











**Table 6**  
**Soil Sample Results Summary**  
**Chromate Chemical Production Waste Related Constituents**  
**Former Morris Canal, Chrome Sites 121 and 207**  
**Jersey City, Hudson County, New Jersey**

	Sample ID	Laboratory Sample ID	Sampling Date	Sampling Depth (feet)	Unit	NJDEP						Hexavalent Chromium	pH/Corrosivity	Oxidation-Reduction Potential (Redox)	Hexavalent Chromium Rerun Samples*
						RDCSRS	Antimony	Chromium	Nickel	Thallium	Vanadium				
						NRDCSRS	31	120,000*	1600	5	78				
						IGWSSL	450	NC	23000	79	1100				
Transect MC-011	MC-011W_1.5	11737-039	11/17/10	1.5/2	mg/Kg		0.295 U	30.0	11.2	0.147 U	24.3	0.502 J	9.08	0.800	~
	MC-011W_4.5	11737-041	11/17/10	4.5/5	mg/Kg		0.387 U	346	25.4	0.217 J	35.3	0.415 U	7.87	14.4	~
	MC-011W_8.5	11737-043	11/17/10	8.5/9	mg/Kg		0.428 J	4870	72.4	0.273 J	0.739 U	0.417 U	8.24	-4.2	~
	MC-011W_12.5	11737-045	11/17/10	12.5/13	mg/Kg		0.359 U	20.6	15.2	0.179 U	29.2	0.370 U	7.87	-118	~
	MC-011W_16.5	11737-047	11/17/10	16.5/17	mg/Kg		0.300 U	37.8	11.7	0.150 U	21.8	0.336 U	7.89	-93.7	~
	MC-011W_20.5	11737-049	11/17/10	20.5/21	mg/Kg		0.306 U	20.5	14.5	0.153 U	26.1	0.347 U	7.90	-5.4	~
	MC-011X_1.5	11788-002	11/18/10	1.5/2	mg/Kg		0.274 U	34.3	19.9	0.137 U	68.2	3.26	7.44	157	~
	MC-011X_4.5	11788-004	11/18/10	4.5/5	mg/Kg		0.328 U	542	466	0.484	653	5.06	8.99	116	~
	MC-011X_8.5	11788-006	11/18/10	8.5/9	mg/Kg		0.442 U	29800	600	0.221 U	475	3810	11.8	-91.2	~
	MC-011X_12.5	11788-008	11/18/10	12.5/13	mg/Kg		0.460 U	33900	675	0.230 U	487	6110	12.0	-14.8	~
	MC-011X_16.5	11788-010	11/18/10	16.5/17	mg/Kg		0.504 U	6650	84.5	0.567	75.6	0.515 U	11.2	-489	~
	MC-011X_20.5	11788-012	11/18/10	20.5/21	mg/Kg		0.445 U	8620	144	0.222 U	115	20.4	12.0	-1.2	~
	MC-011X_23.5	11788-013	11/18/10	23.5/24	mg/Kg		~	~	15.2	~	23.1	0.356 U	6.46	187	~
	MC-011Y_1.5	11888-021	11/19/10	1.5/2	mg/Kg		0.825 J	201	32.4	0.197 J	47.7	0.864 J	7.63	189	~
	MC-011Y_4.5	11888-023	11/19/10	4.5/5	mg/Kg		0.338 U	25.8	15.3	0.169 U	33.2	0.337 U	7.08	-68.7	~
	MC-011Y_8.5	11888-025	11/19/10	8.5/9	mg/Kg		0.356 U	19.4	17.4	0.178 U	38.7	0.343 U	8.01	-12	~
MC-011Y_12.5	11888-027	11/19/10	12.5/13	mg/Kg		0.376 U	11.5	6.86	0.188 U	14.5	0.409 U	5.39	179	~	
MC-011Y_16.5	11888-029	11/19/10	16.5/17	mg/Kg		0.340 U	16.8	12.7	0.170 U	20.0	0.348 U	6.91	141	~	
Transect MC-012	MC-012V_8.5	04702-004	05/13/11	8.5/9	mg/Kg		~	~	~	~	~	0.293 U	~	~	~
	MC-012V_10.5	04702-005	05/13/11	10.5/11	mg/Kg		~	~	~	~	~	0.317 U	~	~	~
	MC-012W_1.5	11737-027	11/17/10	1.5/2	mg/Kg		0.276 U	46.7	22.3	0.138 U	50.5	7.10	9.29	13.0	~
	MC-012W_4.5	11737-029	11/17/10	4.5/5	mg/Kg		0.316 U	58.3	15.5	0.158 U	30.6	0.343 U	8.61	177	~
	MC-012W_6.5	11737-030	11/17/10	6.5/7	mg/Kg		~	~	~	~	~	0.743	7.94	55.0	~
	MC-012W_8.5	11737-031	11/17/10	8.5/9	mg/Kg		0.430 U	18700	497	0.215 U	0.859 U	3880	12.1	-80.8	~
	MC-012W_10.5	11737-032	11/17/10	10.5/11	mg/Kg		~	~	~	~	~	47.9	10.5	-52.6	~
	MC-012W_12.5	11737-033	11/17/10	12.5/13	mg/Kg		0.357 U	22.5	12.8	0.179 U	30.0	0.393 U	9.27	-193	~
	MC-012W_17.5	11737-035	11/17/10	17.5/18	mg/Kg		0.442 U	14.8	7.94	0.221 U	18.5	0.481 U	7.80	-33.4	~
	MC-012W_20.5	11737-037	11/17/10	20.5/21	mg/Kg		0.305 U	21.7	10.7	0.153 U	25.9	0.341 U	8.21	-3.2	~
	MC-012X_1.5	11737-015	11/17/10	1.5/2	mg/Kg		0.285 U	15.9	15.0	0.143 U	52.9	1.20	8.35	29.2	~
	MC-012X_4.5	11737-017	11/17/10	4.5/5	mg/Kg		24.3	38.4	3140	0.145 U	325	4.74	8.89	9.40	~
	MC-012X_6.5	11737-018	11/17/10	6.5/7	mg/Kg		~	~	~	~	~	10900	11.4	-29.8	~
	MC-012X_8.5	11737-019	11/17/10	8.5/9	mg/Kg		0.523 U	26800	685	0.262 U	12.4	8680	11.9	-118	~
	MC-012X_12.5	11737-021	11/17/10	12.5/13	mg/Kg		0.469 U	27800	593	0.235 U	62.7	11400	12.0	-122	~
	MC-012X_16.5	11737-023	11/17/10	16.5/17	mg/Kg		0.419 U	17700	476	0.210 U	142	4320	12.1	-122	~
	MC-012X_18.5	11737-024	11/17/10	18.5/19	mg/Kg		~	~	~	~	~	0.427 U	10.2	-401	~
	MC-012X_20.5	11737-025	11/17/10	20.5/21	mg/Kg		0.284 U	17.6	10.7	0.142 U	16.1	4.43	9.76	-38.3	~
	MC-012Y_0.5	11888-030	11/19/10	0.5/1	mg/Kg		0.556 J	68.5	64.4	0.492	22.4	0.320 U	7.21	154	~
	MC-012Y_4.5	11888-032	11/19/10	4.5/5	mg/Kg		0.414 J	68.1	25.7	0.173 U	24.1	0.998 J	6.20	174	~
MC-012Y_8.5	11888-034	11/19/10	8.5/9	mg/Kg		0.358 U	28.5	25.2	0.179 U	27.5	0.372 U	7.90	143	~	
MC-012Y_12.5	11888-036	11/19/10	12.5/13	mg/Kg		0.295 U	16.8	8.87	0.148 U	24.2	0.329 U	6.49	125	~	
MC-012Y_16.5	11888-038	11/19/10	16.5/17	mg/Kg		0.327 U	40.7	31.8	0.163 U	59.1	0.356 U	6.59	111	~	









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	Sample ID	Laboratory Sample ID	Sampling Date	Sampling Depth (feet)	Unit	NJDEP	Antimony	Chromium	Nickel	Thallium	Vanadium	Hexavalent Chromium	pH/Corrosivity	Oxidation-Reduction Potential (Redox)	Hexavalent Chromium Rerun Samples*
						RDCSRS	31	120,000*	1600	5	78	240	NC	NC	240
						NRDCSRS	450	NC	23000	79	1100	20	NC	NC	20
						IGWSSL	6	NC	31	3	NA	NC	NC	NC	NC
Chrome Site 207	207-B1_1.0	04868-012	05/18/11	1/1.5	mg/Kg		0.313 U	170	15.2	0.587	16.0	0.298 U	9.07	-93	-
	207-B1_5.5	04868-014	05/18/11	5.5/6	mg/Kg		0.330 U	16.5	11.4	0.165 U	24.8	0.291 U	8.15	128	-
	207-B1_8.5	04868-016	05/18/11	8.5/9	mg/Kg		0.313 U	18.2	18.4	0.156 U	30.9	0.296 U	6.44	34.0	-
	207-B1_13.5	04868-017	05/18/11	13.5/14	mg/Kg		0.381 U	13.7	11.2	0.191 U	22.8	0.352 U	7.00	-25	-
	207-B1_17.5	04868-020	05/18/11	17.5/18	mg/Kg		0.302 U	22.4	12.7	0.151 U	37.0	0.272 U	6.33	14.0	-
	207-B2_1.0	04676-040	05/12/11	1/1.5	mg/Kg		1.14 J	270	52.9	1.29	53.6	0.259 U	8.13	95.0	-
	207-B2_5.5	04676-042	05/12/11	5.5/6	mg/Kg		0.315 U	18.7	15.7	0.301 J	29.2	0.282 U	7.54	111	-
	207-B2_9.5	04676-044	05/12/11	9.5/10	mg/Kg		0.292 U	19.7	12.9	0.182 J	30.0	0.278 U	7.65	104	-
	207-B2_13.0	04676-046	05/12/11	13/13.5	mg/Kg		0.490 U	19.3	14.6	0.245 U	29.3	0.438 U	6.57	124	-
	207-B2_16.5	04676-048	05/12/11	16.5/17	mg/Kg		0.295 U	25.8	14.4	0.258 J	33.9	0.276 U	7.44	107	-
	207-B3_1.0	04676-049	05/12/11	1/1.5	mg/Kg		0.865 J	266	55.1	2.41	74.6	0.292 U	10.5	47.0	-
	207-B3_5.5	04676-051	05/12/11	5.5/6	mg/Kg		0.311 U	19.6	14.1	0.238 J	32.7	0.276 U	7.79	108	-
	207-B3_9.5	04676-053	05/12/11	9.5/10	mg/Kg		0.323 U	19.1	12.6	0.256 J	31.4	0.288 U	7.64	98.0	-
	207-B3_13.0	04676-055	05/12/11	13/13.5	mg/Kg		0.295 U	20.2	12.8	0.236 J	32.6	0.283 U	8.18	98.0	-
	207-B3_16.5	04676-058	05/12/11	16.5/17	mg/Kg		0.311 U	22.0	9.26	0.156 U	34.5	0.291 U	7.59	100	-
	207-B4_1.0	04676-031	05/12/11	1/1.5	mg/Kg		0.359 J	71.3	35.8	1.14	63.9	0.253 U	7.82	53.0	-
	207-B4_5.5	04676-033	05/12/11	5.5/6	mg/Kg		0.302 U	55.2	10.9	6.11	44.8	0.280 U	7.37	82.0	-
	207-B4_9.5	04676-035	05/12/11	9.5/10	mg/Kg		0.355 U	19.6	12.2	0.370	29.6	0.302 U	7.41	30.0	-
	207-B4_13.0	04676-037	05/12/11	13/13.5	mg/Kg		0.303 U	23.8	16.8	0.272 J	44.9	0.268 U	7.93	103	-
	207-B4_16.5	04676-039	05/12/11	16.5/17	mg/Kg		0.302 U	7.25	3.52	0.260 J	14.3	0.283 U	7.14	115	-
	207-B5_1.0	04676-021	05/12/11	1/1.5	mg/Kg		0.318 U	124	22.5	0.829	27.1	0.282 U	7.49	552	-
	207-B5_5.5	04676-024	05/12/11	5.5/6	mg/Kg		0.295 U	15.2	9.24	1.45	19.5	0.276 U	7.87	317	-
	207-B5_9.5	04676-026	05/12/11	9.5/10	mg/Kg		0.323 U	23.0	11.7	8.23	22.3	0.308 U	7.21	15.0	-
	207-B5_13.0	04676-028	05/12/11	13/13.5	mg/Kg		0.626 J	9.81	9.73	0.304 J	15.7	0.300 U	7.87	49.0	-
	207-B5_16.5	04676-030	05/12/11	16.5/17	mg/Kg		0.323 U	16.0	10.2	0.162 U	22.9	0.282 U	7.82	53.0	-
	207-B6_1.0	04531-019	05/09/11	1/1.5	mg/Kg		0.317 U	47.4	14.0	0.928	28.7	0.275 U	8.02	84.0	0.275 U
	207-B6_4.0	04531-021	05/09/11	6/6.5	mg/Kg		0.310 U	16.9	14.2	0.204 J	27.8	0.282 U	8.16	86.0	0.282 U
	207-B6_8.0	04531-023	05/09/11	8/8.5	mg/Kg		0.329 U	21.5	16.2	0.210 J	31.6	0.304 U	7.39	-18	0.304 U
	207-B6_10.0	04531-024	05/09/11	10/10.5	mg/Kg		-	-	-	0.160 U	-	-	-	-	-
	207-B6_12.0	04531-025	05/09/11	12/12.5	mg/Kg		0.454 U	21.4	17.1	0.227 U	30.5	0.407 U	7.29	35.0	0.407 U
	207-B8_1.0	04531-028	05/09/11	1/1.5	mg/Kg		0.296 U	60.6	14.4	0.268 J	34.9	0.275 U	7.44	56.0	0.275 U
	207-B8_6.0	04531-031	05/09/11	6/6.5	mg/Kg		0.287 U	15.1	12.7	0.234 J	23.6	0.271 U	8.26	59.0	0.271 U
	207-B8_9.0	04531-032	05/09/11	9/9.5	mg/Kg		0.400 U	24.2	21.2	0.649	35.1	0.346 U	7.40	30.0	0.346 U
	207-B8_12.0	04531-034	05/09/11	12/12.5	mg/Kg		0.293 U	7.24	6.19	0.146 U	11.2	0.281 U	8.25	13.0	0.281 U
	207-B9_1.0	04531-036	05/09/11	1/1.5	mg/Kg		0.504 J	657	56.6	1.85	119	0.352 U	6.95	78.0	0.352 U
	207-B9_4.0	04531-039	05/09/11	4/4.5	mg/Kg		0.293 U	22.9	12.4	0.268 J	35.6	0.280 U	7.44	83.0	0.280 U
	207-B9_8.0	04531-041	05/09/11	8/8.5	mg/Kg		0.313 U	21.1	11.0	0.399	22.6	0.277 U	8.28	78.0	0.277 U
	207-B9_12.0	04531-043	05/09/11	12/12.5	mg/Kg		0.293 U	6.63	6.05	0.146 U	9.78	0.281 U	8.15	71.0	0.281 U
	207-B9_14.5	04531-044	05/09/11	14.5/15	mg/Kg		0.484 U	38.5	28.7	0.242 U	44.6	0.437 U	7.94	35.0	0.437 U
	207-B16_1.5	04630-063	05/11/11	1.5/2	mg/Kg		0.580 J	202	52.9	0.171 U	103	0.297 U	7.50	-14	-
207-B16_5.5	04630-065	05/11/11	5.5/6	mg/Kg		0.335 U	28.5	13.9	0.172 J	23.1	0.307 U	7.40	-8	-	
207-B16_9.5	04630-067	05/11/11	9.5/10	mg/Kg		0.394 U	361	22.3	0.395	24.4	0.353 U	7.23	16.0	-	
207-B16_13.5	04630-069	05/11/11	13.5/14	mg/Kg		0.538 U	38.0	22.1	0.269 U	53.2	0.488 U	7.63	3.00	-	
207-B16_17.5	04630-071	05/11/11	17.5/18	mg/Kg		0.340 U	16.2	7.38	0.170 U	25.8	0.294 U	8.06	-101	-	
207-B17_1.0	04630-052	05/11/11	1/1.5	mg/Kg		0.558 J	228	36.2	0.180 J	59.6	0.281 U	7.60	64.0	-	
207-B17_5.5	04630-055	05/11/11	5.5/6	mg/Kg		0.320 U	49.4	14.3	0.160 U	28.9	0.293 U	7.79	-77	-	
207-B17_9.5	04630-057	05/11/11	9.5/10	mg/Kg		0.639 J	17500	34.8	0.724	1.02 U	0.457 U	7.40	-30	-	
207-B17_13.5	04630-059	05/11/11	13.5/14	mg/Kg		0.476 U	40.3	25.8	0.279 J	54.6	0.406 U	7.00	-28	-	
207-B17_17.5	04630-061	05/11/11	17.5/18	mg/Kg		0.327 U	21.4	9.89	0.164 U	27.7	0.296 U	7.53	-9	-	
207-B18_1.0	04676-002	05/12/11	1/1.5	mg/Kg		0.946 J	212	49.4	1.52	123	0.346 U	6.54	206	-	
207-B18_5.5	04676-005	05/12/11	5.5/6	mg/Kg		0.311 U	17.2	11.8	0.267 J	26.7	0.280 U	7.09	5.00	-	
207-B18_9.5	04676-007	05/12/11	9.5/10	mg/Kg		0.385 U	1410	17.7	1.88	30.4	0.335 U	7.27	-28	-	
207-B18_13.0	04676-009	05/12/11	13/13.5	mg/Kg		0.484 U	46.2	28.8	0.464 J	57.4	0.430 U	7.35	3.00	-	
207-B18_16.5	04676-011	05/12/11	16.5/17	mg/Kg		0.331 U	3.02	1.24 J	0.294 J	3.85	0.303 U	7.70	-15	-	
207-B19_1.0	04676-012	05/12/11	1/1.5	mg/Kg		0.509 J	112	30.8	1.06	44.1	0.304 U	7.73	18.0	-	
207-B19_5.5	04676-014	05/12/11	5.5/6	mg/Kg		0.316 U	22.8	14.3	0.486	32.1	0.292 U	7.31	-96	-	
207-B19_9.5	04676-016	05/12/11	9.5/10	mg/Kg		0.378 U	73.4	16.9	1.24	38.9	0.324 U	7.18	-58	-	
207-B19_13.0	04676-018	05/12/11	13/13.5	mg/Kg		0.453 U	38.1	22.6	0.434 J	57.0	0.430 U	7.52	-93	-	
207-B19_16.5	04676-020	05/12/11	16.5/17	mg/Kg		0.328 U	23.4	11.7	0.252 J	31.6	0.315 U	7.32	-54	-	

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						RDCSRS	31	120,000*	1600	5	78	240	NC	NC	240
						NRDCSRS	450	NC	23000	79	1100	20	NC	NC	20
						IGWSSL	6	NC	31	3	NA	NC	NC	NC	NC
Property #3	P3-B1_3.5	04630-032	05/11/11	3.5/4	mg/Kg		0.344 U	172	21.3	0.269 J	40.7	0.301 U	7.52	18.0	~
	P3-B1_5.5	04630-033	05/11/11	5.5/6	mg/Kg		0.361 U	15.9	15.0	0.181 U	20.4	0.320 U	7.42	-17	~
	P3-B1_9.5	04630-035	05/11/11	9.5/10	mg/Kg		0.283 U	16.5	10.9	0.142 U	28.9	0.280 U	7.39	-86	~
	P3-B1_13.5	04630-037	05/11/11	13.5/14	mg/Kg		0.348 U	15.4	10.4	0.174 U	26.0	0.310 U	7.05	-80	~
	P3-B1_17.5	04630-039	05/11/11	17.5/18	mg/Kg		0.290 U	7.00	6.25	0.145 U	10.2	0.278 U	8.58	164	~
Property #8	P8-B5_1.0	04630-041	05/11/11	1/1.5	mg/Kg		0.375 J	47.4	16.7	0.130	21.7	0.268 U	8.18	172	~
	P8-B5_5.5	04630-044	05/11/11	5.5/6	mg/Kg		0.336 U	15.3	13.0	0.168 U	23.7	0.296 U	7.47	132	~
	P8-B5_9.5	04630-046	05/11/11	9.5/10	mg/Kg		0.325 U	18.0	12.4	0.163 U	30.7	0.281 U	7.37	-35	~
	P8-B5_13.5	04630-048	05/11/11	13.5/14	mg/Kg		0.309 U	23.9	14.1	0.154 U	29.6	0.280 U	7.57	-32	~
	P8-B5_17.5	04630-050	05/11/11	17.5/18.0	mg/Kg		0.306 U	18.5	10.3	0.153 U	21.8	0.268 U	7.78	-26	~

**Footnotes:**

~ = Parameter not analyzed

U = The compound was not detected at the indicated concentration

J = Concentration was reported below the RL but above the MDL; estimated concentration

NC = No Criteria

**BOLD** = Sample exceeds NJDEP Soil Remediation Standard (SRS)

\* = indicates most stringent (residential) soil cleanup criteria of 120,000 mg/kg for trivalent chromium pursuant to the Chromium Soil Cleanup Criteria (NJDEP, September 2008 revised April 2010)