

**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN01											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		0.5-1		2.5-3		4.5-5		6.5-7		8.5-9		8.5-9	
		7-7.5		5-5.5		3-3.5		1-1.5		- 0.5 - (-1)		- 0.5 - (-1)	
		BRN01_0.5-1		BRN01_2.5-3		BRN01_4.5-5		BRN01_6.5-7		BRN01_8.5-9		BRN DUP05	
		JC7286-70A		JC7286-71A		JC7286-72A		JC7286-73A		JC7286-74A		JC7286-69A	
		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	5,520	4,130	4,480	13,600	11,700	10,400		
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-	<2.0 NJ-	4 NJ-	5.7 NJ-	<2.2 NJ-	<2.2 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	<2.0	<2.0	15.4	13.3	4.1	3.9		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<20	<20	224	160	47.8	40.9		
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.20	0.24	0.3	0.65	0.57	0.69		
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.50	<0.51	<0.52	<0.56	<0.54		
Calcium	7440-70-2	-	-	-	mg/kg	14,500	592	3,230	6,070	3,770	4,410		
Chromium	7440-47-3	-	120,000	-	mg/kg	8.1	37.2	13.8	32.8	18.9	22		
Cobalt	7440-48-4	590	1,600	90	mg/kg	5.8	<5.0	6.1	8.8	7.3	8.1		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	35.9	5.8	195	98.4	16.1	22.1		
Iron	7439-89-6	-	-	-	mg/kg	12,900	10,100	23,700	20,000	13,600	13,000		
Lead	7439-92-1	800	400	90	mg/kg	6.6	4.3	850	432	15.6	21.5		
Magnesium	7439-95-4	-	-	-	mg/kg	4,010	1,710	1,210	3,120	3,640	4,750		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	139	76.7	129	256	217	258		
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.034	<0.031	2.7	1.1	<0.034	<0.033		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	12.5	10.1	20.2	22.1	14.3	17.3		
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<990	<1,000	2,160	1,700	2,000		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.0	2.8	<2.1	<2.2	<2.2		
Silver	7440-22-4	5,700	390	1	mg/kg	<0.51	<0.50	1.2	0.66	<0.56	<0.54		
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	<990	<1,000	1,860	<1,100	<1,100		
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<0.99	<1.0	<1.0	<1.1	<1.1		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	55.4	11.2	16.7	38	29.1	36.3		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	22.5	24.3	222	228	52.4	65.1		

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

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- = No Standard or Not Analyzed

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN02											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1-1.5		3-3.5		5-5.5		7-7.75		8-8.5			
		6.5-7		4.5-5		2.5-3		0.5-1		0.5 - 0.0			
		BRN02_1-1.5		BRN02_3-3.5		BRN02_5-5.5		BRN02_7-7.5		BRN02_8-8.5			
		JC7286-59A		JC7286-60A		JC7286-61A		JC7286-62A		JC7286-63A			
		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015			
		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	7,550		8,760		1,360	2,480		3,630
Antimony	7440-36-0	450	31	6	mg/kg	4.6 NJ-		<2.1 NJ-		<2.2 NJ-			<2.2 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	5.9		7		7.3	5.5		<2.2
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	42.9		55.6		<22	30.8		<22
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.28		0.33		<0.22	<0.24		<0.22
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51		12.3		<0.56	<0.59		<0.55
Calcium	7440-70-2	-	-	-	mg/kg	3,140		4,220		664	22,900		2,690
Chromium	7440-47-3	-	120,000	-	mg/kg	30.7		50.3		21.9	7		7.4
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.7		9.5		<5.6	<5.9		<5.5
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	108		84.5		25.3	9.2		5.5
Iron	7439-89-6	-	-	-	mg/kg	21,000		29,200		3,500	9,260		4,900
Lead	7439-92-1	800	400	90	mg/kg	179		136		47.8	38		5.2
Magnesium	7439-95-4	-	-	-	mg/kg	3,080		3,260		<560	1,120		1,880
Manganese	7439-96-5	5,900	11,000	65	mg/kg	143		257		24.3	110		57.1
Mercury	7439-97-6	65	23	0.1	mg/kg	0.096		0.17		0.061	0.098		<0.034
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	20.2		20		9.8	6.6		12.4
Potassium	7740-09-7	-	-	-	mg/kg	<1,000		1,000		<1,100	<1,200		<1,100
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0		<2.1		<2.2	<2.4		<2.2
Silver	7440-22-4	5,700	390	1	mg/kg	0.71		0.63		<0.56	<0.59		<0.55
Sodium	7440-23-5	-	-	-	mg/kg	1,270		1,610		<1,100	<1,200		<1,100
Thallium	7440-28-0	-	-	3	mg/kg	<1.0		<1.0		<1.1	<1.2		<1.1
Vanadium	7440-62-2	1,100	390**	-	mg/kg	52.1 NJ-		44.4		16.2	9.6		11.5
Zinc	7440-66-6	110,000	23,000	930	mg/kg	213		1,030		92.8	55.6		12.2

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN02A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1.5-2	4-4.5	5.5-6	7-7.5	9.5-10					
						6-6.5	3.5-4	2-2.5	0.5-1	- 1.5 - (-2)					
						BRN02A_1.5-2	BRN02A_4-4.5	BRN02A_5.5-6	BRN02A_7-7.5	BRN02A_9.5-10					
						JC7286-65A	JC7286-66A	JC7286-67A	JC7286-68A	JC7286-75A					
						10/26/2015	10/26/2015	10/26/2015	10/26/2015	10/26/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	4,460	6,720	8,900	7,760	8,270					
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-	<2.2 NJ-	4.3 NJ-	2.9 NJ-	<2.2 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	<2.0	15.4	11.9	22.3	5.9					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<20	81.3	75.8	219	44.9					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.26	0.36	0.36	0.44	0.69					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.55	<0.61	<0.64	<0.54					
Calcium	7440-70-2	-	-	-	mg/kg	953	2,220	31,600	3,150	3,910					
Chromium	7440-47-3	-	120,000	-	mg/kg	10	16.3	21.5	24.7	24.3					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<5.1	9	6.2	7.5	7.1					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	6.9	71.9	58.4	66.8	16.7					
Iron	7439-89-6	-	-	-	mg/kg	10,200	29,300	14,500	16,500	15,000					
Lead	7439-92-1	800	400	90	mg/kg	6.1	290	244	705	20.1					
Magnesium	7439-95-4	-	-	-	mg/kg	2,050	2,880	2,680	2,440	5,400					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	124	221	169	181	346					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.033	5.9	0.27	3.5	<0.035					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	10.8	31.4	21.8	21.2	13.1					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	1,180	<1,200	<1,300	2,640					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.2	<2.5	<2.6	<2.2					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.51	0.8	0.75	3.1	<0.54					
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	<1,100	1,280	<1,300	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.1	<1.2	<1.3	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	13.9	39.2	27.4	22.8	37.4					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	26.5	246	135	149	58.5					

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Site 65, Burma Road, Jersey City, NJ
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Sample Location:	BRN_3			
Sample Depth (ft bgs):	2.5-3	5-5.5	7.5-8	9.5-10
Sample Elevation (ft msl):	5-5.5	2.5-3	0-0.5	- 1.5 - (-2)
Client Sample ID:	BRN_3 2.5-3.0	BRN_3 5-5.5	BRN_3 7.5-8.0	BRN_3 9.5-10.0
Lab Sample ID:	JB97557-33A	JB97557-34A	JB97557-35A	JB97557-36A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	25,800	9,840	2,140	8,710
Antimony	7440-36-0	450	31	6	mg/kg	<2.5 NJ-	<2.3 NJ-	<2.6 NJ-	<2.3 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	12.6	11.2	3.3	6.5
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	379	38.8	27	74.6
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.5	0.3	<0.26	0.39
Cadmium	7440-43-9	78	78	2	mg/kg	1.2	<0.57	<0.66	<0.58
Calcium	7440-70-2	-	-	-	mg/kg	11,700	27,700	-	14,800
Chromium	7440-47-3	-	120,000	-	mg/kg	82.7	77.4	18.5	15
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.2	7.8	<6.6	<5.8
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	49	47.7	26.7	32
Iron	7439-89-6	-	-	-	mg/kg	25,300	14,900	9,750	13,700
Lead	7439-92-1	800	400	90	mg/kg	147	137	66.5	238
Magnesium	7439-95-4	-	-	-	mg/kg	21,900	3,810	1,630	3,390
Manganese	7439-96-5	5,900	11,000	65	mg/kg	505	158	137	231
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	26.6	12.7	6	15.2
Potassium	7740-09-7	-	-	-	mg/kg	2,790	<1,100	<1,300	1,300
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.5	<2.3	<2.6	<2.3
Silver	7440-22-4	5,700	390	1	mg/kg	<0.64	0.58	0.78	0.58
Sodium	7440-23-5	-	-	-	mg/kg	4,600	1,960	3,640	1,380
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.1	<1.3	<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	61	40.3	12.4	17
Zinc	7440-66-6	110,000	23,000	930	mg/kg	122	103	-	-

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		Sample Location: BRN04											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		0.5-1		1.6-2.1		2.2-2.7		2.2-2.7		4.6-5.4		8.5-9	
		7-7.5		5.9-6.4		5.3-5.8		5.3-5.8		2.6-3.1		-0.5 - (-1)	
		BRN04_0.5-1		BRN04_1.6-2.1		BRN04_2.2-2.6		BRN DUP03		BRN04 4.6-5.4		BRN04 8.5-9	
		JC7035-22A		JC7035-23A		JC7035-24A		JC7035-32A		JC7035-25A		JC7035-26A	
		10/23/2015		10/23/2015		10/23/2015		10/23/2015		10/23/2015		10/23/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	8,400	24,600	25,300	25,100	5,360			7,630
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.5 NJ-	<2.6 NJ-	<2.8 NJ-	<2.2 NJ-			29.8 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	3.4	13.4	16	14.6	12			21.9
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	81.4	86	88.2	97.9	121			77.4
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.39	1.3	1.3	1.3	0.6			0.34
Cadmium	7440-43-9	78	78	2	mg/kg	<0.53	1.1	1.3	1.2	<0.55			<0.61
Calcium	7440-70-2	-	-	-	mg/kg	5,840	11,300	15,600	15,300	16,800			13,700
Chromium	7440-47-3	-	120,000	-	mg/kg	33.3 EJ	73.1 EJ	134 EJ	86 EJ	18 EJ			23 EJ
Cobalt	7440-48-4	590	1,600	90	mg/kg	10	7.1	6.8	6.9	9.5			6.1
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	88.8	34.1	31.6	33.5	42			102
Iron	7439-89-6	-	-	-	mg/kg	17,300	19,100	17,900	17,200	19,500			18,000
Lead	7439-92-1	800	400	90	mg/kg	133	73.2	81.6	82	628			967
Magnesium	7439-95-4	-	-	-	mg/kg	3,240	21,300	22,900	22,900	2,840			2,370
Manganese	7439-96-5	5,900	11,000	65	mg/kg	197	313	313	270	229			291
Mercury	7439-97-6	65	23	0.1	mg/kg	0.11	0.12	0.099	0.083	0.27			0.59
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	22.6	23.6	24	24.1	27.5			20.6
Potassium	7740-09-7	-	-	-	mg/kg	1,150	3,410	2,640	2,650	<1,100			<1,200
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.5	<2.6	<2.8	<2.2			<2.4
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53	<0.63	<0.66	<0.69	<0.55			<0.61
Sodium	7440-23-5	-	-	-	mg/kg	<1,100	2,910	3,510	3,240	<1,100			<1,200
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.3	<1.3	<1.4	<1.1			<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	48.5 EJ	62.8 EJ	65 EJ	65.2 EJ	19.5 EJ			21 EJ
Zinc	7440-66-6	110,000	23,000	930	mg/kg	223	105	110	115	68			240

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

*Nickel site specific impact to groundwater screening level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.

**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN04A											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		0.5-1 7-7.5		1.6-2.1 5.9-6.4		2.2-2.7 5.3-5.8		4.6-5.4 2.6-3.1		8.5-9 -0.5 - (-1)			
		BRN04A_0.5-1		BRN04A_1.6-2.1		BRN04A_2.2-2.7		BRN04A_4.6-5.4		BRN04A_8.5-9			
		JC7035-27A		JC7035-28A		JC7035-29A		JC7035-30A		JC7035-31A			
		10/23/2015		10/23/2015		10/23/2015		10/23/2015		10/23/2015			
		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	12,000	16,300	23,900	11,600	2,860			
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.4 NJ-	<2.6 NJ-	<2.2 NJ-	<6.9 ^a NJ-			
Arsenic	7440-38-2	19	19	19	mg/kg	3.2	10.4	14	17.7	<2.3			
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	58.6	78.6	82.7	58.6	27.3			
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.42 ^a	0.92	1.3	0.83	<0.23			
Cadmium	7440-43-9	78	78	2	mg/kg	<0.52	0.89	1.2	<0.55	<0.58			
Calcium	7440-70-2	-	-	-	mg/kg	9,060	6,880	16,300	1,680	1,040			
Chromium	7440-47-3	-	120,000	-	mg/kg	49.7 EJ	63 EJ	66.3 EJ	33.3 EJ	2,360 EJ			
Cobalt	7440-48-4	590	1,600	90	mg/kg	13.7	6.7	6.7	9.5	<5.8			
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	125	36	35.5	22.6	<2.9			
Iron	7439-89-6	-	-	-	mg/kg	25,900	18,100	19,500	15,600	4,480			
Lead	7439-92-1	800	400	90	mg/kg	76	82.5	98	39.4	7.4			
Magnesium	7439-95-4	-	-	-	mg/kg	4,380	12,600	21,500	4,720	<580			
Manganese	7439-96-5	5,900	11,000	65	mg/kg	313	234	313	371	30.2			
Mercury	7439-97-6	65	23	0.1	mg/kg	0.075	0.18	0.11	<0.036	<0.035			
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15	21.9	25.2	17.3	<4.6			
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	2,360	3,330	2,440	1,280			
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.4	<2.6	<2.2	<2.3			
Silver	7440-22-4	5,700	390	1	mg/kg	<1.0 ^a	<0.60	<0.65	<0.55	<1.7 ^a			
Sodium	7440-23-5	-	-	-	mg/kg	1,870	2,150	2,720	<1,100	1,630			
Thallium	7440-28-0	-	-	3	mg/kg	<2.1 ^a	<1.2	<1.3	<1.1	<1.2			
Vanadium	7440-62-2	1,100	390**	-	mg/kg	81.9 EJ	48.7 EJ	63.2 EJ	41.2 EJ	<17 ^a EJ			
Zinc	7440-66-6	110,000	23,000	930	mg/kg	100	100	102	86.7	<17 ^a			

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN_5							
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:	
		2-2.5		6-6.5		7.5-8		9.5-10	
		5.5-6		1.5-2		0-0.5		-1.5 - (-2)	
		BRN_5 2-2.5		BRN_5 6.-6.5		BRN_5 7.5-8.0		BRN_5 9.5-10.0	
		JB97557-29A		JB97557-30A		JB97557-31A		JB97557-32A	
		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	25,800	2,800	12,000	11,500
Antimony	7440-36-0	450	31	6	mg/kg	<2.6 NJ-	<2.6 NJ-	<2.5 NJ-	<2.4 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	16.5	8.4	3.9	4.2
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	120	49.3	83.4	37.6
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.5	<0.26	0.66	0.53
Cadmium	7440-43-9	78	78	2	mg/kg	1.7	<0.65	<0.62	<0.61
Calcium	7440-70-2	-	-	-	mg/kg	10,100	2,310	6,420	998
Chromium	7440-47-3	-	120,000	-	mg/kg	107	10.5	21.6	15.6
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.6	<6.5	8.4	6.6
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	64.1	13.2	48.2	13.6
Iron	7439-89-6	-	-	-	mg/kg	26,900	10,300	20,100	17,900
Lead	7439-92-1	800	400	90	mg/kg	136	49.8	81.4	8.3
Magnesium	7439-95-4	-	-	-	mg/kg	19,800	798	4,140	3,150
Manganese	7439-96-5	5,900	11,000	65	mg/kg	291	60.7	400	242
Mercury	7439-97-6	65	23	0.1	mg/kg	31.3	6	21.5	12.7
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	-	-	-	-
Potassium	7740-09-7	-	-	-	mg/kg	2,860	<1,300	2,350	1,260
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.6	<2.6	<2.5	<2.4
Silver	7440-22-4	5,700	390	1	mg/kg	0.66	<0.65	<0.62	<0.61
Sodium	7440-23-5	-	-	-	mg/kg	9,710	<1,300	<1,200	<1,200
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.3	<1.2	<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	71.2	9.5	25.8	21.5
Zinc	7440-66-6	110,000	23,000	930	mg/kg	172	28.3	47.3	34.1

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN06											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1-1.5		3-3.5		5-5.5		7-7.5		9-9.5		9-9.5	
		6.5-7		4.5-5		2.5-3		0.5-1		-1 - (-1.5)		-1 - (-1.5)	
		BRN06_1-1.5		BRN06_3-3.5		BRN06_5-5.5		BRN06_7-7.5		BRN06_9-9.5		BRN DUP04	
		JC7286-49A		JC7286-50A		JC7286-51A		JC7286-52A		JC7286-53A		JC7286-64A	
		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	12,500	24,900	9,590	2,190	9,110	7,500		
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.1 NJ-	<2.4 NJ-	<2.3 NJ-	<2.2 NJ-	<2.3 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	5.9	12.5	8.8	3.7	8.2	6.1		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	98.3	92.5	75.6	<23	69.6	101		
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.41	1.3	0.5	<0.23	0.53	0.38		
Cadmium	7440-43-9	78	78	2	mg/kg	0.79	1.5	<0.60	<0.58	<0.56	<0.57		
Calcium	7440-70-2	-	-	-	mg/kg	8,650	11,600	36,300	1,840	15,000	13,900		
Chromium	7440-47-3	-	120,000	-	mg/kg	61.6	82.2	45.5	5.8	27.8	21.7		
Cobalt	7440-48-4	590	1,600	90	mg/kg	10	6.6	<6.0	<5.8	7.2	<5.7		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	83.9	26.4	36.9	3.5	67.4	31.3		
Iron	7439-89-6	-	-	-	mg/kg	21,200	18,300	12,600	3,800	15,700	12,700		
Lead	7439-92-1	800	400	90	mg/kg	132	55.2	87.6	14.8	121	115		
Magnesium	7439-95-4	-	-	-	mg/kg	7,930	23,400	7,600	802	5,670	3,000		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	288	316	234	53.7	287	348		
Mercury	7439-97-6	65	23	0.1	mg/kg	0.15	0.13	0.1	<0.036	0.27	0.056		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16.6	23.7	13.8	<4.7	23.9 J	14.3 J		
Potassium	7740-09-7	-	-	-	mg/kg	1,120	2,600	1,240	<1,200	2,790	1,150		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.1	<2.4	<2.3	<2.2	<2.3		
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53	1	<0.60	<0.58	<0.56	<0.57		
Sodium	7440-23-5	-	-	-	mg/kg	2,400	6,930	2,580	<1,200	<1,100	<1,100		
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.0	<1.2	<1.2	<1.1	<1.1		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	60.9 NJ-	57.7 NJ-	33.8 NJ-	6.6 NJ-	35 J	20.6 J		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	152	98	62.8	26.8	69.1	55.7		

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN06A											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		0.5-1 7-7.5		2.5-3 5-5.5		4.5-5 3-3.5		6.5-7 1-1.5		8.5-9 -0.5 - (-1)			
		BRN06A_0.5-1		BRN06A_2.5-3		BRN06A_4.5-5		BRN06A_6.5-7		BRN06A_8.5-9			
		JC7286-54A		JC7286-55A		JC7286-56A		JC7286-57A		JC7286-58A			
		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015			
		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	20,500	9,820	9,560	6,680	10,000			
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-	4.6 NJ-	<2.2 NJ-	<2.3 NJ-	<2.2 NJ-			
Arsenic	7440-38-2	19	19	19	mg/kg	11.7	8	6.4	6.1	5.1			
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	69.9	307	53.8	60.4	43.5			
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.1	0.36	0.33	0.26	0.6			
Cadmium	7440-43-9	78	78	2	mg/kg	1.2	1.3	<0.55	<0.58	<0.54			
Calcium	7440-70-2	-	-	-	mg/kg	9,590	14,400	29,500	26,100	2,850			
Chromium	7440-47-3	-	120,000	-	mg/kg	67.5	110	13.7	12.8	26.1			
Cobalt	7440-48-4	590	1,600	90	mg/kg	6.1	10.2	7	<5.8	8.8			
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	24.2	207	35.9	25.1	16.9			
Iron	7439-89-6	-	-	-	mg/kg	16,700	28,000	14,400	11,500	15,700			
Lead	7439-92-1	800	400	90	mg/kg	52.6	650	152	138	17.6			
Magnesium	7439-95-4	-	-	-	mg/kg	19,000	3,930	3,770	2,670	5,850			
Manganese	7439-96-5	5,900	11,000	65	mg/kg	246	242	352	209	478			
Mercury	7439-97-6	65	23	0.1	mg/kg	0.79	0.12	0.3	0.99	<0.036			
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	19.9	31.1	12.3	14.9	24			
Potassium	7740-09-7	-	-	-	mg/kg	2,460	1,580	1,200	1,240	2,460			
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2	<2.6	<2.2	<2.3	<2.2			
Silver	7440-22-4	5,700	390	1	mg/kg	<0.54	<0.66	<0.55	<0.58	<0.54			
Sodium	7440-23-5	-	-	-	mg/kg	3,410	3,400	<1,100	<1,200	<1,100			
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.3	<1.1	<1.2	<2.2 ^a			
Vanadium	7440-62-2	1,100	390**	-	mg/kg	51.4 NJ-	40.7 NJ-	24.2 NJ-	15 NJ-	37.1 NJ-			
Zinc	7440-66-6	110,000	23,000	930	mg/kg	85.5	641	72.5	56.8	55.5			

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

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mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

*Nickel site specific impact to groundwater screening level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.

**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

J - The reported result is an estimated value.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRN_7			
Sample Depth (ft bgs):	2-2.5	5-5.5	7.5-8.0	9.5-10.0
Sample Elevation (ft msl):	5.5-6	2.5-3	0-0.5	-1.5- (-2)
Client Sample ID:	BRN_7 2-2.5.0	BRN_7 5-5.5.0	BRN_7 7.5-8.0	BRN_7 9.5-10.0
Lab Sample ID:	JB97557-25A	JB97557-26A	JB97557-27A	JB97557-28A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	20,700	10,200	6,430	11,700
Antimony	7440-36-0	450	31	6	mg/kg	<2.6 NJ-	<2.5 NJ-	<2.4 NJ-	<2.6 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	10.8	4.8	7	16
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	91.3	115	94.5	69
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.2	0.52	0.37	0.86
Cadmium	7440-43-9	78	78	2	mg/kg	1.1	<0.63	<0.60	<0.65
Calcium	7440-70-2	-	-	-	mg/kg	9,510	15,800	17,300	3,790
Chromium	7440-47-3	-	120,000	-	mg/kg	466	36.5	16.8	173
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.6	6.6	<6.0	10.6
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	56.9	82.1	56.4	22.9
Iron	7439-89-6	-	-	-	mg/kg	24,700	14,200	13,500	19,900
Lead	7439-92-1	800	400	90	mg/kg	78.6	265	382	41.2
Magnesium	7439-95-4	-	-	-	mg/kg	14,900	4,090	2,530	4,780
Manganese	7439-96-5	5,900	11,000	65	mg/kg	297	156	180	291
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	24.1	19.4	19.3	17
Potassium	7740-09-7	-	-	-	mg/kg	2,280	<1,300	<1,200	2,220
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.6	4.7	<2.4	<2.6
Silver	7440-22-4	5,700	390	1	mg/kg	<0.66	<0.63	<0.60	<0.65
Sodium	7440-23-5	-	-	-	mg/kg	3,360	<1,300	<1,200	1,720
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.3	<1.2	<1.3
Vanadium	7440-62-2	1,100	390**	-	mg/kg	55.1	29.7	13.6	45.4
Zinc	7440-66-6	110,000	23,000	930	mg/kg	106	158	95	68.4

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN08											
		2-2.5		3-3.5		6-6.5		7.5-8		9.5-10			
		5.5-6		4.5-5		1.5-2		0 - 0.5		- 1.5 - (-2)			
		BRN08_2-2.5		BRN08_3-3.5		BRN08_6-6.5		BRN08_7.5-8		BRN08_9.5-10			
		JC7286-76A		JC7286-77A		JC7286-78A		JC7286-79A		JC7286-80A			
		10/26/2015		10/26/2015		10/26/2015		10/26/2015		10/26/2015			
		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	5,710	8,250	6,570	10,500	9,670			
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	2.6 NJ-	<2.0 NJ-	<2.3 NJ-	<2.3 NJ-			
Arsenic	7440-38-2	19	19	19	mg/kg	5.1	10.4	22.5	4	4.5			
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	72.1	120	305	48	44.9			
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.29	0.53	0.39	0.48	0.67			
Cadmium	7440-43-9	78	78	2	mg/kg	<0.52	2.1	0.69	<0.57	<0.57			
Calcium	7440-70-2	-	-	-	mg/kg	3,240	11,200	26,200	1,660	2,430			
Chromium	7440-47-3	-	120,000	-	mg/kg	98.4	266	34.2	17.5	42.1 EJ			
Cobalt	7440-48-4	590	1,600	90	mg/kg	6.6	13.1	6.1	6.4	7.9			
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	47.8	107	130	12.1	25.2			
Iron	7439-89-6	-	-	-	mg/kg	11,300	19,600	19,900	15,400	16,000			
Lead	7439-92-1	800	400	90	mg/kg	170	340	681	13	17.5			
Magnesium	7439-95-4	-	-	-	mg/kg	2,620	4,170	3,250	3,170	6,500			
Manganese	7439-96-5	5,900	11,000	65	mg/kg	169	272	391	335	214			
Mercury	7439-97-6	65	23	0.1	mg/kg	0.47	0.77	3.6	<0.037	<0.036			
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.3	36.9	16.5	13.6	15.9			
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,200	<1,000	1,300	4,250			
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.5	8.7	<2.3	<2.3			
Silver	7440-22-4	5,700	390	1	mg/kg	0.68	1.2	1.5	<0.57	<0.57			
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	<1,200	1,220	<1,100	<1,100			
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.0	<1.1	<1.1			
Vanadium	7440-62-2	1,100	390**	-	mg/kg	30.2	61	24.5	23.6	48.5 EJ			
Zinc	7440-66-6	110,000	23,000	930	mg/kg	144	347	536	36.1	64.1			

Notes:

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^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN08A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
						BRN08A_1-1.5	BRN08A_3-3.5	BRN08A_5-5.5	BRN08A_7-7.5	BRN08A_9-9.5					
						JC7286-44A	JC7286-45A	JC7286-46A	JC7286-47A	JC7286-48A					
						10/26/2015	10/26/2015	10/26/2015	10/26/2015	10/26/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	3,680	4,450	9,740	10,900	9,510					
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-	2.3 NJ-	<2.2 NJ-	<2.2 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	<2.0	14	4.2	5.8	4.7					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<20	87.4	51.7	51.4	29.9					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.21	0.3	0.54	0.72	0.35					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.50	<0.58	<0.54	<0.56	<0.57					
Calcium	7440-70-2	-	-	-	mg/kg	837	2,180	1,660	2,030	932					
Chromium	7440-47-3	-	120,000	-	mg/kg	9.1	15.3	23.6	22.5	11.7					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<5.0	<5.8	6.5	8.5	6.7					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	6.4	40.8	13.1	19.1	9.1					
Iron	7439-89-6	-	-	-	mg/kg	8,400	24,700	15,200	17,400	14,900					
Lead	7439-92-1	800	400	90	mg/kg	6	180	16.1	17.4	10.1					
Magnesium	7439-95-4	-	-	-	mg/kg	1,730	702	3,060	4,820	2,430					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	73.5	100	154	181	220					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.033	0.22	<0.034	<0.036	<0.034					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	8.3	13.9	13	16.6	11.9					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,200	1,230	2,150	<1,100					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	3.5	<2.2	<2.2	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.50	2.6	<0.54	<0.56	<0.57					
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	<1,200	<1,100	<1,100	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.1	<1.1	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	10.4 NJ-	27.5 NJ-	25.3 NJ-	34.1 NJ-	17.6 NJ-					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	21.5	38.3	38.4	57.8	29.5					

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN09							
						0.5-1 7-7.5 Client Sample ID: BRN09_0.5-1 Lab Sample ID: JC7286-1A Date Sampled: 10/21/2015 Matrix: Soil		2.5-3 5-5.5 BRN09_2.5-3 JC7286-2A 10/21/2015 Soil		7.5-8 0-0.5 BRN09_7.5-8 JC7286-3A 10/21/2015 Soil		9.5-10 -1.5 - (-2) BRN09_9.5-10 JC7286-4A 10/21/2015 Soil	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	9,520	10,200	8,610	7,790				
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-	<2.3 NJ-	<9.6 ^a NJ-	<2.4 NJ-				
Arsenic	7440-38-2	19	19	19	mg/kg	17	21.1	60.3^a	10.2				
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	90.6	128	108	150				
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.75	0.8	0.64	0.46				
Cadmium	7440-43-9	78	78	2	mg/kg	<0.59	0.63	<2.4 ^a	<0.60				
Calcium	7440-70-2	-	-	-	mg/kg	6,290	8,570	14,600	14,000				
Chromium	7440-47-3	-	120,000	-	mg/kg	57.3	52.7	8260	41.6				
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.6	8.5	10.2	7.2				
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	100	98.9	228 ^a	27.5				
Iron	7439-89-6	-	-	-	mg/kg	17,400	24,500	23,000	14,300				
Lead	7439-92-1	800	400	90	mg/kg	321	278	2,200	255				
Magnesium	7439-95-4	-	-	-	mg/kg	5,800	5,300	7,040	4,500				
Manganese	7439-96-5	5,900	11,000	65	mg/kg	222	383	268	322				
Mercury	7439-97-6	65	23	0.1	mg/kg	1.1	1.9	0.46	1.5				
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	28.6	22.3	26.5	50.2				
Potassium	7740-09-7	-	-	-	mg/kg	2,090	1,390	<960	1,610				
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.4	<2.3	<1.9	<2.4				
Silver	7440-22-4	5,700	390	1	mg/kg	<0.59	<0.57	<2.4 ^a	1.1				
Sodium	7440-23-5	-	-	-	mg/kg	1,870	2,010	1,560	2,230				
Thallium	7440-28-0	-	-	3	mg/kg	<1.2	<1.1	<9.6 ^a	<1.2				
Vanadium	7440-62-2	1,100	390**	-	mg/kg	41.4	35.9	84.0 ^a	21.8				
Zinc	7440-66-6	110,000	23,000	930	mg/kg	260	250	442 ^a	62.9				

Notes:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN09A							
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:	
		1-1.5		5-5.5		7-7.5		9-9.5	
		6.5-7		2.5-3		0.5-1		-1 - (-1.5)	
		BRN09A_1-1.5		BRN09A_5-5.5		BRN09A_7-7.5		BRN09A_9-9.5	
		JC7286-5A		JC7286-6A		JC7286-7A		JC7286-8A	
		10/21/2015		10/21/2015		10/21/2015		10/21/2015	
		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	6,480	4,100	4,350	14,500
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.0 NJ-	2 NJ-	<2.1 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	6.9	12.1	15.8	14.5
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	61.3	38.9	49.5	56.3
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.44	0.24	0.24	0.59
Cadmium	7440-43-9	78	78	2	mg/kg	<0.53	<0.50	<0.50	<0.52
Calcium	7440-70-2	-	-	-	mg/kg	10,500	4,390	8,790	3,340
Chromium	7440-47-3	-	120,000	-	mg/kg	37.4	203	19.3	25.8
Cobalt	7440-48-4	590	1,600	90	mg/kg	7.3	6.3	5.4	5.8
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	68.3	32.6	46.5	21.1
Iron	7439-89-6	-	-	-	mg/kg	15,300	10,000	12,400	17,000
Lead	7439-92-1	800	400	90	mg/kg	151	82.7	226	69.9
Magnesium	7439-95-4	-	-	-	mg/kg	3,060	2,980	1,540	4,290
Manganese	7439-96-5	5,900	11,000	65	mg/kg	155	110	126	169
Mercury	7439-97-6	65	23	0.1	mg/kg	0.4	0.29	3.5	0.87
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	18	19.6	14	17.6
Potassium	7740-09-7	-	-	-	mg/kg	1,250	<1,000	<1,000	2,680
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.0	2.6	<2.1
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53	<0.50	0.86	<0.52
Sodium	7440-23-5	-	-	-	mg/kg	1,850	<1,000	1,620	5,710
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.0	<1.0	<1.0
Vanadium	7440-62-2	1,100	390**	-	mg/kg	33.7	27.7	20.2	34.3
Zinc	7440-66-6	110,000	23,000	930	mg/kg	122	93.8	104	79.5

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

*Nickel site specific impact to groundwater screening level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.

**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

J - The reported result is an estimated value.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN10											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1-1.5		3-3.5		3-3.5		5-5.5		7-7.5		9-9.5	
		6.5-7		4.5-5		4.5-5		2.5-3		0.5-1		-1 - (-1.5)	
		BRN10_1-1.5		BRN10_3-3.5		BRN DUP01		BRN10_5-5.5		BRN10_7-7.5		BRN10_9-9.5	
		JC7286-9A		JC7286-10A		JC7286-14A		JC7286-11A		JC7286-12A		JC7286-13A	
		10/22/2015		10/22/2015		10/21/2015		10/22/2015		10/22/2015		10/21/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	22,900	6,570	7,250	9,070	6,540	9,320		
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.3 NJ-	<2.2 NJ-	<2.3 NJ-	<2.3 NJ-	<2.2 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	16.4	14.8	14.5	40	4.7	4.9		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	103	84.9	83.4	53.1	26	47.1		
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.4	0.4	0.45	0.31	0.36	0.78		
Cadmium	7440-43-9	78	78	2	mg/kg	1.3	<0.58	<0.55	<0.57	<0.56	<0.56		
Calcium	7440-70-2	-	-	-	mg/kg	13,900	18,200	15,500	10,500	587	2,270		
Chromium	7440-47-3	-	120,000	-	mg/kg	98.5	20.7	25.7	64.1	11.5	21.6		
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.2	5.9	5.9	8.4	7.4	6.9		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	49.1	57.8	38	52.6	6.4	11.7		
Iron	7439-89-6	-	-	-	mg/kg	22,900	12,100	11,300	20,400	10,000	14,400		
Lead	7439-92-1	800	400	90	mg/kg	115	203	195	291	6.7	11.6		
Magnesium	7439-95-4	-	-	-	mg/kg	21,400	3,040	3,420	4,040	1,870	3,800		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	397	257	274	212	136	1,090		
Mercury	7439-97-6	65	23	0.1	mg/kg	0.18	1.6	0.88	0.065	<0.038	<0.039		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	29	25.7	18.5	15.6	10.5	15		
Potassium	7740-09-7	-	-	-	mg/kg	2,950	<1,200	1,290	<1,100	<1,100	1,540		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.3	<2.2	3.2	<2.3	<2.2		
Silver	7440-22-4	5,700	390	1	mg/kg	<0.52	0.92	<0.55	<0.57	<0.56	<0.56		
Sodium	7440-23-5	-	-	-	mg/kg	3,210	<1,200	<1,100	<1,100	<1,100	<1,100		
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.1	<1.1	<1.1	<2.2 ^a		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	63.7	19.8	22.2	54.2	17	27.9		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	120	113	132	144	22.3	44.1		

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN10A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
						BRN10A_1-1.5	BRN10A-3-3.5	BRN10A_5-5.5	BRN10A_7-7.5	BRN10A_9-9.5					
						JC7286-15A	JC7286-16A	JC7286-17A	JC7286-18A	JC7286-19A					
						10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	3,600	7,590	5,110	5,830	11,900					
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-	<2.0 NJ-	<2.0 NJ-	<2.0 NJ-	<2.5 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	10	7.7	2.6	11.1	6.7					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	76	185	70.1	178	48					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.28	0.45	0.27	0.4	0.6					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.55	<0.51	<0.50	<0.49	<0.61					
Calcium	7440-70-2	-	-	-	mg/kg	12,600	34,900	18,700	39,700	1,320					
Chromium	7440-47-3	-	120,000	-	mg/kg	19.7	20.6	13.6	21.8	20.3					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<5.5	6.1	<5.0	5.1	8					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	59.6	38.3	12.9	36.2	12.7					
Iron	7439-89-6	-	-	-	mg/kg	11,200	12,400	8,530	11,700	16,500					
Lead	7439-92-1	800	400	90	mg/kg	329	352	328	963	15.7					
Magnesium	7439-95-4	-	-	-	mg/kg	2,430	13,700	9,270	14,400	3,360					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	151	262	169	202	201					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.68	4.5	2.6	1.3	<0.033					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	18	19.3	11.8	13.2	14.6					
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	1,670	1,970	1,190	1,450					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2	<2.0	<2.0	<2.0	<2.5					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.55	1.5	0.58	2.8	<0.61					
Sodium	7440-23-5	-	-	-	mg/kg	1,640	<1,000	<1,000	<990	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.0	<1.0	<0.99	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	14.2	18.6	14.5	19.4	32.1					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	170	198	59.5	229	42.3					

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN11							
						0.5-1 7-7.5		2-2.5 5.5-6		5-5.5 2.5-3		7-7.5 0.5-1	
Sample Depth (ft bgs):						BRN11_0.5-1		BRN11_2-2.5		BRN11_5-5.5		BRN11_7-7.5	
Sample Elevation (ft msl):						JC7286-35A		JC7286-36A		JC7286-37A		JC7286-38A	
Client Sample ID:						10/23/2015		10/23/2015		10/23/2015		10/23/2015	
Lab Sample ID:						Soil		Soil		Soil		Soil	
Date Sampled:						R		Q		R		Q	
Matrix:						R		Q		R		Q	
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	12,800	5,890	8,880	6,890				
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	2.3 NJ-	<2.0 NJ-	7.7 NJ-				
Arsenic	7440-38-2	19	19	19	mg/kg	4.2	19.2	25.8	30.3				
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	72.3	125	84.6	273				
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.31	0.45	0.61	0.59				
Cadmium	7440-43-9	78	78	2	mg/kg	<0.52	<0.58	<0.49	<0.50				
Calcium	7440-70-2	-	-	-	mg/kg	9,140	3,340	28,500	12,400				
Chromium	7440-47-3	-	120,000	-	mg/kg	63.5	140	26.6	27.7				
Cobalt	7440-48-4	590	1,600	90	mg/kg	15.2	8.8	7.8	7				
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	110	86.5	38	96.8				
Iron	7439-89-6	-	-	-	mg/kg	28,000	15,700	19,700	13,200				
Lead	7439-92-1	800	400	90	mg/kg	83	718	236	718				
Magnesium	7439-95-4	-	-	-	mg/kg	6,600	2,130	3,170	1,040				
Manganese	7439-96-5	5,900	11,000	65	mg/kg	395	258	205	107				
Mercury	7439-97-6	65	23	0.1	mg/kg	0.18	2.6	0.57	3.6				
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.1	27.2	21	20.9				
Potassium	7740-09-7	-	-	-	mg/kg	1,450	<1,200	1,510	<1,000				
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.3	3.1	7.5				
Silver	7440-22-4	5,700	390	1	mg/kg	<0.52	0.68	<0.49	0.63				
Sodium	7440-23-5	-	-	-	mg/kg	3,250	<1,200	<980	<1,000				
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<0.98	<1.0				
Vanadium	7440-62-2	1,100	390**	-	mg/kg	69.7	33.7	21	25.2				
Zinc	7440-66-6	110,000	23,000	930	mg/kg	110	661	156	248				

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

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**Table 7
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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN11A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
						BRN11A_1-1.5	BRN11A_3-3.5	BRN11A_5-5.5	BRN11A_7-7.5	BRN11A_9-9.5					
						JC7286-39A	JC7286-40A	JC7286-41A	JC7286-42A	JC7286-43A					
						10/23/2015	10/23/2015	10/23/2015	10/23/2015	10/23/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	9,850	5,860	7,980	13,500	7,640					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.2 NJ-	2.7 NJ-	<2.3 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	3.7	2.7	12.2	7.4	3.7					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	45.1	29	48.6	55.6	27.1					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.34	0.32	0.26	1.4	0.41					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.53	<0.54	<0.60	<0.57	<0.56					
Calcium	7440-70-2	-	-	-	mg/kg	7,280	1,080	17,800	2,250	697					
Chromium	7440-47-3	-	120,000	-	mg/kg	71.9 NJ+	28 NJ+	21.5	25.9	12.4					
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.8	<5.4	7.8	10.8	<5.6					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	80.1	8.3	42.2	20.3	8.2					
Iron	7439-89-6	-	-	-	mg/kg	23,100	10,700	14,100	21,500	10,700					
Lead	7439-92-1	800	400	90	mg/kg	62	9.7	199	19.3	6.9					
Magnesium	7439-95-4	-	-	-	mg/kg	4,520	2,650	3,650	7,430	2,200					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	265	100	152	450	97.8					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.09	<0.034	0.87	0.097	<0.036					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15.1	12.4	16.5	17.1	9.6					
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	<1,100	<1,200	4,840	<1,100					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.2	<2.4	<2.3	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53	<0.54	<0.60	<0.57	<0.56					
Sodium	7440-23-5	-	-	-	mg/kg	2,020	<1,100	<1,200	<1,100	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.1	<1.2	<2.3 ^a	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	53.8	16.6	31.6 NJ-	40.2 NJ-	17.8 NJ-					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	80.5	39.7	115	80.8	25					

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRN12											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1.5-2		1.5-2		3.5-4		5.5-6		7.5-8		9.5-10	
		6-6.5		6-6.5		4-4.5		2-2.5		0-0.5		- 1.5 - (-2)	
		BRN12_1.5-2		BRN DUP02		BRN12_3.5-4		BRN12_5.5-6		BRN12_7.5-8		BRN12_9.5-10	
		JC7286-25A		JC7286-30A		JC7286-26A		JC7286-27A		JC7286-28A		JC7286-29A	
		10/22/2015		10/22/2015		10/22/2015		10/22/2015		10/22/2015		10/22/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	12,300	11,800	4,100	9,940	7,720	4,820		
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.2 NJ-	<2.3 NJ-	<2.1 NJ-	<2.4 NJ-	<2.0 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	4.4	9	6.8	2.3	4.2	19.3		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	113	110	36.8	31.2	106	219		
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.32	0.56	0.31	0.24	0.42	0.44		
Cadmium	7440-43-9	78	78	2	mg/kg	0.6	1.6	<0.59	<0.51	<0.59	<0.49		
Calcium	7440-70-2	-	-	-	mg/kg	9,970	7,760	1,100	10,900	8,850	10,600		
Chromium	7440-47-3	-	120,000	-	mg/kg	46.7	119 NJ+	93.7 NJ+	42.5 NJ+	16.9 NJ+	14.8 NJ+		
Cobalt	7440-48-4	590	1,600	90	mg/kg	17.6	10.1	6.8	12.3	7	5.7		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	70.1	53.7	34.7	115	37.4	77.5		
Iron	7439-89-6	-	-	-	mg/kg	28,100	16,900	9,570	24,600	12,400	13,600		
Lead	7439-92-1	800	400	90	mg/kg	128	176	172	28.9	477	932		
Magnesium	7439-95-4	-	-	-	mg/kg	7,720	7,400	1,100	4,100	3,380	1,130		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	489	289	126	233	284	214		
Mercury	7439-97-6	65	23	0.1	mg/kg	0.15	0.21	0.15	0.04	0.39	5.8		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	20.3	24.1	17.9	13.2	25.2	15.1		
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	1,370	<1,200	<1,000	1,320	<980		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.2	<2.3	<2.1	<2.4	5.5		
Silver	7440-22-4	5,700	390	1	mg/kg	2.3	1.4	<0.59	<0.51	<0.59	0.65		
Sodium	7440-23-5	-	-	-	mg/kg	1,520	1,560	<1,200	1,500	<1,200	1,210		
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.1	<1.2	<1.0	<1.2	<0.98		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	81	52	23.2	70.3	19.4	21.3		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	141	221	191	71.6	79.7	198		

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN12A							
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	10,500		3,200		5,870		6,640	
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-		<2.4 NJ-		<2.4 NJ-		3.2 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	4.9		26.5		7.5		32.3	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	160		93.8		46.5		213	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.32		0.28		0.55		0.61	
Cadmium	7440-43-9	78	78	2	mg/kg	0.84		1.1		<0.61		<0.50	
Calcium	7440-70-2	-	-	-	mg/kg	7,780		2,690		89,800		18,200	
Chromium	7440-47-3	-	120,000	-	mg/kg	61.4 NJ+		128 NJ+		28.6 NJ+		62.1 NJ+	
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.4		9.8		<6.1		9.4	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	92.8		68.9		16.3		108	
Iron	7439-89-6	-	-	-	mg/kg	20,500		22,700		9,280		13,100	
Lead	7439-92-1	800	400	90	mg/kg	153		369		295		702	
Magnesium	7439-95-4	-	-	-	mg/kg	4,740		1,490		4,630		1,580	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	257		184		230		242	
Mercury	7439-97-6	65	23	0.1	mg/kg	0.32		3		0.24		3.7	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.3		19.2		19.8		19.1	
Potassium	7740-09-7	-	-	-	mg/kg	<1,100		<1,200		<1,200		<1,000	
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2		<2.4		<2.4		3.1	
Silver	7440-22-4	5,700	390	1	mg/kg	1.1		<0.61		<3.0 ^a		1.9	
Sodium	7440-23-5	-	-	-	mg/kg	2,290		<1,200		<1,200		1,070	
Thallium	7440-28-0	-	-	3	mg/kg	<1.1		<1.2		<1.2		<1.0	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	64.8		28.7		16		27.6	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	193		716		97.1		576	

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRN13A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						0.5-1 7-7.5	2.5-3 5-5.5	4.5-5 3-3.5	6.5-7 1-1.5	8.5-9 - 0.5 - (-1)					
						BRN13A_0.5-1 JC7286-20A 10/21/2015 Soil	BRN13A_2.5-3 JC7286-21A 10/21/2015 Soil	BRN13A_4.5-5 JC7286-22A 10/21/2015 Soil	BRN13A_6.5-7 JC7286-23A 10/21/2015 Soil	BRN13A_8.5-9 JC7286-24A 10/21/2015 Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	11,500	25,500	3,620	4,920	6,660					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.0 NJ-	<2.3 NJ-	<2.4 NJ-	<2.4 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	2.5	14.1	8.1	3.8	5.3					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	46.4	194	67.5	81.8	147					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.25	1.5	0.39	0.38	0.39					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	1.6	<0.57	<0.59	<0.59					
Calcium	7440-70-2	-	-	-	mg/kg	11,100	11,200	4,700	2,560	24,600					
Chromium	7440-47-3	-	120,000	-	mg/kg	70.3	122 NJ+	39.3 NJ+	8.5 NJ+	16.2 NJ+					
Cobalt	7440-48-4	590	1,600	90	mg/kg	14	9.5	6.6	<5.9	<5.9					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	170	67.1	35.2	22.4	34.6					
Iron	7439-89-6	-	-	-	mg/kg	26,200	30,300	10,200	8,110	11,300					
Lead	7439-92-1	800	400	90	mg/kg	25.8	1,250^b	73.3	134	973					
Magnesium	7439-95-4	-	-	-	mg/kg	4,600	20,000	839	1,110	3,260					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	290	378	135	84	315					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.033	0.49	0.3	0.27	0.45					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15.8	30.3	20.1	13.8	20.9					
Potassium	7740-09-7	-	-	-	mg/kg	1,040	3,670	<1,100	<1,200	<1,200					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.0	<2.3	<2.4	<2.4					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.51	<0.51	<0.57	<0.59	<0.59					
Sodium	7440-23-5	-	-	-	mg/kg	2,010	3,600	<1,100	<1,200	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.0	<1.1	<1.2	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	89.3	79.9	13.8	17	19.5					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	72.2	823	157	63.4	93.7					

Notes:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRS01				
Sample Depth (ft bgs):	1-1.5	3-3.5	5-5.5	7-7.5	9-9.5
Sample Elevation (ft msl):	6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)
Client Sample ID:	BRS01_1-1.5	BRS01_3-3.5	BRS01_5-5.5	BRS01_7-7.5	BRS01_9-9.5
Lab Sample ID:	JC7035-55A	JC7035-56A	JC7035-57A	JC7035-58A	JC7035-59A
Date Sampled:	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
Matrix:	Soil	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	16,700		22,600		5,830		1,420	9,000
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-		<11 NJ-		2.7 NJ-		4.7 NJ-	<2.3 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	<4.1 ^a		28.8		20.1		30.2	8.1
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	33.6		110		44.5		37.2	44.4
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.24		1.5		0.34		<0.26	0.7
Cadmium	7440-43-9	78	78	2	mg/kg	<1.0 ^a		<2.9		<0.63		<0.65	<0.58
Calcium	7440-70-2	-	-	-	mg/kg	8,020		6,890		1,920		1,620	2,500
Chromium	7440-47-3	-	120,000	-	mg/kg	22.6		68.7		19.2		27.7	24.1
Cobalt	7440-48-4	590	1,600	90	mg/kg	16.4		<29		6.4		<6.5	8.2
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	59.1 ^a		68.4		61.3		43.7	18
Iron	7439-89-6	-	-	-	mg/kg	30,800		53,900		21,900		19,900	12,700
Lead	7439-92-1	800	400	90	mg/kg	11.2 ^a		133		269		195	28.4
Magnesium	7439-95-4	-	-	-	mg/kg	6,060		9,850		2,360		<650	4,550
Manganese	7439-96-5	5,900	11,000	65	mg/kg	452^a		544		248		48.1	380
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.032		0.081		1.3		0.72	0.052
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	14.4		54		27.8		15.4	13.6
Potassium	7740-09-7	-	-	-	mg/kg	<1,000		<5,700		<1,300		<1,300	2,000
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.1 ^a		<11		<2.5		<2.6	<2.3
Silver	7440-22-4	5,700	390	1	mg/kg	<1.0 ^a		<2.9		1.2		0.71	<0.58
Sodium	7440-23-5	-	-	-	mg/kg	1,900		<5700		<1,300		<1,300	<1,200
Thallium	7440-28-0	-	-	3	mg/kg	<2.0 ^a		<5.7		<1.3		<1.3	<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	103		75.3		29.1		13.1	35.5
Zinc	7440-66-6	110,000	23,000	930	mg/kg	45.9		187		650		177	53.5

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						0.5-1		2.5-3		4.5-5		6.5-7		9.5-10		9.5-10	
						R	Q	R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	4,480	7,300	5,730	5,980	10,100	8,870						
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-	<2.0 NJ-	69 NJ-	<2.6 NJ-	<2.3 NJ-	<2.3 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	2.4	14.8	10.6	13.3	7.6	8.1						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<24	63.9	249	292	44	41.4						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.24	0.53	0.32	0.28	0.64	0.72						
Cadmium	7440-43-9	78	78	2	mg/kg	<0.61	<0.51	<0.69	<0.64	<0.56	<0.58						
Calcium	7440-70-2	-	-	-	mg/kg	1,030	3,550	3,290	19,000	2,070	2,410						
Chromium	7440-47-3	-	120,000	-	mg/kg	9.7	115	27.3	26	21.8	24.6						
Cobalt	7440-48-4	590	1,600	90	mg/kg	<6.1	7	<6.9	<6.4	7.6	8.1						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	4.9	44	399	95.1	17.1	18.7						
Iron	7439-89-6	-	-	-	mg/kg	9,870	19,100	16,900	14,900	13,500	13,400						
Lead	7439-92-1	800	400	90	mg/kg	6.8	140	2,280	374	19.4	21.4						
Magnesium	7439-95-4	-	-	-	mg/kg	2,620	3,380	1,670	1,710	4,170	4,270						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	106	165	198	186	377	242						
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.033	0.13	7.6	3.2	<0.033	<0.035						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	8.5	20.4	20.2	9.8	13.4	14.5						
Potassium	7740-09-7	-	-	-	mg/kg	<1,200	<1,000	<1,400	<1,300	1,940	1,910						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.4	<2.0	<2.8	3	<2.3	<2.3						
Silver	7440-22-4	5,700	390	1	mg/kg	<0.61	0.73	1.7	<0.64	<0.56	<0.58						
Sodium	7440-23-5	-	-	-	mg/kg	<1,200	1,200	<1,400	<1,300	<1,100	<1,200						
Thallium	7440-28-0	-	-	3	mg/kg	<1.2	<1.0	<6.9 ^a	<1.3	<1.1	<1.2						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	14.6	53.3	20	35.5	33.5	36.3						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	24.1	109	437	150	51.6	58						

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

J - The reported result is an estimated value.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRS_2			
Sample Depth (ft bgs):	2.5-3	5-5.5	7.5-8.0	9.5-10.0
Sample Elevation (ft msl):	5-5.5	2.5-3	0-0.5	-1.5 - (-2)
Client Sample ID:	BRS_2 2-2.50	BRS_2 2.5-5.5	BRS_2 7.5-8.0	BRS_2 9.5-10.0
Lab Sample ID:	JB97557-21A	JB97557-22A	JB97557-23A	JB97557-24A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	7,250	5,490	5,740	5,030
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-	<5.3 ^a NJ-	<13 ^a NJ-	<2.6 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	11.7	51.7^a	23.6^a	8.1
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	45.7	155	60.5	50.4
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.46	0.32	<0.26	0.27
Cadmium	7440-43-9	78	78	2	mg/kg	<0.61	<1.3 ^a	<3.3 ^a	<0.65
Calcium	7440-70-2	-	-	-	mg/kg	3,330	40,400	13,200	11,800
Chromium	7440-47-3	-	120,000	-	mg/kg	58.7	3960	10000	809
Cobalt	7440-48-4	590	1,600	90	mg/kg	<6.1	11.7	<6.6	<6.5
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	40.4	16	43.9	33
Iron	7439-89-6	-	-	-	mg/kg	31,600	19,000	31,800	13,700
Lead	7439-92-1	800	400	90	mg/kg	113	28.9 ^a	186 ^a	302
Magnesium	7439-95-4	-	-	-	mg/kg	4,730	17,300	2,910	1,720
Manganese	7439-96-5	5,900	11,000	65	mg/kg	166	577	230	177
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.9	43.6	19.6	13.2
Potassium	7740-09-7	-	-	-	mg/kg	<1,200	<1,300	<1,300	<1,300
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.4	3.7	<2.6	<2.6
Silver	7440-22-4	5,700	390	1	mg/kg	<0.61	1.5^a	<3.3 ^a	<0.65
Sodium	7440-23-5	-	-	-	mg/kg	1,540	2,510	4,410	2,480
Thallium	7440-28-0	-	-	3	mg/kg	<1.2	<2.6 ^a	<6.6 ^a	<1.3
Vanadium	7440-62-2	1,100	390**	-	mg/kg	26.8	77.6	73.5	17.8
Zinc	7440-66-6	110,000	23,000	930	mg/kg	43.9	206 ^a	354 ^a	97.7

Notes:

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ft msl = feet mean sea level

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS03									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1.6-2.1	2.2-2.7	4.6-5.4	7.5-8	9.5-10					
						5.9-6.4	5.3-5.8	2.6-3.1	0-0.5	-1.5 - (-2)					
						BRS03_1.6-2.1	BRS03_2.2-2.7	BRS03_4.6-5.4	BRS03_7.5-8	BRS03_9.5-10					
						JC7035-45A	JC7035-46A	JC7035-47A	JC7035-48A	JC7035-49A					
						10/20/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	23,000	18,100	6,390	6,360	8,650					
Antimony	7440-36-0	450	31	6	mg/kg	<3.3 NJ-	<3.1 NJ-	<5.2 ^a NJ-	<47 ^a NJ-	<2.5 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	18.3	11.1	5.9 ^a	<47 ^a	12.6					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	103	64	48.9	135	79.3					
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.4	1	0.36	0.47	0.35					
Cadmium	7440-43-9	78	78	2	mg/kg	1.1	0.89	<0.65	<0.59	<0.62					
Calcium	7440-70-2	-	-	-	mg/kg	9,540	11,700	15,000	8,310	16,100					
Chromium	7440-47-3	-	120,000	-	mg/kg	103	60	1850	13000	44.6					
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.7	<7.8	8.4	7.6	10.4					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	47.4	34	61.4	33.7	46.1					
Iron	7439-89-6	-	-	-	mg/kg	28,900	16,600	13,500	12,400	27,700					
Lead	7439-92-1	800	400	90	mg/kg	97.4	62.5	87.3	83.7	143					
Magnesium	7439-95-4	-	-	-	mg/kg	17,800	18,800	2,850	1,880	2,500					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	392	219	180	108	312					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.16	0.19	0.24	0.26	1.5					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	26.7	22.7	17.6	17.9	18.9					
Potassium	7740-09-7	-	-	-	mg/kg	2,740	2,220	<1,300	1,880	<1,200					
Selenium	7782-49-2	5,700	390	11	mg/kg	<3.3	<3.1	<2.6	<47 ^a	<2.5					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.83	<0.78	<0.65	0.85	<0.62					
Sodium	7440-23-5	-	-	-	mg/kg	2,780	2,950	1,680	5,800	2,540					
Thallium	7440-28-0	-	-	3	mg/kg	<1.7	<1.6	<1.3	<24 ^a	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	62.7	53.1	50.4 ^a	<120 ^a	23.5					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	132	74.7	58.2 ^a	<120 ^a	69					

Notes:

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	BRS03A									
						Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:	
						1.6-2.1	2.2-2.7	4.9-5.4	7-7.5	9-9.5					
						5.9-6.4	5.3-5.8	2.6-3.1	0.5-1	-1 - (-1.5)					
						BRS03A_1.6-2.1	BRS03A_2.2-2.7	BRS03A_4.6-5.4	BRS03A_7-7.5	BRS03A_9-9.5					
						JC7035-50A	JC7035-51A	JC7035-52A	JC7035-53A	JC7035-54A					
						10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	24,200	3,390	10,400	5,140	6,700					
Antimony	7440-36-0	450	31	6	mg/kg	<2.9 NJ-	<2.5 NJ-	<2.2 NJ-	<28 ^a NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	15.3	19.1	3.2	<28 ^a	8.8					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	95.8	83.9	25.8	153	83.3					
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.2	0.47	<0.22	0.37	0.36					
Cadmium	7440-43-9	78	78	2	mg/kg	1.2	<0.63	<0.55	<0.71	<0.58					
Calcium	7440-70-2	-	-	-	mg/kg	11,400	2,420	8,490	10,700	11,800					
Chromium	7440-47-3	-	120,000	-	mg/kg	89	36.7	14.9	9920	72.3					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<7.2	6.6	11.2	8.8	7.3					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	90	38.3	103	42	33.4					
Iron	7439-89-6	-	-	-	mg/kg	23,200	10,100	23,000	6,690	19,300					
Lead	7439-92-1	800	400	90	mg/kg	107	95.8	18.9	64	243					
Magnesium	7439-95-4	-	-	-	mg/kg	22,400	1,400	3,980	959	2,690					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	293	92.6	238	141 ^a	317					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.21	0.51	0.13	3.9	0.7					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	24.9	39.8	10.9	22.9	39.8					
Potassium	7740-09-7	-	-	-	mg/kg	2,910	<1,300	<1,100	<1,400	1,320					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.9	<2.5	<2.2	<28 ^a	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.72	<0.63	<0.55	0.71	<0.58					
Sodium	7440-23-5	-	-	-	mg/kg	3,300	<1,300	1,760	4,640	1,990					
Thallium	7440-28-0	-	-	3	mg/kg	<1.4	<1.3	<1.1	<14 ^a	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	64.8	57.3	72.1	<71 ^a	19.5					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	137	306	49.3	664 ^a	50.3					

Notes:

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Site 65, Burma Road, Jersey City, NJ
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Sample Location:	BRS_4			
Sample Depth (ft bgs):	2-2.5	5-5.5	7.5-8.0	9.5-10.0
Sample Elevation (ft msl):	5.5-6	2.5-3	0-0.5	-1.5 - (-2)
Client Sample ID:	BRS_4 2-2.5.0	BRS_4 4.5-5.5	BRS_4 7.5-8.0	BRS_4 9.5-10.0
Lab Sample ID:	JB97557-17A	JB97557-18A	JB97557-19A	JB97557-20A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	28,500	12,000	6,810	10,400
Antimony	7440-36-0	450	31	6	mg/kg	<3.2 NJ-	<2.9 NJ-	<7.2 ^a NJ-	<2.5 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	19	15.3	30.5^a	16.7
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	132	64.9	81.3	77.8
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.7	0.69	0.38	0.46
Cadmium	7440-43-9	78	78	2	mg/kg	1.5	<0.72	1.9 ^a	<0.62
Calcium	7440-70-2	-	-	-	mg/kg	12,100	5,590	12,900	3,820
Chromium	7440-47-3	-	120,000	-	mg/kg	112	498	5370	27.6
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.2	7.5	<6.0	<6.2
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	64.3	52.3	57	60.4
Iron	7439-89-6	-	-	-	mg/kg	28,200	21,100	13,200	16,600
Lead	7439-92-1	800	400	90	mg/kg	124	123	280 ^a	287
Magnesium	7439-95-4	-	-	-	mg/kg	25,800	7,170	2,540	2,270
Manganese	7439-96-5	5,900	11,000	65	mg/kg	291	284	167	157
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	32.9	18.9	18.5	13.6
Potassium	7740-09-7	-	-	-	mg/kg	2,960	1,910	1,400	<1,200
Selenium	7782-49-2	5,700	390	11	mg/kg	<3.2	<2.9	<7.2 ^a	<2.5
Silver	7440-22-4	5,700	390	1	mg/kg	1.1	0.72	2.1 ^a	0.65
Sodium	7440-23-5	-	-	-	mg/kg	5,340	2,190	3,250	3,420
Thallium	7440-28-0	-	-	3	mg/kg	<1.6	<1.4	<3.6 ^a	<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	78.2	53.4	49	21.4
Zinc	7440-66-6	110,000	23,000	930	mg/kg	160	186	250 ^a	135

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						1.2-1.7 6.3-6.8 BRS05_1.2-1.7 JC7035-1A 10/20/2015 Soil		2.2-2.7 5.3-5.8 BRS05_2.2-2.7 JC7035-2A 10/20/2015 Soil		4.2-4.7 3.3-3.8 BRS05_4.2-4.7 JC7035-3A 10/20/2015 Soil		6.2-6.7 1.3-1.8 BRS05_6.2-6.7 JC7035-4A 10/20/2015 Soil		8.2-8.7 -0.2 - (-0.7) BRS05_8.2-8.7 JC7035-5A 10/20/2015 Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	21,500	24,100	12,900	9,050	10,800					
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-	<2.0 NJ-	<2.3 NJ-	<2.4 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	9.3	17.2	31.3	6.1	9.7					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	84	123	76.7	69	97					
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.1	1.4	0.65	0.38	0.39					
Cadmium	7440-43-9	78	78	2	mg/kg	1.7	1.5	<0.59	<0.59	<0.57					
Calcium	7440-70-2	-	-	-	mg/kg	10,100	9,410	2,580	7,520	12,300					
Chromium	7440-47-3	-	120,000	-	mg/kg	75.9	112	22.5	845	23.2					
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.5	7.6	8.5	6.8	6.2					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	56.5	46.5	38.9	40.9	23					
Iron	7439-89-6	-	-	-	mg/kg	28,300	20,200	18,600	13,700	16,000					
Lead	7439-92-1	800	400	90	mg/kg	69.5	113	136	221	277					
Magnesium	7439-95-4	-	-	-	mg/kg	18,100	21,600	3,980	3,080	3,370					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	360	219	548	188	322					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.1	0.2	0.16	0.51	0.19					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	28.5	31	20.1	20	50					
Potassium	7740-09-7	-	-	-	mg/kg	2,300	2,670	1,750	1,260	1,170					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.4	<2.0	<2.3	<2.4	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	2.6^a	<0.51	<0.59	0.95	<0.57					
Sodium	7440-23-5	-	-	-	mg/kg	3,090	3,810	<1,200	1,590	1,440					
Thallium	7440-28-0	-	-	3	mg/kg	<1.2	<1.0	<1.2	<1.2	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	71.1	65	31.1	38.3	37.7					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	2,910	157	155	161	83.1					

Notes:

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^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS05A											
						0.5-1 7-7.5 BRS05A_0.5-1 JC7035-6A 10/20/2015 Soil		2.5-3 5-5.5 BRS05A_2.5-3 JC7035-7A 10/20/2015 Soil		4.5-5 3-3.5 BRS05A_4.5-5 JC7035-8A 10/20/2015 Soil		6.5-7 1-1.5 BRS05A_6.5-7 JC7035-9A 10/20/2015 Soil		8-8.5 0 - (- 0.5) BRS05A_8-8.5 JC7035-10A 10/20/2015 Soil		8-8.5 0 - (- 0.5) BRS DUP05 JC7035-11A 10/20/2015 Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q		
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	8,500	26,400	5,020	13,900	7,450	6,980						
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.0 NJ-	<2.2 NJ-	<24 ^a NJ-	<48 ^a NJ-	129^a NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	3.1	11.7	8.3	<24 ^a	<48 ^a	<51 ^a						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	49.1	84.1	70.2	82.8	136	158						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.29	1.4	0.45	<2.4 ^a	0.36	0.33						
Cadmium	7440-43-9	78	78	2	mg/kg	<0.54	1.3	<0.56	<0.60	<0.60	<0.63						
Calcium	7440-70-2	-	-	-	mg/kg	6,480	13,400	18,100	11,800	9,560	7,960						
Chromium	7440-47-3	-	120,000	-	mg/kg	16.8 EJ	73.2 EJ	625 EJ	8,480 EJ	12,900 EJ	14,400 EJ						
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.4	7.7	6.3	12.6	7.4	8.9						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	34.7	27.4	40.1	43.8	424	785						
Iron	7439-89-6	-	-	-	mg/kg	17,400	18,500	12,100	18,900	12,200	11,100						
Lead	7439-92-1	800	400	90	mg/kg	11.2	64	637	168	1,770	5,930						
Magnesium	7439-95-4	-	-	-	mg/kg	5,230	27,100	3,050	5,170	1,560	1,360						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	222	290	142	257	114	132						
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.035	0.059	0.3	0.48	0.58	0.98						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	14.2	25.8	23.9	19.6	16.7	19.3						
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	3,400	<1,100	2,140	<1,200	<1,300						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.0	<2.2	<24 ^a	<48 ^a	<51 ^a						
Silver	7440-22-4	5,700	390	1	mg/kg	<0.54	<0.49	<0.56	<6.0 ^a	21.0 ^a	13.1 ^a						
Sodium	7440-23-5	-	-	-	mg/kg	<1,100	3,380	1,140	4,030	3,600	3,950						
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<0.98	<1.1	<12 ^a	<24 ^a	<25 ^a						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	39.2	60	30.1	74.8 ^a	<120 ^a	<130 ^a						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	57.1	98.4	69.3	105 ^a	502 ^a	746 ^a						

Notes:

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Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRS_6			
Sample Depth (ft bgs):	2-2.5	5-5.5	7.5-8.0	9.5-10.0
Sample Elevation (ft msl):	5.5-6	2.5-3	0-0.5	-1.5 - (-2)
Client Sample ID:	BRS_6 2-2.5.0	BRS_6 6.5-5.5	BRS_6 7.5-8.0	BRS_6 9.5-10.0
Lab Sample ID:	JB97557-13A	JB97557-14A	JB97557-15A	JB97557-16A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q	
						R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	26,900	9,230	6,530	8,730
Antimony	7440-36-0	450	31	6	mg/kg	<3.3 NJ-	2.5 NJ-	<2.4 NJ-	<2.4 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	13.5	7.6	5.9	6
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	105	68.6	58.2	46.8
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.6	0.56	0.35	0.79
Cadmium	7440-43-9	78	78	2	mg/kg	1.3	<0.62	<0.61	<0.59
Calcium	7440-70-2	-	-	-	mg/kg	14,100	16,700	8,800	4,410
Chromium	7440-47-3	-	120,000	-	mg/kg	123	47.7	18.2	39.1
Cobalt	7440-48-4	590	1,600	90	mg/kg	<8.3	6.8	6.3	7.7
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	46.7	73.8	33.8	21.6
Iron	7439-89-6	-	-	-	mg/kg	22,600	16,600	13,800	16,300
Lead	7439-92-1	800	400	90	mg/kg	92.4	260	175	20
Magnesium	7439-95-4	-	-	-	mg/kg	24,800	4,190	2,960	4,770
Manganese	7439-96-5	5,900	11,000	65	mg/kg	296	218	219	694
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	28.8	17.6	35.3	14.7
Potassium	7740-09-7	-	-	-	mg/kg	2,720	1,810	<1,200	2,140
Selenium	7782-49-2	5,700	390	11	mg/kg	<3.3	<2.5	<2.4	<2.4
Silver	7440-22-4	5,700	390	1	mg/kg	<0.83	4.6	<0.61	<0.59
Sodium	7440-23-5	-	-	-	mg/kg	4,390	<1,200	<1,200	1,300
Thallium	7440-28-0	-	-	3	mg/kg	<1.7	<1.2	<1.2	<1.2
Vanadium	7440-62-2	1,100	390**	-	mg/kg	74.3	34.3	29.8	45.7
Zinc	7440-66-6	110,000	23,000	930	mg/kg	134	116	47.8	60.5

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRS07											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1-1.5		3-3.5		5-5.5		7-7.5		9-9.5			
		6.5-7		4.5-5		2.5-3		0.5-1		-1 - (-1.5)			
		BRS07_1-1.5		BRS07_3-3.5		BRS07_5-5.5		BRS07_7-7.5		BRS07_9-9.5			
		JC7035-12A		JC7035-13A		JC7035-14A		JC7035-15A		JC7035-16A			
		10/20/2015		10/20/2015		10/20/2015		10/20/2015		10/20/2015			
		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	22,200		5,070		4,500	2,500		6,770
Antimony	7440-36-0	450	31	6	mg/kg	<2.3 NJ-		<2.4 NJ-		<2.6 NJ-	<2.6 NJ-		2.7 NJ-
Arsenic	7440-38-2	19	19	19	mg/kg	10		8.5		20	5.3		16
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	72.5		78.5		66.1	<26		56.3
Beryllium	7440-41-7	140	16	0.7	mg/kg	1		0.3		0.26	<0.26		0.44
Cadmium	7440-43-9	78	78	2	mg/kg	0.85		<0.60		<0.64	<0.65		<0.50
Calcium	7440-70-2	-	-	-	mg/kg	10,100		48,000		44,400	2,410		16,400
Chromium	7440-47-3	-	120,000	-	mg/kg	59.2 EJ		14.6 EJ		10.7 EJ	7.3 EJ		19.3 EJ
Cobalt	7440-48-4	590	1,600	90	mg/kg	8.3		<6.0		<6.4	<6.5		5.1
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	52.5		46.7		116	4		15.8
Iron	7439-89-6	-	-	-	mg/kg	18,900		11,500		12,800	3,980		10,200
Lead	7439-92-1	800	400	90	mg/kg	53.4		257		495	13		59.1
Magnesium	7439-95-4	-	-	-	mg/kg	19,300		2,170		6,340	660		2,010
Manganese	7439-96-5	5,900	11,000	65	mg/kg	405		135		228	63.4		502
Mercury	7439-97-6	65	23	0.1	mg/kg	0.11		0.41		0.68	0.053		0.37
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	21.8		29.5		19.3	<5.2		10.6
Potassium	7740-09-7	-	-	-	mg/kg	1,870		<1,200		<1,300	<1,300		1,210
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.3		<2.4		<2.6	<2.6		<2.0
Silver	7440-22-4	5,700	390	1	mg/kg	1		<0.60		<0.64	<0.65		<0.50
Sodium	7440-23-5	-	-	-	mg/kg	2,740		<1,200		<1,300	<1,300		<1,000
Thallium	7440-28-0	-	-	3	mg/kg	<1.2		<1.2		<1.3	<1.3		<1.0
Vanadium	7440-62-2	1,100	390**	-	mg/kg	62.9		14.6		12.5	<6.5 EJ		17.3 EJ
Zinc	7440-66-6	110,000	23,000	930	mg/kg	119		185		171	25.3		143

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		BRS07A															
		Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:			
				0.5-1 7-7.5		2.5-3 5-5.5		4.5-5 3-3.5		6-6.5 1.5-2		8.5-9 -0.5 - (-1)					
				BRS07A_0.5-1		BRS07A_2.5-3		BRS07A_4.5-5		BRS07A_6-6.5		BRS07A_8.5-9					
				JC7035-17A		JC7035-18A		JC7035-19A		JC7035-20A		JC7035-21A					
				10/20/2015		10/20/2015		10/20/2015		10/20/2015		10/20/2015					
				Soil		Soil		Soil		Soil		Soil					
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q		R		Q	
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	22,100		21,700		4,880		4,970		9,840			
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-		<2.5 NJ-		<2.3 NJ-		2.9 NJ-		<2.3 NJ-			
Arsenic	7440-38-2	19	19	19	mg/kg	<2.4		23.3		22.7		8.1		6.1			
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	70.9		72		44.7		52		48.2			
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.24		1.2		0.26		0.27		0.61			
Cadmium	7440-43-9	78	78	2	mg/kg	<0.59		0.78		<0.56		<0.63		<0.57			
Calcium	7440-70-2	-	-	-	mg/kg	6,890		7,660		23,500		15,000		2,680			
Chromium	7440-47-3	-	120,000	-	mg/kg	10.6 EJ		112 EJ		10.4 EJ		46.8 EJ		32			
Cobalt	7440-48-4	590	1,600	90	mg/kg	32.6		19.3		<5.6		8.3		7			
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	59.1 ^a		149		38.3		382		26			
Iron	7439-89-6	-	-	-	mg/kg	47,000		31,200		7,640		31,100		12,600			
Lead	7439-92-1	800	400	90	mg/kg	<4.7 ^a		82		104		451		21.8			
Magnesium	7439-95-4	-	-	-	mg/kg	12,700		16,600		2,050		2,810		3,980			
Manganese	7439-96-5	5,900	11,000	65	mg/kg	705^a		328		166		1,550		294			
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.037		0.15		0.3		0.94		<0.037			
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16.1		25.2		9.2		20.9		14.2			
Potassium	7740-09-7	-	-	-	mg/kg	<1,200		2,180		<1,100		<1,300		1,970			
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.7 ^a		<2.5		<2.3		<2.5		<2.3			
Silver	7440-22-4	5,700	390	1	mg/kg	<1.2 ^a		<0.62		<0.56		<0.63		<0.57			
Sodium	7440-23-5	-	-	-	mg/kg	3,130		3,140		<1,100		<1,300		<1,100			
Thallium	7440-28-0	-	-	3	mg/kg	<2.4 ^a		<1.2		<1.1		<2.5 ^a		<1.1			
Vanadium	7440-62-2	1,100	390**	-	mg/kg	118 EJ		55.7 EJ		13.4 EJ		16.6 EJ		39.9			
Zinc	7440-66-6	110,000	23,000	930	mg/kg	52.9		100		140		72.9		51.4			

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRS 8				
Sample Depth (ft bgs):	3-3.5	5.5-6.0	7.5-8.0	9.5-10.0	9.5-10.0
Sample Elevation (ft msl):	4.5-5	2-2.5	0-0.5	-1.5 - (-2)	-1.5 - (-2)
Client Sample ID:	BRS_8 3-3.5	BRS_8 5.5-6.0	BRS_8 7.5-8.0	BRS_8 9.5-10.0	DUP-2
Lab Sample ID:	JB97557-9A	JB97557-10A	JB97557-11A	JB97557-12A	JB97557-38A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	19,800	10,100	9,860	11,900	12,000			
Antimony	7440-36-0	450	31	6	mg/kg	<2.7 NJ-	<2.3 NJ-	<2.4 NJ-	<2.3 NJ-	<2.3 NJ-			
Arsenic	7440-38-2	19	19	19	mg/kg	16.3	4.6	3.6	6.2	5.3			
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	94.7	52	37.7	56.2	61.3			
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.1	0.67	0.5	0.89	0.98			
Cadmium	7440-43-9	78	78	2	mg/kg	0.81	<0.58	<0.60	<0.57	<0.59			
Calcium	7440-70-2	-	-	-	mg/kg	7,600	4,420	1,530	2,550	2,310			
Chromium	7440-47-3	-	120,000	-	mg/kg	54.9	40.2	14.3	30.3	28.3			
Cobalt	7440-48-4	590	1,600	90	mg/kg	7.3	7.4	6.6	10.7	9			
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	51.3	24.5	10.9	21.8	22.4			
Iron	7439-89-6	-	-	-	mg/kg	21,800	16,800	15,000	16,400	17,800			
Lead	7439-92-1	800	400	90	mg/kg	104	53.7	8.8	17.9	17.9			
Magnesium	7439-95-4	-	-	-	mg/kg	16,800	3,990	2,730	5,370	5,550			
Manganese	7439-96-5	5,900	11,000	65	mg/kg	166	232	370	262	262			
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-	-			
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	21.1	15.9	11.4	19.4	18.8			
Potassium	7740-09-7	-	-	-	mg/kg	2,040	1,630	<1,200	2,180	2,690			
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.7	<2.3	<2.4	<2.3	<2.3			
Silver	7440-22-4	5,700	390	1	mg/kg	<0.67	<0.58	<0.60	<0.57	<0.59			
Sodium	7440-23-5	-	-	-	mg/kg	2,420	<1,200	<1,200	<1,100	<1,200			
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.2	<1.2	<1.1	<1.2			
Vanadium	7440-62-2	1,100	390**	-	mg/kg	47.4	31.2	20.3	36.8	37.4			
Zinc	7440-66-6	110,000	23,000	930	mg/kg	69.9	62	29.3	58.8	-			

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

J - The reported result is an estimated value.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: BRS09											
		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:	
		1-1.5		2-2.5		4-4.5		6-6.5		8-8.5		9.5-10	
		6.5-7		5.5-6		3.5-4		1.5-2		0 - (-0.5)		-1.5 - (-2)	
		BRS09_1-1.5		BRS09_2-2.5		BRS09_4-4.5		BRS09_6-6.5		BRS09_8-8.5		BRS09_9.5-10	
		JC7035-44A		JC7035-68A		JC7035-69A		JC7035-70A		JC7035-71A		JC7035-72A	
		10/20/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	18,100	20,400	5,770	6,250	11,400	10,100		
Antimony	7440-36-0	450	31	6	mg/kg	<2.6 NJ-	<2.5 NJ-	<12 ^a NJ-	<100 ^a NJ-	<12 ^a NJ-	<2.2 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	12	17.3	34.5	<100 ^a	<12 ^a	6.7		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	89.5	89.1	112	311	47.3	43.5		
Beryllium	7440-41-7	140	16	0.7	mg/kg	1	1.2	0.38	0.5	0.64	0.73		
Cadmium	7440-43-9	78	78	2	mg/kg	1.1	1.1	<2.9 ^a	<5.1 ^b	<0.58	<0.55		
Calcium	7440-70-2	-	-	-	mg/kg	9,070	11,200	6,690	8,070	2,200	1,810		
Chromium	7440-47-3	-	120,000	-	mg/kg	132	128	2710	28000	3290	312		
Cobalt	7440-48-4	590	1,600	90	mg/kg	7.1	7.3	21.9	34.4	9.2	8.5		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	50.2	44.7	156 ^a	705 ^b	15.6	16.5		
Iron	7439-89-6	-	-	-	mg/kg	22,100	24,500	82,500	43,300	15,300	14,800		
Lead	7439-92-1	800	400	90	mg/kg	108	164	1,280	1,550^b	18.5	16.2		
Magnesium	7439-95-4	-	-	-	mg/kg	15,300	20,700	3,720	2,450	3,660	4,290		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	301	369	387^a	370 ^b	674	288		
Mercury	7439-97-6	65	23	0.1	mg/kg	0.21	0.19	14.4	14.6	0.15	<0.034		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	28.6	24.1	32.1	131	14.7	16.2		
Potassium	7740-09-7	-	-	-	mg/kg	2,170	2,420	<1,200	<1,000	1,480	1,520		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.6	<2.5	<12 ^a	<20 ^b	<2.3	<2.2		
Silver	7440-22-4	5,700	390	1	mg/kg	<0.65	0.69	3.0^a	<5.1 ^b	<0.58	<0.55		
Sodium	7440-23-5	-	-	-	mg/kg	3,380	3,610	<1,200	1,710	1,460	<1,100		
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.3	<5.8 ^a	<51 ^a	<5.8 ^a	<1.1		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	77.9	75.1	46.8 ^a	543^a	56.2 ^a	46.5		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	148	129	258 ^a	3,430 ^a	62.6 ^a	54.8		

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS09A									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
						BRS09A_1-1.5	BRS09A_3-3.5	BRS09A_5-5.5	BRS09A_7-7.5	BRS09A_9-9.5					
						JC7035-88A	JC7035-89A	JC7035-90A	JC7035-91A	JC7035-92A					
						10/19/2015	10/19/2015	10/19/2015	10/19/2015	10/19/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	5,110	10,500	7,350	8,970	9,200					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.4 NJ-	<2.4 NJ-	<2.2 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	3.2	22.6	4.7	6.3	5.2					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<21	305	39.2	41.8	39.7					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.35	1.1	0.35	0.62	0.66					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.54	<0.59	<0.59	<0.55	<0.58					
Calcium	7440-70-2	-	-	-	mg/kg	1,110	11,000	4,730	1,410	1,310					
Chromium	7440-47-3	-	120,000	-	mg/kg	12	30	631	36.1	42.6					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<5.4	17	6.9	6.1	5.8					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	7.7	100	37.2	11.8	13.7					
Iron	7439-89-6	-	-	-	mg/kg	11,700	20,600	16,300	14,400	13,300					
Lead	7439-92-1	800	400	90	mg/kg	7.1	2,640	35.3	8.9	11.3					
Magnesium	7439-95-4	-	-	-	mg/kg	2,360	3,340	3,920	2,920	3,500					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	111	402	174	301	157					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.032	0.98	0.055	<0.035	<0.036					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	10.5	38.2	13.5	11.6	12.1					
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	1,410	<1,200	1,580	1,460					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.4	<2.4	<2.2	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	0.72	1.5	1.1	1.2	1.3					
Sodium	7440-23-5	-	-	-	mg/kg	<1,100	1,440	<1,200	<1,100	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.2	<1.2	<1.1	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	15.4	29.2	39.4	26.3	27					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	29	139	50.7	30.5	34.5					

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Sample Location:	BRS_10			
Sample Depth (ft bgs):	2-2.5	5-5.5	7.5-8.0	9.5-10.0
Sample Elevation (ft msl):	5.5-6	2.5-3	0-0.5	-1.5 - (-2)
Client Sample ID:	BRS_10 2-2.5	BRS_10 5-5.5	BRS_10 7.5-8.0	BRS_10 9.5-10.0
Lab Sample ID:	JB97557-5A	JB97557-6A	JB97557-7A	JB97557-8A
Date Sampled:	6/19/2015	6/19/2015	6/19/2015	6/19/2015
Matrix:	Soil	Soil	Soil	Soil

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	BRS_10							
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	6,160		4,880		9,690		9,790	
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-		2.4 NJ-		<2.2 NJ-		<2.3 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	7		42.9		4.3		6	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	101		91.3		73.8		39.2	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.5		0.31		0.83		0.63	
Cadmium	7440-43-9	78	78	2	mg/kg	0.79		0.62		<0.56		<0.57	
Calcium	7440-70-2	-	-	-	mg/kg	5,110		18,100		2,160		1,800	
Chromium	7440-47-3	-	120,000	-	mg/kg	28.7		39.3 ^a		33.4		19.4	
Cobalt	7440-48-4	590	1,600	90	mg/kg	6.8		21.5		7.4		6.2	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	86.7		125 ^a		22.4		13.8	
Iron	7439-89-6	-	-	-	mg/kg	13,900		79,000		17,900		16,400	
Lead	7439-92-1	800	400	90	mg/kg	213		278 ^a		34.3		10.9	
Magnesium	7439-95-4	-	-	-	mg/kg	3,050		2,300		4,260		3,290	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	155		332 ^a		160		826	
Mercury	7439-97-6	65	23	0.1	mg/kg	-		-		-		-	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.8		27.8		16.4		14.4	
Potassium	7740-09-7	-	-	-	mg/kg	<1,100		<1,200		2,300		1,310	
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2		<4.9 ^a		<2.2		<2.3	
Silver	7440-22-4	5,700	390	1	mg/kg	<0.56		<1.2 ^a		<0.56		<0.57	
Sodium	7440-23-5	-	-	-	mg/kg	<1,100		<1,200		<1,100		<1,100	
Thallium	7440-28-0	-	-	3	mg/kg	<1.1		<2.4 ^a		<1.1		<1.1	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	28.2		15.7		28.9		22.7	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	170		191		133		39.7	

Notes:

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		BRS11															
		Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:			
				2-2.5		4-4.5		4-4.5		6-6.5		8-8.5		9.5-10			
				5.5-6		3.5-4		3.5-4		1.5-2		0 - (-0.5)		-1.5 - (-2)			
				BRS11_2-2.5		BRS11_4-4.5		DUP02		BRS11_6-6.5		BRS11_8-8.5		BRS11_9.5-10			
				JC7035-85A		JC7035-86A		JC7035-98A		JC7035-87A		JC7035-66A		JC7035-67A			
				10/19/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015			
				Soil		Soil		Soil		Soil		Soil		Soil			
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q	R	Q		
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	9,060		12,100		6,490		11,700		8,320		11,600	
Antimony	7440-36-0	450	31	6	mg/kg	<2.3 NJ-		<2.2 NJ-		<4.3 ^a NJ-		<2.1 NJ-		<2.4 NJ-		<2.3 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	9.4		4.4		<4.3 ^a		6.4		6		5.2	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	94.7		48.4		173		75.8		47.6		37.9	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.51		0.3		0.42		0.46		0.6		0.52	
Cadmium	7440-43-9	78	78	2	mg/kg	0.75		<0.55		<0.54		<0.54		<0.61		<0.57	
Calcium	7440-70-2	-	-	-	mg/kg	11,100		34,900		7,280		52,500		1,830		2,490	
Chromium	7440-47-3	-	120,000	-	mg/kg	32.9		49 J		1,650 J		37.2		16		17.6	
Cobalt	7440-48-4	590	1,600	90	mg/kg	6		11.2		6.8		8.3		6.3		7.4	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	69.1		104		86.2		64.4		17.4		11.2	
Iron	7439-89-6	-	-	-	mg/kg	15,000		24,400		14,700		19,200		14,100		16,700	
Lead	7439-92-1	800	400	90	mg/kg	256		25.5		500		95.7		25		10.9	
Magnesium	7439-95-4	-	-	-	mg/kg	4,730		4,380		3,070		5,790		3,570		3,410	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	204		356		267		428		137		358	
Mercury	7439-97-6	65	23	0.1	mg/kg	0.72		0.032		1.5		0.27		1.4		<0.036	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	18.9		18.5		18.9		15		14.1		14.3	
Potassium	7740-09-7	-	-	-	mg/kg	1,430		1,190		1,260		1,320		1,320		<1,100	
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.3		<2.2		<2.2		<2.1		<2.4		<2.3	
Silver	7440-22-4	5,700	390	1	mg/kg	1.3		1.7		1.7		1.2		0.68		<0.57	
Sodium	7440-23-5	-	-	-	mg/kg	1,660		1,770		<1,100		1,230		<1,200		<1,100	
Thallium	7440-28-0	-	-	3	mg/kg	<1.1		<1.1		<2.2 ^a		<1.1		<1.2		<1.1	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	28.1		64.9 J		14.7 ^a J		43.1		26.4		26.7	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	157		62.7		70.0 ^a		109		49		38	

Notes:

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		BRS11A															
		Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:			
				1-1.5	3-3.5	5-5.5	5-5.5	7-7.5	9-9.5								
				6.5-7	4.5-5	2.5-3	2.5-3	0.5-1	-1 - (-1.5)								
				BRS11A_1-1.5	BRS11A_3-3.5	BRS11A_5-5.5	BRS DUP04	BRS11A_7-7.5	BRS11A_9-9.5								
				JC7035-38A	JC7035-39A	JC7035-40A	JC7035-43A	JC7035-41A	JC7035-42A								
				10/19/2015	10/19/2015	10/19/2015	10/19/2015	10/19/2015	10/19/2015								
				Soil	Soil	Soil	Soil	Soil	Soil								
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q	R	Q		
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	9,600	5,910	7,730	6,300	9,570	8,270						
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-	128 NJ-	<2.3 NJ-	<2.5 NJ-	<2.3 NJ-	<2.2 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	3.8	620	6.5	3.3	4.8	5.7						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	80.3	65.4	90.9	116	54.4	38.1						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.26	0.33	0.26	<0.25	0.51	0.7						
Cadmium	7440-43-9	78	78	2	mg/kg	<0.54	12.4	<0.57	<0.62	<0.58	<0.56						
Calcium	7440-70-2	-	-	-	mg/kg	6,750	24,900	23,600	5,860	1,170	2,490						
Chromium	7440-47-3	-	120,000	-	mg/kg	28.2	14.2	33.6	15.1 J	22.3	22.2						
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.8	<5.6	7.9	<6.2	7.4	6.4						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	70.9	78	141	67.5	12.3	14.9						
Iron	7439-89-6	-	-	-	mg/kg	18,500	7,820	15,800	14,500	16,200	11,500						
Lead	7439-92-1	800	400	90	mg/kg	48.3	9,910	209	100	13.4	14.5						
Magnesium	7439-95-4	-	-	-	mg/kg	4,530	2,460	2,650	2,970	4,880	3,800						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	244	255	171	128	411	253						
Mercury	7439-97-6	65	23	0.1	mg/kg	0.086	0.53	0.28	0.34	0.04	<0.034						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16.3	16	10.8	7.1	16	14						
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	<1,100	<1,100	<1,200	<1,200	1,420						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2	<2.2	<2.3	<2.5	<2.3	<2.2						
Silver	7440-22-4	5,700	390	1	mg/kg	<0.54	10.7	<0.57	<0.62	<0.58	<0.56						
Sodium	7440-23-5	-	-	-	mg/kg	1,780	<1,100	1,570	1,250	<1,200	<1,100						
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<2.2	<1.1	<1.2	<1.2	<1.1						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	61.5	16.3	58.4	40	24.4	29.6						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	71.1	2,170	120	54.1	41.7	52.8						

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS11B									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						2-2.5		4-4.5		6-6.5		8-8.5		9.5-10	
						5.5-6		3.5-4		1.5-2		0- (-0.5)		-1.5 - (-2)	
						BRS11B_2-2.5		BRS11B_4-4.5		BRS11B_6-6.5		BRS11B_8-8.5		BRS11B_9.5-10	
						JC7035-93A		JC7035-94A		JC7035-95A		JC7035-96A		JC7035-97A	
						10/19/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015	
						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	17,700		6,780		8,140		9,100		10,200	
Antimony	7440-36-0	450	31	6	mg/kg	<2.4 NJ-		<2.2 NJ-		<4.6 ^a NJ-		<2.4 NJ-		<2.2 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	14.5		14.2		13.9 ^a		4.4		5.1	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	101		178		113		57.1		46.7	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.87		0.38		0.3		0.92		1.1	
Cadmium	7440-43-9	78	78	2	mg/kg	<0.59		<0.55		<0.58		<0.59		<0.55	
Calcium	7440-70-2	-	-	-	mg/kg	8,870		6,770		8,970		2,810		2,560	
Chromium	7440-47-3	-	120,000	-	mg/kg	63.5		33.9		1460		953		1170	
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.7		6.5		10		7.3		8.5	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	64.4		227		173		20.9		23.2	
Iron	7439-89-6	-	-	-	mg/kg	23,700		14,400		27,800		16,100		17,600	
Lead	7439-92-1	800	400	90	mg/kg	117		891		462		27.7		26.4	
Magnesium	7439-95-4	-	-	-	mg/kg	13,200		2,130		3,080		5,380		4,600	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	286		205		191		242		824	
Mercury	7439-97-6	65	23	0.1	mg/kg	0.32		1,290		5.5		0.29		1.1	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	22.9		27.6		20		11.5		13	
Potassium	7740-09-7	-	-	-	mg/kg	1,960		1,120		<1,200		2,610		2,590	
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.4		<2.2		<2.3		<2.4		<2.2	
Silver	7440-22-4	5,700	390	1	mg/kg	1.6		4.6		1.7		1.6		1.7	
Sodium	7440-23-5	-	-	-	mg/kg	3,300		<1,100		<1,200		<1,200		<1,100	
Thallium	7440-28-0	-	-	3	mg/kg	<1.2		<1.1		<1.2		<1.2		<1.1	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	78.9		21.3		68.3 ^a		36.7		38	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	111		276		163 ^a		80.8		66.3	

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS_12									
						3-3.5		5-5.5		5-5.5		7.5-8.0		9.5-10	
Sample Depth (ft bgs):						4.5-5		2.5-3		2.5-3		0-0.5		-1.5- (-2)	
Sample Elevation (ft msl):						BRS_12 3-3.5		BRS_12 5-5.5		DUP-1		BRS_12 7.5-8.0		BRS_12 9.5-10	
Client Sample ID:						JB97557-1A		JB97557-2A		JB97557-37A		JB97557-3A		JB97557-4A	
Lab Sample ID:						6/19/2015		6/19/2015		6/19/2015		6/19/2015		6/19/2015	
Date Sampled:						Soil		Soil		Soil		Soil		Soil	
Matrix:						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	15,500	5,810	5,360	8,890	7,550					
Antimony	7440-36-0	450	31	6	mg/kg	<2.7 NJ-	<2.6 NJ-	<2.6 NJ-	<3.0 NJ-	<3.1 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	11.5	9.4	12	21.3	15.1					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	97.1	60.2	61.9	334	281					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.95	0.33	0.28	0.66	0.75					
Cadmium	7440-43-9	78	78	2	mg/kg	0.77	<0.64	<0.65	<0.74	<0.77					
Calcium	7440-70-2	-	-	-	mg/kg	6,180	37,100	13,500	19,800	5,560					
Chromium	7440-47-3	-	120,000	-	mg/kg	48.2	22	21.3	19.1	16.7					
Cobalt	7440-48-4	590	1,600	90	mg/kg	<6.6	<6.4	<6.5	7.4	8.3					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	62.5	40.6	33.6	89.1	75.6					
Iron	7439-89-6	-	-	-	mg/kg	15,800	15,900	15,300	14,300	16,200					
Lead	7439-92-1	800	400	90	mg/kg	219	276	133	-	485					
Magnesium	7439-95-4	-	-	-	mg/kg	12,300	2,800	1,820	2,480	1,180					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	166	285	154	312	116					
Mercury	7439-97-6	65	23	0.1	mg/kg	-	-	-	-	-					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	18.8	16.7	12.4	19.4	19					
Potassium	7740-09-7	-	-	-	mg/kg	1,860	<1,300	<1,300	1,520	<1,500					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.7	<2.6	<2.6	<3.0	3.1					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.66	1.1	<0.65	1	1.6					
Sodium	7440-23-5	-	-	-	mg/kg	2,260	<1,300	<1,300	<1,500	<1,500					
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.3	<1.3	<1.5	<1.5					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	42.8	19.2	21.6	24.5	27.9					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	123	538	-	312	3,380					

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Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS13													
						0.5-1		2-2.5		3-3.5		4.5-5		4.5-5		5.5-6		9.5-10	
						R	Q	R	Q	R	Q	R	Q	R	Q	R	Q		
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	14,900	12,400	15,800	4,060	3,180	6,170	13,500							
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.1 NJ-	<2.6 NJ-	<2.2 NJ-	<2.3 NJ-	<2.0 NJ-	2.2 NJ-							
Arsenic	7440-38-2	19	19	19	mg/kg	<4.1	2.7	18.6	10.9	10.4	4.3	14.9							
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	29.7	57	136	49.5	44.6	38.2	211							
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.21	<0.21	0.83	1.1	0.41	<0.20	0.62							
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.52	0.85	<0.55	<0.57	<0.51	0.72							
Calcium	7440-70-2	-	-	-	mg/kg	13,500	12,100	7,460	3,440	2,990	6,350	79,300							
Chromium	7440-47-3	-	120,000	-	mg/kg	34.7	23.4	72	56.7 J	129 J	40.1	28							
Cobalt	7440-48-4	590	1,600	90	mg/kg	16	15.2	7	14.3	<5.7	7.2	10							
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	173	131	66.8	74.6	85.5	64	85.9							
Iron	7439-89-6	-	-	-	mg/kg	34,800	31,200	22,700	13,000	14,400	15,300	18,400							
Lead	7439-92-1	800	400	90	mg/kg	13.5	47.4	341	67.7	53.7	50.4	726							
Magnesium	7439-95-4	-	-	-	mg/kg	4,890	5,450	12,500	981	857	2,540	6,480							
Manganese	7439-96-5	5,900	11,000	65	mg/kg	326	332	292	101	148	140	627							
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.033	0.11	0.72	0.14	0.058	0.32	4.4							
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	13.9	14.1	24.5	56 J	17.1 J	11	28.8							
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,000	2,000	<1,100	<1,100	<1,000	2,460							
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.1	<2.1	<2.6	<2.2	6.4	<2.0	2.1							
Silver	7440-22-4	5,700	390	1	mg/kg	1.4	1.5	1.3	0.97	4.2	0.65	1.5							
Sodium	7440-23-5	-	-	-	mg/kg	2,570	1,640	1,620	<1,100	<1,100	<1,000	1,160							
Thallium	7440-28-0	-	-	3	mg/kg	<2.1	<1.0	<1.3	<1.1	<1.1	<1.0	<1.0							
Vanadium	7440-62-2	1,100	390**	-	mg/kg	102	83	57.7	20	21.4	42.5	32.1							
Zinc	7440-66-6	110,000	23,000	930	mg/kg	59.4	82	188	117	72.7	61.5	473							

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	BRS13A									
						2-2.5		4-4.5		6-6.5		8-8.5		9.5-10	
Sample Location:						BRS13A									
Sample Depth (ft bgs):						2-2.5		4-4.5		6-6.5		8-8.5		9.5-10	
Sample Elevation (ft msl):						5.5-6		3.5-4		1.5-2		0 - (-0.5)		-1.5 - (-2)	
Client Sample ID:						BRS13A_2-2.5		BRS13A_4-4.5		BRS13A_6-6.5		BRS13A_8-8.5		BRS13A_9.5-10	
Lab Sample ID:						JC7035-73A		JC7035-74A		JC7035-75A		JC7035-76A		JC7035-77A	
Date Sampled:						10/19/2015		10/19/2015		10/19/2015		10/19/2015		10/19/2015	
Matrix:						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	21,800	2,090	8,490	6,640	6,730					
Antimony	7440-36-0	450	31	6	mg/kg	<2.6 NJ-	<2.2 NJ-	<2.1 NJ-	<2.4 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	10.8	9.5	2.7	39.9	7.9					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	123	<22	24.6	81.6	59.5					
Beryllium	7440-41-7	140	16	0.7	mg/kg	1.1	0.24	<0.21	0.3	0.34					
Cadmium	7440-43-9	78	78	2	mg/kg	1.2	<0.54	<0.51	<0.60	<0.59					
Calcium	7440-70-2	-	-	-	mg/kg	9,110	1,140	8,950	35,600	16,600					
Chromium	7440-47-3	-	120,000	-	mg/kg	140	18.5	31	14	16.5					
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.8	6.4	10.7	<6.0	6					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	52.4	25.3	121	73.3	20.9					
Iron	7439-89-6	-	-	-	mg/kg	21,600	11,400	24,700	11,100	16,200					
Lead	7439-92-1	800	400	90	mg/kg	164	65.9	11.6	96.5	143					
Magnesium	7439-95-4	-	-	-	mg/kg	18,500	982	3,040	2,430	2,520					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	432	39.7	213	323	352					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.16	0.053	<0.032	0.86	1					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	26.3	15.5	10.9	364	17.9					
Potassium	7740-09-7	-	-	-	mg/kg	2,440	<1,100	<1,000	<1,200	<1,200					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.6	<2.2	<2.1	<2.4	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	0.68	<0.54	1	0.68	0.68					
Sodium	7440-23-5	-	-	-	mg/kg	2,880	<1,100	1,360	<1,200	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.3	<1.1	<1.0	<1.2	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	69.6	12.6	86.6	16.8	19.2					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	174	54.5	50.1	70.3	45.3					

Notes:

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: BRS13B									
						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
						BRS13B_1-1.5	BRS13B_3-3.5	BRS13B_5-5.5	BRS13B_7-7.5	BRS13B_9-9.5					
						JC7035-33A	JC7035-34A	JC7035-35A	JC7035-36A	JC7035-37A					
						10/19/2015	10/19/2015	10/19/2015	10/19/2015	10/19/2015					
						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	10,300	20,000	10,100	8,430	8,930					
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-	<2.7 NJ-	<2.1 NJ-	<2.3 NJ-	<2.4 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	3.2	16.3	2.8	3.5	3.3					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	38	121	37	39.2	38.9					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.24	1	<0.21	0.5	0.44					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	0.71	<0.53	<0.58	<0.61					
Calcium	7440-70-2	-	-	-	mg/kg	8,510	10,400	11,700	1,200	1,080					
Chromium	7440-47-3	-	120,000	-	mg/kg	34.4 EJ	51.1 EJ	53.5	14.6	11.6					
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.2	6.9	10.8	6.3	<6.1					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	117	43.7	829	10.1	9.1					
Iron	7439-89-6	-	-	-	mg/kg	21,800	19,200	20,300	12,100	11,000					
Lead	7439-92-1	800	400	90	mg/kg	32.6	214	46	16.5	10.7					
Magnesium	7439-95-4	-	-	-	mg/kg	3,530	14,500	4,060	2,680	2,040					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	248	455	214	362	341					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.065	8	0.074	<0.035	<0.037					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	13.3	21.6	17.6	11.7	10.9					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	2,520	<1,100	1,300	<1,200					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.7	<2.1	<2.3	<2.4					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.51	<0.67	<0.53	<0.58	<0.61					
Sodium	7440-23-5	-	-	-	mg/kg	2,010	3,610	1,970	<1,200	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.3	<1.1	<1.2	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	74.6 EJ	47.6 EJ	67.4	22	17.9					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	70.5	150	183	36	28.7					

Notes:

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Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: TC_A									
						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Depth (ft bgs):						6.5-7		4.5-5		2.5-3		0.5-1		-1 - (-1.5)	
Sample Elevation (ft msl):						TC_A_1-1.5		TC_A_3-3.5		TC_A_5-5.5		TC_A_7-7.5		TC_A_9-9.5	
Client Sample ID:						JC7615-1A		JC7615-2A		JC7615-3A		JC7615-4A		JC7615-5A	
Lab Sample ID:						10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015	
Date Sampled:						Soil		Soil		Soil		Soil		Soil	
Matrix:						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	8,770	4,920	8,710	9,780	11,800					
Antimony	7440-36-0	450	31	6	mg/kg	<2.0	<2.5	<2.2	<2.1	<2.3					
Arsenic	7440-38-2	19	19	19	mg/kg	5.1	29.4	5	4.2	6.9					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	26.1	374	51.7	43.4	56.5					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.32	0.37	0.7	0.62	1.1 ^a					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.62	<0.56	<0.54	<0.57					
Calcium	7440-70-2	-	-	-	mg/kg	4,130	3,570	2,930	1,160	3,560					
Chromium	7440-47-3	-	120,000	-	mg/kg	23.9	84.4	22.9	16.8	31.2					
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.1	<6.2	7.3	6.8	11.7					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	108	390	21.7	12.3	20.7					
Iron	7439-89-6	-	-	-	mg/kg	21,600	13,000	13,800	14,400	18,700					
Lead	7439-92-1	800	400	90	mg/kg	45.7	1,110	41.4	11.8	21.3					
Magnesium	7439-95-4	-	-	-	mg/kg	3,380	1,710	3,980	3,490	8,080					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	314	104	335	254	326					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.034	15.1	<0.033	<0.035	2.8					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15.7	21.1	14.6	13.6	29.8					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,200	1,630	1,290	2,830					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.5	<2.2	<2.1	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	1.1	2.3	1.2	0.92	1.5					
Sodium	7440-23-5	-	-	-	mg/kg	1,030	<1,200	<1,100	<1,100	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.1	<1.1	<2.3 ^a					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	50.3	17.7	34.1	26.4	41.1					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	47	286	60.4	31.6	71.2					

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		Sample Location: TC B											
		1-1.5		2-2.5		2-2.5		5-5.5		7-7.5		9-9.5	
		6.5-7		5.5-6		5.5-6		2.5-3		0.5-1		-1 - (-1.5)	
		TC_B_1-1.5		TC_B_2-2.5		TCDUP01		TC_B_5-5.5		TC_B_7-7.5		TC_B_9-9.5	
		JC7615-6A		JC7615-7A		JC7615-11A		JC7615-8A		JC7615-9A		JC7615-10A	
		10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015	
		Soil		Soil		Soil		Soil		Soil		Soil	
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	10,200	6,340	7,960	4,990	7,790	5,830		
Antimony	7440-36-0	450	31	6	mg/kg	<2.0	<2.3	<2.3 NJ-	<2.8	<2.3	<2.0 NJ-		
Arsenic	7440-38-2	19	19	19	mg/kg	3.8	13.5	9.1	9.3	4.1	11.3		
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	38.1	89.4	94.4	84.2	33.7	249		
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.41 ^a	0.54	0.53	<0.28	0.56	0.34		
Cadmium	7440-43-9	78	78	2	mg/kg	1.2	0.61	<0.58	<0.71	<0.57	<0.49		
Calcium	7440-70-2	-	-	-	mg/kg	10,800	3,140	2,560	7,430	2,080	9,680		
Chromium	7440-47-3	-	120,000	-	mg/kg	109	32.9	33.2	8.6	16.9	14.7		
Cobalt	7440-48-4	590	1,600	90	mg/kg	13.4	8	7.4	<7.1	5.8	5.7		
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	153	86.9	67.5	38.8	13.8	127		
Iron	7439-89-6	-	-	-	mg/kg	27,000	19,900	16,400	16,000	13,100	12,800		
Lead	7439-92-1	800	400	90	mg/kg	271	334	272	148	16.4	719		
Magnesium	7439-95-4	-	-	-	mg/kg	5,270	2,440	3,130	3,710	3,560	2,090		
Manganese	7439-96-5	5,900	11,000	65	mg/kg	287	169	166	155	298	259		
Mercury	7439-97-6	65	23	0.1	mg/kg	1	<0.036	1.2	<0.034	<0.038	<0.032		
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	30	24.1	22.5	11.2	12.9	16.8		
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,100	<1,200	<1,400	1,350	<990		
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.3	<2.3	<2.8	<2.3	<2.0		
Silver	7440-22-4	5,700	390	1	mg/kg	1.5	1.5	1.2	1.1	1.1	4.2		
Sodium	7440-23-5	-	-	-	mg/kg	2,040	<1,100	<1,200	<1,400	<1,100	<990		
Thallium	7440-28-0	-	-	3	mg/kg	<2.0 ^a	<1.1	<1.2	<1.4	<1.1	<0.99		
Vanadium	7440-62-2	1,100	390**	-	mg/kg	102	27.3	27.3	37.7	26	18.6		
Zinc	7440-66-6	110,000	23,000	930	mg/kg	143	296	333	131	46.8	153		

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						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Location:						TC_C									
Sample Depth (ft bgs):						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Elevation (ft msl):						6.5-7		4.5-5		2.5-3		0.5-1		-1 - (-1.5)	
Client Sample ID:						TC_C_1-1.5		TC_C_3-3.5		TC_C_5-5.5		TC_C_7-7.5		TC_C_9-9.5	
Lab Sample ID:						JC7615-12A		JC7615-13A		JC7615-14A		JC7615-15A		JC7615-16A	
Date Sampled:						10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015	
Matrix:						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	6,650	11,700	12,500	11,200	11,700					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1	<2.3	<2.2	<2.2 NJ-	<2.2 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	2.2	4.8	6.6	6.4	11.7					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	24.5	47.5	49	52.1	46.5					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.25	0.55	1.2	0.88	1.0 ^a					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.57	<0.56	<0.55	<0.55					
Calcium	7440-70-2	-	-	-	mg/kg	3,460	1,630	3,010	2,650	3,960					
Chromium	7440-47-3	-	120,000	-	mg/kg	18.1	17.4	40.8	23.8	36.8					
Cobalt	7440-48-4	590	1,600	90	mg/kg	7.7	6.8	10.3	9.7	9.3					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	32.1	13.2	19	17.8	19.5					
Iron	7439-89-6	-	-	-	mg/kg	14,300	14,400	20,300	17,500	18,000					
Lead	7439-92-1	800	400	90	mg/kg	21.8	16.5	23.1	24.3	27.8					
Magnesium	7439-95-4	-	-	-	mg/kg	3,070	3,050	7,820	5,370	6,260					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	165	336	545	340	303					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.11	0.039	<0.037	<0.034	<0.034					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	12.3	14	17.7	18.2	19.1					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,100	3,310	2,300	1,980					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.3	<2.2	<2.2	<2.2					
Silver	7440-22-4	5,700	390	1	mg/kg	0.99	1.2	1.2	1.1	1					
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	<1,100	<1,100	<1,100	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.1	<1.1	<1.1	<2.2 ^a					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	29.5	22.9	45.5	37.3	41.5					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	42.9	42.6	119	62.2	82.9					

Notes:

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: TC_C1									
						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Depth (ft bgs):						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
Sample Elevation (ft msl):						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
Client Sample ID:						TC_C1_1-1.5	TC_C1_3-3.5	TC_C1_5-5.5	TC_C1_7-7.5	TC_C1_9-9.5					
Lab Sample ID:						JC7615-22A	JC7615-23A	JC7615-24A	JC7615-25A	JC7615-26A					
Date Sampled:						10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015					
Matrix:						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	10,300	9,910	3,450	12,100	4,980					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.3 NJ-	<2.5 NJ-	<2.3 NJ-	<2.2 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	2.6	7.2	12.5	10.6	4.9					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	36.2	71.1	267	61	56.4					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.39	1	0.34	1.2 ^a	0.62					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.52	<0.57	<0.63	<0.58	<0.55					
Calcium	7440-70-2	-	-	-	mg/kg	4,340	7,850	17,100	2,900	3,500					
Chromium	7440-47-3	-	120,000	-	mg/kg	21.6	40.6	13.4	35	13.6					
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.1	8	<6.3	11.9	<5.5					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	45.6	63.6	162	23.8	22.2					
Iron	7439-89-6	-	-	-	mg/kg	20,500	16,000	11,400	17,600	10,900					
Lead	7439-92-1	800	400	90	mg/kg	21.2	131	5,190	38.8	15.4					
Magnesium	7439-95-4	-	-	-	mg/kg	4,950	3,690	838	6,750	3,290					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	237	219	134	498	389					
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.034	0.17	6	<0.035	<0.033					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16	22.2	8.9	20.3	10.7					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	2,010	<1,300	3,080	1,440					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.3	<2.5	<2.3	<2.2					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.52	<0.57	<0.63	<1.2 ^a	<0.55					
Sodium	7440-23-5	-	-	-	mg/kg	1,260	<1,100	<1,300	<1,200	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.1	<1.3	<2.3 ^a	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	54.4	33.3	15.6	49	20.4					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	50.6	116	119	92	37.8					

Notes:

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: TC_D									
						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Depth (ft bgs):						1-1.5	3-3.5	5-5.5	7-7.5	9-9.5					
Sample Elevation (ft msl):						6.5-7	4.5-5	2.5-3	0.5-1	-1 - (-1.5)					
Client Sample ID:						TC_D_1-1.5	TC_D_3-3.5	TC_D_5-5.5	TC_D_7-7.5	TC_D_9-9.5					
Lab Sample ID:						JC7615-17A	JC7615-18A	JC7615-19A	JC7615-20A	JC7615-21A					
Date Sampled:						10/29/2015	10/29/2015	10/29/2015	10/29/2015	10/29/2015					
Matrix:						Soil	Soil	Soil	Soil	Soil					
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	3,610	5,720	10,700	8,200	9,140					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.3 NJ-	<2.5 NJ-	<2.4 NJ-	<2.2 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	2.2	7.3	9.4	12.8	6.9					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	<21	285	118	73.8	83.3					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.28	0.41	0.92	0.78	0.69					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.52	<0.58	<0.63	<0.59	<0.55					
Calcium	7440-70-2	-	-	-	mg/kg	2,250	12,800	32,500	3,950	1,860					
Chromium	7440-47-3	-	120,000	-	mg/kg	32.2	66	55.2	25.5	17.7					
Cobalt	7440-48-4	590	1,600	90	mg/kg	6.1	7	<6.3	8.8	9.1					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	45	82.4	32.4	28	38.8					
Iron	7439-89-6	-	-	-	mg/kg	12,200	14,800	14,700	24,100	13,800					
Lead	7439-92-1	800	400	90	mg/kg	40.5	217	293	202	10.7					
Magnesium	7439-95-4	-	-	-	mg/kg	1,860	2,690	2,350	4,720	3,430					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	117	177	172	343	161					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.11	0.17	0.58	1.8	<0.036					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	12.7	18.7	20.7	19.6	17.7					
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,200	2,320	2,600	1,720					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.3	<2.5	<2.4	<2.2					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.52	<0.58	<0.63	<0.59	<0.55					
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	2,190	<1,300	<1,200	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.3	<1.2	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	72.8	31.4	39.1	35	25.7					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	55	245	149	88.9	41.6					

Notes:

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	MPD_A									
						1.5-2 7-7.5		3-3.5 5.5-6		4-4.5 4.5-5		6-6.5 2.5-3		9-9.5 0 - (-0.5)	
Sample Location:						MPD_A									
Sample Depth (ft bgs):						1.5-2		3-3.5		4-4.5		6-6.5		9-9.5	
Sample Elevation (ft msl):						7-7.5		5.5-6		4.5-5		2.5-3		0 - (-0.5)	
Client Sample ID:						MPD_A_1.5-2		MPD_A_3-3.5		MPD_A_4-4.5		MPD_A_6-6.5		MPD_A_9-9.5	
Lab Sample ID:						JC7615-27A		JC7615-28A		JC7615-29A		JC7615-30A		JC7615-31A	
Date Sampled:						10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015	
Matrix:						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	17,700		2,970		5,550		9,610		14,500	
Antimony	7440-36-0	450	31	6	mg/kg	<2.3 NJ-		<2.2 NJ-		<2.0 NJ-		<2.2 NJ-		<2.0 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	<4.5 ^a		5.6		14		6.7		6.7	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	46.6		45.2		66.8		44.7		39.2	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.44		0.31		0.67		0.76 ^a		0.76	
Cadmium	7440-43-9	78	78	2	mg/kg	<1.1 ^a		<0.56		<0.51		<0.54		<0.50	
Calcium	7440-70-2	-	-	-	mg/kg	8,970		9,740		1,990		3,320		3,270	
Chromium	7440-47-3	-	120,000	-	mg/kg	26		145		24.6		34.4		20.1	
Cobalt	7440-48-4	590	1,600	90	mg/kg	19.7		6.3		5.2		9.1		<5.0	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	111 ^a		48.3		80.1		22.6		14.7	
Iron	7439-89-6	-	-	-	mg/kg	40,400		8,870		12,100		16,100		15,600	
Lead	7439-92-1	800	400	90	mg/kg	18.9 ^a		98.4		318		17.5		30.9	
Magnesium	7439-95-4	-	-	-	mg/kg	6,970		1,420		791		5,500		4,370	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	574 ^a		150		93.3		294		198	
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.034		0.13		0.27		<0.036		0.082	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	19.5		26.7		17.3		21.9		16.8	
Potassium	7740-09-7	-	-	-	mg/kg	<1,100		<1,100		<1,000		1,950		1,800	
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.5 ^a		<2.2		<2.0		<2.2		<2.0	
Silver	7440-22-4	5,700	390	1	mg/kg	<1.1 ^a		<0.56		<0.51		<1.1 ^a		<0.50	
Sodium	7440-23-5	-	-	-	mg/kg	1,920		<1,100		<1,000		<1,100		1,320	
Thallium	7440-28-0	-	-	3	mg/kg	<2.3 ^a		<1.1		<1.0		<2.2 ^a		<1.0	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	118		37.6		15.9		38.4		30.4	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	59.9		103		73.2		73.3		44.7	

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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						1-1.5		2.5-3		4.5-5		9-9.5		9-9.5	
Sample Depth (ft bgs):						7.5-8		6-6.5		4-4.5		0 - (-0.5)		0 - (-0.5)	
Sample Elevation (ft msl):						MPD_A1_1-1.5		MPD_A1_2.5-3		MPD_A1_4.5-5		MPD_A1_9-9.5		MPD DUP04	
Client Sample ID:						JC7615-63A		JC7615-64A		JC7615-65A		JC7615-66A		JC7615-67A	
Lab Sample ID:						10/30/2015		10/30/2015		10/30/2015		10/30/2015		10/30/2015	
Date Sampled:						Soil		Soil		Soil		Soil		Soil	
Matrix:															
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	17,700		2,910		8,680		5,960		7,310	
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-		<2.3 NJ-		<2.4 NJ-		<2.4 NJ-		<2.2 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	2.4		4.1		4.4		6.6		4.5	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	53.7		76.9		36.7		29.5		38.1	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.24		0.23		0.51		0.7		0.75	
Cadmium	7440-43-9	78	78	2	mg/kg	1.1		<0.59		<0.61		<0.59		<0.55	
Calcium	7440-70-2	-	-	-	mg/kg	4,560		1,510		1,990		2,580		2,870	
Chromium	7440-47-3	-	120,000	-	mg/kg	25.8		21.1		17.5		24.4		23.2	
Cobalt	7440-48-4	590	1,600	90	mg/kg	16.1		<5.9		<6.1		7.5		7.2	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	78		25.8		15		13.6		14.4	
Iron	7439-89-6	-	-	-	mg/kg	33,500		6,960		12,100		11,200		10,400	
Lead	7439-92-1	800	400	90	mg/kg	21.8		50.8		19.4		17.7		16.6	
Magnesium	7439-95-4	-	-	-	mg/kg	6,920		1,060		3,120		4,850		3,660	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	221		42.7		268		195		177	
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.035		0.068		<0.038		<0.037		<0.034	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16.9		14.4		12.2		14.9		15.6	
Potassium	7740-09-7	-	-	-	mg/kg	<1,100		<1,200		<1,200		1,340		1,470	
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1		<2.3		<2.4		<2.4		<2.2	
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53		<0.59		<0.61		<0.59		<0.55	
Sodium	7440-23-5	-	-	-	mg/kg	3,750		1,900		<1,200		<1,200		<1,100	
Thallium	7440-28-0	-	-	3	mg/kg	<1.1		<1.2		<1.2		<1.2		<1.1	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	93		18.6		24.9		29.3		30.4	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	55.8		51.8		51.1		65.6		52.4	

Notes:

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ft msl = feet mean sea level

ft bgs = feet below ground surface

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**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: MPD_B											
						1-1.5		1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Depth (ft bgs):						8.5-9		8.5-9		6.5-7		4.5-5		2.5-3		0.5-1	
Sample Elevation (ft msl):						MPD_B_1-1.5		MPD DUP01		MPD_B_3-3.5		MPD_B_5-5.5		MPD_B_7-7.5		MPD_B_9-9.5	
Client Sample ID:						JC7615-32A		JC7615-37A		JC7615-33A		JC7615-34A		JC7615-35A		JC7615-36A	
Lab Sample ID:						10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015		10/27/2015	
Date Sampled:						Soil		Soil		Soil		Soil		Soil		Soil	
Matrix:																	
						R	Q	R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	12,500	11,600	3,550	5,530	13,200	11,500						
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<4.1 ^a NJ-	<2.3 NJ-	<2.4 NJ-	<2.3 NJ-	<2.5 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	<4.1 ^a	3	6.6	4.8	5.8	8.9						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	27.8	35.5	88.4	24.5	48.4	36.8						
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.41 ^a	<0.41 ^a	0.32	0.29	0.85	0.55						
Cadmium	7440-43-9	78	78	2	mg/kg	<1.0 ^a	<0.51	0.91	<0.60	<0.58	<0.63						
Calcium	7440-70-2	-	-	-	mg/kg	17,500	9,890	2,830	5,310	1,370	3,370						
Chromium	7440-47-3	-	120,000	-	mg/kg	9.3	20	28	21.1	23.8	15.4						
Cobalt	7440-48-4	590	1,600	90	mg/kg	18.2	15.1	<5.9	8.1	7.9	6.3						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	272 ^a	145	47.9	81.4	13.9	12.5						
Iron	7439-89-6	-	-	-	mg/kg	38,600	32,000	6,220	19,800	15,600	14,700						
Lead	7439-92-1	800	400	90	mg/kg	16.0 ^a	30.6	112	52.4	23.7	51.3						
Magnesium	7439-95-4	-	-	-	mg/kg	5,190	4,700	1,690	2,940	4,370	2,800						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	336 ^a	282	54.1	174	259	321						
Mercury	7439-97-6	65	23	0.1	mg/kg	0.049	<0.032	0.3	0.14	<0.038	0.12						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	14.6	17.8	15.5	12.4	17.2	13.2						
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	<1,000	<1,200	<1,200	1,400	<1,300						
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.1 ^a	<2.0	<2.3	<2.4	<2.3	<2.5						
Silver	7440-22-4	5,700	390	1	mg/kg	<1.0 ^a	<1.0 ^a	<0.59	<0.60	<0.58	<0.63						
Sodium	7440-23-5	-	-	-	mg/kg	3,040	2,790	1,360	<1,200	<1,200	<1,300						
Thallium	7440-28-0	-	-	3	mg/kg	<2.1 ^a	<2.0 ^a	<1.2	<1.2	<1.2	<1.3						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	132	99.1	23.1	71.6	41.2	23.8						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	70.6	69	98.3	59	62.4	55.7						

Notes:

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**Table 7
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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: MPD_C											
						1-1.5		3-3.5		3-3.5		5-5.5		7-7.5		9-9.5	
						R	Q	R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	4,230	3,600	3,200	12,200	10,100	16,100						
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	3.5 NJ-	3.1 NJ-	<2.3 NJ-	<2.5 NJ-	<3.0 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	7.2	6.4	7.7	4.8	4.2	5.7						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	40.2	254	192	46.2	40.4	67.1						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.24	0.31	0.31	0.52	0.42	0.76						
Cadmium	7440-43-9	78	78	2	mg/kg	<0.53	<0.54	<0.53	<0.58	<0.62	<0.76						
Calcium	7440-70-2	-	-	-	mg/kg	16,300	17,200	15,900	2,790	39,600	3,390						
Chromium	7440-47-3	-	120,000	-	mg/kg	72.3	13.3	11.8	18	12.9	20.8						
Cobalt	7440-48-4	590	1,600	90	mg/kg	6.2	7	9	6.7	<6.2	7.7						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	49.4	74.1	75.7	11.8	9.7	12.4						
Iron	7439-89-6	-	-	-	mg/kg	12,400	13,300	13,800	15,700	13,500	15,600						
Lead	7439-92-1	800	400	90	mg/kg	59.8	180	150	16.4	22.3	32						
Magnesium	7439-95-4	-	-	-	mg/kg	2,240	3,150	5,260	2,870	2,260	3,370						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	125	184	264	445	281	150						
Mercury	7439-97-6	65	23	0.1	mg/kg	0.068	0.28	0.4	<0.040	0.11	0.036						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	17.5	20.1	24.7	13.3	10.5	16.4						
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	<1,100	<1,100	<1,200	<1,200	<1,500						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.1	<2.1	<2.3	<2.5	<3.0						
Silver	7440-22-4	5,700	390	1	mg/kg	<0.53	<0.54	<0.53	<0.58	<1.2 ^a	<0.76						
Sodium	7440-23-5	-	-	-	mg/kg	<1,100	<1,100	<1,100	<1,200	<1,200	<1,500						
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.1	<1.1	<1.2	<1.2	<1.5						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	30.7	17	18.4	25.2	18.9	29						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	71.5	168	120	51.2	35.3	56						

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	MPD_D									
						1-1.5		2-2.5		4-4.5		6-6.5		9-9.5	
Sample Location:						MPD_D									
Sample Depth (ft bgs):						1-1.5		2-2.5		4-4.5		6-6.5		9-9.5	
Sample Elevation (ft msl):						10.5-11		9.5-10		7.5-8		5.5-6		2.5-3	
Client Sample ID:						MPD_D_1-1.5		MPD_D_2-2.5		MPD_D_4-4.5		MPD_D_6-6.5		MPD_D_9-9.5	
Lab Sample ID:						JC7615-44A		JC7615-45A		JC7615-46A		JC7615-47A		JC7615-48A	
Date Sampled:						10/28/2015		10/28/2015		10/28/2015		10/28/2015		10/28/2015	
Matrix:						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	10,600	2,740	5,200	12,000	9,430					
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-	<2.1 NJ-	<2.1 NJ-	<2.7 NJ-	<2.3 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	7.4	4.1	8.3	5.1	13					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	60	54	60.2	54.2	50.4					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.73	0.22	0.46	0.64	0.64					
Cadmium	7440-43-9	78	78	2	mg/kg	<0.55	<0.52	<0.54	<0.68	<0.58					
Calcium	7440-70-2	-	-	-	mg/kg	3,370	5,430	3,410	2,970	1,610					
Chromium	7440-47-3	-	120,000	-	mg/kg	24.9	18.8	13.9	15.3	43.2					
Cobalt	7440-48-4	590	1,600	90	mg/kg	9.4	<5.2	6.2	<6.8	7.2					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	32.8	57.5	38.9	8.1	9.5					
Iron	7439-89-6	-	-	-	mg/kg	17,500	12,500	14,600	12,200	13,400					
Lead	7439-92-1	800	400	90	mg/kg	47.9	61.3	130	9.8	16.8					
Magnesium	7439-95-4	-	-	-	mg/kg	4,710	1,070	2,390	2,350	3,550					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	297	89.8	221	275	244					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.056	0.1	0.18	<0.033	<0.037					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	18.5	25.4	15.5	10.9	13.4					
Potassium	7740-09-7	-	-	-	mg/kg	1,960	<1,000	1,290	<1,400	1,250					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2	<2.1	<2.1	<2.7	<2.3					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.55	<0.52	<0.54	<0.68	<0.58					
Sodium	7440-23-5	-	-	-	mg/kg	1,100	<1,000	<1,100	<1,400	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.0	<1.1	<1.4	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	42.9	17.2	22.2	21.2	45.3					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	80.8	62.6	70.3	41.2	78.4					

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Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	MPD_E							
						1.7-2.3 11.7-12.3		4.5-5 9-9.5		5.5-6 8-8.5		7.5-8 6-6.5	
Sample Location:						MPD_E							
Sample Depth (ft bgs):						1.7-2.3		4.5-5		5.5-6		7.5-8	
Sample Elevation (ft msl):						11.7-12.3		9-9.5		8-8.5		6-6.5	
Client Sample ID:						MPD_E_1.7-2.3		MPD_E_4.5-5		MPD_E_5.5-6		MPD_E_7.5-8	
Lab Sample ID:						JC7615-49A		JC7615-50A		JC7615-51A		JC7615-52A	
Date Sampled:						10/29/2015		10/29/2015		10/29/2015		10/29/2015	
Matrix:						Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	13,100		6,670		9,130		8,620	
Antimony	7440-36-0	450	31	6	mg/kg	<4.3 ^a NJ-		<2.1 NJ-		<2.2 NJ-		<2.2 NJ-	
Arsenic	7440-38-2	19	19	19	mg/kg	4.5		6.5		5.7		6.3	
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	54.6		39.5		54.4		57.9	
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.32		0.39		0.47		0.64	
Cadmium	7440-43-9	78	78	2	mg/kg	<1.1 ^a		<0.53		<0.54		<0.56	
Calcium	7440-70-2	-	-	-	mg/kg	9,470		3,760		6,750		3,560	
Chromium	7440-47-3	-	120,000	-	mg/kg	23.0 ^a		10.9		17.1		28.1	
Cobalt	7440-48-4	590	1,600	90	mg/kg	15.7		7.1		9.7		7.9	
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	126 ^a		57.5		47.5		29.8	
Iron	7439-89-6	-	-	-	mg/kg	34,700		15,300		19,400		15,500	
Lead	7439-92-1	800	400	90	mg/kg	41.2 ^a		7.4		17.2		45.9	
Magnesium	7439-95-4	-	-	-	mg/kg	5,090		2,540		5,770		3,850	
Manganese	7439-96-5	5,900	11,000	65	mg/kg	376^a		122		250		274	
Mercury	7439-97-6	65	23	0.1	mg/kg	0.071		<0.033		<0.032		0.049	
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15.6		16.1		17.9		16.4	
Potassium	7740-09-7	-	-	-	mg/kg	1,180		<1,100		<1,100		1,600	
Selenium	7782-49-2	5,700	390	11	mg/kg	<4.3 ^a		<2.1		<2.2		<2.2	
Silver	7440-22-4	5,700	390	1	mg/kg	1.1^a		<0.53		<0.54		<0.56	
Sodium	7440-23-5	-	-	-	mg/kg	2,400		<1,100		1,180		<1,100	
Thallium	7440-28-0	-	-	3	mg/kg	<2.1 ^a		<1.1		<1.1		<1.1	
Vanadium	7440-62-2	1,100	390**	-	mg/kg	101		22.3		44.6		36.3	
Zinc	7440-66-6	110,000	23,000	930	mg/kg	82.4		28.6		46.5		71.1	

Notes:

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^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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**Table 7
Roadway Soil Boring Target Analyte List (TAL) Metals Analytical Summary Table
Site 65, Burma Road, Jersey City, NJ
Sampled by APTIM (f/k/a CB&I)**

		MPD_E1															
		Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:		Matrix:			
				1-1.5	2-2.5	4.5-5	7-7.5	9-9.5	9-9.5	12.5-13	11.5-12	9-9.5	6.5-7	4.5-5	4.5-5		
				MPD_E1_1-1.5	MPD_E1_2-2.5	MPD_E1_4.5-5	MPD_E1_7-7.5	MPD_E1_9-9.5	MPD_DUP05	JC7615-78A	JC7615-79A	JC7615-80A	JC7615-81A	JC7615-82A	JC7615-83A		
				10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015	10/30/2015	Soil	Soil	Soil	Soil	Soil	Soil		
Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	R		Q		R		Q		R		Q	
						R	Q	R	Q	R	Q	R	Q	R	Q		
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	11,600	10,000	3,490	8,280	9,870	10,300						
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.2 NJ-	<2.0 NJ-	<2.3 NJ-	<2.2 NJ-	<2.3 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	4.7	11.3	<2.0	14.2	8.4	8.1						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	115	64.2	<20	106	57.3	80.4						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.3	0.68	0.26	0.63	0.73	0.75						
Cadmium	7440-43-9	78	78	2	mg/kg	0.92	<0.56	<0.51	0.61	<0.55	<0.58						
Calcium	7440-70-2	-	-	-	mg/kg	8,930	2,720	833	3,390	5,190	3,350						
Chromium	7440-47-3	-	120,000	-	mg/kg	34.5	23.7	9.1	27.2	28.7	25.3						
Cobalt	7440-48-4	590	1,600	90	mg/kg	12.7	7.9	<5.1	9.3	8.2	20.1						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	118	25.7	6.2	64.5	33.1	24.6						
Iron	7439-89-6	-	-	-	mg/kg	25,900	16,200	8,630	16,000	14,000	13,300						
Lead	7439-92-1	800	400	90	mg/kg	131	47.4	6.9	183	23.7	16.9						
Magnesium	7439-95-4	-	-	-	mg/kg	5,180	4,610	1,660	3,680	5,410	6,060						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	282	261	75.1	190	1,910	1,210						
Mercury	7439-97-6	65	23	0.1	mg/kg	0.73	0.16	<0.034	0.29	<0.034	<0.033						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	16.1	15.6	8.8	34.2	16.1	23.4						
Potassium	7740-09-7	-	-	-	mg/kg	1,040	1,900	<1,000	1,660	2,930	3,770						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.2	<2.0	<2.3	<2.2	<2.3						
Silver	7440-22-4	5,700	390	1	mg/kg	1.4	0.62	<0.51	<0.57	<0.55	<0.58						
Sodium	7440-23-5	-	-	-	mg/kg	2,560	<1,100	<1,000	1,290	<1,100	1,530						
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.1	<1.0	<1.1	<3.3 ^a	<2.3 ^a						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	77.8	37.3	11.1	41.4	42	35.3						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	194	78.8	22	161	82.1	63						

Notes:

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

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Site 65, Burma Road, Jersey City, NJ
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Analyte	CAS #	Non-Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Residential Direct Contact Soil Remediation Standard (NJAC 7:26D 9/17)	Default Impact to Groundwater Soil Screening Level (11/13)	Units	Sample Location: MPD_F											
						1-1.5		1-1.5		2-2.5		5-5.5		7-7.5		9-9.5	
Sample Depth (ft bgs):						14.5-15		14.5-15		13.5-14		10.5-11		8.5-9		6.5-7	
Sample Elevation (ft msl):						MPD_F_1-1.5		MPD_F_1-1.5		MPD_F_2-2.5		MPD_F_5-5.5		MPD_F_7-7.5		MPD_F_9-9.5	
Client Sample ID:						JC7615-54A		JC7615-53A		JC7615-55A		JC7615-56A		JC7615-57A		JC7615-58A	
Lab Sample ID:						10/29/2015		10/29/2015		10/29/2015		10/29/2015		10/29/2015		10/29/2015	
Date Sampled:						Soil		Soil		Soil		Soil		Soil		Soil	
Matrix:																	
						R	Q	R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	11,100	10,300	10,700	7,540	9,920	7,590						
Antimony	7440-36-0	450	31	6	mg/kg	<4.2 ^a NJ-	<4.2 ^a NJ-	<2.1 NJ-	<2.3 NJ-	<2.3 NJ-	<2.2 NJ-						
Arsenic	7440-38-2	19	19	19	mg/kg	10.1	9.8	10.9	7.8	5.6	6.2						
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	69.4	76.5	68.5	50.2	46.1	57.8						
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.93^a	0.88^a	0.84	0.59	0.61	0.55						
Cadmium	7440-43-9	78	78	2	mg/kg	<0.53	<0.52	<0.53	<0.57	<0.56	<0.55						
Calcium	7440-70-2	-	-	-	mg/kg	2,640	2,790	2,600	3,030	1,880	3,420						
Chromium	7440-47-3	-	120,000	-	mg/kg	28.8	26.9	27.3	53.2	19.6	27.7						
Cobalt	7440-48-4	590	1,600	90	mg/kg	10.1	8.9	9.5	6.7	6.5	7.2						
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	25.7	25.8	29.9	24.3	17.5	20.6						
Iron	7439-89-6	-	-	-	mg/kg	19,700	17,300	23,700	12,800	13,800	12,400						
Lead	7439-92-1	800	400	90	mg/kg	35.8	34.4	48.1	46.5	29.1	27.2						
Magnesium	7439-95-4	-	-	-	mg/kg	5,700	5,120	4,510	4,420	3,250	4,930						
Manganese	7439-96-5	5,900	11,000	65	mg/kg	397	361	335	172	429	300						
Mercury	7439-97-6	65	23	0.1	mg/kg	<0.035	<0.035	0.041	0.076	0.081	<0.035						
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	19.3	17.5	18.1	17.8	14.6	15.4						
Potassium	7740-09-7	-	-	-	mg/kg	2,880	2,580	1,770	2,230	1,430	2,100						
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.1	<2.1	<2.3	<2.3	<2.2						
Silver	7440-22-4	5,700	390	1	mg/kg	<1.1 ^a	<1.0 ^a	<0.53	<0.57	<0.56	<0.55						
Sodium	7440-23-5	-	-	-	mg/kg	1,350	1,330	1,160	<1,100	<1,100	1,440						
Thallium	7440-28-0	-	-	3	mg/kg	<2.1 ^a	<2.1 ^a	<1.1	<1.1	<1.1	<1.1						
Vanadium	7440-62-2	1,100	390**	-	mg/kg	42.5	41.5	39.8	33.3	26.1	36.5						
Zinc	7440-66-6	110,000	23,000	930	mg/kg	73.1	72.5	67.6	78.2	54	60.6						

Notes:

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						Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
						14.5-15		12.5-13		10.5-11		8.5-9		6.5-7	
						MPD_F1_1-1.5		MPD_F1_3-3.5		MPD_F1_5-5.5		MPD_F1_7-7.5		MPD_F1_9-9.5	
						JC7615-73A		JC7615-74A		JC7615-75A		JC7615-76A		JC7615-77A	
						10/30/2015		10/30/2015		10/30/2015		10/30/2015		10/30/2015	
						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	9,970	10,200	10,600	7,550	9,000					
Antimony	7440-36-0	450	31	6	mg/kg	<2.2 NJ-	<2.3 NJ-	<4.1 ^a NJ-	<2.3 NJ-	<2.4 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	4.4	9.3	7.6	4.5	5.6					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	37.9	63.6	58.4	34.9	49.5					
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.23	0.92	0.99^a	0.45	0.66					
Cadmium	7440-43-9	78	78	2	mg/kg	0.56	<0.57	<0.52	<0.58	<0.59					
Calcium	7440-70-2	-	-	-	mg/kg	7,460	2,840	3,370	2,150	3,900					
Chromium	7440-47-3	-	120,000	-	mg/kg	23.1	26.8	28.6	16.5	19.8					
Cobalt	7440-48-4	590	1,600	90	mg/kg	11.2	8.6	9.4	6	6.8					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	122	22.2	26.7	18.8	20.1					
Iron	7439-89-6	-	-	-	mg/kg	21,900	16,200	20,800	11,500	12,500					
Lead	7439-92-1	800	400	90	mg/kg	166	25.5	35.2	17.4	21.8					
Magnesium	7439-95-4	-	-	-	mg/kg	4,270	5,490	5,730	3,200	4,600					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	227	399	329	291	376					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.12	<0.032	0.041	<0.034	<0.037					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	15.7	17	18.4	13.1	16.5					
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	2,540	2,020	1,460	1,670					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.2	<2.3	<2.1	<2.3	<2.4					
Silver	7440-22-4	5,700	390	1	mg/kg	<0.55	<0.57	<1.0 ^a	<0.58	<0.59					
Sodium	7440-23-5	-	-	-	mg/kg	2,380	1,700	1,090	<1,200	<1,200					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.1	<2.1 ^a	<1.2	<1.2					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	65.8	41	40.7	25	31					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	85.4	71.9	78.5	43.9	59.5					

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						Sample Location:		Sample Depth (ft bgs):		Sample Elevation (ft msl):		Client Sample ID:		Lab Sample ID:		Date Sampled:	
						1.5-2	3.5-4	5-5.5	7-7.5								
						7-7.5	5-5.5	3.5-4	1.5-2								
						MPD_G_1.5-2	MPD_G_3.5-4	MPD_G_5-5.5	MPD_G_7-7.5								
						JC7615-59A	JC7615-60A	JC7615-61A	JC7615-62A								
						10/29/2015	10/29/2015	10/29/2015	10/29/2015								
						Soil	Soil	Soil	Soil								
						R	Q	R	Q	R	Q	R	Q				
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	4,100	7,110	8,520	10,100								
Antimony	7440-36-0	450	31	6	mg/kg	<2.0 NJ-	<2.4 NJ-	<2.6 NJ-	<2.3 NJ-								
Arsenic	7440-38-2	19	19	19	mg/kg	3	6.4	6.3	6.7								
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	32.4	71.1	63	57.2								
Beryllium	7440-41-7	140	16	0.7	mg/kg	0.23	0.58	0.7	0.9								
Cadmium	7440-43-9	78	78	2	mg/kg	<0.51	<0.59	<0.64	<0.58								
Calcium	7440-70-2	-	-	-	mg/kg	3,130	2,150	2,470	3,040								
Chromium	7440-47-3	-	120,000	-	mg/kg	21.6	18.8	20.2	22.6								
Cobalt	7440-48-4	590	1,600	90	mg/kg	5.9	8	6.7	8.2								
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	49.2	33.5	25.9	18.3								
Iron	7439-89-6	-	-	-	mg/kg	13,000	11,300	13,400	14,300								
Lead	7439-92-1	800	400	90	mg/kg	35.6	75.5	53.9	26.9								
Magnesium	7439-95-4	-	-	-	mg/kg	1,850	2,730	4,040	5,160								
Manganese	7439-96-5	5,900	11,000	65	mg/kg	140	117	215	320								
Mercury	7439-97-6	65	23	0.1	mg/kg	0.045	0.21	0.63	<0.035								
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	13.3	18.8	14.6	15.4								
Potassium	7740-09-7	-	-	-	mg/kg	<1,000	1,420	1,830	2,350								
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.0	<2.4	<2.6	<2.3								
Silver	7440-22-4	5,700	390	1	mg/kg	<0.51	<0.59	<0.64	<0.58								
Sodium	7440-23-5	-	-	-	mg/kg	<1,000	1,460	<1,300	<1,200								
Thallium	7440-28-0	-	-	3	mg/kg	<1.0	<1.2	<1.3	<1.2								
Vanadium	7440-62-2	1,100	390**	-	mg/kg	60.4	25.8	29.7	41.1								
Zinc	7440-66-6	110,000	23,000	930	mg/kg	50.9	74.6	62.8	77.4								

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The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

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						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Location:						MPD_H									
Sample Depth (ft bgs):						1-1.5		3-3.5		5-5.5		7-7.5		9-9.5	
Sample Elevation (ft msl):						15.5-16		13.5-14		11.5-12		9.5-10		7.5-8	
Client Sample ID:						MPD_H_-1.5		MPD_H_3-3.5		MPD_H_5-5.5		MPD_H_7-7.5		MPD_H_9-9.5	
Lab Sample ID:						JC7615-68A		JC7615-69A		JC7615-70A		JC7615-71A		JC7615-72A	
Date Sampled:						10/30/2015		10/30/2015		10/30/2015		10/30/2015		10/30/2015	
Matrix:						Soil		Soil		Soil		Soil		Soil	
						R	Q	R	Q	R	Q	R	Q	R	Q
Aluminum	7429-90-5	-	78,000	6,000	mg/kg	11,600	9,360	4,830	3,670	7,420					
Antimony	7440-36-0	450	31	6	mg/kg	<2.1 NJ-	<2.1 NJ-	<2.7 NJ-	<2.7 NJ-	<2.2 NJ-					
Arsenic	7440-38-2	19	19	19	mg/kg	3.4	7.8	<2.7	5.2	8.2					
Barium	7440-39-3	59,000	16,000	2,100	mg/kg	42.7	421	<27	48.3	34.8					
Beryllium	7440-41-7	140	16	0.7	mg/kg	<0.21	0.67	0.35	0.34	0.63					
Cadmium	7440-43-9	78	78	2	mg/kg	0.61	<0.53	<0.67	<0.56	<0.55					
Calcium	7440-70-2	-	-	-	mg/kg	8,520	2,000	3,000	37,600	3,340					
Chromium	7440-47-3	-	120,000	-	mg/kg	12.7	21.7	25.2	14	23.5					
Cobalt	7440-48-4	590	1,600	90	mg/kg	14.6	7.2	<6.7	<5.6	6.1					
Copper	7440-50-8	45,000	3,100	11,000	mg/kg	132	22.8	10.7	23.7	22.6					
Iron	7439-89-6	-	-	-	mg/kg	32,200	15,700	12,200	10,500	13,300					
Lead	7439-92-1	800	400	90	mg/kg	33.7	157	24.4	37.8	22.4					
Magnesium	7439-95-4	-	-	-	mg/kg	4,240	3,840	2,530	4,340	4,680					
Manganese	7439-96-5	5,900	11,000	65	mg/kg	285	260	126	115	205					
Mercury	7439-97-6	65	23	0.1	mg/kg	0.066	0.047	<0.032	0.072	<0.032					
Nickel	7440-02-0	23,000	1,600	205*	mg/kg	12.5	14.9	13	9.9	14.6					
Potassium	7740-09-7	-	-	-	mg/kg	<1,100	1,750	<1,300	<1,100	2,150					
Selenium	7782-49-2	5,700	390	11	mg/kg	<2.1	<2.1	<2.7	<2.2	<2.2					
Silver	7440-22-4	5,700	390	1	mg/kg	0.81	<0.53	<0.67	<0.56	<0.55					
Sodium	7440-23-5	-	-	-	mg/kg	2,830	1,180	<1,300	<1,100	<1,100					
Thallium	7440-28-0	-	-	3	mg/kg	<1.1	<1.1	<1.3	<1.1	<1.1					
Vanadium	7440-62-2	1,100	390**	-	mg/kg	113	35.1	27.7	14	31.9					
Zinc	7440-66-6	110,000	23,000	930	mg/kg	72.1	165	30.9	31.6	75.2					

Notes:

^a Elevated detection limit due to dilution required for high interfering element.

^b Elevated detection limit due to dilution required for matrix interference (indicated by failing internal standard on original analysis).

ft msl = feet mean sea level

ft bgs = feet below ground surface

mg/kg = milligram per kilogram

- = No Standard or Not Analyzed

*Nickel site specific impact to groundwater screening level method calculated using SPLP laboratory methods; SPLP = Synthetic Precipitation Leaching Procedure.

**The use of the USEPA Regional Soil Screening Level of 390 mg/kg for vanadium is proposed as an alternative remediation standard for the site. Based on: <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide-november-2015>

The groundwater elevation used for the evaluation of the Impact to Groundwater (IGW) exposure pathway is 5.2 feet NAVD.

Result exceeded criteria

Analytical Data Qualifiers:

< - The analyte was not detected at the stated reporting limit.

NJ- : Matrix spike recovery below control limits; result is an estimated value with potential low bias.

J - The reported result is an estimated value.

EJ - The reported value is estimated because of the presence of interference;

J+ - The result is estimated and may be biased high.

J- - The result is estimated and may be biased low.