#### **ATTACHMENT 2**

FINAL POST-REMEDIAL SUMMARY LABORATORY ANALYTICAL DATA FOR REMAINING SOIL TABLES

# Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	DDC62/65 D61D2 (D01D)	DDC62/65 D06D2	DDC 62/65 DO	PPG63/65_B16 (B09R2/B12R)	PPG63/65 B10	DDC62/65 D42 /D44D\	DDC 62/65 D14	PPG63/65 B19R (B15R2)
									<del>_</del>	6.7-7.2	6-6.5	
Sample Depth (ft bgs):		Non-Residential	Residential	Impact to	5.8-6.3	4.8-5.3	4.7-5.2	7.6-8.1	5.2-5.7			9.3-9.8
Sample Elevation (ft msl):	<u>.                                    </u>	Direct Contact	Direct	Groundwater	1.7-2.2	3-3.5	3-3.5	0-0.5	2.5-3	1-1.5	1-1.5	-2.8 - ( -2.3 )
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)								
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB85013-3	JB86481-1	JB72034-6	JB74072-1	JB73044-2	JB73863-2	JB73940-1	JB88436-1
Date Sampled:					12/22/2014	1/14/2015	7/18/2014	8/14/2014	7/31/2014	8/12/2014	8/13/2014	2/18/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis												
Antinopolo		450	24		2.5	-2 C N I	.0.4	22 N.I.	-0.0 NJ	2.5	-0.5 N.I	5.4 N.I
Antimony	mg/kg	450	31	0	<2.5	<2.6 NJ-	<2.1	<2.3 NJ-	<2.3 NJ-	<2.5	<2.5 NJ-	<5.4 NJ-
Chromium	mg/kg	120,000	-	-	22.6	89.6 *J	285 NJ+	21.6	136	30.2	318	23.6
Nickel	mg/kg	23,000	1,600	205**	14.8	<5.2	18.7	16 NJ-	17.5	12.9	16.3	16.5
Thallium	mg/kg	79	5	3	<1.2	<1.3	<1.1	<1.1	<1.1	<1.3	<1.2	<2.7
Vanadium	mg/kg	1,100	390	NA	22.9	<6.5	34.9	30.6	32.2	23.2	42	32.9
General Chemistry												
Chromium, Hexavalent	mg/kg	20	-	-	3.8 / <0.51	2.4 NJ- / 3.7 NJ-	1.3 NJ-	0.76 *NJ- / 0.48 *NJ-	3.4 *J	<0.51 / 5.5 *NJ-	6.3 NJ- / 2.1 *NJ-	<1.1 NJ- / <1.1 NJ-
Iron, Ferrous	%	-	-	-	1.6	0.45	-	-	-	-	-	1.4
рН	su	-	-	-	8.65	8.2	7.77	8.8	8.25	8.99	10.23	8.48
Redox Potential Vs H2	mv	-	-	-	180	193	259	241	265	165	-98.1	255
Solids, Percent	%	-	-	-	78.4	77.6	86	88.3	84.6	78	82.2	37.3
Sulfide Screen		-	-	-	NEGATIVE	NEGATIVE	-	-	-	-	-	NEGATIVE
Total Organic Carbon	mg/kg	-	-	-	6,260	26,000	-	-	-	-	-	116,000

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
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- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
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- R The reported result is rejected.

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.
- <sup>b</sup> The ferrous iron test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.
- $^{\mbox{\scriptsize c}}$  Multiple injections indicate possible sample non-homogeneity.
- <sup>d</sup> The sulfide screen test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.
- # = Sample deemed usable due to acceptable insoluble recovery and secondary analytics.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

## Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG 63/65_B20 (B17R)	PPG63/65_B23 (B18R2)	PPG 63/65_B21	PPG63/65_B22	PPG 63/65_B24R	PPG 63/65_B25	PPG 63/65_B26	PPG 63/65_DUP-B26	PPG 63/65_B27R	PPG 63/65_B28
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	7.9-8.4	6.1-6.6	6.4-6.9	6.1-6.6	6.9-7.4	6.7-7.2	7-7.5	7-7.5	8.6-9.1	6.7-7.2
Sample Elevation (ft msl)	:	<b>Direct Contact</b>	Direct	Groundwater	-1-(-0.5)	1-1.5	0.5-1	1-1.5	0.5-1.0	0-0.5	-0.3 - 0.2	-0.3-0.2	-1.2 - ( -0.7 )	0.8-1.3
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)										
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB74503-3	JB75142-2	JB74503-4	JB75142-1	JB79265-2	JB76736-1	JB76736-2	JB76736-3	JB77761-2	JB77329-2
Date Sampled:					8/20/2014	8/27/2014	8/20/2014	8/27/2014	10/15/2014	9/16/2014	9/16/2014	9/16/2014	9/25/2014	9/23/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis				1			1		1		<u> </u>	1	•	
Auting		450	04		0.0 N I	0.0	0.0 N I	0.0	4.0.1	0.0 N I	0.4 N.I	0.4 N I	4.0.11	0.0 N I
Antimony	mg/kg	450	31	6	<2.3 NJ-	<2.3	<2.3 NJ-	<2.2	<4.9 NJ-	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-	<4.8 NJ-	<2.3 NJ-
Chromium	mg/kg	120,000	-	-	57.3 *NJ	1260	15.7 *NJ	34	63.1	21 EJ	19.2 EJ	20.4 EJ	389	69
Nickel	mg/kg	23,000	1,600	205**	15.2 *NJ	14.4 NJ-	13.9 *NJ	14.6 NJ-	12.9	18.1	14.7	13.6	11.3	16.5
Thallium	mg/kg	79	5	3	<1.2	<1.2	<1.1	<1.1	<2.5	<1.2	<1.2	<1.2	<2.4	<1.1
Vanadium	mg/kg	1,100	390	NA	26.4	36.3 NJ-	22	33.1 NJ-	24.8	27.4 EJ	25.1 EJ	24.8 EJ	42.3	29
General Chemistry														
Chromium, Hexavalent	mg/kg	20	-	-	2.6 *NJ- / <0.46 NJ-	0.79 NJ- / 7.2 NJ-	0.69 *NJ- / <0.46 NJ-	1.5 NJ- / 0.8 NJ-	<0.99 NJ+ / 2.2	<0.46 NJ-	<0.48 NJ-	<0.47 NJ-	2.0 NJ-	0.95 *NJ+
Iron, Ferrous	%	-	-	-	-	0.97	-	-	-	-	-	-	-	-
рН	su	-	-	-	9.58	10.48	8.56	9.8	8.5	7.85	8.26	7.93	8.88	9.16
Redox Potential Vs H2	mv	-	-	-	13.6	-95.4	96.7	143	185	201	190	168	41.5	196
Solids, Percent	%	-	-	-	87.1	82.2	86.9	87.8	40.6	86.6	83.5	84.9	40	90
Sulfide Screen		-	-		-	NEGATIVE	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-

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mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

# Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG 63/65_B29	PPG 63/65_B30	PPG 63/65_B31	PPG 63/65_B32	PPG 63/65-B33	PPG 63/65-DUP-B33	PPG 63/65-B34	PPG 63/65_B35	PPG 63/65_B36	PPG 63/65_B37	PPG63/65_B38
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	7.8-8.3	5.2-5.8	7.6-8.1	4.8-5.3	0.2-0.7	0.2-0.7	0.6-1.1	4.7-5.2	5.9-6.4	6.2-6.7	0-0.5
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	-0.8 - ( -0.3 )	2.7-3.3	-0.2-0.3	3.2-3.7	9-9.5	9-9.5	7.9-8.4	2.8-3.3	1.6-2.1	1.3-1.8	9-9.5
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)											
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB77761-1	JB79068-1	JB79265-1	JB79265-3	JB79649-3	JB79649-13	JB79649-6	JB80083-1	JB80083-2	JB80083-3	JB80262-2
Date Sampled:					9/25/2014	10/13/2014	10/15/2014	10/15/2014	10/20/2014	10/20/2014	10/20/2014	10/24/2014	10/24/2014	10/24/2014	10/28/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis	1 1		l			ı	<u> </u>	1		l e e e e e e e e e e e e e e e e e e e					
Antimony	mg/kg	450	31	6	2.9	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-	<2.8 NJ-	<2.5 NJ-	<2.5 NJ-	<2.3 NJ-
Chromium	mg/kg	120,000	-	-	3640	120	43.2	148	96.5	109	56	22.7	2110	18.3	55.4 NJ+
Nickel	mg/kg	23,000	1,600	205**	12.7	11.2	13.1	14.1	21.5	21.4	33.9	13.8	18.6	14.2	22.9
Thallium	mg/kg	79	5	3	<6.3 a	<1.1	<1.2	<1.2	<1.1	<1.1	<1.1	<1.4	<1.2	<1.3	<1.1
Vanadium	mg/kg	1,100	390	NA	62.9	19	25.2	13.5	28.9	27.7	54.4	20.4	48	22.6	27.4
General Chemistry															
Chromium, Hexavalent	mg/kg	20	-	-	0.6 NJ-	5.6	4.9 NJ+ / 0.84	14.4 NJ+ / 13	2.5 *NJ- / 1.3 *NJ-	1.9 *NJ- / 1 *NJ-	1.9 *NJ- / 3.1 *NJ-	0.56 NJ- / 1.4 NJ-	19 NJ- / 2.3 NJ-	<0.51 NJ-	4.7 NJ- / 4 NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-
рН	su	-	-		9.72	7.93	9.61	7.91	7.54	6.91	7.64	8.46	9.32	8.41	7.7
Redox Potential Vs H2	mν	-	-	-	-86.7	255	137	278	616	547	522	231	152	183	298
Solids, Percent	%	-	-	-	78.5	86.9	82.6	81.2	89.5	90.4	93.5	73.2	81.5	78.2	89.4
Sulfide Screen		-	-	-	-	-	-	-	-	-	-	NEGATIVE	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	-	11,700	-	-	-

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## Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65 R39	PPG63/65 B40	PPG 63/65_B41	PPG 63/65 B42	PPG 63/65_DUP-B42	PPG 63/65 B43R	PPG63/65 B44R	PPG 63/65_B45	PPG 63/65_B46	PPG 63/65 B47	PPG 63/65 B48
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	1-1.5	1.4-1.9	7.1-7.6	8.4-8.9	8.4-8.9	8.7-9.2	4-4.5	4-4.5	4.2-4.7	5.1-5.6	3.8-4.3
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	8-8.5	7.7-8.2	0.3-0.8	-1-(-0.5)	-1-(-0.5)	-0.8 - (-1.3)	3.5-4	3.5-4	3.3-3.8	2.8-3.3	3.7-4.2
Excavated:	_	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)		7.7 0.2	0.0 0.0	1 ( 0.0)	1 ( 0.0)	0.0 (1.0)	0.0 4	0.0 4	0.0 0.0	2.0 0.0	0.7 4.2
Lab Sample ID:	_	7:26D 5/12)	7:26D 5/12)	Son Screening (11/13)	JB80262-3	JB80262-5	JB80445-2	JB80445-3	JB80445-5	JB80851-5	JB82305-1	JB80538-4	JB80538-6	JB80640-1	JB80640-3
Date Sampled:	<del>- </del>	7.200 3/12)	7.200 3/12)		10/28/2014	10/28/2014	10/29/2014	10/29/2014	10/29/2014	11/4/2014	11/19/2014	10/30/2014	10/30/2014	10/31/2014	10/31/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
IVIALITA.					3011	3011	3011	3011	3011	3011	3011	3011	3011	3011	3011
Metals Analysis															
Motaro / maryoro															
Antimony	mg/kg	450	31	6	<2.1 NJ-	<2.1 NJ-	<2.7 NJ-	<5.6 NJ-	<2.3 NJ-	<6.9 NJ- <sup>a</sup>	<2.0 NJ-	<2.4 NJ-	<2.5 NJ-	<2.2	<2.4
Chromium	mg/kg	120,000	-	-	95.1 NJ+	122 NJ+	2920 NJ-	56.9 NJ-	15.9 NJ-	128 NJ-	17.7	16.2	22.6	367 NJ+	649 NJ+
Nickel	mg/kg	23,000	1,600	205**	46.5	50.8	12.6	30.4 J	9 J	<14	13.5	12.7	14.6	15.2	14.4
Thallium	mg/kg	79	5	3	<1.1	<1.0	<1.3	<2.8	<1.2	<3.4 a	<0.98	<1.2	<1.2	<1.1	<1.2
Vanadium	mg/kg	1,100	390	NA	41.8	43.7	41.8	44.2 J	16.2 J	22.3	27.3	21.3	21.6	32.9	32.8
General Chemistry															
Concrat Chambary															
Chromium, Hexavalent	mg/kg	20	-	-	2.6 NJ- / 1.6 NJ-	4.5 NJ- / 3.8 NJ-	14.3 NJ- / 5.1 NJ-	2 NJ- / <1.2 NJ-	<0.49 NJ- / 2.4 NJ-	<1.4	1.4	1.3 NJ / <0.48 *NJ-	1.8 NJ- / <0.48 *NJ-	5.7 NJ-/ 3 NJ-	8 NJ- / 12.5 NJ-
Iron, Ferrous	%	-	-	-	0.52	-	-	-	-	-	-	-	-	-	-
pH	su	-	-	-	7.48	7.76	9.67	8.8	8.54	7.74	8.2	7.88	7.95	8.62	8.01
Redox Potential Vs H2	mv	-	-	-	290	301	52.9	93.3	184	259	167	141	139	166	97.7
Solids, Percent	%	-	-	-	92	91.2	74.6	34.4	81.2	28.2	73.4	82.9	83.3	84.9	81.6
Sulfide Screen		-	-	-	NEGATIVE	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	32,800		-	-		-	-	-	-	-	-

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Sampled by CB&I

Client Comple ID.		AL I	NI I	N.I. Dofoult	DDC CO/CE D40	DDC CO/CE DEAD	DDC CO/CE DE4	DDC CO/CE DEC	DDC CO/CE DEO	DDC CO/CE DEE	DDC CO/CE DEC	DDC CO/CE DEZ	DDC C2/CE DEC	DDC CO/CE DEC	DDC C2/CE DC0
Client Sample ID:		NJ Nam Dagidantial	NJ Desidential	NJ Default	PPG 63/65_B49		PPG 63/65_B51		PPG 63/65_B53		PPG 63/65_B56	<del></del>	_		PPG 63/65_B60
Sample Depth (ft bgs):		Non-Residential	Residential	Impact to	3.9-4.4	2-2.5	0-0.5	4.2-4.7	3.5-4	1.5-2	3.2-3.7	1.9-2.4	0.5-1	1.7-2.2	2.1-2.6
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	4.3-4.8	6-6.5	7.2-7.7	3.3-3.8	4-4.5	7.2-7.7	4.9-5.4	5.3-5.8	6.7-7.2	5.5-6.0	5.1-5.6
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)											
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB80851-4	JB81729-5	JB80992-4	JB80992-5	JB80992-6	JB81497-1	JB81729-3	JB82085-4	JB82085-5	JB82617-2	JB82617-3
Date Sampled:					11/4/2014	11/13/2014	11/5/2014	11/5/2014	11/5/2014	11/10/2014	11/12/2014	11/18/2014	11/18/2014	11/24/2014	11/24/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
						•									
Metals Analysis															
Antimony	mg/kg	450	31	6	<2.4 NJ-	<2.2 NJ-	<2.5 NJ-	<2.6 NJ-	<2.4 NJ-	<2.2 NJ-	<2.7 NJ-	<2.6 NJ-	<2.2 NJ-	<2.6 NJ-	<2.1 NJ-
Chromium	mg/kg	120,000	-	-	15.2 NJ-	99.5 *NJ	124 NJ-	123 NJ-	10.8 NJ-	49.3 ENJ+	19.5 *NJ	129 *NJ	99.9 *NJ	1060 NJ+	31.6 NJ+
Nickel	mg/kg	23,000	1,600	205**	11.4	59.2 NJ-	57	15.3	10.5	10	12.8 NJ-	26.2 NJ-	13.3 NJ-	30.9	16.3
Thallium	mg/kg	79	5	3	<1.2	<1.1 NJ-	<1.2	<1.3	<1.2	<1.1	<1.3 NJ-	<1.3 NJ-	<1.1 NJ-	<1.3	<1.0
Vanadium	mg/kg	1,100	390	NA	22	25.7 NJ-	42.3	23.7	14.3	17.5 EJ	23.6 NJ-	35.6 NJ-	20.6 NJ-	59.2	18.7
General Chemistry															
Control Charles															
Chromium, Hexavalent	mg/kg	20	-	-	<0.47	0.94 *NJ- / 0.88 NJ-	0.49 *NJ- / 2.4 NJ-	2.1 *NJ- / 1.4 NJ-	4.4 *NJ- / 1.1NJ-	2.4 NJ- / 4.6 NJ-	<0.53 *NJ-/ <0.53 NJ-	<0.53	8.5	16.2	<0.43
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
рН	su	-	-	-	7.89	8.6	8.24	8.3	8.29	9.22	7.24	8.59	9.02	8.44	7.56
Redox Potential Vs H2	mv	-	-	-	233	272	277	107	121	286	119	338	276	288	284
Solids, Percent	%	-	-	-	85.2	93.2	84.3	77	82.3	89.3	76	75.3	88	74.8	93.6
Sulfide Screen	İ	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
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#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.
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- $^{\mbox{\scriptsize c}}$  Multiple injections indicate possible sample non-homogeneity.
- <sup>d</sup> The sulfide screen test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.
- # = Sample deemed usable due to acceptable insoluble recovery and secondary analytics.

ft msl = feet mean sea level

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mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

## Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG 63/65_DUP-B60	PPG63/65_B61R2 (B01R)	PPG63/65_B62	PPG63/65_B63	PPG63/65_B64R#	PPG63/65_DUP-B64R	PPG 63/65_B66	PPG 63/65_B68	PPG63/65_B69
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	2.1-2.6	5.8-6.3	2.8-3.3	2.4-2.9	9.6-10.1	9.6-10.1	8.1-8.6	6.5-7	5.5-6
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	5.1-5.6	1.7-2.2	4.8-5.3	4.8-5.3	-3.1 - ( -2.6 )	-3.1 - ( -2.6 )	0.4- (-0.1)	0.1-(-0.4)	2.5-3
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)									
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB82617-4	JB85013-3	JB83152-5	JB83152-7	JB85013-4	JB85013-5	JB84204-2	JB84204-3	JB84487-2
Date Sampled:					11/24/2014	12/22/2014	12/3/2014	12/3/2014	12/23/2014	12/23/2014	12/12/2014	12/12/2014	12/17/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis	<u></u>												
Antimony	mg/kg	450	31	6	<2.6 NJ-	<2.5 NJ-	<3.0 NJ-	<2.3 NJ-	<2.3 NJ-	<2.3 NJ-	<2.5 NJ-	<2.8 NJ-	<2.5 NJ-
Chromium	mg/kg	120,000	-	-	22.7 NJ+	22.6	905	68.9	12.5	19.3	138	305	84.9
Nickel	mg/kg	23,000	1,600	205**	15.9	14.8	18.6	20	11	10.1	13.7	26.9	17.7
Thallium	mg/kg	79	5	3	<1.3	<1.2	<1.5	<1.1	<1.1	<1.2	<1.3	<1.4	<1.2
Vanadium	mg/kg	1,100	390	NA	16.7	22.9	34.4	27.1	19.6	20.8	28	33.5	30.6
General Chemistry			<u> </u>										
Chromium, Hexavalent	mg/kg	20	-	-	<0.52	3.8 *NJ- / <0.51 NJ-	<0.61 NJ- / 2.2 *NJ-	0.72 NJ- / 1.1 *NJ-	<0.46*NJ- / <0.46 NJ-	0.61 *NJ- / <0.46	2.4 NJ+/ <0.50 NJ-	<0.57 N / <0.57 NJ-	<0.50 *NJ
Iron, Ferrous	%	-	-	-	-	1.6	-	-	-	-	-	-	-
рН	su	-	-	-	7.52	8.65	7.43	7.13	8.54	7.63	7.31	8.42	7.37
Redox Potential Vs H2	mν	-	-	-	282	180	251	205	174	183	250	266	65.9
Solids, Percent	%	-	-	-	76.4	78.4	66.1	84	86.8	86.3	80.8	70.2	80.5
Sulfide Screen		-	-	-	-	NEGATIVE	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	6,260	-	-	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
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# Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_B71	PPG63/65_B72	PPG63/65_B74#	PPG63/65_B75R	PPG63/65_B76	PPG63/65_B77R	PPG63/65_B78	PPG63/65_B79	PPG63/65_B80	PPG63/65_B81
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	4.2-4.7	3.7-4.2	9.8-10.3	2.4-2.9	7.5-8	7.6-8.1	1.7-2.2	5.1-5.6	5.1-5.6	2.1-2.6
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	3.9-4.4	4.3-4.8	-2.9-(-2.4)	5.7-6.2	-0.7-(-0.2)	-0.5-0.0	6.2-6.7	1-1.5	3-3.5	5.8-6.3
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)										
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB85013-1	JB85013-2	JB85287-1	JB86000-2	JB85756-1	JB86481-2	JB85840-2	JB86000-3	JB86000-4	JB86141-5
Date Sampled:					12/22/2014	12/22/2014	12/30/2014	1/8/2015	1/5/2015	1/14/2015	1/7/2015	1/9/2015	1/9/2015	1/12/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis														
Antimony	mg/kg	450	31	6	<2.2 NJ-	<2.4 NJ-	<3.0 NJ-	<2.6 NJ-	<2.4 NJ-	<2.3 NJ-	<2.6 NJ-	<2.4 NJ-	<2.5 NJ-	<2.7 NJ-
Chromium	mg/kg	120,000	-	-	29.8	14.8	630	24.4	30.2	56.3 *J	65.4	8.8	12	20.8
Nickel	mg/kg	23,000	1,600	205**	14.2	12.8	9.7	15.5	14.8	12.1	28.8	8.8	11.6	14.3
Thallium	mg/kg	79	5	3	<1.1	<1.2	<1.5	<1.3	<1.2	<1.2	<1.3	<1.2	<1.2	<1.4
Vanadium	mg/kg	1,100	390	NA	29	22.9	16.8	33.9	31 EJ	27.2	53.7 EJ	9.9	18.6	16.1
General Chemistry														
Chromium, Hexavalent	mg/kg	20	-	-	0.73 *NJ- / <0.47 NJ-	<0.50 *NJ-/ <0.50NJ-	<0.59 NJ	<0.51NJ-	<0.47 NJ- / 0.56 NJ-	2.4 NJ- / 0.9 NJ-	<0.55 *NJ- / 0.58 *NJ-	<0.48 *NJ-	<0.49 *NJ-	<0.55 *NJ
Iron, Ferrous	%	=	-	-	-	-	-	-	1.4 <sup>c</sup>	-	-	-	-	-
рН	su	-	-	-	7.5	8.15	8.33	8.46	7.74	8.79	7.41	7.92	7.82	7.65
Redox Potential Vs H2	mv	-	-	-	184	216	308	202	159	166	245	231	183	344
Solids, Percent	%	-	-	-	84.8	80.5	67.4	79.1	84.9	88	72.6	83.1	82	73.2
Sulfide Screen		-	-	-	-	-	-	-	NEGATIVE <sup>a</sup>	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	933	-	-	-	-	-

#### Analytical Data Qualifiers:

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# Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG 63/65_B84		PPG63/65_B90		PPG63/65_B92		PPG63/65_B94	PPG63/65_B95	_		PPG63/65_B105
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	4.1-4.6	2.8-3.3	3.1-3.6	3.1-3.6	3.6-4.1	2.6-3.1	1.4-1.9	3.9-4.4	1.1-1.6	1.9-2.4	1.6-2.1
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	3.7-4.2	5.8-6.3	5.5-6.0	5-5.5	5-5.5	6-6.5	7.2-7.7	4.7-5.2	6.2-6.7	6.7-7.2	6.3-6.8
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)											
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB86669-1	JB87496-1	JB87496-2	JB87496-3	JB87595-1	JB87701-1	JB87701-2	JB87890-1	JB87981-4	JB88725-4	JB88785-2
Date Sampled:					1/16/2015	2/2/2015	2/3/2015	2/3/2015	2/4/2015	2/5/2015	2/5/2015	2/6/2015	2/10/2015	2/24/2015	2/25/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis															
Antimony	mg/kg	450	31	6	<2.3 NJ-	<2.3 NJ-	<2.4 NJ-	<2.5 NJ-	<2.5 NJ-	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.6 NJ-	<2.8 NJ-	<2.6 NJ-
Chromium	mg/kg	120,000	-	-	15.9	22.1	27.5	13.4	12.8	15.9	19.3	55.3	21.9	72.6	22.6
Nickel	mg/kg	23,000	1,600	205**	12.1	17.5	14.4	10.5	10.7	13	16.7	11.3	33.1	31.1	10.8
Thallium	mg/kg	79	5	3	<1.2	<1.2	<1.2	<1.2	<1.2	<1.1	<1.2	<1.2	<1.3	<1.4	<1.3
Vanadium	mg/kg	1,100	390	NA	17	27.2	37.6	18.9	17.3	24.6	28.6	15.4	26.6	55.6	18.3
General Chemistry															
Chromium, Hexavalent	mg/kg	20	-	-	<0.47 NJ- / <0.47 NJ-	0.74 NJ- / 0.55	<0.46 NJ- / 0.92	<0.51 NJ- / 0.91	<0.50 NJ- / 0.5NJ-	<0.44	<0.46	6.7 *NJ- / 10.2 NJ-	<0.50	<0.57 NJ- / 0.63 NJ-	<0.51 NJ- / 4.7 NJ-
Iron, Ferrous	%	-	-	-	0.57	-	-	-	0.87	-	-	-	-	0.72	-
рН	su	-	-	-	8	7.22	8.18	7.21	7.13	7.89	7.86	7.9	7.03	8.04	8.09
Redox Potential Vs H2	mν	-	-	-	356	222	230	207	205	350	203	419	203	365	223
Solids, Percent	%	-	-	-	84.7	82.9	87.4	78.8	79.4	90.3	86.4	82.6	80.3	69.8	78.6
Sulfide Screen		-	-	-	NEGATIVE	-	-	-	NEGATIVE	-	-	-	-	NEGATIVE	-
Total Organic Carbon	mg/kg	-	-	-	4,050	-	-	-	20,600	-	-	-	-	125,000	-

#### Analytical Data Qualifiers:

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### Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_B106	PPG63/65_B107	PPG 63/65_B108	PPG 63/65_B109	PPG63/65_B110	PPG63/65_B111R	PPG63/65_B112R	PPG63/65_B113	PPG63/65_B114	PPG63/65_B115
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	5.5-6	1.5-2	4.3-4.8	4.1-4.6	3.3-3.8	4.5-5	5.2-5.7	4.7-5.2	5.3-5.8	6.4-6.9
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	5-5.5	8-8.5	5-5.5	5.2-5.7	5.5-6	4.2-4.7	3.2-3.7	3.7-4.2	2.7-3.2	2.4-2.9
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)										
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB92520-1	JB92520-2	JB92632-1	JB92632-4	JB92766-1	JB93212-1	JB93212-2	JB92858-4	JB92858-7	JB93021-2
Date Sampled:					4/15/2015	4/15/2015	4/16/2015	4/16/2015	4/17/2015	4/24/2015	4/24/2015	4/21/2015	4/21/2015	4/22/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis														
Antimony	mg/kg	450	31	6	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-	<2.2 NJ-	<2.2 NJ-	<2.4 NJ-	<2.4 NJ-	<2.7 NJ-	<2.7 NJ-	<2.6 NJ-
Chromium	mg/kg	120,000	-	-	24.2 EJ	155 EJ	35.1 EJ	29.1 EJ	18.1	13.6	14.8	14.1 ENJ+	13.8 ENJ+	11.2
Nickel	mg/kg	23,000	1,600	205**	16.6	19.5	18	23	14.9	11.1	11.4	12.9	13.5	10.1
Thallium	mg/kg	79	5	3	<1.1	<1.2	<1.1	<1.1	<1.1	<1.2	<1.2	<1.3	<1.3	<1.3
Vanadium	mg/kg	1,100	390	NA	27.4	45.2	41.3	47.5	28.1	19.9	21.1	19.3 EJ	18 EJ	16
General Chemistry														
Chromium, Hexavalent	mg/kg	20	-	-	<0.46 NJ- / 0.52 NJ-	6.7 NJ- / 14.4 NJ-	0.95	1.1	<0.46 *NJ- / <0.46 NJ-	<0.49 NJ- / <0.49 NJ-	<0.49 NJ- / <0.49 NJ-	<0.52 NJ- / 0.53 NJ-	0.71 NJ- / <0.55 NJ-	<0.51NJ- / <0.51 NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	0.9	-	-	0.81
рН	su	-	-	-	8.27	8.08	6.87	6.71	7.93	7.66	7.61	7.21	6.85	7
Redox Potential Vs H2	mv	-	-	-	225	273	258	233	325	226	219	198	236	195
Solids, Percent	%	-	-	-	86.8	85.9	85.4	85.5	86.8	82	81.7	77.5	72.9	78.8
Sulfide Screen		-	-	-	-	-	-	-	-	-	NEGATIVE	-	-	NEGATIVE
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	1,440	-	-	4,960

#### Analytical Data Qualifiers:

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su = standard unit

mv = millivolts

# Base Post-Excavation Soil Samples (2014-2016) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65 B116	PPG 63/65 B117	PPG63/65 B118	PPG63/65 B119	PPG63/65 B120	PPG63/65 B121
Sample Depth ( ft bgs):		Non-Residential	Residential	Impact to	6.4-6.9	5.3-5.8	3.5-4	3.7-4.2	3.7-4.2	2.2-2.7
Sample Elevation (ft msl):		Direct Contact	Direct	Groundwater	2.8-3.3	4.2-4.7	7-7.5	5.8-6.3	6.8-7.3	4.8-5.3
Excavated:		Soil (NJAC	Soil (NJAC	Soil Screening (11/13)						
Lab Sample ID:		7:26D 5/12)	7:26D 5/12)		JB93021-4	JB93163-3	JB93547-2	JB93547-6	JB95015-2	JC15057-1
Date Sampled:					4/22/2015	4/23/2015	4/29/2015	4/29/2015	5/19/2015	2/29/2016
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis										
Antimony	mg/kg	450	31	6	<2.4 NJ-	<2.6 NJ-	<2.3	<2.5	<2.5	<2.2 NJ-
Chromium	mg/kg	120,000	-	-	18.4	24.1 NJ-	42.7	111	12.6	26.7 NJ+
Nickel	mg/kg	23,000	1,600	205**	14.4	26.6 ENJ-	19.2 EJ	20.3 EJ	10.2	13.2
Thallium	mg/kg	79	5	3	<1.2	<1.3	<1.1	<1.3	<1.2	<1.1
Vanadium	mg/kg	1,100	390	NA	24.3	27.7 ENJ-	44.6	30.6	13	14.6
General Chemistry										
Chromium, Hexavalent	mg/kg	20	-	-	<0.50 NJ- / <0.50 NJ-	<0.53 NJ- / <0.53 NJ-	<0.46 NJ- / 2.4 *NJ-	0.77 NJ- / 0.49 *NJ-	<0.49	2 NJ- / 2.1 NJ-
Iron, Ferrous	%	-	-	-	-	-	0.76	-	12.6	0.76 <sup>b</sup>
рН	su	-	-	-	7.17	7.82	7.82	7.94	7.91	7.72
Redox Potential Vs H2	mv	-	-	-	195	177	289	250	321	343
Solids, Percent	%	-	-	-	80.5	75.2	86.3	82.4	82.3	87.8
Sulfide Screen			-	-	-		NEGATIVE		-	NEGATIVE
Total Organic Carbon	mg/kg	-	-	-	-	-	30,000 J	-	-	3,970 <sup>c</sup>

Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- **J+** The result is estimated and may be biased high.
- J--The result is estimated and may be biased low.
- **R** The reported result is rejected.

Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.
- <sup>b</sup> The ferrous iron test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.
- $^{\mbox{\scriptsize c}}$  Multiple injections indicate possible sample non-homogeneity.
- <sup>d</sup> The sulfide screen test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.
- # = Sample deemed usable due to acceptable insoluble recovery and secondary analytics.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

## Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ 2014-2015 Sampled by CB&I

22.6

32

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_SW04	PPG 63/65_SW22	PPG 63/65_SW23	PPG 63/65_SW25R	PPG 63/65-SW26	PPG 63/65_SW27R2	PPG 63/65-SW28
Sample Depth (ft bgs):		Non-Residential	Residential	Impact to	1.5-2	4.8-5.3	3.8-4.3	1.5-2.0	0.3-0.8	1.2-1.7	0.2-0.7
Sample Elevation (ft msl):		Direct Contact	Direct Contact	Groundwater	6-6.5	3.2-3.7	4.2-4.7	6.5-7	14.9-15.4	8-8.5	8-8.5
Lab Sample ID:		Soil (NJAC	Soil (NJAC	Soil Screening	JB69910-8	JB79068-2	JB79068-3	JB80992-2	JB79649-1	JB81729-6	JB79649-4
Date Sampled:		7:26D 5/12)	7:26D 5/12)	(11/13)	6/19/2014	10/13/2014	10/13/2014	11/5/2014	10/20/2014	11/13/2014	10/20/2014
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis											
Antimony	mg/kg	450	31	6	<2.1 NJ-	<2.3 NJ-	3.6 NJ-	<2.5 NJ-	<2.1 NJ-	<2.6 NJ-	2.9 NJ-
Chromium	mg/kg	120,000	-	-	40.4	9.2	30.8	123 NJ-	24.4	377 *NJ	160
lickel	mg/kg	23,000	1,600	205**	12.5	14	31.8	24.6	16.7	50.6 NJ-	25.5
Thallium	mg/kg	79	5	3	<1 1	<1.2	<1.2	<1.2	<1.1	<1.3 NJ-	<1.1

General Chemistry											
Chromium, Hexavalent	mg/kg	20	-	-	0.45	0.62	1.6	2.8 *NJ- / 1.5 NJ-	2.4 *NJ- / 1.7 *NJ-	7.2 *NJ- / <0.51 NJ-	1.1 *NJ- / 2.9 *NJ-
Iron, Ferrous	%	-	-	-	-	-	-	1.1	-	-	-
рН	su	-	-	-	8.5	7.51	8.17	8.16	7.94	7.73	7.75
Redox Potential Vs H2	mv	-	-	-	376	351	315	289	509	260	652
Solids, Percent	%	-	-	-	90	86	82.8	81.9	93.2	78.9	89.3
Sulfide Screen		-	-	-	-	-	-	NEGATIVE	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	53,400	-	-	-

12

21.1

#### Analytical Data Qualifiers:

Vanadium

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.

mg/kg

- **J** The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.

1,100

- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

Result exceeded criteria

390

NA

54.7 NJ-

39.1

22.9

#### Sidewall Post-Excavation Soil Samples (2014-2015)

### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

2014-2015 Sampled by CB&I

Client Sample ID: Sample Depth (ft bgs): Sample Elevation (ft msl): Lab Sample ID: Date Sampled: Matrix:		NJ Non-Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Default Impact to Groundwater Soil Screening (11/13)	PPG 63/65-SW29 0.4-0.9 7.9-8.4 JB79649-5 10/20/2014 Soil	PPG 63/65-SW30 0-0.5 9-9.5 JB79649-7 10/20/2014 Soil	PPG 63/65-SW31 0.5-1 8.6-9.1 JB79649-8 10/20/2014 Soil	PPG 63/65-SW32 0.2-0.7 10.3-10.8 JB79649-9 10/20/2014 Soil	PPG 63/65-SW33 1.5-2 9-9.5 JB79649-10 10/20/2014 Soil	PPG 63/65-SW34 1.5-2 9-9.5 JB79649-11 10/20/2014 Soil	PPG 63/65-SW35 1.2-1.7 9.3-9.8 JB79649-12 10/20/2014 Soil
Metals Analysis											
Antimony	mg/kg	450	31	6	<2.3	<2.5 NJ-	<2.4 NJ-	<2.3 NJ-	4.4 NJ-	<2.3 NJ-	<2.2 NJ-
Chromium Nickel	mg/kg mg/kg	120,000 23,000	1,600	205**	105 38.2	190 41.7	287 50.3	146 49	79.3 96.3	74.3 26.1	23 20.4
Thallium Vanadium	mg/kg mg/kg	79 1,100	5 390	3 NA	<1.2 45.9	<1.3 35.6	<1.2 47.1	<1.2 40.5	<3.1 <sup>a</sup> 42	<1.2 33.5	<1.1 25.7
General Chemistry											
Chromium, Hexavalent	mg/kg	20	-	-	0.49 *NJ- / 1 *NJ-	2.0 *NJ- / <0.51 *NJ-	3.6 *NJ- / 1.6 *NJ-	0.85 *NJ- / <0.46 *NJ-	2.4 *NJ- / 1.8 *NJ-	2.7 *NJ- / 3 *NJ-	1.6 *NJ-/ 1.2 *NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	-
рН	su	-	-	-	7.39	6.9	7.61	6.93	7.64	7.11	7.17
Redox Potential Vs H2	mv	-	-	-	562	551	482	559	563	524	514
Solids, Percent Sulfide Screen	%	-	-	-	86	78.4	84.8	86.7	93	83.8	91.4
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
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- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
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#### Notes:

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- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

## Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ 2014-2015 Sampled by CB&I

Client Sample ID:	NJ	NJ	NJ Default	PPG63/65_SW37	PPG 63/65_SW38R	PPG63/65_SW39	PPG 63/65_SW40	PPG 63/65_SW43	PPG 63/65_SW44	PPG 63/65_SW50
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	0.2-0.7	1.1-1.6	0.9-1.4	1.7-2.2	3.3-3.8	2.8-3.3	2.8-3.3
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	8.8-9.3	7.3-7.8	8.2-8.7	6.3-6.8	4.2-4.7	4.7-5.2	4.9-5.4
Lab Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening	JB80262-4	JB81368-1	JB80262-7	JB80445-1	JB80538-7	JB80640-2	JB81368-3
Date Sampled:	7:26D 5/12)	7:26D 5/12)	(11/13)	10/28/2014	11/10/2014	10/28/2014	10/29/2014	10/30/2014	10/31/2014	11/10/2014
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil

Metals Analysis											
Antimony	mg/kg	450	31	6	<2.2 NJ-	2.8 NJ-	<2.1 NJ-	<2.2 NJ-	<2.4 NJ-	<2.3	<2.5 NJ-
Chromium	mg/kg	120,000	-	-	232 NJ+	78.6 ENJ+	27.9 NJ+	36.6 NJ-	16.5	62.4 NJ+	71.3 ENJ+
Nickel	mg/kg	23,000	1,600	205**	40.2	59.2	18.5	22.9	14.8	24.9	15
Thallium	mg/kg	79	5	3	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2	<1.3
Vanadium	mg/kg	1,100	390	NA	37.4	38.6 EJ	21.9	18.6	22.6	45.9	29.5 EJ

General Chemistry											
									10 00 N.I. / 0 40 *N.I.		4.4511./45.511
Chromium, Hexavalent	mg/kg	20	-	-	1.9 NJ-/ 4 NJ-	3.5 NJ- / 5.1 NJ-	1.3 NJ- / 1.6 NJ-	3.3 NJ- / 4.1 NJ-	0.66 NJ- / <0.48 *NJ-	2.2 NJ- / 1.3 NJ-	4.4 NJ- / 15 NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	0.31
рН	su	-	-	-	7.53	8.16	7.52	8.38	7.63	8.67	9.25
Redox Potential Vs H2	mv	-	-	-	307	336	302	368	178	198	227
Solids, Percent	%	-	-	-	84.9	90.1	90.1	89.5	83.2	87.7	77
Sulfide Screen		-	-	-	-	-	-	-	-	-	NEGATIVE
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-	-	9,400

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

2014-2015	Sampled	by CB&I
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Client Sample ID: Sample Depth (ft bgs): Sample Elevation (ft msl): Lab Sample ID: Date Sampled: Matrix:		NJ Non-Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Default Impact to Groundwater Soil Screening (11/13)	PPG 63/65_SW56 0.6-1.1 7.5-8.0 JB81729-2 11/12/2014 Soil	PPG 63/65_SW57 0.7-1.2 6.5-7 JB82085-1 11/18/2014 Soil	PPG63/65_SW58 1-1.5 6.2-6.7 JB82085-2 11/18/2014 Soil	PPG63/65_SW59 0-0.5 7.2-7.7 JB82085-3 11/18/2014 Soil	PPG63/65_SW60 0-0.5 6.5-7 JB82305-2 11/20/2014 Soil	PPG63/65_SW61R 0.4-0.9 6.8-7.3 JB83152-6 12/3/2014 Soil	PPG63/65_SW64 1.9-2.4 5.3-5.8 JB83152-4 12/3/2014 Soil
Matala Avaluata	-					•					
Metals Analysis											
Antimony	mg/kg	450	31	6	<2.1 NJ-	<2.3 NJ-	<2.3 NJ-	<2.2 NJ-	<2.2 NJ-	<2.3 NJ-	<3.4 NJ-
Chromium	mg/kg	120,000	-	-	185 *NJ	25 *NJ	48.5 *NJ	39.8 *NJ	33.2	86.8	228
Nickel	mg/kg	23,000	1,600	205**	22.1 NJ-	15.8 NJ-	13.8 NJ-	11.1 NJ-	7.8	15.7	28.6
Thallium	mg/kg	79	5	3	<1.0 NJ-	<1.1 NJ-	<1.2 NJ-	<1.1 NJ-	<1.1	<1.1	<1.7
Vanadium	mg/kg	1,100	390	NA	33.5 NJ-	23.5 NJ-	19.6 NJ-	18.6 NJ-	8	23.5	73.6
General Chemistry											
Chromium, Hexavalent	mg/kg	20	-	-	4.5 *NJ- / 2.1NJ-	2.1	2.4	2.7	3.4	2.5 NJ- / 3.9 *NJ-	2.2 NJ- / 6.8 *NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-	2	-
pН	su	-	-	-	8.4	8.16	8.66	8.54	8.68	7.49	7.18
Redox Potential Vs H2	mv	-	-	-	248	115	318	319	269	303	281
Solids, Percent	%	-	-	-	91.9	86.3	83.6	88.7	89.9	85	61
Sulfide Screen		-	-	-	-	-	-	-	-	NEGATIVE	-
Total Organic Carbon	mg/kg	-	-	-	=	-	•	-	-	42,000	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
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- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
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#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

## Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_SW72R	PPG63/65_SW75	PPG63/65_SW76	PPG63/65_SW92	PPG63/65_SW93	PPG63/65_SW107	PPG63/65_SW110	PPG63/65_SW111
Sample Depth (ft bgs):		Non-Residential	Residential	Impact to	0.7-1.2	0.3-0.8	3.8-4.3	0.3-0.8	4.1-4.6	0.2-0.7	0-0.5	0.2-0.7
Sample Elevation (ft msl):		Direct Contact	Direct Contact	Groundwater	6.5-7.0	7.8-8.3	4.3-4.8	9.2-9.7	2.3-2.8	8.8-9.3	10.5-11	10.3-10.7
Lab Sample ID:		Soil (NJAC	Soil (NJAC	Soil Screening	JB86243-1	JB86000-1	JB86141-1	JB87890-2	JB87890-4	JB88785-1	JB88913-3	JB88913-4
Date Sampled:		7:26D 5/12)	7:26D 5/12)	(11/13)	1/13/2015	1/8/2015	1/9/2015	2/6/2015	2/9/2015	2/25/2015	2/26/2015	2/26/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis												
					i							
Antimony	mg/kg	450	31	6	<2.1 NJ-	<2.3 NJ-	<2.4 NJ-	<2.2 NJ-	<2.5 NJ-	<2.1 NJ-	<2.2 NJ-	<2.1 NJ-
Chromium	mg/kg	120,000	-	-	293	248	1,200	201	16.3	13.2	54.2	26.9
Nickel	mg/kg	23,000	1,600	205**	26.6	26.5	18.1	25.3	15.5	11.2	16.2	13.1
Thallium	mg/kg	79	5	3	<1.1	<1.2	<1.2	<1.1	<1.3	<1.1	<1.1	<1.1
Vanadium	mg/kg	1,100	390	NA	51.3	43.3	52.1	45.9	17.9	16.2	35.7	39.5
General Chemistry												
Chromium, Hexavalent	mg/kg	20	-	-	8.3 *NJ- / 7.4 *NJ-	1.7 *NJ-	<0.47 *NJ	4.7 *NJ- / 19.5 NJ-	<0.51 *NJ- / <0.51 NJ-		4.7 NJ- / 3.3	1.1 NJ- / 0.71
Iron, Ferrous	%	-	-	-	-	-	-	0.56	-	0.55	-	-
рН	su	-	-	-	7.85	7.02	9.09	7.6	8.06	8.14	7.02	8.81
Redox Potential Vs H2	mν	-	-	-	285	305	318	460	231	204	414	339
Solids, Percent	%	-	-	-	88.8	83.5	84.6	88.4	79	94.2	87.2	91.3
Sulfide Screen		-	-	-	-	-	-	NEGATIVE	-	NEGATIVE	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	43,100	-	7,280	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
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#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### **Sidewall Post-Excavation Soil Samples (2014-2015)**

#### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ 2014-2015 Sampled by CB&I

Client Sample ID:	NJ	NJ	NJ Default	PPG63/65_SW115	PPG63/65_SW116	PPG63/65_SW117	PPG63/65_SW118	PPG63/65_SW119	PPG63/65_SW120	PPG63/65_SW121R	PPG63/65_SW122
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	0.5-1	2.8-3.3	0.2-0.7	3.3-3.8	3.5-4.0	2.5-3.0	2.3-2.8	0.8-1.3
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	7-7.5	7.2-7.7	10.8-11.3	6-6.5	5.8-6.3	6.8-7.3	8.2-8.7	8-8.5
Lab Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening	JB89093-2	JB92520-3	JB92520-4	JB92632-2	JB92632-3	JB92632-5	JB93363-1	JB92766-3
Date Sampled:	7:26D 5/12)	7:26D 5/12)	(11/13)	2/27/2015	4/15/2015	4/15/2015	4/16/2015	4/16/2015	4/16/2015	4/27/2015	4/17/2015

Metals Analysis												
Antimony	mg/kg	450	31	6	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.2 NJ-	<2.4 NJ-	<2.3 NJ-	<2.5 NJ-	<2.6 NJ-
Chromium	mg/kg	120,000	-	-	332	26.7 EJ	34.9 EJ	16 EJ	24.1 EJ	19.4 EJ	23.3	58.3
Nickel	mg/kg	23,000	1,600	205**	33.6	16.5	17.4	11.9	19.4	14.7	20.7	14
Thallium	mg/kg	79	5	3	<1.1	<1.1	<1.2	<1.1	<1.2	<1.2	<1.3	<1.3
Vanadium	mg/kg	1,100	390	NA	51	33.4	32.3	25.8	36.8	15.5	30.3	28.2

<b>General Chemistry</b>												
Chromium, Hexavalent	mg/kg	20	-	-	8.2 *NJ- / 12.7 *NJ-	0.65 NJ- / 1.3 NJ-	1.5 NJ- / 0.53 NJ-	<0.45	3.2	1	0.58 NJ- / 0.66 *NJ-	0.58 *NJ- / 1.1 NJ-
Iron, Ferrous	%	-	-	-	-	-	0.27	-	-	-	-	-
рН	su	-	-	-	7.96	7.37	7.79	7.11	6.86	7.66	8.85	7.74
Redox Potential Vs H2	mv	-	-	-	327	280	517	304	259	264	309	363
Solids, Percent	%	-	-	-	85.8	87.6	85.3	88.4	87.1	89.6	81.4	76.4
Sulfide Screen		-	-	-	-	-	NEGATIVE	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	102,000	-	-	-	-	-

#### Analytical Data Qualifiers:

Matrix:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- EJ The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ

2014-2015 Sampled by CB&I

Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_SW123	PPG63/65_SW124	PPG63/65_SW125	PPG63/65_SW126	PPG63/65_SW127	PPG63/65_SW128R	PPG63/65_SW129
Sample Depth (ft bgs):		Non-Residential	Residential	Impact to	0.5-1.0	0.6-1.1	5-5.5	2.8-3.3	4.5-5	2.7-3.2	5-5.5
Sample Elevation (ft msl):		Direct Contact	Direct Contact	Groundwater	7.7-8.2	7.6-8.1	3.3-3.8	4.7-5.2	4-4.5	9.8-10.3	3.1-3.6
Lab Sample ID:		Soil (NJAC	Soil (NJAC	Soil Screening	JB92766-4	JB92766-5	JB92766-7	JB92858-1	JB92858-2	JB93363-2	JB92858-5
Date Sampled:		7:26D 5/12)	7:26D 5/12)	(11/13)	4/17/2015	4/17/2015	4/17/2015	4/20/2015	4/20/2015	4/27/2015	4/21/2015
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis											
Antimony	mg/kg	450	31	6	<2.7 NJ-	<2.5 NJ-	<3.3 NJ-	<2.4 NJ-	<2.7 NJ-	<2.4 NJ-	<2.5 NJ-
Chromium	mg/kg	120,000	-	-	127	99.8	1,630	561 ENJ+	44.9 ENJ+	31.3	19 ENJ+
Nickel	mg/kg	23,000	1,600	205**	14.5	12.3	22.1	14	17.2	13.2	15.9
Thallium	mg/kg	79	5	3	<1.4	<1.2	<1.7	<1.2	<1.3	<1.2	<2.5
Vanadium	mg/kg	1,100	390	NA	30.4	20.6	77.5	31.3 EJ	23.4 EJ	33.3	26.4 EJ
General Chemistry											
Chromium, Hexavalent	mg/kg	20	-	-	3.4 *NJ- / 12.7 NJ-	4.3 *NJ- / 5.6 NJ-	<0.65 *NJ- / <0.65 NJ-	14.4 NJ- / 1.6 NJ-	<0.53 NJ- / <0.53 NJ-	1.3 NJ- / 2.3 *NJ-	<0.52 NJ- / <0.52 NJ-
Iron, Ferrous	%	-	-	-	-	0.6	-	-	-	0.34	=
pH	su	-	-	-	7.98	8.29	7.63	7.65	7.02	7.75	6.86
Redox Potential Vs H2	mv	-	-	-	366	322	179	215	221	341	182
Solids, Percent	%	-	-	-	75.9	78.3	61.1	84.1	76.1	81.2	77.1
Sulfide Screen		-	-		-	NEGATIVE	-	-	-	NEGATIVE	-
Total Organic Carbon	mg/kg	-	-	-	-	215,000	-	-	-	14,400 J	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Sidewall Post-Excavation Soil Samples (2014-2015)

## Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ 2014-2015 Sampled by CB&I

Client Sample ID: Sample Depth (ft bgs): Sample Elevation (ft msl) Lab Sample ID: Date Sampled: Matrix:	:	NJ Non-Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Residential Direct Contact Soil (NJAC 7:26D 5/12)	NJ Default Impact to Groundwater Soil Screening (11/13)	PPG63/65_SW130 4.5-5 3.7-4.2 JB92858-6 4/21/2015 Soil	PPG63/65_SW131 2.5-3.0 5.9-6.4 JB93021-1 4/22/2015 Soil	PPG63-65_DUP- SW131 2.5-3.0 5.9-6.4 JB93021-5 4/22/2015 Soil	PPG63/65_SW132 1.6-2.1 4.3-4.8 JB93021-3 4/22/2015 Soil	PPG63/65_SW133 2-2.5 7.5-8.0 JB93163-1 4/23/2015 Soil	PPG63/65_SW134R 2.5-3.0 7.8-8.3 JB95015-1 5/19/2015 Soil	PPG63/65_SW135 1.9-2.4 7.9-8.4 JB93363-3 4/27/2015 Soil
Metals Analysis											
Antimony	mg/kg	450	31	6	<2.4 NJ-	<3.4 NJ-	<3.4 NJ-	<2.9 NJ-	<2.5 NJ-	<2.3 NJ-	<2.4 NJ-
Chromium Nickel	mg/kg	120,000 23,000	1,600	- 205**	767 ENJ+ 34.3	191 31.6	197 29.3	98 31.3	60 NJ- 59.3 ENJ-	33.3 20.7	15.6 7.9
Thallium	mg/kg mg/kg	79	1,600	3	34.3 <1.2	<1.7	29.3 <1.7	<1.5	59.3 ENJ- <1.2	<1.2	7.9 <1.2
Vanadium	mg/kg	1,100	390	NA	50 EJ	73.3	63.4	59.7	28.8 ENJ-	25.4	14.7
General Chemistry											
Chromium, Hexavalent	mg/kg	20	-	-	8.2 NJ- / 16.8 NJ-	<0.67 NJ- / <0.67 NJ-	1.4 NJ- / <0.67	<0.58 NJ- / <0.58 NJ-	<0.50 NJ- / 8.3 NJ-	0.47 NJ- / 1.5 NJ-	3.4 NJ- / 2.2 *NJ-
Iron, Ferrous	%	-	-	-	0.7	-	-	-	-	32.8	-
рН	su	-	-	-	8.22	7.94	7.91	7.13	7.59	7.44	8.36
Redox Potential Vs H2	mv	-	-	-	214	124	206	202	322	335	372
Solids, Percent	%	-	-	-	83	59.6	59.3	69.5	80.5	85.2	82.4
Sulfide Screen		-	-	-	NEGATIVE	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	38,400	-	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

# Sidewall Post-Excavation Soil Samples (2014-2015) Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil PPG Site 63, 1 Burma Road, Jersey City, NJ 2014-2015 Sampled by CB&I

Client Sample ID: Sample Depth (ft bgs): Sample Elevation (ft msl): Lab Sample ID:	-	NJ Non-Residential Direct Contact Soil (NJAC	NJ Residential Direct Contact Soil (NJAC	NJ Default Impact to Groundwater Soil Screening	PPG63/65_SW138 1.2-1.7 6.8-7.3 JB93547-7	PPG63/65_SW139 2.6-3.1 7.9-8.4 JB95015-3
Date Sampled:		7:26D 5/12)	7:26D 5/12)	(11/13)	4/29/2015	5/19/2015
Matrix:					Soil	Soil
Metals Analysis						
Antimony	mg/kg	450	31	6	<2.5	<2.6 NJ-
Chromium		120,000	31	0	58.7	35.6 EJ
Nickel	mg/kg	23,000	1,600	205**	16.7	22.6
	mg/kg	,				
Thallium	mg/kg	79	5	3	<1.2	<1.3
Vanadium	mg/kg	1,100	390	NA	25	28
General Chemistry						
						-
Chromium, Hexavalent	mg/kg	20	-	-	3.6 NJ- / 2.8 *NJ-	1.2 NJ / 1.1 NJ-
Iron, Ferrous	%	-	-	-	-	34.4
рН	su	-	-	-	9.51	7.76
Redox Potential Vs H2	mv	-	-	-	241	343
Solids, Percent	%	-	-	-	84.2	79.5
Sulfide Screen		-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- $\boldsymbol{J}$  The reported result is an estimated value.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

#### Notes:

- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.
- <sup>a</sup> Analytical result in this location was not considered an exceedance because analyte of concern was compliance averaged below soil remediation standard.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

#### Table 2C

#### Concrete Post-Excavation Samples (2014-2015)

#### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Concrete

#### PPG Site 63, 1 Burma Road

Jersey City, NJ Sampled by CB&I

					<del>-</del>	crocy city, its samp			
Client Sample ID:		NJ	NJ	NJ Default	PPG63/65_CCS01	PPG 63/65_CCS02	PPG63/65_CCS03	PPG63/65_CCG4	PPG63/65_CCSMP
Sample Depths (ft. bgs)		Non-Residential	Residential	Impact to	4.5 - 5	0.2-0.7	1.3 -1.8	3.2 - 3.7	0.8 - 1.3
Sample Elevations (ft. msl)		Direct Contact	Direct	Groundwater	3 -3.5	7.8-8.3	6.2 - 6.7	4.3 - 4.8	6.7- 7.2
Lab Sample ID:		Soil (NJAC	Soil (NJAC	Soil (11/13)	JB74992-1	JB80992-1	JB84487-1	JB92766-9	JB93547-3
Date Sampled:		7:26D 5/12)	7:26D 5/12)		8/26/2014	11/5/2014	12/16/2014	4/17/2015	4/29/2015
Matrix:					Concrete/Solid	Concrete/Solid	Concrete/Solid	Concrete/Solid	Concrete/Solid
Metals Analysis									
Antimony	mg/kg	450	31	6	<2.2 NJ-	<1.9	<2.2 NJ-	<2.1 NJ-	<2.2
Chromium	mg/kg	120000	ı	-	140 NJ-	94.2	75.9	11.6	21.7 EJ
Nickel	mg/kg	23000	1600	205**	5.5	28.6	8.7	6.5	7.5
Thallium	mg/kg	79	5	3	<1.1	<0.96	<1.1	<1.1	<1.1
Vanadium	mg/kg	1100	390	NA	11.6	24.9	15.7	17.3	12.1
General Chemistry									
	T	•		1	T			T	
Chromium, Hexavalent	mg/kg	20	-	-	3.7	0.59 *NJ- / 1.4 NJ-	3.8 *NJ+	0.59 *NJ- / 0.51 NJ-	<0.42 NJ- / < 0.42 *NJ-
Iron, Ferrous	%	-	-	-	-	-	-	-	-
pH	su	-	-	-	10.82	9.24	11.61	12.13	11.59
Redox Potential Vs H2	mv	-	-	-	148	267	104	124	123
Solids, Percent	%	-	1	-	95	99.2	95	95	94.6
Sulfide Screen		-		-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	-

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with
- **EJ** The reported value is estimated because of the presence of interference;
- N -The matrix spike sample recovery in the associated QC sample is not within
- **J+** The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.

#### Notes:

\*\*- Nickel site specific impact due to groundwater screen level method

calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		AD	001		AD	0004		AD005				AD007				AD008	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	6.5-7	7-7.5	7.5-8	8-8.5	5.5-6	5.5-6	3.5-4	4-4.5	4-4.5	5.5-6	6-6.5	6.5-7	6.5-7	6.5-7	6-6.5	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	1.4-1.9	0.9-1.4	0.4-0.9	-0.1- 0.4	1.5-2	1.5-2	3.6-4.1	3.1-3.6	3.1-3.6	1.7-2.2	1.2-1.7	0.7-1.2	0.7-1.2	0.7-1.2	1-1.5	1-1.5	1-1.5
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	AD001 6.5-7	AD001 7-7.5	AD001 7.5-8	AD001 8-8.5	AD004 5.5-6	DUP 01	AD005 3.5-4	AD005 4-4.5	DUP 02	AD007 5.5-6	AD007 6-6.5	AD007 6.5-7	DUP 09	DUP 09	AD008 6-6.5	DUP 10	DUP 10
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11,10)	JB44205-1	JB44205-2	JB44205-3	JB44205-4	JB46800-4	JB46800-5	JB46800-8	JB46800-9	JB46800-10	JB46883-20	JB46883-21	JB46883-22	JB46883-23	JB46883-23R	JB46883-31	JB46883-32	JB46883-32R
Date Sampled:				8/5/2013	8/5/2013	8/5/2013	8/5/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
			<u>'</u>	•	•		•	•	•	•		•	•	•	•	•				
Antimony (mg/kg)	450	31	6	<2.3 NJ-	<2.3 NJ-	<2.3 NJ-	<2.3 NJ-	<2.3	<2.5	<2.0	<2.0	<2.0	4 NJ-	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-		2.6	<1.9	
Chromium (mg/kg)	120,000	-	-	34.7	30.2	36.2 NJ+	27.3 NJ+	189	142	254	255	346	55.2 EJ	22.5	18.4	16.6		41.3	30.5	
Nickel (mg/kg)	23,000	1,600	205**	16.8	15.8	16.1	12.2	15.4	16.2	18.2	19.4	26.4	16.6	17.4	13.4	11.8		13.9	17.6	
Thallium (mg/kg)	79	5	3	<1.1	<1.2	<1.2	<1.1	<1.2	<1.2	<1.0	<0.99	<0.99	<1.3	<1.2	<1.2	<1.2		<0.99	<0.93	
Vanadium (mg/kg)	1,100	390	-	32.9	35.4	52	43.3	33	72.8	28.9	30.6	14.3 NJ+	24.7 EJ	32.3	26.4	24.3		18.4	24.3	
Chromium, Hexavalent (mg/kg)	20	-	-	1.3 NJ-	0.67 NJ-	0.92 NJ-	1.2 NJ-	<0.47 NJ-	<0.48 NJ-	<0.54 NJ-	14.8 NJ-	4.7 NJ-	<0.50 NJ-	<0.47 NJ-	<0.46 NJ-	<0.45 NJ-	<0.45 NJ-	<0.65 NJ-	<0.70 NJ-	<0.70 NJ-
рН	-	-	-	9.84	9.53	9.37	9.26	9.99	10.14	7.92	7.76	8.18	7.74	8.09	8.38	8.47		7.66	7.66	
Redox Potential Vs H2 (mV)	-	-	-	213	151	160	169	16.7	-12.5	128	138	230	281	259	256	263		209	158	
Solids, Percent (%)	-	-	-	86.1	87.6	89.1	89.4	85.3	84.2	74.4	76.4	79.1	80	84.9	86.8	88.3		61.3	57.5	

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface mg/kg = milligram per kilogram
- mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

Result exceeded criteria

Page 1 of 19

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default			AD	0009					AD	011		
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	6-6.5	6-6.5	6.5-7	6.5-7	6.5-7	6.5-7	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	0.5-1	0.5-1	0-0.5	0-0.5	0-0.5	0-0.5	1.7-2.2	1.7-2.2	1.2-1.7	1.2-1.7	0.7-1.2	0.7-1.2
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	AD009 6-6.5	AD009 6-6.5	AD009 6.5-7	AD009 6.5-7	DUP 12	DUP 12	AD011 5.5-6	AD011 5.5-6	AD011 6-6.5	AD011 6-6.5	AD011 6.5-7	AD011 6.5-7
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)		JB47183-7	JB47183-7R	JB47183-8	JB47183-8R	JB47183-9	JB47183-9R	JB47087-2	JB47087-2R	JB47087-3	JB47087-3R	JB47087-4	JB47087-4R
Date Sampled:				9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
					•	•	•	•	•	•		•	•	•	_ <b>-</b>
Antimony (mg/kg)	450	31	6	<2.5		3.5		<2.0		<2.4 NJ-		<2.3		<2.5	
Chromium (mg/kg)	120,000	-	-	11.1		22.2		17.5		18.4		15		16.7	
Nickel (mg/kg)	23,000	1,600	205**	12.3		21.4		15.3		14.3		14.7		14.6	
Thallium (mg/kg)	79	5	3	<1.3		<0.99		<1.0		<1.2		<1.1		<1.2	
Vanadium (mg/kg)	1,100	390	-	17.2		25.9		25.3		17.5		18.1		19.6	
Chromium, Hexavalent (mg/kg)	20	-	-	<0.49 NJ-	<0.49 NJ-	<0.60 NJ-	<0.60 NJ-	<0.54 NJ-	<0.54 NJ-	<0.49 NJ-	<0.49 NJ-	<0.48 NJ-	<0.48 NJ-	<0.48 NJ-	<0.48 NJ-
рН	-	-	-	8.16		8.91		9.56		8.02		8.57		8.16	
Redox Potential Vs H2 (mV)	-	-	-	285		280		270		268		289		264	
Solids, Percent (%)	-	-	-	81.5		66.3		74.7		81.9		84		82.7	

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

Page 2 of 19

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		BD	001			BD002			BD003					BD	0004			
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	7-7.5	7.5-8	8-8.5	8.5-9	6.5-7	7-7.5	7.5-8	5.5-6	5.5-6	5.5-6	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	6.5-7	6.5-7
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	-0.1 - 0.4	-0.1- (-0.6)	-0.6 - (- 1.1)	-1.1 - ( - 1.6 )	0.3-0.8	-0.2 - 0.3	-0.7 - ( - 0.2 )	1.8-2.3	1.8-2.3	1.8-2.3	2.2-2.7	2.2-2.7	1.7-2.3	1.7-2.3	1.2-1.7	1.2-1.7	1.2-1.7	1.2-1.7
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	BD001 7-7.5	BD001 7.5-8	BD001 8-8.5	BD001 8.5-9	BD002 6.5-7	BD002 7-7.5	BD002 7.5-8	BD003 5.5-6	DUP 07	DUP 07	BD004 5.5-6	BD004 5.5-6	BD004 6-6.5	BD004 6-6.5	BD004 6.5-7	BD004 6.5-7	DUP 06	DUP 06
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(13.12)	JB44205-5	JB44205-6	JB44205-7	JB44205-8	JB43880-49A	JB43880-50A	JB43880-51A	JB46883-8R	JB46883-9	JB46883-9R	JB46800-38	JB46800-38R	JB46800-39	JB46800-39R	JB46800-40	JB46800-40R	JB46800-41	JB46800-41R
Date Sampled:				8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/2/2013	8/2/2013	8/2/2013	9/10/2013	9/10/2013	9/10/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
											•		•				•				
Antimony (mg/kg)	450	31	6	<2.2 NJ-	<2.4 NJ-	<2.5 NJ-	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.3 NJ-		<2.4		3.2 NJ-		<2.2		<2.2		<2.4	
Chromium (mg/kg)	120,000	-	-	181	18.5	18.8	19.3	65.7 NJ+	23.8 NJ+	17.7 NJ+		15.5		31.4		33.5		15.5		23.5	
Nickel (mg/kg)	23,000	1,600	205**	12.9	13.7	14.6	13.7	15.1	14	14.3		15.1		21.4		18.8		14.5		19.1	
Thallium (mg/kg)	79	5	3	<1.1	<1.2	<1.2	<1.1	<1.2	<1.1	<2.3 <sup>a</sup>		<1.2		<1.2		<1.1		<1.1		<1.2	
Vanadium (mg/kg)	1,100	390	-	22.7	20.7	17.3	26.2	24.5	35.7	24.2		20.8		22.4		32.6		24		33.3	
Chromium, Hexavalent (mg/kg)	20	-	-	0.95 NJ-	<0.46 NJ-	0.87 NJ-	0.67 NJ-	<0.46 NJ-	<0.46 NJ-	0.47 NJ-	<0.48 NJ-	<0.49 NJ-	<0.49 NJ-	<0.47 NJ-	0.59 NJ-	<0.46 NJ-	0.7 NJ-	<0.45 NJ-	<0.45 NJ-	<0.47 NJ-	<0.47 NJ-
рН	-	-	-	10.33	10.06	9.54	9.64	9.52	9.36	9.16		8.51		8.14		8.35		8.13		8.23	
Redox Potential Vs H2 (mV)	-	-	-	128	116	129	148	147	155	156		179		220		202		201		201	
Solids, Percent (%)	-	-	-	90.5	87.2	83	88.4	87.1	87.7	89.3		81.7		85.2		86.9		88.4		85.7	

#### Analytical Data Qualifiers:

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- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
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- R The reported result is rejected .
- Notes:

  CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default					BD	005						BD	006	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	7-7.5	7-7.5	7-7.5	7-7.5	6-6.5	6.5-7	7-7.5	7.5-8
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.2-2.7	2.2-2.7	1.7-2.3	1.7-2.3	1.2-1.7	1.2-1.7	0.7-1.2	0.7-1.2	0.7-1.2	0.7-1.2	1.5-2	1-1.5	0.5-1	0-0.5
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	BD005 5.5-6	BD005 5.5-6	BD005 6-6.5	BD005 6-6.5	BD005 6.5-7	BD005 6.5-7	BD005 7-7.5	BD005 7-7.5	DUP 08	DUP 08	BD006 6-6.5	BD006 6.5-7	BD006 7-7.5	BD006 7.5-8
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11,710)	JB46883-10	JB46883-10R	JB46883-11	JB46883-11R	JB46883-12	JB46883-12R	JB46883-13	JB46883-13R	JB46883-14	JB46883-14R	JB44447-13	JB44447-14	JB44447-15	JB44447-16
Date Sampled:				9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013
Matrix:				Soil         Soil	Soil	Soil	Soil	Soil									
			•			•	•	•	•	•		•	•	•	•	•	
Antimony (mg/kg)	450	31	6	<2.3 NJ-		<2.3 NJ-		<2.3 NJ-		<2.3 NJ-		<2.5 NJ-		<2.3 NJ-	<2.4 NJ-	<2.5 NJ-	<2.4 NJ-
Chromium (mg/kg)	120,000	-	-	43.2 EJ		22.5 EJ		24.4 EJ		19.9 EJ		17.9 EJ		25 *ENJ-	29.4 *ENJ-	21.6 *ENJ-	18.4 *ENJ-
Nickel (mg/kg)	23,000	1,600	205**	15.7		16.1		16.3		16.4		15.8		12.5	14.4	15.6	13.1
Thallium (mg/kg)	79	5	3	<1.2		<1.2		<1.2		<1.2		<1.3		<1.2	<1.2	<1.3	<1.2
Vanadium (mg/kg)	1,100	390	-	53.5 EJ		25.5 EJ		31 EJ		26.6 EJ		23.5 EJ		28.3 NJ-	28.1 NJ-	26.5 NJ-	21.2 NJ-
		_	,		T												1
Chromium, Hexavalent (mg/kg)	20	-	-	1.2 NJ-	2.7 NJ-	<0.47 NJ-	<0.47 NJ-	<0.47 NJ-	<0.47 NJ-	<0.49 NJ-	<0.49 NJ-	<0.50 NJ-	0.54 NJ-	0.49 NJ-	<0.49 NJ-	<0.49 NJ-	<0.49 NJ-
рН	-	-	-	7.83		7.45		7.6		7.82		7.8		8.14	7.49	7.11	7.4
Redox Potential Vs H2 (mV)	-	-	-	276		260		270		271		270		255	257	229	235
Solids, Percent (%)	-	-	-	86		84.3		84.5		82.3		80.2		90.4	82.2	81.2	81.6

#### Analytical Data Qualifiers:

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- standards/criteria.

  Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				BD	0007							BD	8000			
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2-2.5	2-2.5	1.5-2	1.5-2	1-1.5	1-1.5	0.5-1	0.5-1	2.4-2.9	2.4-2.9	1.9-2.4	1.9-2.4	1.4-1.9	1.4-1.9	0.9-1.4	0.9-1.4
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	BD007 5-5.5	BD007 5-5.5	BD007 5.5-6	BD007 5.5-6	BD007 6-6.5	BD007 6-6.5	BD007 6.5-7	BD007 6.5-7	BD008 4.5-5	BD008 4.5-5	BD008 5-5.5	BD008 5-5.5	BD008 5.5-6	BD008 5.5-6	BD008 6-6.5	BD008 6-6.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(1)	JB46883-15	JB46883-15R	JB46883-16	JB46883-16R	JB46883-17	JB46883-17R	JB46883-18	JB46883-18R	JB46883-24	JB46883-24R	JB46883-25	JB46883-25R	JB46883-26	JB46883-26R	JB46883-27	JB46883-27R
Date Sampled:				9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013
Matrix:				Soil	Soil														
							•	•	•		•	•		•		•	•	•	
Antimony (mg/kg)	450	31	6	<2.3 NJ-		<2.3 NJ-		<2.3 NJ-		<2.1 NJ-		<2.2 NJ-		3.8 NJ-		3.9 NJ-		<11 <sup>a</sup> NJ-***	
Chromium (mg/kg)	120,000	-	-	38.3 EJ		29.1 EJ		28.9 EJ		31.1 EJ		73.2		238		69.3		64.1	
Nickel (mg/kg)	23,000	1,600	205**	18.5		15		16.1		17.9		14.5		23.4		16.7		22.5	
Thallium (mg/kg)	79	5	3	<1.2		<1.2		<1.1		<1.0		<1.1		<1.1		<1.0		<5.7 <sup>a</sup> ***	
Vanadium (mg/kg)	1,100	390	-	38.5 EJ		27.2 EJ		36.8 EJ		39.7 EJ		16.9		34.7		18.1		21.5	
Chromium Hovovolont (ma/ka)	20		Г	0.45 NJ-	0.98 NJ-	0.63 NJ-	1 NJ-	0.81 NJ-	0.75 NJ-	0.6 NJ-	0.64 NJ-	<0.46 NJ-	<0.46 NJ-	<0.50 NJ-	-0.50 N.I	-0.59 N I	-0.59 N I	<0.49 NJ-	<0.49 NJ-
Chromium, Hexavalent (mg/kg)	20	-	-		0.96 NJ-		I NJ-	ļ	0.75 NJ-		0.04 NJ-		<0.46 NJ-		<0.50 NJ-	<0.58 NJ-	<0.58 NJ-		<0.49 NJ-
pH	-	-	-	7.97		7.94		8.05		7.86		7.68		7.8		7.73		7.78	
Redox Potential Vs H2 (mV)	-	-	-	269		271		277		250		273		26.6		273		217	
Solids, Percent (%)	-	-	-	88.2		86.7		89.9		73.4		87.4		79.4		68.4		81.4	

#### Analytical Data Qualifiers:

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Notes:

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- ft msl = feet mean sea level
- ft bgs = feet below ground surface mg/kg = milligram per kilogram
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- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
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  Result exceeded criteria

Page 5 of 19

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				BD	0009						BD	010		
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	5.5-6	5.5-6	6-6.5	6-6.5	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	3.4-3.9	3.4-3.9	2.9-3.4	2.9-3.4	2.4-2.9	2.4-2.9	1.9-2.4	1.9-2.4	2.3-2.8	2.3-2.8	1.8-2.3	1.8-2.3	1.8-2.3	1.8-2.3
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	BD009 4.5-5	BD009 4.5-5	BD009 5-5.5	BD009 5-5.5	BD009 5.5-6	BD009 5.5-6	BD009 6-6.5	BD009 6-6.5	BD010 5.5-6	BD010 5.5-6	BD010 6-6.5	BD010 6-6.5	DUP11	DUP11
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11/10)	JB47087-10	JB47087-10R	JB47087-11	JB47087-11R	JB47087-12	JB47087-12R	JB47087-13	JB47087-13R	JB47087-7	JB47087-7R	JB47087-8	JB47087-8R	JB47087-9	JB47087-9R
Date Sampled:				9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013
Matrix:				Soil	Soil	Soil											
							•										
Antimony (mg/kg)	450	31	6	<2.3 NJ-		<2.2 NJ-		<2.2 NJ-		<2.2 NJ-		<2.4		<2.4		93.4 ***	
Chromium (mg/kg)	120,000	-	-	181		21.8		19.5		49.6		490		30.1		16	
Nickel (mg/kg)	23,000	1,600	205**	14.8		17		13.7		23.3		22.5		18.8		19	
Thallium (mg/kg)	79	5	3	<1.1		<1.1		<1.1		<1.1		<1.2		<1.2		<1.2	
Vanadium (mg/kg)	1,100	390	-	38.9		32.4		31		39.8		15.4		14.7		17	
Chromium, Hexavalent (mg/kg)	20	<del>.</del>	_	11.2 NJ-	8.3 NJ-	<0.45 NJ-	<0.45 NJ-	<0.45 NJ-	<0.45 NJ-	0.61 NJ-	<0.46 NJ-	<0.49 NJ-	<0.49 NJ-	<0.49 NJ-	<0.49 NJ-	<0.48 NJ-	<0.48 NJ-
onoman, nexavalent (mg/kg)	20							ļ									-
pn	-	-	-	7.86		7.98		7.96		7.96		8.08		8.12		8.22	
Redox Potential Vs H2 (mV)	-	-	-	301		300		311		317		296		291		290	
Solids, Percent (%)	-	-	-	86.5		89.2		88.8		87.6		81.5		82.4		83	

#### Analytical Data Qualifiers:

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- \* Duplicate analysis not within control limits; indeterminate bias direction.
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- Notes:

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- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- † Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		CD	001			CD	0002			CD003	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	7-7.5	7.5-8	8-8.5	8.5-9	6-6.5	6.5-7	7-7.5	7.5-8	6.5-7	7-7.5	7.5-8
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	0.8-1.3	0.3-0.8	-0.2 - 0.3	-0.7 - ( - 0.2 )	1.9-2.4	1.3-1.8	0.8-1.3	0.3-0.8	1.5-2	1-1.5	0.5-1
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD001 7-7.5	CD001 7.5-8	CD001 8-8.5	CD001 8.5-9	CD002 6-6.5	CD002 6.5-7	CD002 7-7.5	CD002 7.5-8	CD003 6.5-7	CD003 7-7.5	CD003 7.5-8
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(1)	JB43880-35A	JB43880-1A	JB43880-2A	JB43880-3A	JB43880-4A	JB43880-5A	JB43880-6A	JB43880-7A	JB43880-30A	JB43880-31A	JB43880-32A
Date Sampled:				7/31/2013	7/31/2013	7/31/2013	7/31/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/31/2013	7/31/2013	7/31/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	<2.0 NJ-	<2.4 NJ-	<2.4 NJ-	<2.0 NJ-	<2.3 NJ-	<2.3 NJ-	<2.4 NJ-				
Chromium (mg/kg)	120,000	-	-	15.3 NJ+	17.9	17	15.9	25.7	18.9	32.7	15.6	37.7	32.9	17.5
Nickel (mg/kg)	23,000	1,600	205**	13.1	14.3	14.4	17.2	17.5	14.3	22.7	12.2	16.8	16.5	12.9
Thallium (mg/kg)	79	5	3	<1.0	<1.2	<1.2	<1.0	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Vanadium (mg/kg)	1,100	390	-	22.2	24.4	24.2	23.3	35.5	30.1	49.1	22.7	31.2	29.3	25.4
Chromium, Hexavalent (mg/kg)	20	-	-	<0.52 NJ-	<0.48 NJ-	<0.47 NJ-	5.3 NJ-	0.69 NJ-	0.76 NJ-	0.48 NJ-	0.98 NJ-	<0.47 NJ-	<0.46 NJ-	<0.46 NJ-
рН	-	-	-	6.98	7.13	7.37	6.77	6.88	7.24	6.98	6.72	7.24	7.1	7.21
Redox Potential Vs H2 (mV)	-	-	-	197	310	248	276	241	242	232	239	236	212	213
Solids, Percent (%)	-	-	-	77.2	82.9	84.5	43.6	86.5	86.1	86.6	84.4	85.9	86.6	86.9

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:

  CCPW Chromate Chemical
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram
- mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		CD	004			CD	006		CD008	CD	009
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	7-7.5	7.5-8	8-8.5	8.5-9	7-7.5	7.5-8	8-8.5	8.5-9	6.5-7	5.5-6	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	0.8-1.3	0.3-0.8	-0.2 - 0.3	-0.7 - ( -0.2 )	-0.1 - ( 0.4 )	-0.6 - ( - 0.1 )	-1.1 - ( -0.6 )	-1.6 - ( 1.1 )	0.5-1	1.7-2.2	1.2-1.7
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD004 7-7.5	CD004 7.5-8	CD004 8-8.5	CD004 8.5-9	CD006 7-7.5	CD006 7.5-8	CD006 8-8.5	CD006 8.5-9	CD008 6.5-7	CD009 5.5-6	CD009 6-6.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)		JB44205-25	JB44205-26	JB44205-27	JB44205-28	JB44205-33	JB44205-34	JB44205-35	JB44205-36	JB43880-43A	JB43880-46A	JB43880-47A
Date Sampled:				8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/2/2013	8/2/2013	8/2/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
			,											
Antimony (mg/kg)	450	31	6	<2.3 NJ-	<2.3 NJ-	<2.3 NJ-	<2.5 NJ-	<2.3 NJ-	<2.2 NJ-	<2.4 NJ-	<2.1 NJ-	<2.3 NJ-	<2.1 NJ-	<2.4 NJ-
Chromium (mg/kg)	120,000	-	-	46.3 NJ+	34.3 NJ+	22.4 NJ+	18.4 NJ+	46.7 NJ+	29 NJ+	18.4 NJ+	24.3 NJ+	39.5 NJ+	30.3 NJ+	19.5 NJ+
Nickel (mg/kg)	23,000	1,600	205**	11.9	16.9	13.5	14.1	12.2	17	14	17.6	13.2	14.1	15.1
Thallium (mg/kg)	79	5	3	<1.1	<1.1	<1.1	<1.2	<1.1	<1.1	<1.2	<1.0	<1.2	<1.0	<1.2
Vanadium (mg/kg)	1,100	390	-	28.5	41.2	24.6	24.4	24.5	25.8	31.3	30.9	22	32.1	24.5
Chromium, Hexavalent (mg/kg)	20	-	-	1.2 NJ-	<0.47 NJ-	<0.46 NJ-	<0.49 NJ-	<0.44 NJ-	<0.44 NJ-	<0.46 NJ-	<1.2 NJ-	0.55 NJ-	<0.50 NJ-	<0.46 NJ-
рН	-	-	-	6.95	8.76	7.9	7.36	9.31	9.31	8.73	7.37	7.77	7.16	7.34
Redox Potential Vs H2 (mV)	-	-	-	290	279	256	214	224	229	149	233	211	222	225
Solids, Percent (%)	-	-	-	88.9	85.5	87.9	82.4	91	90.4	87.6	33.5	83.6	79.9	87.4

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
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- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				CD	010							CD	011			
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4.5-5⁺	4.5-5 <sup>+</sup>	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.7-3.2	2.7-3.2	2.2-2.7	2.2-2.7	1.7-2.2	1.7-2.2	1.2-1.7	1.2-1.7	3.1-3.6	3.1-3.6	2.6-3.1	2.6-3.1	2.1-2.6	2.1-2.6	1.6-2.1	1.6-2.1
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD010 4.5-5	CD010 4.5-5	CD010 5-5.5	CD010 5-5.5	CD010 5.5-6	CD010 5.5-6	CD010 6-6.5	CD010 6-6.5	CD011 4.5-5	CD011 4.5-5	CD011 5-5.5	CD011 5-5.5	CD011 5.5-6	CD011 5.5-6	CD011 6-6.5	CD011 6-6.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(115)	JB46883-1	JB46883-1R	JB46883-2	JB46883-2R	JB46883-3	JB46883-3R	JB46883-4	JB46883-4R	JB46800-42	JB46800-42R	JB46800-43	JB46800-43R	JB46800-44	JB46800-44R	JB46800-45	JB46800-45R
Date Sampled:				9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
			,							•	•		•						
Antimony (mg/kg)	450	31	6	<2.3 NJ-		<2.3 NJ-		<2.4		<2.4		<2.4		<2.3		<2.3		<2.2	
Chromium (mg/kg)	120,000	-	-	17 EJ		58.8 EJ		35.8		41.2		19.7		461		48.6		25.3	
Nickel (mg/kg)	23,000	1,600	205**	12		22.2		14.2		16		14.4		14.6		12.3		13.1	
Thallium (mg/kg)	79	5	3	<1.1		<1.1		<1.2		<1.2		<1.2		<1.2		<1.1		<1.1	
Vanadium (mg/kg)	1,100	390	-	20.3 EJ		45.1 EJ		29.4		27.8		25.8		34.2		20.8		25.9	
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	<0.47NJ-	0.55 NJ-	0.49 NJ-	0.54 NJ-	<0.46 NJ-	<0.47 NJ-	<0.47 NJ-	<0.48 NJ-	<0.48 NJ-	2.5 NJ-	3.5 NJ-	0.65 NJ-	<0.46 NJ-	<0.46 NJ-	<0.46 NJ-
рН	-	-	-	8.84		8.84		8.61		8.18		8.65		9.05		8.77		8.44	
Redox Potential Vs H2 (mV)	-	-	-	258		229		244		251		178		169		218		212	
Solids, Percent (%)	-	-	-	84.8		88.7		86.1		85.2		82.5		86.5		87.1		86.6	

#### Analytical Data Qualifiers:

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- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				CD012				CD013										
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5-5.5	5.5-6⁺	5.5-6	5.5-6	5.5-6	6-6.5	6-6.5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	6.5-7	6.5-7	
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.8-3.3	2.3-2.8	2.3-2.8	2.3-2.8	2.3-2.8	1.8-2.3	1.8-2.3	2.8-3.3	2.8-3.3	2.3-2.8	2.3-2.8	1.8-2.3	1.8-2.3	1.3-1.8	1.3-1.8	1.3-1.8	1.3-1.8	
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD012 5-5.5	CD012 5.5-6	CD012 5.5-6	DUP 04	DUP 04	CD012 6-6.5	CD012 6-6.5	CD013 5-5.5	CD013 5-5.5	CD013 5.5-6	CD013 5.5-6	CD013 6-6.5	CD013 6-6.5	CD013 6.5-7	CD013 6.5-7	DUP 05	DUP 05	
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	, , , ,	JB46800-17	JB46800-18	JB46800-18R	JB46800-20	JB46800-20R	JB46800-19	JB46800-19R	JB46800-21	JB46800-21R	JB46800-22	JB46800-22R	JB46800-23	JB46800-23R	JB46800-24	JB46800-24R	JB46800-36	JB46800-36R	
Date Sampled:				9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	9/9/2013	
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
	-			-																	
Antimony (mg/kg)	450	31	6	<2.3	<2.3		<2.2		<2.4		<2.3 NJ-		<2.0 NJ-		<2.1 NJ-		<2.2 NJ-		<2.2 NJ-		
Chromium (mg/kg)	120,000	-	-	26	16.7		18.4		21.1		23.3		17.9		26.8		25.9		18.4		
Nickel (mg/kg)	23,000	1,600	205**	13.7	12.6		14.9		14.4		13.9		13.7		15.3		17.2		14.7		
Thallium (mg/kg)	79	5	3	<1.2	<1.2		<1.1		<1.2		<1.2		<0.99		<1.1		<1.1		<1.1		
Vanadium (mg/kg)	1,100	390	-	20.8 NJ+	21.6		26.3 NJ+		23.6 NJ+		21.2		19.1		23.4		27.4		27.8		
Chromium Hovovolont (ma/ka)	1 20 1		1	-0.47 N.I	0.61 N.I	-0.46 N.I	0.50 N I	-0.46 N.I	0.46 N.I	40.46 N.I	-0.47 N.I	0 61 N I	-0.51 N.I	-0.51 N.I	-0.45 N.I	0.47 NJ-	1 -0.44 N.I	T -0.44 N.I	-0.44 N.I	T -0.44 N.I	
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	0.61 NJ-	<0.46 NJ-	0.59 NJ-	<0.46 NJ-	0.46 NJ-	<0.46 NJ-	<0.47 NJ-	0.61 NJ-	<0.51 NJ-	<0.51 NJ-	<0.45 NJ-	0.47 NJ-	<0.44 NJ-	<0.44 NJ-	<0.44 NJ-	<0.44 NJ-	
рН	-	-	-	8.32	8.3		8.06		8.49		7.53		7.23		7.29		7.86		8.43		
Redox Potential Vs H2 (mV)	-	-	-	154	147		251		204		201		189		173		166		297		
Solids, Percent (%)	-	-	-	84.5	87.8		87.7		86.7		84.4		79.2		88.8		90.3		91.4		

#### Analytical Data Qualifiers:

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- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface mg/kg = milligram per kilogram
- mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				CD		CD015								
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	8-8.5	8-8.5	8.5-9⁺	8.5-9	9-9.5	9-9.5	9.5-10	9.5-10	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	-0.1 - 0.4	-0.1 - 0.4	-0.6 - ( -0.1 )	-0.6 - ( -0.1 )	-1.1 - ( - 0.6)	-1.1 - ( - 0.6)	-1.6 - ( - 1.1 )	-1.6 - ( - 1.1 )	2.2-2.7	2.2-2.7	1.7-2.2	1.7-2.2	1.2-1.7	1.2-1.7
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD014 8-8.5	CD014 8-8.5	CD014 8.5-9	CD014 8.5-9	CD014 9-9.5	CD014 9-9.5	CD014 9.5-10	CD014 9.5-10	CD015 5.5-6	CD015 5.5-6	CD015 6-6.5	CD015 6-6.5	CD015 6.5-7	CD015 6.5-7
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11,10)	JB44447-33	JB44447-33R	JB44447-34	JB44447-34R	JB44447-35	JB44447-35R	JB44447-36	JB44447-36R	JB44447-30	JB44447-30R	JB44447-31	JB44447-31R	JB44447-32	JB44447-32R
Date Sampled:				8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		,	•														
Antimony (mg/kg)	450	31	6	<2.0 NJ-		<2.5		<2.0 NJ-		<2.0 NJ-		<2.3 NJ-		<2.3 NJ-		<2.4 NJ-	
Chromium (mg/kg)	120,000	-	-	483		36.3		15		29.7		28.4		162		35.9	
Nickel (mg/kg)	23,000	1,600	205**	19.5		15.3		14.5		16.3		11.6		16.2		13.7	
Thallium (mg/kg)	79	5	3	<1.0		<1.2		<1.0		<0.99		<1.2		<1.1		<1.2	
Vanadium (mg/kg)	1,100	390	-	41.1		20.8		17		25.4		18.3		24.1		26	
Chromium, Hexavalent (mg/kg)	20	-	-	3.6 NJ-	10.2 NJ-	<0.48 NJ-	<0.48 NJ-	<0.50 NJ-	<0.50 NJ-	<0.94 NJ-	<0.94 NJ-	<0.47 NJ-	<0.47 NJ-	<0.47 NJ-	0.96 NJ-	<0.48 NJ-	<0.48 NJ-
pH	-	-	-	8.7		7.76		8.02		7.69		7.91		8.11		8.03	
Redox Potential Vs H2 (mV)	-	-	-	159		180		183		171		155		160		168	
Solids, Percent (%)	-	-	-	78.1		83.2		79.8		42.5		85		85.8		84.1	

#### Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram
- mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

Page 11 of 19

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default			CD	CD017						
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5-5.5	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	6-6.5	6.5-7	7-7.5	7.5-8
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.5-3	2-2.5	1.5-2	1.5-2	1-1.5	1-1.5	1.2-1.7	0.7-1.2	0.2-0.7	-0.3 - 0.2
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD016 5-5.5	CD016 5.5-6	CD016 6-6.5	CD016 6-6.5	CD016 6.5-7	CD016 6.5-7	CD017 6-6.5	CD017 6.5-7	CD017 7-7.5	CD017 7.5-8
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)		JB44447-17	JB44447-18	JB44447-19	JB44447-19R	JB44447-20	JB44447-20R	JB44447-1	JB44447-2	JB44447-3	JB44447-4
Date Sampled:				8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013
Matrix:				Soil									
			,							,			
Antimony (mg/kg)	450	31	6	<2.4 NJ-	<2.4 NJ-	<2.0 NJ-		<2.0 NJ-		<2.3 NJ-	<2.2 NJ-	<2.4 NJ-	<2.5 NJ-
Chromium (mg/kg)	120,000	-	-	25.6 *ENJ-	12.7 *ENJ-	19.8 *ENJ-		14 *ENJ-		168 *ENJ-	42 *ENJ-	25.4	18.1
Nickel (mg/kg)	23,000	1,600	205**	14.6	12.4	15.3		15.3		19.2	14.1	16.6	15.8
Thallium (mg/kg)	79	5	3	<1.2	<1.2	<1.0		<1.0		<1.1	<1.1	<1.2	<1.2
Vanadium (mg/kg)	1,100	390	-	23.5 NJ-	18.7 NJ-	22 NJ-		18.1 NJ-		44.5 NJ-	25.2 NJ-	20.2	19.9
	•	•	•	•		•		•	•	•	•	•	•
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	<0.48 NJ-	<0.51 NJ-	<0.51 NJ-	<0.50 NJ-	<0.50 NJ-	2.6 NJ-	1.1 NJ-	0.58 NJ-	0.49 NJ-
рН	-	-	-	8.67	8.56	8.34		8.36		8.33	8.38	7.88	7.58
Redox Potential Vs H2 (mV)	-	-	-	193	180	182		258		296	217	241	264
Solids, Percent (%)	-	-	-	84.6	82.7	78.4		79.7		89.7	89.4	84.1	83.1

#### Analytical Data Qualifiers:

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- \* Duplicate analysis not within control limits; indeterminate bias direction.
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- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface mg/kg = milligram per kilogram
- mg/kg = milligram p mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below

standards/criteria.

Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default					CD	018		CD019										
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	6-6.5	6-6.5	4-4.5	4-4.5	4.5-5⁺	4.5-5⁺	5-5.5	5-5.5	5.5-6	5.5-6
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.7-3.2	2.7-3.2	2.2-2.7	2.2-2.7	1.7-2.2	1.7-2.2	1.2-1.7	1.2-1.7	1.2-1.7	1.2-1.7	3.3-3.8	3.3-3.8	2.8-3.3	2.8-3.3	2.3-2.8	2.3-2.8	1.8-2.3	1.8-2.3
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	CD018 4.5-5	CD018 4.5-5	CD018 5-5.5	CD018 5-5.5	CD018 5.5-6	CD018 5.5-6	CD018 6-6.5	CD018 6-6.5	DUP 13	DUP 13	CD019 4-4.5	CD019 4-4.5	CD019 4.5-5	CD019 4.5-5	CD019 5-5.5	CD019 5-5.5	CD019 5.5-6	CD019 5.5-6
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(1.1.10)	JB47185-2	JB47185-2R	JB47185-3	JB47185-3R	JB47185-4	JB47185-4R	JB47185-5	JB47185-5R	JB47185-6	JB47185-6R	JB47183-1	JB47183-1R	JB47183-2	JB47183-2R	JB47183-3	JB47183-3R	JB47183-4	JB47183-4R
Date Sampled:				9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	<2.1 NJ-		<2.4		<2.4		<2.5		<2.4		<2.3 NJ-		<2.4 NJ-		3.4 NJ-		<2.3 NJ-	
Chromium (mg/kg)	120,000	-	-	69.0 <sup>a</sup> *J		18.8		34.4		19.2		22.7		216		70.3		160		25.9	
Nickel (mg/kg)	23,000	1,600	205**	12.7 <sup>a</sup>		11.2		16.8		16.9		17		11.3		16.6		22.9		17.1	
Thallium (mg/kg)	79	5	3	<2.1 <sup>a</sup>		<1.2		<1.2		<1.3		<1.2		<1.1		<1.2		<0.99		<1.2	
Vanadium (mg/kg)	1,100	390	1	28		21.4		28.3		24.5		23.9		24.1		15.6		29.3		36.7	
Chromium, Hexavalent (mg/kg)	20	-	-	<0.44 NJ-	0.49 NJ-	<0.47 NJ-	0.89 NJ-	0.56 NJ-	<0.48 NJ-	<0.50 NJ-	<0.50 NJ-	<0.49 NJ-	<0.49 NJ-	<0.45 NJ-	<0.45 NJ-	<0.48 NJ-	0.51 NJ-	<0.55 NJ-	<0.55 NJ-	<0.47 NJ-	<0.47 NJ-
pH	- 1	-	-	7.92		7.97		7.66		8		7.79		8.01		7.99		7.7		7.73	
Redox Potential Vs H2 (mV)	- 1	-	-	275		276		273		290		271		284		289		292		256	
Solids, Percent (%)	- 1	-	-	90.2		85.3		83.6		79.3		81.8		89.6		84.2		72.1		84.3	

#### Analytical Data Qualifiers:

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- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
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- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
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Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		DD	001			DD	002		DD004	DD005			
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	7-7.5	7.5-8	8-8.5	8.5-9	6-6.5	6.5-7	7-7.5	7.5-8	6.5-7	5-5.5	5-5.5	5.5-6	5.5-6
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	0.9-1.4	0.4-0.9	-0.1 - ( 0.4 )	-0.6 - ( -0.1 )	1.5-2	1-1.5	0.5-1	0-0.5	0.9-1.4	2.5-3	2.5-3	2-2.5	2-2.5
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	DD001 7-7.5	DD001 7.5-8	DD001 8-8.5	DD001 8.5-9	DD002 6-6.5	DD002 6.5-7	DD002 7-7.5	DD002 7.5-8	DD004 6.5-7	DD005 5-5.5	DD005 5-5.5	DD005 5.5-6	DD005 5.5-6
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)		JB43880-8A	JB43880-9A	JB43880-10A	JB43880-11A	JB44205-29	JB44205-30	JB44205-31	JB44205-32	JB43880-23A	JB47183-12	JB47183-12R	JB47185-1	JB47185-1R
Date Sampled:				7/31/2013	7/31/2013	7/31/2013	7/31/2013	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/1/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
			,													
Antimony (mg/kg)	450	31	6	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-	<2.6 NJ-	<2.2 NJ-	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.5 NJ-	<2.4 NJ-		<2.3 NJ-	
Chromium (mg/kg)	120,000	-	-	20.1	16.9	15.1	17	24.1 NJ+	25.8 NJ+	19.5 NJ+	16.7 NJ+	19.2	15.9		58.1 *J	
Nickel (mg/kg)	23,000	1,600	205**	14.3	13.1	12.2	13.3	14.4	12.2	13.4	14.5	15	13.8		15	
Thallium (mg/kg)	79	5	3	<1.2	<1.2	<1.2	<1.3	<1.1	<1.1	<1.2	<1.1	<1.3	<1.2		<1.2	
Vanadium (mg/kg)	1,100	390	-	28.2	22	19.6	21.2	27.7	24.7	23.1	22.6	23.8	20.9		23.8	
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	0.49 NJ-	0.49 NJ-	0.69 NJ-	<0.46 NJ-	<0.46 NJ-	<0.46 NJ-	<0.46 NJ-	<0.50 NJ-	<0.48 NJ-	<0.48 NJ-	<0.49 NJ-	<0.49 NJ-
pH	-	-	-	7.81	7.72	6.98	7.26	8.46	8.72	8.56	8.44	7.54	8.8		8.6	
Redox Potential Vs H2 (mV)	-	-	-	216	226	309	317	214	206	229	235	237	173		269	
Solids, Percent (%)	-	-	-	85.4	84.2	83.4	80.7	86.4	86.5	86.9	87.6	80.6	82.6		81.4	

#### Analytical Data Qualifiers:

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- Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
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  Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default				DD	006		DD007							
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	3.2-3.7	3.2-3.7	2.7-3.2	2.7-3.2	2.2-2.7	2.2-2.7	1.7-2.2	1.7-2.2	2.8-3.3	2.8-3.3	2.3-2.8	2.3-2.8	1.8-2.3	1.8-2.3
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	DD006 4.5-5	DD006 4.5-5	DD006 5-5.5	DD006 5-5.5	DD006 5.5-6	DD006 5.5-6	DD006 6-6.5	DD006 6-6.5	DD007 5-5.5	DD007 5-5.5	DD007 5.5-6	DD007 5.5-6	DD007 6-6.5	DD007 6-6.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(1)	JB44447-65	JB44447-65R	JB44447-66	JB44447-66R	JB44447-67	JB44447-67R	JB44447-68	JB44447-68R	JB44447-38	JB44447-38R	JB44447-39	JB44447-39R	JB44447-40	JB44447-40R
Date Sampled:				8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013
Matrix:				Soil													
			•														
Antimony (mg/kg)	450	31	6	<2.0		<2.5		<2.3		<2.3		<2.3 NJ-		<2.3 NJ-		<2.4 NJ-	
Chromium (mg/kg)	120,000	-	-	71.7		30.7		59.7		33.6		18.8		17.9		24	
Nickel (mg/kg)	23,000	1,600	205**	15.6		14.5		14.2		15.1		10.4		13.6		16	
Thallium (mg/kg)	79	5	3	<1.0		<1.2		<1.1		<1.2		<1.1		<1.1		<1.2	
Vanadium (mg/kg)	1,100	390	-	28		25.5		22.1		24		19.3		23.8		30.6	
		_	ı														1
Chromium, Hexavalent (mg/kg)	20	-	-	1.7 NJ-	<0.53 NJ-	<0.48 NJ-	<0.48 NJ-	0.79 NJ-	0.7 NJ-	<0.49 NJ-	<0.49 NJ-	1.2 NJ-	0.57 NJ-	<0.45 NJ-	<0.45 NJ-	<0.46 NJ-	0.46 NJ-
рН	-	-	-	8.47		8.62		8.37		8.1		8.9		8.61		8.34	
Redox Potential Vs H2 (mV)	-	-	-	134		163		184		193		217		220		237	
Solids, Percent (%)	-	-	-	75.8		83.4		84.4		82.1		88.9		88.5		87.5	

#### Analytical Data Qualifiers:

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- ft msl = feet mean sea level
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  Result exceeded criteria

Page 15 of 19

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		DD	008					DD	009				ED	001
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5-5.5	5.5-6	6-6.5	6.5-7	5.5-6	5.5-6	6-6.5	6-6.5	6.5-7	6.5-7	7-7.5	7-7.5	5-5.5	5.5-6
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.4-2.9	1.9-2.4	1.4-1.9	0.9-1.4	1.8-2.3	1.8-2.3	1.3-1.8	1.3-1.8	0.8-1.3	0.8-1.3	0.3-0.8	0.3-0.8	3.3-3.8	2.8-3.3
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	DD008 5-5.5	DD008 5.5-6	DD008 6-6.5	DD008 6.5-7	DD009 5.5-6	DD009 5.5-6	DD009 6-6.5	DD009 6-6.5	DD009 6.5-7	DD009 6.5-7	DD009 7-7.5	DD009 7-7.5	ED001 5-5.5	ED001 5.5-6
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11110)	JB44447-9	JB44447-10	JB44447-11	JB44447-12	JB44447-21	JB44447-21R	JB44447-22	JB44447-22R	JB44447-23	JB44447-23R	JB44447-24	JB44447-24R	JB43880-14A	JB43880-15A
Date Sampled:				8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	8/8/2013	7/31/2013	7/31/2013
Matrix:				Soil													
		•															
Antimony (mg/kg)	450	31	6	<2.5	<2.2 NJ-	<2.4 NJ-	<2.3 NJ-	<2.4 NJ-		<2.0 NJ-		<2.0 NJ-		<2.0 NJ-		<2.6 NJ-	<2.5 NJ-
Chromium (mg/kg)	120,000	-	-	19.9	14.9 *ENJ-	20.2 *ENJ-	15.4 *ENJ-	15.5		14.6		14.7		13.5		21.6	22.1
Nickel (mg/kg)	23,000	1,600	205**	16	13.7	14	14.9	15.1		14.7		14.9		14.7		14.2	15.2
Thallium (mg/kg)	79	5	3	<1.2	<1.1	<1.2	<1.2	<1.2		<1.0		<1.0		<1.0		<1.3	<1.2
Vanadium (mg/kg)	1,100	390	-	20.4	17.9 NJ-	17.8 NJ-	19.7 NJ-	19.4		17.7		18.9		18		23.7	26.1
	_																
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	<0.45 NJ-	<0.48 NJ-	<0.49 NJ-	<0.48 NJ-	<0.48 NJ-	<0.53 NJ-	<0.53 NJ-	<0.50 NJ-	<0.50 NJ-	<0.51 NJ-	<0.51 NJ-	1.6 NJ-	3.5 NJ-
рН	-	-	-	8.38	7.9	7.81	7.97	7.89		7.4		7.84		7.71		7.07	7.24
Redox Potential Vs H2 (mV)	-	-	-	141	238	221	238	238		222		223		213		276	273
Solids, Percent (%)	-	-	-	85.4	89.1	83.4	81.7	83.3		75.8		79.7		78.9		80.1	83.2

## Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
- **EJ** The reported value is estimated because of the presence of interference; indeterminate bias
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram
- mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below

standards/criteria.

Result exceeded criteria

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		ED	002			ED003				ED	0004				ED	0005	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4-4.5	4.5-5	6-6.5	6.5-7	4.5-5	7-7.5	7.5-8	4.5-5	4.5-5	7.5-8	7.5-8	8-8.5	8-8.5	4-4.5	4.5-5	6-6.5	6.5-7
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	4-4.5	3.5-4	2-2.5	1.5-2	3.5-4	1-1.5	0.5-1	3-3.5	3-3.5	0-0.5	0-0.5	-0.5 - 0	-0.5 - 0	3.4-3.9	2.9-3.4	1.4-1.9	0.9-1.4
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	ED002 4-4.5	ED002 4.5-5	ED002 6-6.5	ED002 6.5-7	ED003 4.5-5	ED003 7-7.5	ED003 7.5-8	ED004 4.5-5	ED004 4.5-5	ED004 7.5-8	ED004 7.5-8	ED004 8-8.5	ED004 8-8.5	ED005 4-4.5	ED005 4.5-5	ED005 6-6.5	ED005 6.5-7
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11/10)	JB43880-24A	JB43880-25A	JB43880-26A	JB43880-27A	JB43880-17A	JB43880-18A	JB43880-19A	JB44447-50	JB44447-50R	JB44447-51	JB44447-51R	JB44447-52	JB44447-52R	JB44205-45	JB44205-46	JB44205-47	JB44205-48
Date Sampled:				7/29/2013	7/29/2013	7/30/2013	7/30/2013	8/1/2013	8/1/2013	8/1/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013
Matrix:				Soil																
			•	•	•		•	•	•		•		•	•		•	•			
Antimony (mg/kg)	450	31	6	<2.3 NJ-	<2.5 NJ-	<2.4 NJ-	<2.4 NJ-	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-	<2.4		<2.3		<2.4		<2.3 NJ-	<2.3 NJ-	<2.3 NJ-	<2.5 NJ-
Chromium (mg/kg)	120,000	-	-	32.4	26.9	39.9	17.1	23.8	22.2	28.2	283		54		51		38.7	72.5	470	83.6
Nickel (mg/kg)	23,000	1,600	205**	18.7	13.4	17.9	13.9	14.1	14.7	15	17.2		16.4		16		12.6	16.1	13.6	14.7
Thallium (mg/kg)	79	5	3	<1.2	<1.3	<1.2	<1.2	<1.1	<1.2	<1.2	<1.2		<1.2		<1.2		<1.2	<1.2	<1.2	<1.2
Vanadium (mg/kg)	1,100	390	-	30.9	23.2	37.3	25.4	33	24.2	27.5	40.3		31.6		29.1		21.3	32	26.9	27.9
Chromium, Hexavalent (mg/kg)	20	-	-	<0.47 NJ-	<0.50 NJ-	<0.46 NJ-	<0.47 NJ-	0.61 NJ-	4.3 NJ-	0.63 NJ-	<0.46 NJ-	0.72 NJ-	1.2 NJ-	1.3 NJ-	0.94 NJ-	0.57 NJ-	<0.47 NJ-	<0.45 NJ-	0.86 NJ-	<0.49 NJ-
рН	-	-	-	8.32	7.96	8.41	7.88	8.68	7.64	7.93	10.28		9.06		9.42		10.07	9.84	9.48	8.79
Redox Potential Vs H2 (mV)	-	-	-	224	164	171	192	255	222	214	53		95.3		112		84	90.2	142	167
Solids, Percent (%)	-	-	-	84.4	80.6	87.6	84.4	89.2	84.1	87.6	87.1		85.3		88.1		86	89.4	87.7	81.1

## Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
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- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected . Notes:
- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below

Result exceeded criteria

standards/criteria.

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Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default			EC	0006			ED007	ED008	ED	009		ED	010	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	4.5-5 <sup>+</sup>	4.5-5 <sup>+</sup>	5.5-6	5.5-6	6-6.5	6-6.5	5.5-6	6-6.5	5.5-6	5.5-6	7.5-8	7.5-8	8-8.5	8-8.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	3-3.5	3-3.5	2-2.5	2-2.5	1.5-2	1.5-2	2-2.5	1.5-2	2.1-2.6	2.1-2.6	0.5-1	0.5-1	0-0.5	0-0.5
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	ED006 4.5-5	ED006 4.5-5	ED006 5.5-6	ED006 5.5-6	ED006 6-6.5	ED006 6-6.5	ED007 5.5-6	ED008 6-6.5	ED009 5.5-6	ED009 5.5-6	ED010 7.5-8	ED010 7.5-8	ED010 8-8.5	ED010 8-8.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)	(11110)	JB44447-62	JB44447-62R	JB44447-63	JB44447-63R	JB44447-64	JB44447-64R	JB44205-40	JB44205-24	JB44447-56	JB44447-56R	JB44447-71	JB44447-71R	JB44447-72	JB44447-72R
Date Sampled:				8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/7/2013	8/7/2013	8/7/2013	8/7/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		•									•				•		
Antimony (mg/kg)	450	31	6	<2.2		<2.3		<2.4		<2.0 NJ-	<2.0 NJ-	<2.4		<2.4		<2.5	
Chromium (mg/kg)	120,000	-	-	152		29		13		29.5 NJ+	18 NJ+	20.2		77.6		23.5	
Nickel (mg/kg)	23,000	1,600	205**	13.8		16.5		12.2		16.3	13.1	16		13.5		12.2	
Thallium (mg/kg)	79	5	3	<1.1		<1.2		<1.2		<0.99	<1.0	<1.2		<1.2		<1.2	
Vanadium (mg/kg)	1,100	390	-	24.5		22.4		17.7		20.6	17.9	21.6		24.6		21.6	
Chromium, Hexavalent (mg/kg)	20	-	-	4.6 NJ-	11.5 NJ-	<0.49 NJ-	<0.49 NJ-	<0.48 NJ-	<0.48 NJ-	<0.51 NJ-	1 NJ-	<0.49 NJ-	<0.49 NJ-	1.3 NJ-	13 NJ-	0.52 NJ-	<0.50 NJ-
pH	-	-	-	9.57		8.76		8.59		7.76	8.8	8.48		8.63		8.49	
Redox Potential Vs H2 (mV)	-	-	-	131		149		161		292	329	156		165		157	
Solids, Percent (%)	-	-	-	88.5		82.3		83		77.9	77.3	81.4		82.9		80.2	

## Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
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- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .
- Notes:

  CCPW Chromate Chemical Pro
- CCPW = Chromate Chemical Production Waste ft msl = feet mean sea level
- ft bgs = feet below ground surface
- mg/kg = milligram per kilogram
- mV = millivolts

  a Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP =
- Synthetic Precipitation Leaching Procedure.

  \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- \*\*\*Located below w standards/criteria.

Historical Soil Samples - Pre-Post-Excavation – Design Borings (2013)

Laboratory Analytical Summary Data for Remaining Soil

PPG Site 63

1 Burma Road

Jersey City, New Jersey

2013- Sampled by CB&I

Sample Location:	NJ	NJ	NJ Default		ED	013			FD001				FD	002			FD	0004
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5.5-6	6-6.5	6.5-7	7-7.5	6-6.5	6.5-7	7-7.5	4.5-5	4.5-5	5-5.5	5-5.5	5.5-6	5.5-6	6-6.5	6-6.5
Elevations (ft msl)	Direct Contact	Direct Contact	Groundwater	2.4-2.9	1.9-2.4	1.4-1.9	0.9-1.4	2.1-2.6	1.6-2.1	1.1-1.6	3.6-4.1	3.6-4.1	3.1-3.6	3.1-3.6	2.6-3.1	2.6-3.1	1.6-2.1	1.6-2.1
Client Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	ED013 5.5-6	ED013 6-6.5	ED013 6.5-7	ED013 7-7.5	FD001 6-6.5	FD001 6.5-7	FD001 7-7.5	FD002 4.5-5	FD002 4.5-5	FD002 5-5.5	FD002 5-5.5	FD002 5.5-6	FD002 5.5-6	FD004 6-6.5	FD004 6-6.5
Lab Sample ID:	7:26D 5/12)	7:26D 5/12)		JB44447-5	JB44447-6	JB44447-7	JB44447-8	JB44205-42	JB44205-43	JB44205-44	JB44447-58	JB44447-58R	JB44447-59	JB44447-59R	JB44447-60	JB44447-60R	JB44447-28	JB44447-28R
Date Sampled:	10 10 10 10 10 10 10 10 10 10 10 10 10 1			8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/8/2013	8/8/2013
Matrix:	00000 000000 0000000000000000000000000			Soil														
											•							
intimony (mg/kg)	450	31	6	<2.0	<2.4	<2.3	<2.4	<2.4 NJ-	<2.4 NJ-	<2.4 NJ-	<2.2		<2.4		<2.5		<2.0 NJ-	
Chromium (mg/kg)	120,000	-	-	647	15.3	70.9	60.6	18.6	14.9	16.1	214		70.5		17.7		12.6	
lickel (mg/kg)	23,000	1,600	205**	18.8	14.7	15.5	15.7	15.6	13.1	13.4	21.4		13.4		11.4		12.7	
hallium (mg/kg)	79	5	3	<1.0	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.1		<1.2		<1.2		<0.99	
anadium (mg/kg)	1,100	390	-	35	17.8	22.2	22.2	23	19.7	20.8	47.8		21.9		16.6		16.9	
Chromium, Hexavalent (mg/kg)	20	-	-	0.53 NJ-	<0.49 NJ-	<0.48 NJ-	<0.49 NJ-	<0.46 NJ-	<0.49 NJ-	<0.47 NJ-	7.4	7.7	9.6	0.97	<0.47	<0.47	<0.52	<0.52
Н	-	-	-	8.35	7.62	7.8	7.99	8.02	7.56	7.6	9.18		9.22		7.35		7.27	
ledox Potential Vs H2 (mV)	-	-	-	127	123	131	147	284	282	281	176		177		179		200	
Solids, Percent (%)	-	-	-	75	81.1	83.5	82.1	86.2	81.8	85.8	88.1		84.3		84.9		77.2	

Analytical Data Qualifiers:

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- **J** The reported result is an estimated value.
- \*J Duplicate analysis not within control limits; result is estimated with indeterminate bias direction.
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- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- J+ The result is estimated and may be biased high.
- J- The result is estimated and may be biased low.
- R The reported result is rejected .

Notes:

- CCPW = Chromate Chemical Production Waste
- ft msl = feet mean sea level
- ft bgs = feet below ground surface mg/kg = milligram per kilogram
- mg/kg = milligram per mV = millivolts
- <sup>a</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>+</sup> Hex Chrome Sample did not pass 2nd QA & QC. See Table 2D-2 for secondary analyses.
- \*\*Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel; SPLP = Synthetic Precipitation Leaching Procedure.
- \*\*\*Located below water table so IGW SSL does not apply, and compliance averaged to below
- standards/criteria.

  Result exceeded criteria

## Table 2D-2 Soil Analytical Rerun Summary Table PPG Site 63, 1 Burma Road Jersey City, NJ Sampled by CB&I

Sample Location:	CD010	CD012	CD014	CD019	ED004	ED006
Sample Depth (ft bgs):	4.5-5	5.5-6	8.5-9	4.5-5	4-4.5	4.5-5
Client Sample ID:	CD010 4.5-5	CD012 5.5-6	CD014 8.5-9	CD019 4.5-5	ED004 4-4.5	ED006 4.5-5
Lab Sample ID:	JB46883-1RT	JB46800-18RT	JB44447-34RT	JB47183-2RT	JB44447-49RT	JB44447-62RT
Date Sampled:	9/10/2013	9/9/2013	8/8/2013	9/12/2013	8/6/2013	8/7/2013
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil
Iron, Ferrous (%)	1.2 <sup>a</sup>	0.74 <sup>a</sup>	0.96 <sup>a</sup>	3.1 <sup>a</sup>	0.71 <sup>a</sup>	1.1 <sup>a</sup>
Sulfide Screen	NEGATIVE b	NEGATIVE b	NEGATIVE b	NEGATIVE b	NEGATIVE b	NEGATIVE b
Total Organic Carbon (mg/Kg)	2680 <sup>c</sup>	2330 <sup>c</sup>	4150 <sup>c</sup>	68400 <sup>c</sup>	4400 <sup>c</sup>	4110 <sup>c</sup>

#### Footnotes:

mg/kg = milligram per kilogram

ft bgs = feet below ground surface

<sup>&</sup>lt;sup>a</sup> The ferrous iron test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.

<sup>&</sup>lt;sup>b</sup> The sulfide screen test was analyzed after completion of Cr6 testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr6 recoveries.

<sup>&</sup>lt;sup>c</sup> Analysis done out of holding time.

# **Historical Soil Samples**

# Remedial Investigation (2012-2013)

# **Laboratory Analytical Data for Remaining Soil Remedial Investigation Report**

# PPG Site 63

## 1 Burma Road

# Jersey City, New Jersey

Sample Location:	NJ	NJ	NJ Default		063_	C013				063_C013A		
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5-5.5	10-10.5	15-15.5	20-20.5	0-0.5	0.5-1	1.5-2	2.5-3	3.5-4
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	2-2.5	-2 - (-2.5)	-7 - (-7.5)	-12 - (-12.5)	10.5-11	10-10.5	9-9.5	8-8.5	7-7.5
Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	460-48605-17	460-48605-18	460-48605-19	460-48605-27	460-52992-6	460-52992-7	460-52992-8	460-52992-9	460-52992-10
Date:	7:26D 5/12)	7:26D 5/12)		12/17/2012	12/17/2012	12/17/2012	12/17/2012	03/25/2013	03/25/2013	03/25/2013	03/25/2013	03/25/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	0.42 U	0.41 U	1.2 U	0.41 U	10.0*	18.8*	9.8*	11.1*	12.4*
Chromium (mg/kg)	120,000	N/A	N/A	86.7	16.5	14.9	14.3	295	60.5	192	127	94.5
Nickel (mg/kg)	23,000	1,600	205**	12.2	13.4	12.4	11	84.9	51.7	69.3	53.7	54.2
Thallium (mg/kg)	79	5	3	0.2 U	0.19 U	0.58 U	0.19 U	0.22 U	0.21 U	0.23 U	0.20 U	0.21 U
Vanadium (mg/kg)	1,100	390	N/A	20.6	20.6	20.1	22	41.4	37.5	49.6	34.7	30.6
Hexavalent Chromium (mg/kg)	20	N/A	N/A	0.85 U	0.85 U	2.4 U	0.83 U	0.63 U	0.59 U	0.66 U	0.56 U	0.58 U

U = NON DETECT

J = ESTIMATED

IGW SSL = DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL

FT MSL = FEET MEAN SEA LEVEL FT BGS = FEET BELOW GROUND SURFACE

MG/KG= MILLIGRAM PER KILOGRAM

N/A= NOT AVAILABLE

\* METAL EXCEEDANCE AT THIS LOCATION ARE NOT INDICATIVE OF CCPW RELATED CONTAMINATION

\*\* SITE SPECIFIC - IGW SSL

FOR 063\_F010, 063\_Z002, 063\_Z005, MW-9 AND MW-12
DEPTHS/ELEVATIONS PRESENTED IN THIS TABLE REPRESENT THE TOP OF THE SAMPLE INTERVAL OF 0.5-FT.

# **Historical Soil Samples**

# Remedial Investigation (2012-2013)

# **Laboratory Analytical Data for Remaining Soil Remedial Investigation Report**

# PPG Site 63

### 1 Burma Road

# Jersey City, New Jersey

Sample Location:	NJ	NJ	NJ Default			063_C014A					063_F010		
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	0-0.5	0.5-1	1.5-2	2.5-3	3.5-4	0	5	10	15	20
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	7.2-7.7	6.7-7.2	5.7-6.2	4.7-5.2	3.7-4.2	10.7	5.7	0.7	-4.3	-9.3
Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	460-52992-1	460-52992-2	460-52992-3	460-52992-4	460-52992-5	063_F010_0.0	063_F010_5.0	F010_10.0	063_F010_15.0	063_F010_20.0
Date:	7:26D 5/12)	7:26D 5/12)		03/25/2013	03/25/2013	03/25/2013	03/25/2013	03/25/2013	12/17/2012	12/17/2012	12/17/2012	12/17/2012	12/17/2012
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	1.8	1.7	0.41 U	0.83	0.76	3.3	0.46 U	0.42 U	0.4 U	0.41 U
Chromium (mg/kg)	120,000	N/A	N/A	290	304	18.6	163	220	154	15.1	24.7	14.1	16.8
Nickel (mg/kg)	23,000	1,600	205**	71.5	91.3	11.1	35.6	41.6	65.2	12.5	14.4	9.2	10
Thallium (mg/kg)	79	5	3	0.22 U	0.23 U	0.19 U	0.20 U	0.20 U	0.2 U	0.22 U	0.2 U	0.19 U	0.2 U
Vanadium (mg/kg)	1,100	390	N/A	50.2	46.3	11.8	31.3	37.8	44	21.6	28.7	21	27.7
Hexavalent Chromium (mg/kg)	20	N/A	N/A	0.64 U	0.65 U	0.57 U	0.60 U	0.60 U	1.6 J	1.1 J	0.86 U	0.83 U	0.85 U

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GROUNDWATER SOIL SCREENING

LEVEL

FT MSL = FEET MEAN SEA LEVEL FT BGS = FEET BELOW GROUND SURFACE

MG/KG= MILLIGRAM PER KILOGRAM

N/A= NOT AVAILABLE

\* METAL EXCEEDANCE AT THIS LOCATION ARE NOT INDICATIVE OF CCPW RELATED CONTAMINATION

\*\* SITE SPECIFIC - IGW SSL

FOR 063\_F010, 063\_Z002, 063\_Z005, MW-9 AND MW-12
DEPTHS/ELEVATIONS PRESENTED IN THIS TABLE REPRESENT THE TOP OF THE SAMPLE INTERVAL OF 0.5-FT.

# **Historical Soil Samples**

# Remedial Investigation (2012-2013)

# **Laboratory Analytical Data for Remaining Soil Remedial Investigation Report**

**PPG Site 63** 

1 Burma Road

Jersey City, New Jersey

Sample Location:	NJ	NJ	NJ Default			063_F010a					063_Z002		
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	0-0.5	0.5-1	1.5-2	2.5-3	3.5-4	8.5	12	12	12	16.5
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	10.2-10.7	9.7-10.2	8.7-9.2	7.7-8.2	6.7-7.2	-0.1	-3.6	-3.6	-3.6	-8.1
Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	460-53059-1	460-53059-2	460-53059-3	460-53059-4	460-53059-5	063_Z002_8.5	063_Z002_12.0	063_Z002_12.0	063_Z002_12.0-D	063_Z002_16.5
Date:	7:26D 5/12)	7:26D 5/12)		03/25/2013	03/25/2013	03/25/2013	03/25/2013	03/25/2013	12/19/2012	12/19/2012	12/19/2012	12/19/2012	12/19/2012
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	0.54	0.41	0.41	0.88	3.0	0.4 UJ	0.38 UJ	0.38 U	0.38 UJ	0.42 U
Chromium (mg/kg)	120,000	N/A	N/A	34.1	29.0	29.3	163	41.2	15.2	14.5	15.45	16.4	15.5
Nickel (mg/kg)	23,000	1,600	205**	18.5	13.6	22.2	46.6	30.7	13.8	9.5	9.45	9.4	11.1 J
Thallium (mg/kg)	79	5	3	0.27	0.21	0.23	0.23	0.52	0.19 U	0.18 U	0.18 U	0.18 U	0.2 U
Vanadium (mg/kg)	1,100	390	N/A	44.0	32.4	38.4	45.2	49.4	22	18.7	17.9	17.1	23 J
Hexavalent Chromium (mg/kg)	20	N/A	N/A	0.69 U	0.58 U	0.56 U	0.67 U	0.63 U	0.87 U	0.85 U	0.83 U	0.81 U	0.83 U

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GROUNDWATER SOIL SCREENING
LEVEL

FT MSL = FEET MEAN SEA LEVEL FT BGS = FEET BELOW GROUND SURFACE

MG/KG= MILLIGRAM PER KILOGRAM

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\* METAL EXCEEDANCE AT THIS LOCATION ARE NOT INDICATIVE OF CCPW RELATED CONTAMINATION

\*\* SITE SPECIFIC - IGW SSL

FOR 063\_F010, 063\_Z002, 063\_Z005, MW-9 AND MW-12
DEPTHS/ELEVATIONS PRESENTED IN THIS TABLE REPRESENT THE TOP OF THE SAMPLE INTERVAL OF 0.5-FT.

# **Historical Soil Samples**

# Remedial Investigation (2012-2013)

# **Laboratory Analytical Data for Remaining Soil Remedial Investigation Report**

# **PPG Site 63**

1 Burma Road

Jersey City, New Jersey

Sample Location:	NJ	NJ	NJ Default		063	_Z005		MV	V-9		MW-12	
Sample Depth (ft bgs):	Non-Residential	Residential	Impact to	5	10	15	20	3.5-4	6.5-7	0.5-1	3.5-4	7.5-8
Sample Elevation (ft msl):	Direct Contact	Direct Contact	Groundwater	2.5	-2.5	-7.5	-12.5	6.4-6.9	3.4-3.9	8.8-9.3	5.8-6.3	1.8-2.3
Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening (11/13)	063_Z005_5.0	063_Z005_10.0	063_Z005_15.0	063_Z005_20.0	460-52992-13	460-53059-11	460-52992-15	460-52992-16	460-53059-13
Date:	7:26D 5/12)	7:26D 5/12)		12/21/2012	12/21/2012	12/21/2012	12/21/2012	03/25/2013	03/26/2013	03/25/2013	03/25/2013	03/26/2013
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Antimony (mg/kg)	450	31	6	1.9 J	0.66 UJ	0.4 UJ	0.44 UJ	0.47 U	0.43 U	0.46 U	0.52 U	0.44 U
Chromium (mg/kg)	120,000	N/A	N/A	860	245	21.8	11.6	678	24.4	941	44.6	54.1
Nickel (mg/kg)	23,000	1,600	205**	9.9	26.2	10	9.5	13.7	16.5	27.2	14.5	24.7
Thallium (mg/kg)	79	5	3	0.2 U	0.31 U	0.19 U	0.21 U	0.22 U	0.22 J	0.22 U	0.25 U	0.30
Vanadium (mg/kg)	1,100	390	N/A	20.6 J	25.8 J	19.7 J	16.2 J	30.5	38.5	44.6	22.3	62.3
Hexavalent Chromium (mg/kg)	20	N/A	N/A	0.95 U	1.4 U	0.81 U	0.85 U	0.61 U	0.58 U	0.64 U	0.71 U	0.60 U

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LEVEL

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MG/KG= MILLIGRAM PER KILOGRAM

N/A= NOT AVAILABLE

\* METAL EXCEEDANCE AT THIS LOCATION ARE NOT INDICATIVE OF CCPW RELATED CONTAMINATION

\*\* SITE SPECIFIC - IGW SSL

FOR 063\_F010, 063\_Z002, 063\_Z005, MW-9 AND MW-12 **DEPTHS/ELEVATIONS PRESENTED IN** THIS TABLE REPRESENT THE TOP OF THE SAMPLE INTERVAL OF 0.5-FT.

CAMPLE LOCATION						200 5000			200	5004		200 5004	
SAMPLE LOCATION	NJ	NJ	NJ Default			063_B003a				B004		063_B004a	
SAMPLE ID	Non-Residential	Residential	Impact to	063_B003a_5.0	063_B003a_5.0-D	063_B003a_6.9	063_B003a_11.0	063_B003a_15.0	063_B004_10.0	063_B004_15.0	063_B004a_8.1	063_B004a_12.0	063_B004a_16.0
LABORATORY ID				460-29144-15	460-29144-16	460-29144-17	460-29144-18	460-29144-19	460-29057-3	460-29057-4	460-29144-6	460-29144-7	460-29144-8
TOP OF SAMPLE (ft bgs)	Direct Contact	Direct Contact	Groundwater	5	5	6.9	11	15	10	15	8.1	12	16
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3.4	3.4	1.5	-2.6	-6.6	-1.4	-6.4	0.4	-3.5	-7.5
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/22/2011	7/22/2011	7/22/2011	7/22/2011	7/22/2011	7/21/2011	7/21/2011	7/22/2011	7/22/2011	7/22/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)	<del>,</del>						_						_
ANTIMONY	450	31	6	0.96 UJ	0.92 UJ	0.98 UJ	1.2 UJ	0.96 UJ	2.2 UJ	0.95 UJ	0.99 UJ	1.1 UJ	0.93 UJ
CHROMIUM	120,000	N/A	N/A	36.7	32.1	14.9	17.7	26.3	207	15.1	12.9	16.3	14.9
NICKEL	23,000	1,600	205**	17.1	16.3	12.6	4.3 J	13.5	20 J	11.5	10.4	5.5 J	12.3
THALLIUM	79	5	3	1.1 U	1 U	1.1 U	1.3 U	1.1 U	2.5 U	1 U	1.1 U	1.2 U	1 U
VANADIUM	1,100	390	N/A	37.8	31.6	23.6	42.4	24.9	30.7	22.6	17.7	46.3	19.3
Miscellaneous Parameters (mg/kg)							_						_
HEXAVALENT CHROMIUM	20	N/A	N/A	0.57 U	0.55 U	0.58 U	0.72 U	0.54 U	1.3 U	0.54 U	7.1	0.6 U	0.56 U
Miscellaneous Parameters (mv)							_						_
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	405	412	410	427	478	346	375	392	334	372
Miscellaneous Parameters (s.u.)		-	_					_				_	
PH	N/A	N/A	N/A	8.14	8.02	7.85	7.31	7.96	7.55	8.01	8.43	7.58	8.1

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mv = millivolts

s.u. = standard units

N/A = Not Applicable

\*\* SITE SPECIFIC IGW SSL = DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL \*\*\* COMPLIANCE AVERAGED BELOW

STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT

APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_B005		063_	B006		063_	B007	
SAMPLE ID	Non-Residential	Residential	Impact to	063_B005_11.4	063_B005_15.5	063_B005_20.0	063_B006_10.0	063_B006_12.2	063_B007_7.1	063_B007_11.1	063_B007_15.0	063_B007_15.0-D
LABORATORY ID				460-28939-9	460-28939-10	460-28939-11	460-28862-5	460-28862-6	460-28939-3	460-28939-4	460-28939-5	460-28939-6
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	11.4	15.5	20	10	12.2	7.1	11.1	15	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	-3.8	-7.9	-12.4	-2.9	-5.1	0.4	-3.6	-7.5	-7.5
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/19/2011	7/19/2011	7/19/2011	7/15/2011	7/15/2011	7/19/2011	7/19/2011	7/19/2011	7/19/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)	•											
ANTIMONY	450	31	6	0.93 UJ	0.97 UJ	0.94 UJ	2.6 UJ	1.1 UJ	0.9 UJ	3.3 UJ	0.95 UJ	0.97 UJ
CHROMIUM	120,000	N/A	N/A	29.3	14.4	33.1	932 J	13.1 J	11.8	14.2	14	16.7
NICKEL	23,000	1,600	205**	13.2	6.2 J	12.5	20.6 J	8.4 J	11.4	13.3 J	6.2 J	6.6 J
THALLIUM	79	5	3	1 U	1.1 U	1 U	2.8 U	1.3 U	0.99 U	3.6 U	1 U	1.1 U
VANADIUM	1,100	390	N/A	25	15.5	23.1	20.6 J	22.6	15.6	18 J	15.3	17.1
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.54 UJ	0.55 UJ	0.54 UJ	1.5 UJ	0.64 UJ	0.55 UJ	1.9 UJ	0.57 UJ	0.57 UJ
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	338	450	448	384	513	445	391	388	394
Miscellaneous Parameters (s.u.)			-									
PH	N/A	N/A	N/A	9.03	8.36	8.57	8.09	8.01	8.78	7.61	8.79	8.64

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STANDARD

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APPLY

EXCEEDS MINIMUM STANDARD/SCREENING

CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_	B008		063_	B009		063_B010	
SAMPLE ID	Non-Residential	Residential	Impact to	063_B008_6.5	063_B008_10.0	063_B008_12.8	063_B008_16.5	063_B009_9.3	063_B009_13.0	063_B010_7.3	063_B010_11.0	063_B010_15.0
LABORATORY ID				460-29032-13	460-29032-14	460-29032-15	460-29032-16	460-28645-9	460-28645-10	460-29336-5	460-29336-6	460-29336-7
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	6.5	10	12.8	16.5	9.3	13	7.3	11	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	1.7	-1.8	-4.6	-8.3	-1	-4.7	1.1	-2.6	-6.6
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/20/2011	7/20/2011	7/20/2011	7/20/2011	7/11/2011	7/11/2011	7/28/2011	7/28/2011	7/28/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)	,				-	-	-					-
ANTIMONY	450	31	6	0.95 UJ	0.96 UJ	0.97 UJ	0.95 UJ	0.67 UJ	0.65 UJ	0.91 UJ	2.9 UJ	0.9 UJ
CHROMIUM	120,000	N/A	N/A	15.9	27.2	21	34.7	22.3	27.8	13.5	13	41.8
NICKEL	23,000	1,600	205**	13.3	20.2	14.2	19.9	16.9	15.9	11.1	13.7 J	12.1
THALLIUM	79	5	3	1 U	1.1 U	1.1 U	1 U	0.37 U	0.36 U	1 U	3.2 U	0.99 U
VANADIUM	1,100	390	N/A	20.8	27.1	24.1	48.2	33 J	43.1 J	28.2	19.8 J	44.2
Miscellaneous Parameters (mg/kg)					-							-
HEXAVALENT CHROMIUM	20	N/A	N/A	0.55 U	0.54 U	0.56 U	0.52 U	0.6 UJ	0.57 UJ	0.54 U	1.6 U	0.55 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	347	369	395	399	433	472	346	382	379
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	9.27	8.69	7.99	8.22	8.82	8.27	9.4	7.54	8.35

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STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT

APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA NON-DETECTION EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

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SAMPLE LOCATION	NJ	NJ	NJ Default			063_B010a				063_	B011	
SAMPLE ID	Non-Residential	Residential	Impact to	063_B010a_5.0	063_B010a_7.5	063_B010a_11.5	063_B010a_15.0	063_B010a_15.0-D	063_B011_5.0	063_B011_10.0	063_B011_15.0	063_B011_18.0
LABORATORY ID				460-29302-15	460-29302-16	460-29302-17	460-29302-18	460-29302-19	460-29355-14	460-29355-15	460-29355-16	460-29355-17
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	7.5	11.5	15	15	5	10	15	18
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3.3	0.8	-3.2	-6.7	-6.7	2.7	-2.3	-7.3	-10.3
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/27/2011	7/27/2011	7/27/2011	7/27/2011	7/27/2011	7/28/2011	7/28/2011	7/28/2011	7/28/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	0.97 UJ	1 UJ	1.1 UJ	0.88 UJ	0.9 UJ	1 UJ	1.4 UJ	0.97 UJ	1 UJ
CHROMIUM	120,000	N/A	N/A	28.9 J	12.5 J	21.5	38.9	33.9	74.1 J	32.1 J	21.6 J	25.1 J
NICKEL	23,000	1,600	205**	10.2	11.9	12.8	16.7	17.3	14.1	24.4	13.2	13.7
THALLIUM	79	5	3	1.1 U	1.1 U	1.2 U	0.97 U	0.99 U	1.1 U	1.5 U	1.1 U	1.1 U
VANADIUM	1,100	390	N/A	16.9	15.2	29.7	36.5	39.5	27.6	29	28.9	34.4
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.6 U	0.64 U	0.66 U	0.54 U	0.55 U	0.57 U	0.82 U	0.58 U	0.56 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	434	433	438	412	423	417	420	427	407
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	8.4	7.66	7.47	9.18	8.87	8.4	8.04	7.59	8.99

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\*\*\* COMPLIANCE AVERAGED BELOW

STANDARD
^ SAMPLE IS BELOW WATER TABLE

THEREFORE NJDEP IGWSSL DOES NOT APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_B0	12/MW3			063_B013	
SAMPLE ID	Non-Residential	Residential	Impact to	063_B012_5.0	063_B012_10.5	063_B012_15.0	063_B012_17.0	063_B013_5.0	063_B013_10.0	063_B013_15.0
LABORATORY ID				460-28645-2	460-28645-3	460-28645-4	460-28645-5	460-29336-22	460-29336-23	460-29336-24
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	10.5	15	17	5	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	2.2	-3.3	-7.8	-9.8	3.9	-1.1	-6.1
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/11/2011	7/11/2011	7/11/2011	7/11/2011	7/28/2011	7/28/2011	7/28/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)										
ANTIMONY	450	31	6	0.58 UJ	0.6 UJ	0.66 UJ	0.63 UJ	0.98 UJ	2.2 J	2.7 UJ
CHROMIUM	120,000	N/A	N/A	14.7	18.1	12.7	17.4	155	9.6	22.4
NICKEL	23,000	1,600	205**	13.1	16.3	7.7	12.6	16.6	10 J	12 J
THALLIUM	79	5	3	0.32 U	0.33 U	0.37 U	0.35 U	1.1 U	1.2 U	3 U
VANADIUM	1,100	390	N/A	23.2 J	24.8 J	21.3 J	33 J	30.3	10.8 J	24.5 J
Miscellaneous Parameters (mg/kg)										
HEXAVALENT CHROMIUM	20	N/A	N/A	0.55 UJ	0.56 UJ	0.58 UJ	0.55 UJ	0.56 UJ	0.64 UJ	1.6 UJ
Miscellaneous Parameters (mv)										
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	455	455	435	429	439	413	399
Miscellaneous Parameters (s.u.)										
PH	N/A	N/A	N/A	8.2	8.13	7.47	8.16	8.12	8.16	7.84

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STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_B	8014					063_B015/MV	N4		
SAMPLE ID	Non-Residential	Residential	Impact to	063_B014_7.0	063_B014_11.2	063_B014_15.0	063_B014_20.0	063_B015_0.0	063_B015_4.0	063_B015_7.3	063_B015_10.5	063_B015_10.5-D	063_B015_15.0	063_B015_17.3
LABORATORY ID				460-29195-20	460-29195-21	460-29195-22	460-29195-23	460-28783-1	460-28783-2	460-28783-3	460-28783-4	460-28783-5	460-28783-6	460-28783-7
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	7	11.2	15	20	0	4	7.3	10.5	10.5	15	17.3
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	1.5	-2.7	-6.5	-11.5	7	3	-0.3	-3.5	-3.5	-8	-10.3
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/25/2011	7/25/2011	7/25/2011	7/25/2011	7/14/2011	7/14/2011	7/14/2011	7/14/2011	7/14/2011	7/14/2011	7/14/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	ABOVE	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)	,							_						
ANTIMONY	450	31	6	1 UJ	2.1 J	2.2 UJ	0.9 UJ	0.91 UJ	0.95 UJ	1.1 UJ	8.7 J	4.8 J	2.5 UJ	1 UJ
CHROMIUM	120,000	N/A	N/A	16	14.1	26.3	20.1	51.4 J	15.1 J	13.4 J	45.2 J	26.4 J	208 J	8.1 J
NICKEL	23,000	1,600	205**	18	12.6	15.7 J	11.4	24.9	14.6	16.3	18.6	17.5	16.1 J	5.6 J
THALLIUM	79	5	3	1.1 U	1.4 U	2.4 U	0.99 U	1 U	1 U	1.2 U	1.5 U	1.5 U	2.8 U	1.1 U
VANADIUM	1,100	390	N/A	12.3	19.3	25.3	23.4	50.9	22.7	15.5	15 J	13.5 J	24.5 J	12.7
Miscellaneous Parameters (mg/kg)														
HEXAVALENT CHROMIUM	20	N/A	N/A	0.66 J	0.74 UJ	1.3 UJ	0.54 UJ	0.52 J	0.55 U	0.67 U	0.75 U	0.82 J	1.5 U	0.62 U
Miscellaneous Parameters (mv)														
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	375	322	338	430	402	480	391	376	366	382	384
Miscellaneous Parameters (s.u.)		-						-						
PH	N/A	N/A	N/A	8.19	7.69	7.55	5.03	7.91	7.91	7.81	7.65	7.66	7.25	7.96

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STANDARD

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APPLY
EXCEEDS MINIMUM STANDARD/SCREENING
CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063	C003			063 C004	
SAMPLE ID	Non-Residential	Residential	Impact to	063_C003_5.0	063_C003_5.0-D	063_C003_6.7	063_C003_10.5	063_C004_10.0	063_C004_10.0-D	063_C004_15.0
LABORATORY ID				460-29057-6	460-29057-7	460-29057-8	460-29057-9	460-29057-15	460-29057-16	460-29057-17
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	5	6.7	10.5	10	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3.4	3.4	1.7	-2.1	-1.5	-1.5	-6.5
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011	7/21/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)										
ANTIMONY	450	31	6	1.1 UJ	1 UJ	1.1 UJ	1.9 J	1.6 UJ	1.5 UJ	0.92 UJ
CHROMIUM	120,000	N/A	N/A	45.4 J	26.5 J	11.9 J	66.5 J	33.3	22.9	19.3
NICKEL	23,000	1,600	205**	11.8	11.4	10.5	11.1	7.9 J	8 J	10.9
THALLIUM	79	5	3	1.2 U	1.1 U	1.2 U	1.1 U	1.8 U	1.7 U	1 U
VANADIUM	1,100	390	N/A	19.3	18.3	17.7	50.5	30.6	35.5	19.7
Miscellaneous Parameters (mg/kg)										
HEXAVALENT CHROMIUM	20	N/A	N/A	0.6 U	0.6 U	0.61 U	0.61 U	0.94 U	0.91 U	0.55 U
Miscellaneous Parameters (mv)										
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	367	365	368	487	391	393	398
Miscellaneous Parameters (s.u.)										
PH	N/A	N/A	N/A	7.92	7.88	7.6	7.83	7.47	7.41	7.94

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_C004a			063_C005			063_C006	
SAMPLE ID	Non-Residential	Residential	Impact to	063_C004a_6.7	063_C004a_11.0	063_C004a_15.0	063_C005_7.5	063_C005_11.5	063_C005_15.5	063_C006_7.5	063_C006_11.5	063_C006_15.5
LABORATORY ID				460-29144-21	460-29144-11	460-29144-22	460-28742-9	460-28742-10	460-28742-11	460-28742-16	460-28742-17	460-28742-18
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	6.7	11	15	7.5	11.5	15.5	7.5	11.5	15.5
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	1.8	-2.5	-6.5	-0.1	-4.1	-8.1	0.4	-3.6	-7.6
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/22/2011	7/22/2011	7/22/2011	7/13/2011	7/13/2011	7/13/2011	7/13/2011	7/13/2011	7/13/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	1.1 UJ	0.92 UJ	0.89 UJ	0.93 UJ	0.93 UJ	2.4 UJ	0.99 UJ	0.96 UJ	0.95 UJ
CHROMIUM	120,000	N/A	N/A	9.8	18.8	50.8	479 J	14.9 J	2470 J	17.3 J	12.1 J	12.3 J
NICKEL	23,000	1,600	205**	9.8	13.1	16.2	12.9 J	8.9 J	15.3 J	14.3	6.1 J	12.2
THALLIUM	79	5	3	1.2 U	1 U	0.98 U	1 U	1 U	2.7 U	1.1 U	1.1 U	1 U
VANADIUM	1,100	390	N/A	15.3	20.2	22.3	19	24.2	29.9	19.6	16.7	15.2
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.61 U	0.55 U	0.53 U	1.4 J	0.56 U	0.56 U	0.6 U	0.55 U	0.54 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	465	501	396	265	460	457	323	358	364
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	8.38	8.28	7.58	9.79	8.26	8.17	8.96	8.11	8.27

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_C007			063_	C008			063_C009	
SAMPLE ID	Non-Residential	Residential	Impact to	063_C007_8.0	063_C007_12.0	063_C007_16.0	063_C008_5.0	063_C008_6.7	063_C008_11.0	063_C008_15.0	063_C009_5.0	063_C009_6.5	063_C009_14.0
LABORATORY ID				460-28742-22	460-28742-23	460-28742-24	460-29032-6	460-29032-7	460-29032-8	460-29032-9	460-29032-2	460-29032-3	460-29032-4
TOP OF SAMPLE (ft bgs)	Direct Contact	Direct Contact	Groundwater	8	12	16	5	6.7	11	15	5	6.5	14
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	-0.1	-4.1	-8.1	3.1	1.4	-2.9	-6.9	3.5	2	-5.5
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/13/2011	7/13/2011	7/13/2011	7/20/2011	7/20/2011	7/20/2011	7/20/2011	7/20/2011	7/20/2011	7/20/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)													
ANTIMONY	450	31	6	1.1 UJ	0.98 UJ	1 UJ	0.98 UJ	1 UJ	1 UJ	0.9 UJ	1 UJ	1 UJ	2.3 UJ
CHROMIUM	120,000	N/A	N/A	12.9 J	19.6 J	13.4 J	19.9	16	17.8	35	70.1	14.5	29.8
NICKEL	23,000	1,600	205**	13.4	14.2	12.8	12	13.3	11	16.6	9.6	11.7	10.6 J
THALLIUM	79	5	3	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	0.99 U	1.1 U	1.1 U	2.5 U
VANADIUM	1,100	390	N/A	16.5	21.5	19.7	17.6	21.7	22.6	37.7	18.5	21.4	21.5 J
Miscellaneous Parameters (mg/kg)													
HEXAVALENT CHROMIUM	20	N/A	N/A	0.61 U	0.55 U	0.56 U	0.6 U	0.61 U	0.57 U	0.52 U	0.59 U	0.59 U	0.54 U
Miscellaneous Parameters (mv)													
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	375	391	414	361	374	400	488	433	449	292
Miscellaneous Parameters (s.u.)					·		·		•		·		
PH	N/A	N/A	N/A	8.2	8.44	7.87	9.05	8.02	7.82	8.42	9.13	8.29	7.14

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default	063_0	C009a		063_C010			063_	C011	
SAMPLE ID	Non-Residential	Residential	Impact to	063_C009a_10.0	063_C009a_15.0	063_C010_6.4	063_C010_10.5	063_C010_15.0	063_C011_5.0	063_C011_6.7	063_C011_10.5	063_C011_15.0
LABORATORY ID				460-29302-28	460-29302-29	460-29302-23	460-29302-24	460-29302-25	460-29195-12	460-29195-13	460-29195-14	460-29195-15
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	10	15	6.4	10.5	15	5	6.7	10.5	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	-2.1	-7.1	1.7	-2.4	-6.9	2.7	1	-2.8	-7.3
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/27/2011	7/27/2011	7/27/2011	7/27/2011	7/27/2011	7/25/2011	7/25/2011	7/25/2011	7/25/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	0.91 UJ	6.6 J^	1 UJ	0.99 UJ	0.94 UJ	0.98 UJ	1.1 UJ	1.1 UJ	1 UJ
CHROMIUM	120,000	N/A	N/A	49.6	3570	14.4	39.6	31.5	24.5	11.8	21.9	40.4
NICKEL	23,000	1,600	205**	10.7	15.8	13.7	20.1	13.4	12.3	11.9	12.3	20.4
THALLIUM	79	5	3	1 U	1 U	1.1 U	1.1 U	1 U	1.1 U	1.2 U	1.2 U	1.1 U
VANADIUM	1,100	390	N/A	23.7	87.6	17.8	48	34.7	19	15.5	26.4	47.2
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	1.1 J	8.1	0.59 U	0.56 U	0.55 U	0.56 UJ	0.6 UJ	0.62 UJ	0.58 UJ
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	347	429	486	472	467	436	438	451	434
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	9.43	10.1	7.92	8.3	8.87	8.26	7.66	8.05	8.5

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_C012			063_D003/MW5	
SAMPLE ID	Non-Residential	Residential	Impact to	063_C012_6.4	063_C012_10.5	063_C012_15.8	063_D003_6.7	063_D003_13.0	063_D003_17.0
LABORATORY ID				460-29336-16	460-29336-17	460-29336-18	460-28742-3	460-28742-4	460-28742-5
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	6.4	10.5	15.8	6.7	13	17
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	1.3	-2.8	-8.1	2.4	-3.9	-7.9
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/28/2011	7/28/2011	7/28/2011	7/13/2011	7/13/2011	7/13/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)									
ANTIMONY	450	31	6	0.98 UJ	3.4 UJ	0.95 UJ	0.93 UJ	0.87 UJ	0.92 UJ
CHROMIUM	120,000	N/A	N/A	15.5	21.8	26.9	16.2	18.7	9.3
NICKEL	23,000	1,600	205**	11.9	19 J	14.7	12.4	11.6	7.3 J
THALLIUM	79	5	3	1.1 U	3.7 U	1 U	1 U	0.96 U	1 U
VANADIUM	1,100	390	N/A	21.3	27.7 J	35.3	23	29.8	14.6
Miscellaneous Parameters (mg/kg)									
HEXAVALENT CHROMIUM	20	N/A	N/A	0.59 U	2 U	0.56 U	0.53 UJ	0.55 UJ	0.54 UJ
Miscellaneous Parameters (mv)									
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	440	433	457	375	389	404
Miscellaneous Parameters (s.u.)									
PH	N/A	N/A	N/A	8.16	8.08	7.78	9.33	9.11	8.85

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default			063 D004				063 D005	
SAMPLE ID	Non-Residential		Impact to	063 D004 5.0	063 D004 6.7		063_D004_10.5-D	063 D004 15.0	063 D005 6.0	063 D005 10.0	063 D005 15.0
LABORATORY ID				460-29195-5	460-29195-4	460-29195-6	460-29195-7	460-29195-8	460-28783-12	460-28783-13	460-28783-14
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	6.7	10.5	10.5	15	6	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3.6	1.9	-1.9	-1.9	-6.4	2.6	-1.4	-6.4
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/25/2011	7/25/2011	7/25/2011	7/25/2011	7/25/2011	7/14/2011	7/14/2011	7/14/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)											
ANTIMONY	450	31	6	1.1 UJ	1.5 J	0.92 UJ	0.93 UJ	0.97 UJ	1.4 UJ	0.95 UJ	0.92 UJ
CHROMIUM	120,000	N/A	N/A	28.2	46.2	23.2	20.2	13	13.8 J	53.8 J	35.9 J
NICKEL	23,000	1,600	205**	9.5 J	14.6	12.9	11.1	11.4	12.1 J	12.4	14.1
THALLIUM	79	5	3	1.3 U	1.1 U	1 U	1 U	1.1 U	1.5 U	1 U	1 U
VANADIUM	1,100	390	N/A	22.5	60	27.1	32.5	18.2	20.1	28.8	56.7
Miscellaneous Parameters (mg/kg)											
HEXAVALENT CHROMIUM	20	N/A	N/A	0.65 UJ	0.56 UJ	0.55 UJ	0.55 UJ	0.53 UJ	0.78 U	0.54 U	0.51 U
Miscellaneous Parameters (mv)											
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	438	438	429	429	433	413	404	428
Miscellaneous Parameters (s.u.)											
PH	N/A	N/A	N/A	7.81	8.18	8.65	8.76	8.66	6.95	8	8.76

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N/A = Not Applicable

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STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT

APPLY
EXCEEDS MINIMUM STANDARD/SCREENING

SAMPLE LOCATION	NJ	NJ	NJ Default		063_D0	06/MW6			063_	D007	
SAMPLE ID	Non-Residential	Residential	Impact to	063_D006_5.0	063_D006_6.5	063_D006_10.0	063_D006_15.0	063_D007_5.7	063_D007_10.0	063_D007_10.0-D	063_D007_15.0
LABORATORY ID				460-28661-6	460-28661-7	460-28661-8	460-28661-9	460-29302-6	460-29302-7	460-29302-8	460-29302-9
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	6.5	10	15	5.7	10	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3	1.5	-2	-7	2.5	-1.8	-1.8	-6.8
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/12/2011	7/12/2011	7/12/2011	7/12/2011	7/27/2011	7/27/2011	7/27/2011	7/27/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)	•										
ANTIMONY	450	31	6	0.66 UJ	0.69 UJ	0.61 UJ	0.57 UJ	1 UJ	0.92 UJ	0.92 UJ	0.88 UJ
CHROMIUM	120,000	N/A	N/A	3850	15.4	19.9	46.5	14.6 J	21.7 J	20.2 J	19 J
NICKEL	23,000	1,600	205**	11.3	12.6	8.2	13.8	13.3	12.2	12.4	12.1
THALLIUM	79	5	3	0.36 U	0.38 U	0.34 U	1 J	1.1 U	1 U	1 U	0.97 U
VANADIUM	1,100	390	N/A	13	16.6	36.5	86.2	16.5	21.4	19.8	28.3
Miscellaneous Parameters (mg/kg)											
HEXAVALENT CHROMIUM	20	N/A	N/A	0.62 U	0.64 U	0.56 U	0.55 U	0.65 U	0.57 U	0.57 U	0.56 U
Miscellaneous Parameters (mv)											
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	229	292	322	334	344	367	389	528
Miscellaneous Parameters (s.u.)											
PH	N/A	N/A	N/A	8.83	7.98	8.09	8.94	7.16	8.13	8.13	8

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s.u. = standard units

N/A = Not Applicable

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STANDARD

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APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_D008			063_D009/MW7			063_D010	
SAMPLE ID	Non-Residential	Residential	Impact to	063_D008_5.0	063_D008_10.0	063_D008_15.0	063_D009_5.0	063_D009_10.0	063_D009_13.2	063_D010_5.1	063_D010_10.0	063_D010_15.0
LABORATORY ID				460-29302-11	460-29302-12	460-29302-13	460-28661-2	460-28661-3	460-28661-4	460-29233-24	460-29233-25	460-29233-26
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	10	15	5	10	13.2	5.1	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	3.1	-1.9	-6.9	3.6	-1.4	-4.6	3.2	-1.7	-6.7
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/27/2011	7/27/2011	7/27/2011	7/12/2011	7/12/2011	7/12/2011	7/26/2011	7/26/2011	7/26/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	1.1 UJ	1 UJ	0.92 UJ	0.63 UJ	0.62 UJ	0.63 UJ	0.99 UJ	0.94 UJ	0.97 UJ
CHROMIUM	120,000	N/A	N/A	10.9 J	35.7 J	33.5	23.4	46.5	26.9	25.6 J	49.9 J	39.4 J
NICKEL	23,000	1,600	205**	10.2	18	19.4	12.6	11.2	15.2	12.8	18.5	12
THALLIUM	79	5	3	1.2 U	1.1 U	1 U	0.35 U	0.35 U	0.35 U	1.1 U	1 U	1.1 U
VANADIUM	1,100	390	N/A	13.7	46.9	41.9	22.8	24.7	30.7	23.6	46.8	22.5
Miscellaneous Parameters (mg/kg)								-				-
HEXAVALENT CHROMIUM	20	N/A	N/A	0.68 U	0.55 U	0.54 U	0.6 U	0.57 U	0.55 U	0.58 U	0.55 U	0.55 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	461	467	485	288	351	362	498	471	501
Miscellaneous Parameters (s.u.)				_							_	
PH	N/A	N/A	N/A	7.65	8	8.34	8.63	8.38	8.4	8.28	8.92	8.81

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**STANDARD** 

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**APPLY** 

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA NON-DETECTION EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default			063_D011					063_E003		
SAMPLE ID	Non-Residential	Residential	Impact to	063_D011_0.0	063_D011_7.0	063_D011_11.0	063_D011_11.0-D	063_D011_15.0	063_E003_0.0	063_E003_6.0	063_E003_10.5	063_E003_10.5-D	063_E003_15.0
LABORATORY ID				460-29336-10	460-29336-11	460-29336-12	460-29336-13	460-29336-14	460-29233-1	460-29233-2	460-29233-3	460-29233-4	460-29233-5
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	0	7	11	11	15	0	6	10.5	10.5	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	9.7	2.7	-1.3	-1.3	-5.3	10.3	4.3	-0.2	-0.2	-4.7
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/28/2011	7/28/2011	7/28/2011	7/28/2011	7/28/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011
ABOVE/BELOW GW TABLE				ABOVE	BELOW	BELOW	BELOW	BELOW	ABOVE	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)													
ANTIMONY	450	31	6	1 UJ	1 U	0.93 U	0.98 U	0.98 U	0.9 UJ	0.96 UJ	0.94 UJ	0.93 UJ	0.9 UJ
CHROMIUM	120,000	N/A	N/A	303	12.5	28	33.3	39.1	28.9 J	19.4 J	15.1 J	14.8 J	17.7 J
NICKEL	23,000	1,600	205**	29.8	12.9	15.6	17.2	16.5	33.8	13.3	13.3	11.8	10.2
THALLIUM	79	5	3	1.1 U	1.1 U	1 U	1.1 U	1.1 U	0.99 U	1.1 U	1 U	1 U	0.98 U
VANADIUM	1,100	390	N/A	54	16.3	38.7	42.6	41.4	51.1	27.9	21.9	23	22.4
Miscellaneous Parameters (mg/kg)							-						
HEXAVALENT CHROMIUM	20	N/A	N/A	1.4 J	0.62 U	0.56 U	0.57 U	0.56 U	0.54 U	0.73 J	0.55 U	0.54 U	0.53 U
Miscellaneous Parameters (mv)													
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	459	450	426	427	429	518	456	461	462	468
Miscellaneous Parameters (s.u.)													
PH	N/A	N/A	N/A	7.67	7.38	8.86	8.99	8.72	8.03	9.12	9.05	8.89	8.71

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063_	E004				063_E005		
SAMPLE ID	Non-Residential	Residential	Impact to	063_E004_6.5	063_E004_11.0	063_E004_15.0	063_E004_18.3	063_E005_0.0	063_E005_0.5	063_E005_6.0	063_E005_10.0	063_E005_15.0
LABORATORY ID				460-29233-7	460-29233-8	460-29233-9	460-29233-10	460-29233-11	460-29233-12	460-29233-13	460-29233-14	460-29233-15
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	6.5	11	15	18.3	0	0.5	6	10	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	7.4	2.9	-1.1	-4.4	9.3	8.8	3.3	-0.7	-5.7
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	ABOVE	ABOVE	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	0.9 UJ	1 UJ	0.91 UJ	0.95 UJ	0.94 UJ	0.91 UJ	0.99 UJ	0.97 UJ	0.92 UJ
CHROMIUM	120,000	N/A	N/A	28.7 J	15.2 J	19 J	9.8 J	302 J	53.5 J	13.5 J	26.2 J	14.3 J
NICKEL	23,000	1,600	205**	18.1	11	10.6	6.6 J	28.4	7.8 J	10.6	16.2	10.9
THALLIUM	79	5	3	0.99 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U
VANADIUM	1,100	390	N/A	37.1	24.5	24.6	16.5	61.3	9 J	21.1	38.4	21.3
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.55 U	0.57 U	0.54 U	0.55 U	1.7 J	0.52 U	0.58 U	0.55 U	0.53 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	451	456	481	475	499	507	455	460	474
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	9.03	8.81	8.6	8.08	8.12	8.52	8.23	8.31	8.7

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EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA NON-DETECTION EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default		063	E006			063 E	:007		
SAMPLE ID	Non-Residential	Residential	Impact to	063 E006 0.0	063 E006 6.0	063 E006 10.0	063 E006 15.0	063 E007 0.0	063 E007 5.0	063 E007 10.0	063 E007 15.0	
LABORATORY ID			,	460-29233-18	460-29233-19	460-29233-20	460-29233-21	460-29302-1	460-29302-2	460-29302-3	460-29302-4	
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	0	6	10	15	0	5	10	15	
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	8.9	2.9	-1.1	-6.1	8.1	3.1	-1.9	-6.9	
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/27/2011	7/27/2011	7/27/2011	7/27/2011	
ABOVE/BELOW GW TABLE				ABOVE	BELOW	BELOW	BELOW	ABOVE	BELOW	BELOW	BELOW	
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
Metals (mg/kg)	•					_						
ANTIMONY	450	31	6	0.87 UJ	1 UJ	0.95 UJ	0.93 UJ	0.96 J	1.2 UJ	0.96 UJ	1 UJ	
CHROMIUM	120,000	N/A	N/A	152 J	12.2 J	27.7 J	28.5 J	328 J	12.6 J	13 J	21.3 J	
NICKEL	23,000	1,600	205**	24	10.4	11.4	13.7	28.2	11.5	11.3	12.9	
THALLIUM	79	5	3	0.96 U	1.1 U	1 U	1 U	1 U	1.3 U	1.1 U	1.1 U	
VANADIUM	1,100	390	N/A	45.4	16.2	21.9	32.4	66.6	14.2	19	29.1	
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	1.7 J	0.59 U	0.55 U	0.55 U	4.4	0.69 U	0.56 U	0.56 U	
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	351	366	369	505	493	407	408	419	
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	8.11	7.55	8.05	8.21	8.15	7.36	8.12	8.17	

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APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default			065 A005				065	A006	
SAMPLE ID	Non-Residential	Residential	Impact to	065 A005 5.0	065 A005 5.0-D	065_A005_10.0	065 A005 15.0	065 A005 17.5	065_A006_8.2	065 A006 11.7	065 A006 11.7-D	065 A006 15.0
	Non-Residential	Residential	illipact to									
LABORATORY ID				460-29456-20	460-29456-21	460-29456-22	460-29456-23	460-29456-24	460-29456-15	460-29456-14	460-29456-16	460-29456-18
TOP OF SAMPLE (ft bgs)	Direct Contact	Direct Contact	Groundwater	5	5	10	15	17.5	8.2	11.7	11.7	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	2.7	2.7	-2.3	-7.3	-9.8	-0.9	-4.4	-4.4	-7.7
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	1.4 UJ	5.7 UJ	1.1 UJ	0.99 UJ	0.99 UJ	12.7 UJ	1.1 UJ	1.1 UJ	1 UJ
CHROMIUM	120,000	N/A	N/A	7060	9090	206	92.1	18	12400	18.3	21.1	100
NICKEL	23,000	1,600	205**	14.4	18.5 J	11.6	12.6	10.9	22.7 J	7.7 J	7.4 J	7.7 J
THALLIUM	79	5	3	1.6 U	6.3 U***	1.2 U	1.1 U	1.1 U	5.6 U***	1.2 U	1.2 U	1.1 U
VANADIUM	1,100	390	N/A	40.2	52.4 J	32.8	20.9	18.2	52.8 J	27.3	29.7	20.8
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.66 U	0.75 J	0.69 U	0.59 U	0.56 U	4.2	0.62 U	0.65 U	0.61 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	201	213	338	381	481	214	332	337	344
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	10.4	10.3	8.92	8.26	7.99	11.7	7.75	7.73	7.91

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APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default	ault 065_A007 065_A008								A009
SAMPLE ID	Non-Residential	Residential	Impact to	065 A007 6.9	065 A007 6.9-D	065 A007 11.0	065 A007 15.0	065 A008 7.0	065 A008 10.4	065 A008 15.0	065 A009 6.0	065 A009 15.0
	Non-Residential	Residential	illipact to									
LABORATORY ID				460-29456-9	460-29456-10	460-29456-11	460-29456-12	460-29456-4	460-29456-5	460-29456-6	460-29456-34	460-29456-35
TOP OF SAMPLE (ft bgs)	Direct Contact	Direct Contact	Groundwater	6.9	6.9	11	15	7	10.4	15	6	15
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	0.5	0.5	-3.6	-7.6	0.6	-2.8	-7.4	1.5	-7.5
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)												
ANTIMONY	450	31	6	9.2 J	10.6 J	3.5 UJ	1 UJ	3.1 J	1.4 UJ	1 UJ	6.1 J	0.9 UJ
CHROMIUM	120,000	N/A	N/A	50.9 J	44 J	23.1 J	23.4	1510 J	490 J	30.8 J	23.2	95.9
NICKEL	23,000	1,600	205**	17.3	19.8	8.8 J	8.8 J	14.3	14.9	9.9	11.3	17.7
THALLIUM	79	5	3	1.3 U	1.2 U	3.8 U^	1.1 U	1.1 U	1.6 U	1.1 U	1.1 U	0.99 U
VANADIUM	1,100	390	N/A	27.8	42.1	21.1 J	24.4	30	24.1	26.7	7.9 J	38.5
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.66 U	0.67 U	2 U	0.6 U	9.5	0.84 U	0.58 U	0.6 U	0.55 U
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	218	137	454	428	340	387	450	410	398
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	9.57	9.65	7.96	8.38	10	8.37	7.94	8.01	8.75

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THEREFORI APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default	065	A010		065 A011				065 A012		
						005 4044 40.0		005 4044 40.0	005 4040 5.0	005 4040 400		005 4040 45 0	005 4040 40.5
SAMPLE ID	Non-Residential	Residential	Impact to	065_A010_15.0	065_A010_15.0-D		065_A011_15.0	065_A011_18.0	065_A012_5.0		065_A012_10.0-D		065_A012_18.5
LABORATORY ID				460-29456-38	460-29456-39	460-29355-9	460-29355-10	460-29355-11	460-29456-26	460-29456-27	460-29456-28	460-29456-29	460-29456-30
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	15	15	10	15	18	5	10	10	15	18.5
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	-7.5	-7.5	-2.4	-7.4	-10.4	2.7	-2.3	-2.3	-7.3	-10.8
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	8/1/2011	8/1/2011	7/28/2011	7/28/2011	7/28/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Metals (mg/kg)													
ANTIMONY	450	31	6	0.93 UJ	0.98 UJ	1.1 UJ	0.97 UJ	0.91 UJ	0.99 UJ	1.7 UJ	1.7 UJ	0.99 UJ	1 UJ
CHROMIUM	120,000	N/A	N/A	32.6	34.6	13.7 J	14.1 J	20.9 J	21.8	243 J	121 J	50.1	14.2
NICKEL	23,000	1,600	205**	12.3	15.6	12.1	9.3	16	13.1	24.7	23.1	7.2 J	13.7
THALLIUM	79	5	3	1 U	1.1 U	1.2 U	1.1 U	1 U	1.1 U	1.8 U	1.9 U	1.1 U	1.1 U
VANADIUM	1,100	390	N/A	28.8	34.3	20.7	21.2	32.6	28.3	33.2	33.1	19.7	20.5
Miscellaneous Parameters (mg/kg)													
HEXAVALENT CHROMIUM	20	N/A	N/A	0.53 U	0.54 U	0.59 U	0.58 U	0.55 U	0.55 U	0.99 U	1 U	0.58 U	0.59 U
Miscellaneous Parameters (mv)													
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	382	390	449	428	430	449	452	442	433	428
Miscellaneous Parameters (s.u.)													
PH	N/A	N/A	N/A	9.16	9.04	7.29	8.32	8.97	8.32	7.79	7.83	7.84	8.49

U = NON DETECT

J = ESTIMATED

ft msl = FEET MEAN SEA LEVEL

ft bgs = FEET BELOW GROUND SURFACE

mg/kg = MILLIGRAMS PER KILOGRAM

mv = millivolts

s.u. = standard units

N/A = Not Applicable

\*\* SITE SPECIFIC IGW SSL = DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL \*\*\* COMPLIANCE AVERAGED BELOW

STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT

APPLY

EXCEEDS MINIMUM STANDARD/SCREENING CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default				065 /	N 01 4				
				005 4040 50		A013	005 4040 47.0	005 4044 40.0			005 4044 40.7	
SAMPLE ID	Non-Residential	Residential	Impact to	065_A013_5.0	065_A013_10.0	065_A013_15.5	065_A013_17.0	065_A014_10.0	065_A014_10.0-D	065_A014_15.0	065_A014_16.7	
LABORATORY ID				460-29355-3	460-29355-4	460-29355-5	460-29355-6	460-29469-5	460-29469-6	460-29469-7	460-29469-8	
TOP OF SAMPLE (ft bgs)	Direct Contact	<b>Direct Contact</b>	Groundwater	5	10	15.5	17	10	10	15	16.7	
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	1.7	-3.3	-8.8	-9.3	-3.1	-3.1	-8.1	-9.8	
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	7/28/2011	7/28/2011	7/28/2011	7/28/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	
ABOVE/BELOW GW TABLE				BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
Metals (mg/kg)												
ANTIMONY	450	31	6	1.9 J	4.3 J	3.2 UJ	0.96 UJ	6 J	5.9 J	2.4 UJ	1.1 UJ	
CHROMIUM	120,000	N/A	N/A	22.3	11.3	13.3 J	17.1	22	25	221	3.6	
NICKEL	23,000	1,600	205**	12.5	19.1	13.9 J	13.2	18.6	15.1	26.7	1.5 J	
THALLIUM	79	5	3	1.1 U	1.4 U	3.5 UJ	1.1 U	1.5 U	1.5 U	2.6 U	1.2 U	
VANADIUM	1,100	390	N/A	14.4	14.5	18.4 J	24.8	17.4	15.7	35.2	7.6 J	
Miscellaneous Parameters (mg/kg)												
HEXAVALENT CHROMIUM	20	N/A	N/A	0.59 U	0.72 U	2 U	0.57 U	0.76 UJ	0.74 UJ	1.3 UJ	0.64 UJ	
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	479	411	374	404	348	351	347	368	
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	8.3	8.01	7.76	7.03	7.75	7.71	7.71	7.2	

U = NON DETECT

J = ESTIMATED

ft msl = FEET MEAN SEA LEVEL

ft bgs = FEET BELOW GROUND SURFACE

mg/kg = MILLIGRAMS PER KILOGRAM

mv = millivolts

s.u. = standard units

N/A = Not Applicable

\*\* SITE SPECIFIC IGW SSL = DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL \*\*\* COMPLIANCE AVERAGED BELOW

STANDARD

^ SAMPLE IS BELOW WATER TABLE THEREFORE NJDEP IGWSSL DOES NOT

APPLY
EXCEEDS MINIMUM STANDARD/SCREENING

CRITERIA

SAMPLE LOCATION	NJ	NJ	NJ Default			065_	A015					
SAMPLE ID	Non-Residential	Residential	Impact to	065_A015_0.0	065_A015_5.0	065_A015_10.3	065_A015_10.3-D	065_A015_15.0	065_A015_19.0			
LABORATORY ID				460-29469-9	460-29469-10	460-29469-11	460-29469-12	460-29469-13	460-29469-14			
TOP OF SAMPLE (ft bgs)	Direct Contact	Direct Contact	Groundwater	0	5	10.3	10.3	15	19			
TOP OF SAMPLE ELEV. (ft msl)	Soil (NJAC	Soil (NJAC	Soil Screening	6.6	1.6	-3.7	-3.7	-8.4	-12.4			
SAMPLE_DATE	7:26D 5/12)	7:26D 5/12)	(11/13)	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011	8/1/2011			
ABOVE/BELOW GW TABLE				ABOVE	BELOW	BELOW	BELOW	BELOW	BELOW			
MATRIX				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Metals (mg/kg)												
ANTIMONY	450	31	6	1.7 J	1 UJ	1.9 J	2 J	2.8 UJ	1 UJ			
CHROMIUM	120,000	N/A	N/A	132	91.4	17.4 J	34.8 J	25.1 J	15.4			
NICKEL	23,000	1,600	205**	33.4	13.8	11.8 J	16.4	18.3 J	13.9			
THALLIUM	79	5	3	1 U	1.2 U	1.8 U	1.8 U	3.1 U^	1.1 U			
VANADIUM	1,100	390	N/A	44.6	13.6	13.7 J	18.6	29.5 J	25.6			
Miscellaneous Parameters (mg/kg)						-						
HEXAVALENT CHROMIUM	20	N/A	N/A	0.51 UJ	3.2 J	0.91 UJ	0.95 UJ	1.6 UJ	0.61 UJ			
Miscellaneous Parameters (mv)												
OXIDATION REDUCTION POTENTIAL	N/A	N/A	N/A	363	439	391	371	457	355			
Miscellaneous Parameters (s.u.)												
PH	N/A	N/A	N/A	8.67	8.03	7.63	7.6	7.67	7.76			

U = NON DETECT

J = ESTIMATED

ft msl = FEET MEAN SEA LEVEL

ft bgs = FEET BELOW GROUND SURFACE

mg/kg = MILLIGRAMS PER KILOGRAM

mv = millivolts

s.u. = standard units N/A = Not Applicable

\*\* SITE SPECIFIC IGW SSL = DEFAULT IMPACT TO GROUNDWATER SOIL SCREENING LEVEL

\*\*\* COMPLIANCE AVERAGED BELOW

**STANDARD** ^ SAMPLE IS BELOW WATER TABLE

THEREFORE NJDEP IGWSSL DOES NOT

**APPLY** EXCEEDS MINIMUM STANDARD/SCREENING

CRITERIA

#### Table 2H

Historical Soil Samples
Site Investigation Borings (2011)
Complete Laboratory Analytical Summary Table PPG Site 63
1 Burma Road
Jersey City, NJ
2011- Sampled by TRC

Sample Location:				SB 4	SB 6	SB 7	SB 8	S	B 10
Sample Depth (ft bgs):	NJ	NJ	NJ Default	7.5-8.0	7.5-8.0	10.5-11.0	8.5-9.0	9.0-9.5	10.0-10.5
Sample Elevation (ft msl):	Non-Residential	Residential	Impact to	0.5-1	-0.5-0	-3.5-(-3)	-0.9-(-0.4)	-1.8-(-1.3)	-2.8-(-2.3)
Client Sample ID:	Direct Contact	Direct Contact	Groundwater	SB4/7.5-8.0	SB6/7.5-8.0	SB07/10.5-11.0	SB-8/8.5-9.0	SB10/9.0-9.5	SB10/10.0-10.5
Lab Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening	JA81086-6A	JA80694-2A	JA80694-11A	JA80919-8A	JA80783-5	JA80783-6
Date Sampled:	7:26D 5/12)	7:26D 5/12)	(11/13)	07/15/11	07/12/11	07/12/11	07/14/11	07/13/11	07/13/11
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil
Excavation Status:									
Antimony (mg/kg)	450	31	6	<4.9	<7.1***	<5.4	<4.9	<2.5	<5.6
Chromium (mg/kg)	120,000	N/A	N/A	21.1	54.3	46.3	46.6	14.5	33.9
Nickel (mg/kg)	23,000	1,600	205**	16.6	25.4	21.1	25.1	13.1	13.9
Thallium (mg/kg)	79	5	3	<2.5	<3.6***	<2.7	<2.5	<1.3	<2.8
Vanadium (mg/kg)	1,100	390	N/A	28.6	35.9	32.2	37.2	21.1	22.2
Hexavalent Chromium (mg/kg)	20	N/A	N/A	<9.9	3.6	1.5	2.2	<0.49	1.3

#### NOTES:

SPLP = Synthetic Precipitation Leaching Procedure.

\*\*\* = Soil sample collected entirely below the water table; therefore, the IGWSSL does not apply.;

IGWSSL = Default Impact To Groundwater Soil Screening Level.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

Additional chrome data reported in Tables 2J and 4J.

<sup>&</sup>lt; - The analyte was not detected at the stated reporting limit.

<sup>\*\* =</sup> Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel;

#### Table 2H

Historical Soil Samples
Site Investigation Borings (2011)
Complete Laboratory Analytical Summary Table PPG Site 63
1 Burma Road
Jersey City, NJ
2011- Sampled by TRC

Sample Location:				SE	112	TW 1		TW 2	
Sample Depth (ft bgs):	NJ	NJ	NJ Default	12.0-12.5	13.0-13.5	10.0-10.5	9.5-10.0	17.0-17.5	22.0-22.5
Sample Elevation (ft msl):	Non-Residential	Residential	Impact to	-3.6-(-3.1)	-4.6-(-4.1)	-2.2-(-1.7)	-1.4-(-0.9)	-8.9-(-8.4)	-13.9-(-13.4)
Client Sample ID:	Direct Contact	Direct Contact	Groundwater	SB12/12.0-12.5	SB12/13.0-13.5	TW1/10.0-10.5	TW2/9.5-10.0	TW2/17.0-17.5	TW2/22.0-22.5
Lab Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening	JA81086-8A	JA81086-9A	JA80919-3A	JA80783-8A	JA80783-9A	JA80783-10A
Date Sampled:	7:26D 5/12)	7:26D 5/12)	(11/13)	07/15/11	07/15/11	07/14/11	07/13/11	07/13/11	07/13/11
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil
Excavation Status:									
Antimony (mg/kg)	450	31	6	<2.4	<5.0	<7.3***	<2.3	<2.3	<2.3
Chromium (mg/kg)	120,000	N/A	N/A	17.8	32.1	21.4	24.3	16.6	27.9
Nickel (mg/kg)	23,000	1,600	205**	16	25.9	<15	10	14.4	14.5
Thallium (mg/kg)	79	5	3	<1.2	<2.5	<3.6***	<1.1	<1.1	<1.1
Vanadium (mg/kg)	1,100	390	N/A	19.8	37.6	24.5	28.3	26.2	30.3
		•				•	•		
Hexavalent Chromium (mg/kg)	20	N/A	N/A	<0.50	<10	8.3	< 0.46	<0.47	<0.47

#### NOTES:

SPLP = Synthetic Precipitation Leaching Procedure.

\*\*\* = Soil sample collected entirely below the water table; therefore, the IGWSSL does not apply.;

IGWSSL = Default Impact To Groundwater Soil Screening Level.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

Additional chrome data reported in Tables 2J and 4J.

<sup>&</sup>lt; - The analyte was not detected at the stated reporting limit.

<sup>\*\* =</sup> Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel;

#### Table 2H

Historical Soil Samples
Site Investigation Borings (2011)
Complete Laboratory Analytical Summary Table PPG Site 63
1 Burma Road
Jersey City, NJ
2011- Sampled by TRC

Sample Location:				TV	1 3	Т	W 4	MW 1	MW 2	MW 5/063_D003
Sample Depth (ft bgs):	NJ	NJ	NJ Default	10.5-11.0	12.0-12.5	9.0-9.5	14.0-14.5	8	12	11
Sample Elevation (ft msl):	Non-Residential	Residential	Impact to	-1.5-(-1)	-3-(-2.5)	2.2-2.7	-2.8-(-2.3)	-0.9	-3.7	-1.9
Client Sample ID:	Direct Contact	Direct Contact	Groundwater	TW3/10.5-11.0	TW3/12.0-12.5	TW4/9.0-9.5	TW4/14.0-14.5	MW-1/8	MW-2/12	MW-5/11
Lab Sample ID:	Soil (NJAC	Soil (NJAC	Soil Screening	JA80783-2A	JA80783-3A	JA80919-10A	JA80919-11A	JA81094-2A	JA80569-2	JA80782-2A
Date Sampled:	7:26D 5/12)	7:26D 5/12)	(11/13)	07/13/11	07/13/11	07/14/11	07/14/11	07/15/11	07/11/11	07/13/11
Matrix:				Soil	Soil	Soil	Soil	Soil	Soil	Soil
Excavation Status:										
Antimony (mg/kg)	450	31	6	<2.3	<2.3	<2.2	<2.5	<2.3	<2.5	<2.3
Chromium (mg/kg)	120,000	N/A	N/A	28.6	26.9	21.2	21.8	15.6	30.4	29.7
Nickel (mg/kg)	23,000	1,600	205**	18.8	12.4	12.4	25	14.5	16.2	15
Thallium (mg/kg)	79	5	3	<1.1	<1.1	<1.1	<1.2	<1.2	<1.2	<1.2
Vanadium (mg/kg)	1,100	390	N/A	39.6	28.2	31.6	33.7	22.3	40.5	34.1
Hexavalent Chromium (mg/kg)	20	N/A	N/A	<0.47	<0.45	0.5	<0.48	<0.48	<0.50	1.1

#### NOTES:

SPLP = Synthetic Precipitation Leaching Procedure.

\*\*\* = Soil sample collected entirely below the water table; therefore, the IGWSSL does not apply.;

IGWSSL = Default Impact To Groundwater Soil Screening Level.

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

Additional chrome data reported in Tables 2J and 4J.

<sup>&</sup>lt; - The analyte was not detected at the stated reporting limit.

<sup>\*\* =</sup> Site-specific impact to groundwater criteria developed using SPLP methodology for Nickel;

#### TABLE 2I

#### **Historical Soil Samples**

## Interim Remedial Action Report (1998-2000)

### **Analytical Laboratory Results for Remaining Soil**

#### **TEST BORING SOIL SAMPLE RESULTS GROUP 12**

PPG Site 63, 1 Burma Road Jersey City, New Jersey

Sampled by ICF Kaiser/IT Corporation

SAMPLE ID	Ground Surface Elevation (ft msl)	SAMPLE DEPTH (ft bgs)	SAMPLE ELEVATION (ft msl)	LOCATION	DATE	Chromium, Hexavalent (mg/kg)	Chromium, Total (mg/kg)
630807007	12.9	8.80-10.50	2.4-4.1	PPG12-B07	9/21/1998	5.7 U	55 J
630811006	12.8	14.00-14.20	-1.4-(-1.2)	PPG12-B11	1/7/1999	1.1 J	552
630812004	9.5	6.00-7.10	2.4-3.5	PPG12-B12	1/11/1999	0.79 J	1780
630812104	9.5	6.00-7.10	2.4-3.5	PPG12-B12	1/11/1999	0.39 U	464
630812005	9.5	8.00-8.90	0.6-1.5	PPG12-B12	1/11/1999	0.42 U	299
630812006	9.5	10.00-10.40	-0.9-(-0.5)	PPG12-B12	1/11/1999	0.5 U	2030
630812007	9.5	14.00-14.90	-5.4-(-4.5)	PPG12-B12	1/11/1999	0.84 J	39
630813005	10.0	8.00-8.50	1.5-2	PPG12-B13	1/8/1999	0.44 UJ	16
630817006	13.2	12.00-12.00*	1.2*	PPG12-B17	1/7/1999	1.6 J	152

Notes:

mg/kg= milligram/kilogram

ft msl = feet mean sea level

ft bgs= feet below ground surface

J = estimated value

U = not detected

<sup>\*</sup> Sample Depth typo in original report, exact sample interval unknown.

#### Table 2J

#### Site Investigation Borings (2016)

# Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

## PPG Site 63

1 Burma Road, Jersey City, NJ Sampled by CB&I

Sample Location:				ED012-A		SB11-A			SB13-A		B73-A		SB5-A	
Sample Depth (ft bgs):	NJ Non-	NJ Residential	NJ Default	7.8-8.3	8.9-9.4	9.4-9.9	9.9-10.4	9-9.5	9.5-10	10-10.5	2.5-3	10.4-10.9	10.9-11.4	11.4-11.9
Sample Elevation (ft msl):	Residential	Direct Contact	Impact to	0.7-1.2	-0.4 - 0.1	-0.9 - (-0.4)	-1.4 - (-0.9)	-0.5- 0	-1 - (-0.5)	-1.5 - (-1.0)	5-5.5	-2.9 - (-2.4)	-3.4 - (-2.9)	-3.9 - (-3.4)
Client Sample ID:	Direct Contact	Soil (NJAC 7:	Groundwater	ED012-A_7.8-8.3	SB11-A_8.9-9.4	SB11-A_9.4-9.9	SB11-A_9.9-10.4	SB13-A_9-9.5	SB13-A_9.5-10	SB13-A_10-10.5	B73-A_2.5-3.0	SB5-A_10.4-10.9	SB5-A_10.9-11.4	SB5-A_11.4-11.9
Lab Sample ID:	Soil (NJAC 7:	26D 5/12) <sup>1</sup>	Soil Screening	JC16626-1RA	JC16626-4RA	JC16626-5A	JC16626-6A	JC16626-7RA	JC16626-8A	JC16626-9A	JC16626-10RA	JC16626-13RA	JC16626-14A	JC16626-15A
Date Sampled:	26D 5/12) <sup>1</sup>		(11/13)	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016	3/18/2016
Matrix:	ĺ			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Excavation Status:														
	•		•		•						•			
Metals Analysis														
Chromium (mg/kg)	120,000	-	-	15.4 / 48.6	19.8 / 29.6	27.7	19.1	18.1 / 23.8	24.3	11.4	244 / 206	19.4 / 21.9	12.3	6
General Chemistry														
Chromium, Hexavalent (mg/kg) <sup>C</sup>	20	-	-	0.7	27.7 <sup>E</sup>	-	-	45.4 <sup>E</sup>	-	-	2	37.2 <sup>E</sup>	-	-
Chromium, Hexavalent (mg/kg) <sup>C</sup>	20			0.48	1.7	-	-	2.7	=	-	<0.48	1.6	-	-
Chromium, Hexavalent (mg/kg) <sup>D</sup>	20	-	-	0.86	<1.3	-	-	<1.5	-	-	<0.47	<1.3	-	-
pH (su)	-	-	-	9.08	6.94	-	-	7.46	-	-	7.76	7.6	-	-
Redox Potential Vs H2 (mv)	-		-	310	296	-	-	276	-	-	336	340	-	-
Solids, Percent (%)	-	-	-	90.8	32.1	-	-	26.5	-	-	84	30	-	-

#### **Analytical Data Qualifiers:**

- < The analyte was not detected at the stated reporting limit.
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- N -The matrix spike sample recovery in the associated QC sample is not within QC limits.
- R The reported result is rejected.
- J- The result is estimated and may be biased low.

### Footnotes:

<sup>c</sup> 7196A sample methodology

ft bgs = feet below ground surface mg/kg = milligram per kilogram su = standard unit mv = millivolts

<sup>&</sup>lt;sup>D</sup>7199 sample methodology (Sample was homogenized before being run)

<sup>&</sup>lt;sup>E</sup> False positives (i.e., errant exceedances) for Cr6+ were reported for SB5, SB11, and SB13. The original Cr6+ results were suspect due to Cr6+ concentrations reported greater than total chrome. The laboratory re-homogenized the soil samples and collected new aliquots that were processed and analyzed both by EPA Method 7196A and EPA Method 7199 for confirmation of the Cr6+ concentrations. Total chrome was also re-analyzed to confirm the reported concentrations. Re-analysis of the samples confirmed Cr6+ is not present above the applicable criteria at these locations.

<sup>&</sup>lt;sup>1</sup> NOTE: Soil Remediation Standards from June 2008 were incorporated in the May 2012 rule without change.

#### Table 2K

#### **Supplemental Soil Investigation Sample Summary Table (2016)**

#### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

## PPG Site 63, 1 Burma Road,

Jersey City, NJ Sampled by CB&I

Client Sample ID:		NJ Non-	NJ Residential	NJ Default	SWR001_2.5-3.0	SWR002_2.6-3.1	SWR003_2.5-3.0	SWR004_2.5-3.0	SWR005_2.5-3.0	SWR006_2.5-3.0	SWR007_2.5-3.0	DUP-1	SWR008_2.5-3.0	SWR009_1.0-1.5	SW010_1.0-1.5
Sample Depth ( ft bgs):		Residential	Direct Contact	Impact to	2.5-3.0	2.6-3.1	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	2.5-3.0	1.0-1.5	1.0-1.5
Sample Elevation (ft msl):		Direct Contact	Soil (NJAC 7:	Groundwater	8.5-9.0	7.4-7.9	6.4-6.9	6.1-6.6	6.2-6.7	6.3-6.8	6.4-6.9	6.4-6.9	8.5-9.0	9.2-9.7	8.4-8.9
Excavated		Soil (NJAC 7:	26D 5/12) <sup>1</sup>	Soil											
Lab Sample ID:		26D 5/12) <sup>1</sup>		(11/13)	JC31406-1/1A/1R	JC31406-4/4A/4R	JC31406-5/5A/5R	JC31406-7/7A/7R	JC31406-6/6A/6R	JC31406-8/8A/8R	JC31406-9/9A/9R	JC31406-11/11A/11R	JC31527-8/8A/8T	JC31607-8/8A/8R	JC31527- 10/1A/10T
Date Sampled:					11/9/2016	11/9/2016	11/9/2016	11/9/2016	11/9/2016	11/9/2016	11/9/2016	11/9/2016	11/10/2016	11/11/2016	11/10/2016
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis															
Antimony	mg/kg	450	31	6	<2.3 NJ-	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-	<2.2 NJ-	<2.3 NJ-	<2.7 NJ-	<2.7 NJ-	<2.0 NJ-	30.3 NJ- <sup>f</sup>	4.8 NJ-
Chromium	mg/kg	120,000	-	-	47.6	22.9	56.1	96.2	59.2	19	13.8	13.2	33.4	124	130
Nickel	mg/kg	23,000	1,600	205**	13	51.9	22.2	14.2	23.6	12.9	13.4	13.1	16.5	83.6	104
Thallium	mg/kg	79	5	3	<1.2	<1.1	<1.2	<1.1	<1.1	<1.1	<1.3	<1.4	<0.98	<1.1	<2.1
Vanadium	mg/kg	1,100	390	NA	27.9	24.2	34	32.3	39.5	26.7	17.7	17.6	28.2	44.9	46.5
General Chemistry															
Chromium, Hexavalent	mg/kg	20	-	-	1.0 *NJ / 2.0 *NJ-	2.2 *NJ / <0.44 *NJ-	0.6 *NJ / <0.47 *NJ-	14.6 *NJ / 4.8 *NJ-	0.51 *NJ / 1.2 *NJ-	1.1 *NJ / 0.46 *NJ-	<0.55 *NJ / <0.55 *NJ-	<0.56 *NJ / 0.63 *NJ-	5.1 NJ- / 3.9	8.1 *NJ- / 2.6 NJ-	0.51 NJ- / 0.53
Iron, Ferrous	%	-	-	-	-		-	-	-	-	-	-	-	-	-
pH <sup>a</sup>	su	-	-	ı	8.2	8.29	7.72	8.51	7.96	8.26	7.95	7.59	7.98	7.67	8.05
Redox Potential Vs H2	mv	-	-	-	508	524	517	538	515	550	561	568	526	539	528
Solids, Percent	%	-	-	-	86	89.9	85.4	87	88.2	87.3	73.3	71.8	97	91.6	94.4
Sulfide Screen		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-		-	-	-	<del>-</del>	-	-	-	-

#### **Analytical Data Qualifiers:**

- < The analyte was analyzed for, but was not detected above the stated reporting
- \* Duplicate analysis not within control limits; indeterminate bias direction.
- J The reported result is an estimated value.
- NJ The matrix spike sample recoveries in the associated QC sample are outside QC limits; the result is an estimated value with no definitive bias.
- NJ- The matrix spike sample recoveries in the associated QC sample are below QC limits; the result is an estimated value with a potential low bias.

# Footnotes:

- <sup>a</sup> Field analysis required. Received out of hold time and analyzed by request.
- <sup>b</sup> Elevated detection limit due to dilution required for high interfering element.
- <sup>c</sup> The ferrous iron test was analyzed after completion of Cr<sup>+6</sup> testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr<sup>+6</sup> recoveries.
- <sup>d</sup> The sulfide screen test was analyzed after completion of Cr<sup>+6</sup> testing (outside of normal hold times for this parameter) in order to provide more information about the possible impact of the sample matrix on Cr<sup>+6</sup> recoveries.
- <sup>e</sup> Analysis done out of holding time.
- <sup>f</sup> Exceedance of Default Impact to Groundwater Soil Screening Level addressed by compliance averaging.
- <sup>9</sup> Detection limit in excess of Default Impact to Groundwater Soil Screening Level; however the sample was collected within the saturated zone.
- <sup>1</sup> NOTE: Soil Remediation Standards from June 2008 were incorporated in the May 2012 rule without change.
- \*\*- Nickel site specific impact due to groundwater screen level method calculated using SPLP laboratory methods

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

su = standard unit

mv = millivolts

Result exceeded the most stringent criteria

#### Table 2K

#### **Supplemental Soil Investigation Sample Summary Table (2016)**

#### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

## PPG Site 63, 1 Burma Road,

Jersey City, NJ Sampled by CB&I

								Sampled by	CDQI					
Client Sample ID:		NJ Non-	NJ Residential	NJ Default	SWR011_1.0-1.5	DUP-2	SWR013_1.0-1.5	SWR017_2.5-3.0	PPG63/65_SW25R2_4.3-4.8	PPG63/65_SW93_0.3-0.8	PPG63/65_SW119_1.6-2.1	BR001_4.2-4.7 (AD006)	BR002_3.5-4.0	BR003_8.1-8.6 (CD005)
Sample Depth ( ft bgs):		Residential	<b>Direct Contact</b>	Impact to	1.0-1.5	1.0-1.5	1.0-1.5	2.5-3.0	4.3-4.8	0.3-0.8	1.6-2.1	4.2-4.7	3.5-4.0	8.1-8.6
Sample Elevation (ft msl)	:	<b>Direct Contact</b>	Soil (NJAC 7:	Groundwater	7.2-7.7	7.2-7.7	8.8-9.3	5.3-5.8	4.5-5.0	10.5-11.0	8.5-9.0	3.0-3.5	5.0-5.5	-0.5 - 0
Excavated		Soil (NJAC 7:	26D 5/12) <sup>1</sup>	Soil										
Lab Sample ID:		26D 5/12) <sup>1</sup>		(11/13)	JC31527- 11/11A/11T	JC31527- 12/12A/12T	JC31607-9/9A/9R	JC31607-4/4A/4R	JC32217-1/1A/1R	JC31527-9/9A/9T	JC31406-3/3A/3R	JC31607-2/2A/2R	JC31607-1/1A/1R	JC31527-1/1A/1T
Date Sampled:					11/10/2016	11/10/2016	11/11/2016	11/11/2016	11/22/2016	11/10/2016	11/9/2016	11/11/2016	11/11/2016	11/10/2016
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis														
Antimony	mg/kg	450	31	6	3.9 NJ-	3.8 NJ-	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.0 NJ-	<2.2 NJ-	5.9 NJ-	<2.3 NJ-	<6.8 NJ- <sup>9</sup>
Chromium	mg/kg	120,000	-		174	122	305	40.1	185	36.7	30.3	25.8	467	2610
Nickel	mg/kg	23,000	1,600	205**	104	65.3	57	24.3	47.5	21.4	28.6	16.5	7.9	16.3
Thallium	mg/kg	79	5	3	<2.2	<2.1	<1.1	<1.1	<2.3	<1.0	<2.2 <sup>b</sup>	<1.1	<1.1	<1.1
Vanadium	mg/kg	1,100	390	NA	51.5	51.3	54.8	18.8	48.2	28.4	50.4	26.5	15.7	48.7
General Chemistry														
Chromium, Hexavalent	mg/kg	20	-	-	<0.45 NJ- / 2.3	<0.45 NJ- / 3.7	1 *NJ- / <0.46 NJ-	<0.47 *NJ- / <0.47 NJ-	2.4 NJ - / 8.3 NJ-	1.3 NJ- / <0.42	1 *NJ / 0.72 *NJ-	<0.47 *NJ- / <0.47 NJ-	16.1 *NJ- / 15.2 NJ-	2.7 NJ- / 4
Iron, Ferrous	%	-	-	-	-	-	-	-	-	-	-	-	-	-
рН <sup>а</sup>	su	-	-	-	7.94	8.09	7.87	7.58	8.11	7.95	7.65	8.17	7.5	9.58
Redox Potential Vs H2	mv	-	-	-	540	540	541	531	520	530	514	536	534	537
Solids, Percent	%	-	-	-	88.4	89.7	87.1	85.6	83.9	95.9	86.1	84.4	84.8	85.9
Sulfide Screen		-	-	-	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/kg	-	-	-	-	-	-	-	135,000 J	-	-	-	-	-

## **Analytical Data Qualifiers:**

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# Footnotes:

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ft msl = feet mean sea level

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Result exceeded the most stringent criteria

#### Table 2K

#### **Supplemental Soil Investigation Sample Summary Table (2016)**

#### Final Post-Remedial Summary Laboratory Analytical Data for Remaining Soil

## PPG Site 63, 1 Burma Road,

Jersey City, NJ Sampled by CB&I

								Sampled by CD&I								
Client Sample ID:		NJ Non-	NJ Residential	NJ Default	BR004_7.3-7.8 (CD007)	BR005_4.7-5.2 (FD002)	BR006_4.4-4.9	BR007_4.1-4.6	BR008_6.7-7.2 (BD010)	BR009_3.3-3.8	BR010_1.9-2.4	TP001_B01	TP001_SW01	TP001_SW02	TP001_SW03	TP001_SW04
Sample Depth ( ft bgs):		Residential	<b>Direct Contact</b>	Impact to	7.3-7.8	4.7-5.2	4.4-4.9	4.1-4.6	6.7-7.2	3.3-3.8	1.9-2.4	1.5-2.0	1.0-1.5	1.0-1.5	0.5-1.0	1.0-1.5
Sample Elevation (ft msl):		<b>Direct Contact</b>	Soil (NJAC 7:	Groundwater	0.5-1.0	4.1-4.6	4.0-4.5	4.0-4.5	2.8-3.3	6.0-6.5	8.0-8.5	10.4-10.9	11.4-11.9	10.9-11.4	10.4-10.9	10.9-11.4
Excavated		Soil (NJAC 7:	26D 5/12) <sup>1</sup>	Soil												
Lab Sample ID:		26D 5/12) <sup>1</sup>		(11/13)	JC31406-10/10A/10R	JC31607-6/6A/6R	JC31607-5/5A/5R	JC31607-3/3A/3R	JC31607-7/7A/7R	JC31527-7/7A/7T	JC31406- 2/2A/2R/2T	JC31527- 2/2A/2R	JC31527-3/3A/3R	JC31527-4/4A/4R	JC31527-5/5A/5R	JC31527- 6/6A/6R/6RT
Date Sampled:					11/9/2016	11/11/2016	11/11/2016	11/11/2016	11/11/2016	11/10/2016	11/9/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016	11/10/2016
Matrix:					Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Metals Analysis																
Antimony	mg/kg	450	31	6	<2.3 NJ-	<2.3 NJ-	<2.4 NJ-	<2.5 NJ-	<2.1 NJ-	<2.9 NJ-	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-	<2.2 NJ-
Chromium	mg/kg	120,000	-	-	26.4	19.1	19.8	17	354	262	71.2	40.9	30.5	44.6	51.9	40.3
Nickel	mg/kg	23,000	1,600	205**	14.9	14.3	14.4	16.1	32	34	15.2	16.9	18.3	17.5	21.2	17.5
Thallium	mg/kg	79	5	3	<1.2	<1.2	<1.2	<1.2	<2.1	<1.4	<1.1	<1.1	<1.1	<1.2	<1.1	<1.1
Vanadium	mg/kg	1,100	390	NA	27	27.1	21.3	25.8	46.6	65.9	19.7	37.3	33.6	38.9	42.9	38.3
General Chemistry																
Chromium, Hexavalent	mg/kg	20	-	-	0.47 *NJ / 0.64 *NJ-	<0.48 *NJ-/ <0.48 NJ-	1.7 *NJ- / <0.48 NJ-	<0.50 *NJ- / <0.50 NJ-	10.4 *NJ- / 17.6 NJ-	1 NJ- / 4.5	4.1 *NJ / 4.5 *NJ-	5.2 NJ- / 2 NJ-	1.7 NJ- / 2.5 NJ-	3.5 NJ- / 2.3 NJ-	6.5 NJ- / 4.3 NJ-	4.6 NJ- / 4.7 NJ-
Iron, Ferrous	%	-	-	-	-	-	1.3 <sup>c</sup>	-	-	-	0.96 <sup>c</sup>	-	-	-	-	0.59 <sup>c</sup>
pH <sup>a</sup>	su	-	-	1	8	8.14	8.18	7.88	8.17	7.62	8.45	8.39	8.78	8.6	8.9	8.85
Redox Potential Vs H2	mv	-	-	-	520	543	546	540	545	267	541	262	265	264	269	276
Solids, Percent	%	-	-	-	84.8	84.2	83.5	80.3	90.4	68.6	87.4	84.7	86.2	84.1	86.3	86.8
Sulfide Screen		-	-	-	-	-	NEGATIVE <sup>d</sup>	•	-	-	NEGATIVE <sup>d</sup>	1	-	-	-	NEGATIVE <sup>d</sup>
Total Organic Carbon	mg/kg	-	-	-	-	-	11,800 <sup>e</sup> J	-	-	-	11,200 <sup>e</sup> J	-	-	-	-	11,300 <sup>e</sup> J

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