.42	21.27	20.73	20.47	20.19
Color	Visual	cloudy	cloudy	cloudy	cloudy	cloudy	cloudy	cloudy
Odor	Olfactory	mild	mild	none	none	none	none	none

Comments: Started purge @ 957
Sampled well @ 1055

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-12 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-12 QA/QC Collected? No

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>13.75</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>4.32</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>9.43</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.54</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.61</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings					
Time	24 hr	1034	1039	1044	1049	1054	
Water Level (0.33)	feet	4.32	4.32	4.32	4.32	4.32	
Volume Purged	gal	1.75	2.00	2.25	2.75	3.0	
Flow Rate	mL / min	300	300	300	300	300	
Turbidity (+/- 10% or < 50)	NTU	92.2	76.4	60.0	54.6	50.9	
Dissolved Oxygen (+/- 10%)	%	5.9	6.7	6.1	7.3	6.3	
Dissolved Oxygen (+/- 10%)	mg/L	0.57	0.60	0.51	0.60	0.57	
Eh / ORP (+/- 10)	MeV	103.9	96.4	98.7	99.4	97.9	
Specific Conductivity	mS/cm^c	2.543	2.569	2.583	2.588	2.600	
Conductivity (+/- 3%)	µmho / cm	2.308	2.329	2.332	2.345	2.342	
pH (+/- 0.1)	pH unit	9.02	8.99	8.96	8.96	8.96	
Temp (+/- 0.5)	C	20.15	20.12	19.93	20.00	19.93	
Color	Visual	cloudy	cloudy	cloudy	clear	clear	
Odor	Olfactory	none	none	none	none	none	

Comments: Started purge @ 957
Sampled well @ 1055

* Three consecutive readings within range indicates stabilization of that parameter.

Monitoring Well Purging / Sampling Form

Project Name and Number: Roth Steel Site 60156356.10

Monitoring Well Number: MW-13 Date: July 13, 2010

Samplers: Cristine Vinciguerra and Greta White

Sample Number: MW-13 QA/QC Collected? MS/MSD

Purging / Sampling Method: Low Flow / Peristaltic Pump

1. L = Well Depth:	<u>13.95</u>	feet		D (inches)	D (feet)
2. D = Casing Diameter (I.D.):	<u>0.17</u>	feet		1-inch	0.08
3. W = Depth to Water:	<u>5.62</u>	feet		2-inch	0.17
4. C = Column of Water in Well:	<u>8.33</u>	feet		3-inch	0.25
5. V = Volume of Water in Well = C(3.14159)(0.5D) ² (7.48)	<u>1.36</u>	gal		4-inch	0.33
6. 3(V) = Target Purge Volume	<u>4.07</u>	gal		6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using YSI and Turbidity Meter

Parameter	Units	Readings						
Time	24 hr	1540	1545	1550	1555	1600	1605	1610
Water Level (0.33)	feet	5.62	5.62	5.62	5.62	5.62	5.62	5.62
Volume Purged	gal	0	>0.25	0.25	0.5	0.75	1.00	100
Flow Rate	mL / min	100	100	100	150	150	150	150
Turbidity (+/- 10% or < 50)	NTU	51.8	40.2	38.3	35.7	29.8	26.4	30.4
Dissolved Oxygen (+/- 10%)	%	27.0	9.5	7.5	7.3	7.2	7.1	7.2
Dissolved Oxygen (+/- 10%)	mg/L	2.37	0.89	0.70	0.70	0.70	0.69	0.70
Eh / ORP (+/- 10)	MeV	25.5	24.4	26.5	29.4	32.0	34.7	35.6
Specific Conductivity	mS/cm^c	1.598	1.459	1.468	1.463	1.464	1.467	1.465
Conductivity (+/- 3%)	µmho / cm	1.403	1.281	1.243	1.234	1.232	1.230	1.223
pH (+/- 0.1)	pH unit	8.44	8.28	8.19	8.13	8.10	8.07	8.06
Temp (+/- 0.5)	C	19.23	17.42	16.95	16.77	16.69	16.51	16.45
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	none	none	none	none	none	none	none

Comments: Started purge @ 1540
Sampled well @ 1610

* Three consecutive readings within range indicates stabilization of that parameter.

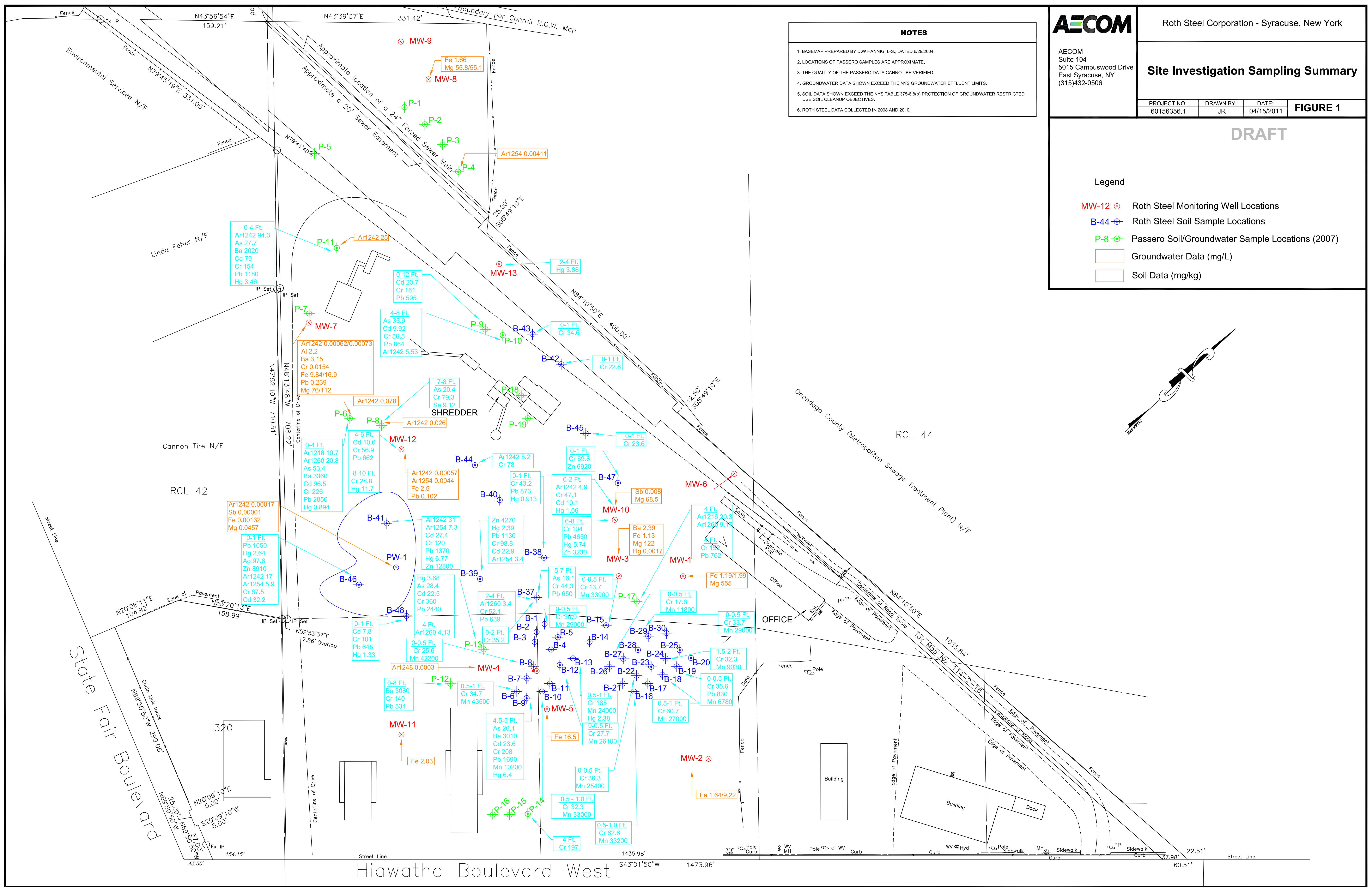
NOTES

1. BASEMAP PREPARED BY D.W HANNIG, L.S., DATED 6/29/2004.
2. LOCATIONS OF PASSERO SAMPLES ARE APPROXIMATE.
3. THE QUALITY OF THE PASSERO DATA CANNOT BE VERIFIED.
4. GROUNDWATER DATA SHOWN EXCEED THE NYS GROUNDWATER EFFLUENT LIMITS.
5. SOIL DATA SHOWN EXCEED THE NYS TABLE 375-6.8(b) PROTECTION OF GROUNDWATER RESTRICTED USE SOIL CLEANUP OBJECTIVES.
6. ROTH STEEL DATA COLLECTED IN 2008 AND 2010.

DRAFT

Legend

- ⊙ MW-12 Roth Steel Monitoring Well Locations
- ⊕ B-44 Roth Steel Soil Sample Locations
- ⊕ P-8 Passero Soil/Groundwater Sample Locations (2007)
- Groundwater Data (mg/L)
- Soil Data (mg/kg)



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