Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0001-EY		EA0001-GB		EA0002-EY		EA0002-GB		EA0003-EY		EA0003-GB		EA0004-EY		EA0004-GB		EA0005-EY		EA0005-GB	
		Sampling Location:	1		1		2		2		3		3		4		4		5		5	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024	
Parameter	**EPA RSL Residential Soil HQ = 0.1 (mg/kg)**	**EPA RML Residential Soil HQ = 3.0 (mg/kg)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	7,700	230,000	**9900**		**9100**		**7500**		**9700**		**8100**		**7300**		**8800**		**8100**		**8200**		**7400**	
Antimony	3.1	94	**0.74**	J+	**0.88**	J	**0.61**	J+	**0.84**	J	**0.74**	J+	**1.1**	J	**0.47**	J+	**0.98**	J	**0.44**	J+	**0.77**	J
Arsenic	0.68	68	**15**		**7.7**	J-	**12**		**9.5**		**14**		**13**	J-	**19**		**15**		**16**	J	**10**	J-
Barium	1,500	46,000	**110**		**61**		**91**		**96**		**100**		**140**		**93**		**61**		**110**		**84**	
Beryllium	16	470	**0.59**		**0.7**		**0.48**		**0.72**		**0.46**		**0.64**		**0.6**		**0.79**		**0.53**		**0.61**	
Cadmium	0.71	21	**5.6**	J+	**1.2**		**1.6**	J+	**1.5**		**0.84**	J+	**0.89**		**2.1**	J+	**0.34**	J	**0.73**	J+	**0.52**	
Calcium	N/A	N/A	**3000**		**1700**		**14000**		**1600**		**1800**		**1700**		**1600**		**910**		**2300**		**520**	
Chromium	N/A	N/A	**46**		**17**	J+	**23**		**21**	J+	**18**		**15**	J+	**24**		**14**	J+	**18**		**11**	J+
Cobalt	2.3	70	**10**	J+	**12**		**7.3**	J+	**9.7**		**5.1**	J+	**5.5**		**7.2**	J+	**10**		**5.8**	J+	**6.2**	
Copper	310	9,400	**74**		**31**		**58**		**36**		**51**		**100**		**40**		**27**		**32**		**29**	
Iron	5,500	160,000	**28000**		**27000**	J+	**21000**		**26000**		**18000**		**18000**	J+	**23000**		**27000**		**21000**		**19000**	J+
Lead	200	200	**280**		**58**		**170**		**150**		**290**		**500**		**220**		**99**		**170**		**170**	
Magnesium	N/A	N/A	**4100**		**3400**		**3400**		**3500**		**1400**		**1200**		**2600**		**2500**		**1800**		**1200**	
Manganese	180	5,500	**430**		**300**		**320**		**260**		**260**		**240**		**290**		**330**		**400**		**360**	
Nickel	140	4,200	**38**		**41**	J+	**25**		**38**	J+	**16**		**15**	J+	**29**		**35**	J+	**16**		**15**	J+
Potassium	N/A	N/A	**1200**		**720**		**770**		**780**		**670**		**390**	J	**690**		**370**	J	**460**		**270**	J
Selenium	39	1200	0.92	U	**3**	UJ	0.93	U	**3.2**	UJ	**0.8**		**3.4**	UJ	0.97	U	**2.7**	UJ	0.78	U	**2.9**	UJ
Silver	39	1200	**1.2**		**0.85**	UJ	**0.57**		**0.91**	UJ	**0.39**		**0.97**	UJ	**0.61**		**0.78**	UJ	**0.2**		**0.82**	UJ
Sodium	N/A	N/A	180	U	**150**	J	190	U	**240**	J	160	U	**120**	J	190	U	**160**	J	160	U	**93**	J
Thallium	0.078	2.3	**0.31**		2.1	U	**0.21**		2.3	U	**0.16**		2.4	U	**0.29**		2	U	**0.31**		2.1	U
Vanadium	39	1200	**19**		**21**	J+	**16**		**21**	J+	**17**		**18**	J+	**19**		**19**	J+	**17**		**17**	J+
Zinc	2,300	70,000	**250**		**93**		**220**		**180**		**200**		**170**		**200**		**98**		**150**		**100**	
Mercury	0.71	21	**0.43**		**0.12**		**0.3**		**0.17**		**0.25**		**0.42**		**0.33**		**0.07**	J	**0.15**		**0.11**	

NOTES:
mg/kg = Milligrams per kilogram
DUP = Duplicate
EPA = U.S. Environmental Protection Agency
EY = Entire Yard (Composite) Sample
GB = Grab Sample
HQ = Hazard quotient
N/A = Not applicable
RML = Removal Management Levels
RSL = Regional Screening Levels
Q = Qualifier
Bolded results indicate detections
Shaded results indicate exceedance of screening value with correlating shading

Qualifiers
J = The result is an estimated quantity.
J+ = The result is an estimated quantity, the result may be biased high.
J- = The result is an estimated quantity, the result may be biased low.
U = The analyte was not detected above the quantitation limit.
UJ = The analyte was not detected. Additionally, the quantitation limit may be inaccurate or imprecise.

Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0006-EY		EA0006-GB		EA0007-EY		EA0007-EY-DUP		EA0007-EY-DUP		EA0007-GB		EA0008-EY		EA0008-GB		EA0009-EY		EA0009-GB	
		Sampling Location:	6		6		7		7		7		7		8		8		9		9	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/30/2024		10/30/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024		10/29/2024	
Parameter	**EPA RSL Residential Soil HQ = 0.1 (mg/kg)**	**EPA RML Residential Soil HQ = 3.0 (mg/kg)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	7,700	230,000	**4600**	J+	**6600**		**8400**		**8100**		**8300**		**7800**		**8900**		**8500**		**9200**		**10000**	
Antimony	3.1	94	**0.46**	J+	**0.98**	J	**0.4**	J+	0.4	U	**0.37**	J+	**0.87**	J	**0.58**	J	**1.1**	J	**0.37**	J+	**0.86**	J
Arsenic	0.68	68	**11**		**12**	J-	**15**		**14**		**14**	J	**11**		**16**	J	**17**		**13**	J	**10**	
Barium	1,500	46,000	**69**		**170**		**95**		**90**		**92**		**110**		**80**		**150**		**110**		**56**	
Beryllium	16	470	**0.31**		**0.81**		**0.5**		**0.49**		**0.46**		**0.65**		**0.55**		**0.74**		**0.49**		**0.78**	
Cadmium	0.71	21	**0.98**	J+	**1.3**		**0.74**	J+	**0.72**	J+	**0.75**	J+	**0.72**		**0.78**	J+	**1.7**		**0.66**	J+	**0.26**	J
Calcium	N/A	N/A	**4700**		**2900**		**3100**		**2900**		**2800**		**1700**		**3400**		**1800**		**5600**		**1100**	
Chromium	N/A	N/A	**14**		**14**	J+	**16**		**16**		**15**		**11**	J+	**18**		**15**	J+	**20**		**14**	J+
Cobalt	2.3	70	**4.9**	J+	**8.8**		**5.8**	J+	**5.6**	J+	**5.8**	J+	**7.1**		**8.1**	J+	**9.8**		**8.1**	J+	**12**	
Copper	310	9,400	**38**		**49**		**30**		**28**		**32**		**23**		**38**		**120**		**48**		**27**	
Iron	5,500	160,000	**19000**		**37000**	J+	**21000**		**21000**		**20000**		**24000**		**26000**		**28000**		**24000**		**31000**	
Lead	200	200	**130**		**320**		**180**		**160**		**180**		**310**		**100**		**360**		**130**		**26**	
Magnesium	N/A	N/A	**2500**	J+	**2200**		**1900**		**1900**		**1900**		**1800**		**2800**		**2100**		**3500**		**3000**	
Manganese	180	5,500	**270**		**540**		**370**		**370**		**370**		**390**		**370**		**420**		**470**		**310**	
Nickel	140	4,200	**18**		**25**	J+	**18**		**18**		**17**		**19**	J+	**24**		**30**	J+	**23**		**28**	J+
Potassium	N/A	N/A	**690**		**530**		**640**		**580**		**570**		**320**	J	**910**		**490**		**1000**		**640**	
Selenium	39	1200	0.99	U	**3.2**	UJ	0.96	U	1	U	0.84	U	**2.9**	UJ	0.95	U	**3.1**	UJ	0.92	U	**2.9**	UJ
Silver	39	1200	0.2	U	**0.9**	UJ	**0.19**		0.2	U	**0.21**		**0.82**	UJ	**0.19**		**0.9**	UJ	0.18	U	**0.84**	UJ
Sodium	N/A	N/A	200	U	**210**	J	190	U	200	U	170	U	**140**	J	190	U	**150**	J	180	U	**170**	J
Thallium	0.078	2.3	**0.21**		2.3	U	**0.24**		**0.22**		**0.25**		2.1	U	**0.3**		2.2	U	**0.23**		2.1	U
Vanadium	39	1200	**9.4**		**18**	J+	**17**		**16**		**16**		**18**	J+	**17**		**19**	J+	**17**		**22**	J+
Zinc	2,300	70,000	**180**		**290**		**170**		**160**		**160**		**170**		**160**		**200**		**210**		**72**	
Mercury	0.71	21	**0.11**		**0.27**		**0.11**		**0.12**				**0.08**	J	**0.1**	J	**0.1**	J	**0.2**		**0.12**	

NOTES:
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Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0010-EY		EA0010-GB		EA0011-EY		EA0011-GB		EA0012-EY		EA0012-GB		EA0013-EY		EA0013-GB		EA0014-EY		EA0014-GB	
		Sampling Location:	10		10		11		11		12		12		13		13		14		14	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/29/2024		10/29/2024		10/30/2024		10/30/2024		10/29/2024		10/29/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024	
Parameter	**EPA RSL Residential Soil HQ = 0.1 (mg/kg)**	**EPA RML Residential Soil HQ = 3.0 (mg/kg)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	7,700	230,000	**8500**		**7400**		**3800**	J+	**5700**		**8300**		**7400**		**8600**	J+	**8500**		**3900**	J+	**3300**	
Antimony	3.1	94	**0.56**	J+	**0.97**	J	0.4	U	**0.93**	J	**1**	J+	**1.4**	J	**0.65**	J+	**1.3**	J	**0.51**	J+	**1.5**	J
Arsenic	0.68	68	**18**		**14**		**9**		**12**		**18**	J	**12**		**18**		**17**		**12**		**18**	
Barium	1,500	46,000	**150**		**81**		**51**		**130**		**100**		**96**		**110**		**79**		**92**		**85**	
Beryllium	16	470	**0.63**		**0.7**		**0.26**		**0.65**		**0.44**		**0.56**		**0.67**		**0.77**		**0.31**		**0.47**	
Cadmium	0.71	21	**1.7**	J+	**1.2**		**0.74**	J+	**1.2**		**2.5**	J+	**1.2**		**2**	J+	**0.5**		**0.74**	J+	**0.74**	
Calcium	N/A	N/A	**4200**		**2400**		**10000**		**6500**		**2800**		**1800**		**5300**		**1400**		**22000**		**5300**	
Chromium	N/A	N/A	**26**		**18**	J+	**17**		**14**	J+	**27**		**14**	J+	**23**		**13**	J+	**18**		**12**	J+
Cobalt	2.3	70	**7.7**	J+	**8.2**		**4.2**	J+	**7.3**		**5.9**	J+	**6.1**		**7.7**	J+	**12**		**4.1**	J+	**4.3**	
Copper	310	9,400	**140**		**38**		**38**		**53**		**140**		**72**		**58**		**30**		**37**		**53**	
Iron	5,500	160,000	**25000**		**24000**		**15000**		**23000**		**20000**		**21000**		**27000**		**29000**		**16000**		**19000**	
Lead	200	200	**280**		**250**		**55**		**220**		**230**		**160**		**160**		**49**		**82**		**120**	
Magnesium	N/A	N/A	**2500**		**2300**		**2900**	J+	**3400**		**2000**		**1200**		**3300**	J+	**2500**		**7200**	J+	**2100**	
Manganese	180	5,500	**400**		**350**		**240**		**400**		**330**		**400**		**400**		**470**		**240**		**190**	
Nickel	140	4,200	**26**		**29**	J+	**14**		**23**	J+	**31**		**30**	J+	**26**		**27**	J+	**15**		**16**	J+
Potassium	N/A	N/A	**810**		**410**	J	**580**		**590**		**610**		**290**	J	**820**		**640**		**570**		**380**	J
Selenium	39	1200	0.88	U	**3.2**	UJ	0.99	U	**3.5**	UJ	0.9	U	**3.5**	UJ	0.95	U	**3.4**	UJ	0.9	U	**2.8**	UJ
Silver	39	1200	**0.38**		**0.91**	UJ	0.2	U	**1**	UJ	**0.82**		**1**	UJ	**0.57**		**0.98**	UJ	0.18	U	**0.79**	UJ
Sodium	N/A	N/A	180	U	**150**	J	200	U	**200**	J	180	U	**110**	J	190	U	**160**	J	180	U	**130**	J
Thallium	0.078	2.3	**0.26**		2.3	U	0.2	U	2.5	U	**0.28**		2.5	U	**0.34**		2.5	U	**0.3**		**0.72**	J
Vanadium	39	1200	**19**		**18**	J+	**8**		**18**	J+	**17**		**18**	J+	**18**		**20**	J+	**8.9**		**8.8**	J+
Zinc	2,300	70,000	**330**		**190**		**140**		**250**		**290**		**190**		**220**		**100**		**140**		**110**	
Mercury	0.71	21	**0.21**		**0.26**		**0.056**	J	**0.23**		**0.26**		**0.18**		**0.21**		**0.067**	J	**0.13**		**0.41**	

NOTES:
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EY = Entire Yard (Composite) Sample
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RML = Removal Management Levels
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Bolded results indicate detections
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Qualifiers
J = The result is an estimated quantity.
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Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0015-EY		EA0015-GB		EA0015-GB-DUP		EA0016-EY		EA0016-GB		EA0017-EY		EA0017-GB		EA0018-EY		EA0018-GB		EA0019-EY		EA0019-GB	
		Sampling Location:	15		15		15		16		16		17		17		18		18		19		19	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024		10/30/2024	
Parameter	EPA RSL Residential Soil HQ = 0.1 (mg/kg)	EPA RML Residential Soil HQ = 3.0 (mg/kg)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	7,700	230,000	**8700**	J+	**8000**		**7900**	J+	**9000**	J+	**7900**		**8900**		**8500**		**8000**	J+	**7400**		**9100**		**6300**	J-
Antimony	3.1	94	0.38	U	**0.71**	J	**0.72**	J	0.36	U	**0.82**	J	**0.93**	J	**3.7**	J	**0.48**	J+	**1.6**	J	**0.39**	J+	**0.92**	J
Arsenic	0.68	68	**15**		**12**		**11**		**14**		**11**		**16**		**11**		**14**		**12**		**16**		**11**	J
Barium	1,500	46,000	**50**		**34**		**35**		**100**		**62**		**660**		**8600**		**93**		**99**		**92**		**80**	
Beryllium	16	470	**0.47**		**0.6**		**0.59**		**0.49**		**0.63**		**0.7**		**0.77**		**0.5**		**0.65**		**0.56**		**0.61**	
Cadmium	0.71	21	**0.52**	J+	**0.48**		**0.36**	J	**0.84**	J+	**0.39**	J	**2.6**	J+	**4.6**		**1.2**	J+	**1.8**		**1.2**	J+	**1.3**	
Calcium	N/A	N/A	**1200**		**770**		**740**		**1700**		**650**		**4000**		**14000**		**1500**		**1300**		**3500**		**2400**	
Chromium	N/A	N/A	**15**		**11**	J+	**12**	J+	**16**		**11**	J+	**30**		**100**	J+	**16**		**15**	J+	**23**		**17**	J+
Cobalt	2.3	70	**6.2**	J+	**7**		**6.7**		**6.4**	J+	**7.3**		**8.1**	J+	**7.6**		**6.2**	J+	**7.3**		**8.8**	J+	**7.8**	
Copper	310	9,400	**24**		**17**		**16**		**43**		**20**		**75**		**200**		**50**		**82**		**53**		**73**	
Iron	5,500	160,000	**21000**		**21000**		**20000**	J+	**21000**		**21000**		**26000**		**22000**		**22000**		**22000**		**25000**		**20000**	J+
Lead	200	200	**35**		**26**		**24**		**210**		**300**		**500**		**4200**		**230**		**360**		**220**		**570**	J
Magnesium	N/A	N/A	**2000**	J+	**1700**		**1600**		**1900**	J+	**1700**		**2400**		**2200**		**1800**	J+	**1700**		**3200**		**2100**	
Manganese	180	5,500	**290**		**250**		**250**		**380**		**360**		**380**		**470**		**330**		**300**		**380**		**330**	J
Nickel	140	4,200	**17**		**19**	J+	**18**	J+	**18**		**24**	J+	**25**		**23**	J+	**18**		**23**	J+	**27**		**23**	J+
Potassium	N/A	N/A	**550**		**320**	J	**330**	J	**570**		**260**	J	**860**		**660**		**500**		**310**	J	**1100**		**540**	
Selenium	39	1200	0.96	U	**2.7**	UJ	3.1	U	0.91	U	**3.2**	UJ	0.96	U	**3.4**	UJ	0.97	U	**3**	UJ	0.88	U	**2.6**	UJ
Silver	39	1200	0.19	U	**0.77**	UJ	0.87	U	0.18	U	**0.9**	UJ	**0.37**		**0.97**	UJ	**0.21**		**0.87**	UJ	**0.24**		**0.73**	UJ
Sodium	N/A	N/A	190	U	**120**	J	**130**	J	180	U	**120**	J	190	U	**270**	J	190	U	**130**	J	180	U	**150**	J
Thallium	0.078	2.3	**0.22**		1.9	U	2.2	U	**0.24**		2.3	U	**0.32**		2.4	U	**0.27**		2.2	U	**0.25**		1.8	U
Vanadium	39	1200	**16**		**17**	J+	**16**	J+	**17**		**16**	J+	**19**		**18**	J+	**16**		**17**	J+	**19**		**16**	J+
Zinc	2,300	70,000	**100**		**67**		**66**		**220**		**100**		**680**		**5900**		**240**		**230**		**230**		**230**	
Mercury	0.71	21	**0.36**		**0.12**		**0.16**		**0.14**		**0.092**	J	**0.2**		**0.12**		**0.15**		**0.095**	J	**0.13**		**0.13**	

NOTES:
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Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0020-EY		EA0020-GB		EA0021-EY		EA0021-GB		EA0022-EY		EA0022-GB		EA0023-EY		EA0023-GB		EA0024-EY		EA0024-GB	
		Sampling Location:	20		20		21		21		22		22		23		23		24		24	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/30/2024		10/30/2024		10/31/2024		10/31/2024		10/30/2024		10/30/2024		10/31/2024		10/31/2024		10/30/2024		10/30/2024	
Parameter	**EPA RSL Residential Soil HQ = 0.1 (mg/kg)**	**EPA RML Residential Soil HQ = 3.0 (mg/kg)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	7,700	230,000	**8600**		**7200**		**8500**		**7300**		**8400**		**8200**	J+	**8700**		**8500**		**9200**		**7300**	
Antimony	3.1	94	**0.49**	J+	**1.4**	J	0.32	U	**0.71**	J	**0.41**	J+	**2.3**	J	0.35	U	**1.1**	J	**0.45**	J+	**1.1**	J
Arsenic	0.68	68	**13**		**12**		**11**		**11**		**14**		**12**		**12**		**15**		**16**		**10**	
Barium	1,500	46,000	**73**		**80**		**55**		**61**		**68**		**110**		**59**		**220**		**93**		**39**	
Beryllium	16	470	**0.54**		**0.66**		**0.43**		**0.6**		**0.5**		**0.65**		**0.48**		**1**		**0.66**		**0.58**	
Cadmium	0.71	21	**0.9**	J+	**1.1**		**0.56**	J+	**0.52**		**0.92**	J+	**1.6**		**0.56**	J+	**0.39**	J	**2**	J+	**0.77**	
Calcium	N/A	N/A	**2100**		**1500**		**1900**		**1300**		**1800**		**2500**		**1700**		**3200**		**8000**		**550**	
Chromium	N/A	N/A	**19**		**17**	J+	**12**		**9.4**	J+	**15**		**13**	J+	**14**		**9.7**	J+	**24**		**12**	J+
Cobalt	2.3	70	**6.6**	J+	**6.9**		**5.8**	J+	**6**		**6**	J+	**6.4**		**6.5**	J+	**6.8**		**6.6**	J+	**6.6**	
Copper	310	9,400	**45**		**30**		**24**		**17**		**33**		**30**		**26**		**23**		**39**		**24**	
Iron	5,500	160,000	**21000**		**21000**		**19000**		**18000**	J+	**20000**		**21000**	J+	**20000**		**16000**	J+	**22000**		**20000**	J+
Lead	200	200	**180**		**280**		**40**		**56**		**200**		**650**		**69**		**340**		**210**		**180**	
Magnesium	N/A	N/A	**2100**		**1800**		**1800**		**1300**		**2000**		**2000**		**2000**		**1300**		**4100**		**1600**	
Manganese	180	5,500	**280**		**270**		**250**		**250**		**230**		**310**		**300**		**310**		**320**		**250**	
Nickel	140	4,200	**22**		**22**	J+	**17**		**17**		**20**		**20**	J+	**18**		**18**		**22**		**23**	J+
Potassium	N/A	N/A	**650**		**330**	J	**590**		**370**	J	**640**		**270**	J	**620**		**280**	J	**620**		**310**	J
Selenium	39	1200	0.89	U	**3.2**	UJ	0.8	U	3.5	U	0.91	U	3.2	U	0.88	U	3.1	U	**1.1**		3	U
Silver	39	1200	**0.19**		**0.93**	UJ	0.16	U	1	U	**0.21**		0.92	U	0.18	U	0.89	U	**0.62**		0.87	U
Sodium	N/A	N/A	180	U	**130**	J	160	U	**150**	J	180	U	**150**	J	180	U	**230**	J	200	U	**120**	J
Thallium	0.078	2.3	**0.19**		2.3	U	**0.22**		2.5	U	**0.22**		2.3	U	**0.22**		2.2	U	**0.39**		2.2	U
Vanadium	39	1200	**17**		**17**	J+	**16**		**16**	J+	**16**		**18**	J+	**15**		**24**	J+	**19**		**18**	J+
Zinc	2,300	70,000	**170**		**120**		**110**		**75**		**160**		**190**		**120**		**140**		**210**		**170**	
Mercury	0.71	21	**0.21**	J+	**0.054**	J	**0.13**	J+	**0.14**		**0.18**	J+	**0.33**		**0.15**	J+	**0.099**	J	**0.3**	J+	**0.14**	

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Validated Analytical Results for Metals
East Avenue Study Area
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Metals		Sample Number:	EA0025-EY		EA0025-GB		EA0026-EY		EA0026-GB		EA0027-EY		EA0027-GB		EA0028-EY		EA0028-GB		EA0029-EY		EA0029-GB		EA0029-GB-DUP	
		Sampling Location:	25		25		26		26		27		27		28		28		29		29		29	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024	
Parameter	**EPA RSL Residential Soil HQ = 0.1 (mg/kg)**	**EPA RML Residential Soil HQ = 3.0 (mg/kg)**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Aluminum	7,700	230,000	**8900**		**6900**		**11000**		**7200**		**8600**		**9000**		**10000**		**8500**		**10000**		**5400**		**5100**	
Antimony	3.1	94	0.34	U	**0.82**	J	**0.62**	J+	**1.4**	J	**0.48**	J+	**1.1**	J	**0.37**	J+	**0.78**	J	**0.59**	J+	**8.4**		**12**	
Arsenic	0.68	68	**16**		**12**		**16**		**15**		**12**		**9.9**		**16**		**11**		**21**		**15**		**15**	
Barium	1,500	46,000	**71**		**66**		**95**		**120**		**59**		**79**		**80**		**92**		**120**		**280**		**290**	
Beryllium	16	470	**0.52**		**0.64**		**0.63**		**0.83**		**0.44**		**0.58**		**0.56**		**0.69**		**0.63**		**0.91**		**0.92**	
Cadmium	0.71	21	**1.2**	J+	**0.39**	J	**1.8**	J+	**3.2**		**0.6**	J+	**1.2**		**1.3**	J+	**0.66**		**1.3**	J+	**11**		**15**	
Calcium	N/A	N/A	**2500**		**760**		**3000**		**1300**		**2600**		**1100**		**3500**		**1100**		**3600**		**5600**		**5000**	
Chromium	N/A	N/A	**14**		**8.9**	J+	**27**		**26**	J+	**13**		**11**	J+	**25**		**14**	J+	**24**		**27**	J+	**24**	J+
Cobalt	2.3	70	**5.7**	J+	**6.2**		**8.8**	J+	**8.9**		**6.3**	J+	**5.9**		**8.6**	J+	**7.2**		**9.8**	J+	**8.2**		**8.8**	
Copper	310	9,400	**26**		**22**		**50**		**52**		**33**		**330**		**44**		**28**		**63**		**370**		**400**	
Iron	5,500	160,000	**19000**		**19000**	J+	**25000**		**24000**	J+	**20000**		**22000**	J+	**24000**		**21000**	J+	**29000**		**28000**	J+	**31000**	J+
Lead	200	200	**77**		**71**		**140**		**370**		**75**		**180**		**180**		**240**		**210**		**1100**		**1400**	
Magnesium	N/A	N/A	**1600**		**1200**		**3100**		**2500**		**2300**		**1200**		**2800**		**1900**		**3000**		**1300**		**1500**	
Manganese	180	5,500	**330**		**290**		**380**		**390**		**280**		**270**		**390**		**240**		**500**		**280**		**300**	
Nickel	140	4,200	**16**		**15**		**26**		**44**		**18**		**80**		**23**		**19**		**28**		**59**		**40**	
Potassium	N/A	N/A	**450**		**260**	J	**810**		**300**	J	**700**		**290**	J	**820**		**300**	J	**910**		**550**		**540**	
Selenium	39	1200	0.84	U	3.1	U	0.99	U	3.2	U	0.87	U	2.8	U	0.84	U	3.3	U	0.89	U	3.7	U	3.5	U
Silver	39	1200	**0.19**		0.88	U	**0.57**		0.93	U	0.17	U	**1.6**	J+	**0.3**		0.94	U	0.18	U	1.1	U	1	U
Sodium	N/A	N/A	170	U	**110**	J	200	U	**120**	J	170	U	**100**	J	170	U	**130**	J	180	U	**290**	J	**300**	J
Thallium	0.078	2.3	**0.25**		2.2	U	**0.29**		2.3	U	**0.2**		2	U	**0.25**		2.3	U	**0.33**		2.7	U	2.5	U
Vanadium	39	1200	**17**		**18**	J+	**21**		**19**	J+	**15**		**18**	J+	**19**		**19**	J+	**21**		**22**	J+	**24**	J+
Zinc	2,300	70,000	**130**		**76**		**210**		**260**		**140**		**240**		**190**		**150**		**300**		**610**		**720**	
Mercury	0.71	21	**0.2**	J+	**0.1**		**0.6**	J+	**0.32**		**0.11**	J+	**0.14**		**0.24**	J+	**0.61**		**0.18**	J+	**0.23**		**0.19**	

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Validated Analytical Results for Metals
East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0030-EY		EA0030-GB		EA0031-EY		EA0031-GB		EA0032-EY		EA0032-GB		EA0033-EY		EA0033-GB	
		Sampling Location:	30		30		31		31		32		32		33		33	
		Matrix:	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024	
Parameter	EPA RSL Residential Soil HQ = 0.1 (mg/kg)	EPA RML Residential Soil HQ = 3.0 (mg/kg)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	7,700	230,000	**10000**		**9100**		**9300**		**6600**		**11000**		**8800**	J+	**9500**		**11000**	J+
Antimony	3.1	94	**1.2**	J	**1.5**	J	**0.4**	J+	**0.7**	J	**0.51**	J+	**1.2**	J	**0.61**	J+	**1.7**	J
Arsenic	0.68	68	**18**		**18**	J-	**14**		**8.1**		**17**		**17**		**13**		**12**	
Barium	1,500	46,000	**83**		**96**		**130**		**64**		**140**		**110**		**75**		**140**	
Beryllium	16	470	**0.55**		**0.77**		**0.79**		**0.49**		**0.7**		**1**		**0.5**		**0.85**	
Cadmium	0.71	21	**1.1**	J+	**1.1**		**1**	J+	**0.59**		**1.1**	J+	**0.44**	J	**2.5**	J+	**0.78**	
Calcium	N/A	N/A	**1800**		**2500**		**7900**		**1900**		**3200**		**2300**		**3100**		**2000**	
Chromium	N/A	N/A	**21**		**22**	J+	**16**		**7.3**	J+	**22**		**13**	J+	**16**		**16**	J+
Cobalt	2.3	70	**8.8**	J+	**9.6**		**5.6**	J+	**3.7**	J	**9.2**	J+	**10**		**7.4**	J+	**10**	
Copper	310	9,400	**57**		**67**		**35**		**14**		**87**		**42**		**130**		**980**	
Iron	5,500	160,000	**26000**		**27000**	J+	**20000**		**17000**	J+	**26000**		**27000**	J+	**23000**		**39000**	J+
Lead	200	200	**140**		**210**		**180**		**88**		**170**		**91**		**100**		**230**	
Magnesium	N/A	N/A	**2700**		**2500**		**2400**		**940**		**2800**		**2400**		**2400**		**4100**	
Manganese	180	5,500	**360**		**320**		**510**		**650**		**530**		**400**		**350**		**250**	
Nickel	140	4,200	**24**		**36**		**23**		**19**		**26**		**28**		**21**		**26**	
Potassium	N/A	N/A	**890**		**600**		**690**		**300**	J	**940**		**450**	J	**950**		**2000**	
Selenium	39	1200	1	U	**3.3**	UJ	**0.96**		3	U	1	U	3.9	U	1	U	3.2	U
Silver	39	1200	0.21	U	**0.94**	UJ	0.18	U	0.85	U	**0.46**		1.1	U	0.21	U	0.9	U
Sodium	N/A	N/A	210	U	**170**	J	180	U	**97**	J	200	U	**170**	J	210	U	**330**	J
Thallium	0.078	2.3	**0.28**		2.4	U	**0.28**		2.1	U	**0.35**		2.8	U	**0.24**		2.3	U
Vanadium	39	1200	**19**		**20**		**17**		**17**	J+	**21**		**25**	J+	**18**		**22**	J+
Zinc	2,300	70,000	**190**	J	**170**	J-	**190**		**65**		**220**		**120**		**290**		**250**	
Mercury	0.71	21	**0.18**	J+	**0.17**		**0.15**	J+	**0.095**	J	**0.26**	J+	**0.2**		**0.32**	J+	**1.5**	

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East Avenue Study Area
October, 2024

Metals		Sample Number:	EA0034-EY		EA0034-EY-DUP		EA0034-EY-DUP		EA0034-GB		EA0035-EY		EA0035-GB		EA0036-EY		EA0036-GB		EA0037-EY		EA0037-GB	
		Sampling Location:	34		34		34		34		35		35		36		36		37		37	
		Matrix:	Soil		Soil		SO		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
		Units:	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
		Date Sampled:	10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024		10/31/2024	
Parameter	EPA RSL Residential Soil HQ = 0.1 (mg/kg)	EPA RML Residential Soil HQ = 3.0 (mg/kg)	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	7,700	230,000	**9100**		**8600**	J+	**8500**	J+	**7600**	J+	**8700**		**8400**	J+	**8700**		**8500**	J+	**11000**		**6500**	J+
Antimony	3.1	94	0.41	U	**0.4**	J+	**0.35**	J+	**1.3**	J	0.41	U	**0.89**	J	0.38	U	**0.65**	J	**0.7**	J+	**1.2**	J
Arsenic	0.68	68	**12**		**12**		**12**		**12**		**15**		**14**		**12**		**7**		**15**		**12**	
Barium	1,500	46,000	**88**		**86**		**160**		**120**		**71**		**63**		**66**		**42**		**130**		**150**	
Beryllium	16	470	**0.45**		**0.5**		**0.45**		**0.68**		**0.55**		**0.72**		**0.43**		**0.47**	J	**0.56**		**0.67**	
Cadmium	0.71	21	**0.62**	J+	**0.63**	J+	**0.65**	J+	**0.86**		**0.91**	J+	**0.38**	J	**0.45**	J+	**0.14**	J	**1.3**	J+	**1.3**	
Calcium	N/A	N/A	**2300**		**2800**		**2300**		**2400**		**6700**		**2200**		**1100**		**1500**		**3800**		**2200**	
Chromium	N/A	N/A	**17**		**17**		**16**		**14**	J+	**27**		**14**	J+	**13**		**8.3**	J+	**21**		**14**	J+
Cobalt	2.3	70	**6.6**	J+	**6.3**	J+	**6.3**	J+	**6.9**		**9.9**	J+	**8.6**		**4.8**	J+	**3.6**	J	**7.9**	J+	**7.5**	
Copper	310	9,400	**31**		**31**		**31**		**59**		**40**		**34**		**26**		**10**		**130**		**350**	
Iron	5,500	160,000	**20000**		**21000**		**20000**		**21000**	J+	**27000**		**27000**	J+	**19000**		**17000**	J+	**24000**		**21000**	J+
Lead	200	200	**150**		**160**		**160**		**230**		**66**		**58**		**120**		**80**		**340**		**360**	
Magnesium	N/A	N/A	**2100**		**2100**	J+	**2000**	J+	**1700**		**5300**		**3100**		**1400**		**1000**		**2300**		**1700**	
Manganese	180	5,500	**290**		**290**		**290**		**420**		**440**		**300**		**180**		**120**		**450**		**420**	
Nickel	140	4,200	**20**		**18**		**18**		**26**		**29**		**25**		**15**		**18**		**21**		**26**	
Potassium	N/A	N/A	**680**		**640**		**600**		**400**	J	**1300**		**630**		**470**		**190**	J	**1100**		**540**	
Selenium	39	1200	1	U	0.78	U	0.79	U	3.2	U	1	U	3.2	U	0.96	U	3.4	U	**0.96**		3.4	U
Silver	39	1200	0.21	U	**0.18**		**0.17**		0.93	U	0.21	U	0.93	U	0.19	U	0.96	U	**0.28**		0.97	U
Sodium	N/A	N/A	210	U	160	U	160	U	**140**	J	210	U	**180**	J	190	U	**120**	J	180	U	**120**	J
Thallium	0.078	2.3	**0.21**		**0.27**		**0.22**		2.3	U	**0.33**		2.3	U	**0.21**		2.4	U	**0.25**		2.4	U
Vanadium	39	1200	**17**		**16**		**15**		**18**	J+	**19**		**19**	J+	**17**		**18**	J+	**21**		**18**	J+
Zinc	2,300	70,000	**150**		**150**		**150**		**160**		**190**		**110**		**140**		**59**		**460**		**400**	
Mercury	0.71	21	**0.17**	J+	**0.17**				**0.25**		**0.13**	J+	**0.11**	J	**0.14**	J+	**0.051**	J	**0.57**		**0.45**	J+

NOTES:
mg/kg = Milligrams per kilogram
DUP = Duplicate
EPA = U.S. Environmental Protection Agency
EY = Entire Yard (Composite) Sample
GB = Grab Sample
HQ = Hazard quotient
N/A = Not applicable
RML = Removal Management Levels
RSL = Regional Screening Levels
Q = Qualifier
Bolded results indicate detections
Shaded results indicate exceedance of screening value with correlating shading

Qualifiers
J = The result is an estimated quantity.
J+ = The result is an estimated quantity, the result may be biased high.
J- = The result is an estimated quantity, the result may be biased low.
U = The analyte was not detected above the quantitation limit.
UJ = The analyte was not detected. Additionally, the quantitation limit may be inaccurate or imprecise.