APPENDIX A
Site Investigation Photo Plates

Comment

Strata
0-0.05 m begl: Made Ground - Minor vegetation over ashy soil.
0.05 to 0.3 m begl: Made Ground - Black ash with minor brick contamination.
0.3 – 1.5 m begl: Made Ground - Black ash, clinker and red brick.

Trial pit terminated at 1.5 m.

Sampling
ES 0.5-1.25 m

Project
173367 - Carlton Colliery

Reference
TP101

Date
9th April 2019

Originator
MJML

AA Environmental Limited
Units 4-8 Cholswell Court
Shippon, Abingdon
OX13 6HX
T: (01235) 536042
F: (01235) 523849
info@aae-llp.com
www.aae-llp.com

Comment

Strata
0-0.3 m begl: Made Ground – black ash, clinker, brick, stone, ceramics
0.3–1.5 m begl: Made Ground consisting predominantly of ash, red burnt shale, clinker and brick.

Sampling
ES 0.5-1.0 m
ES 1.5-1.5 m

Project
173367 - Carlton Colliery

Reference
TP102

Date
9th April 2019

Originator
MJML

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Shippon, Abingdon
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Comment *Strata* 0-0.5 m begl: Made Ground – ash, soil, clinker, brick, stone, red burnt shale, clinker and brick. Potential ACM fragment noted in material. > 0.5 m begl: Made Ground - reworked mudstone (colliery spoil) *Sampling* ES 0.0-0.5 m	**Project** 173367 - Carlton Colliery **Reference** TP103 **Date** 9th April 2019 **Originator** MJML

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www.aae-llp.com

Comment

Strata
0.0-0.5 m begl: Made ground consisting of black ash and clinker.
0.5-1.0 m begl: Made ground consisting of blank clinker and ash, burnt shale and brick.
1.0-1.8 m begl: red burnt shale and clinker: Material was significantly smouldering.

Sampling
ES 0.5-1.0
ES 1.0-1.8

Project
173367 - Carlton Colliery

Reference
TP104

Date
9th April 2019

Originator
MJML

Environmental Consultants

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Comment

Strata
0.0-0.3 m begl: Made ground consisting of black ash and clinker.
0.3-1.8 m begl: Made ground consisting of clinker, burnt shale and brick. Material was warm and minor evidence of smouldering.
>1.8 m begl: Made ground - reworked mudstone (colliery spoil)

Sampling
ES 0.0-1.0
ES 1.0-1.8

Project
173367 - Carlton Colliery

Reference
TP105

Date
9th April 2019

Originator
MJML

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Comment

Strata
0-0.05 m begl: Made Ground - vegetation on thin layer of soil and brick;
0.05-2.0 m begl: Made Ground reworked mudstone with minor fragments of brick and stone
0-2.0 m begl: Made ground - reworked mudstone (colliery spoil)

Sampling
ES 0.0-2.0 m

Project
173367 - Carlton Colliery

Reference
TP106

Date
9th April 2019

Originator
MJML

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Environmental Consultants

Comment

Strata
0-0.75 m begl: Made Ground –ash, clinker, brick, soil, stone and ceramic. Suspected ACM fragment observed.
0.75–2.0 m begl: Made Ground consisting predominantly of ash, red burnt shale, clinker and brick.

Broken metal pipe filled with tar within soil matrix (0.5 m).

Sampling
ES 0-0.5 m (tar)
ES 0.25-0.75 m
ES 1.2-2.0 m

Project
173367 - Carlton Colliery

Reference
TP107

Date
9th April 2019

Originator
MJML

AA Environmental Limited
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Comment

Strata
0-0.5 m begl: Made Ground - vegetation over ash and soil.
0.5-3 m begl: Made Ground - Black coal ash and clinker.

Sampling
ES 0-1.3 m

Project
173367 - Carlton Colliery

Reference
TP108

Date
9th April 2019

Originator
MJML

Environmental Consultants

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Shippon, Abingdon
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Comment *Stockpile SP1* Mixed ash and brick and pipe Potential ACM noted within matrix	**Project** 173367 - Carlton Colliery
	Reference SP1
	Date 9th April 2019
	Originator MJML
	Environmental Consultants **AA Environmental Limited** Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com

Comment Mixed clinker and burnt shale	**Project** 173367 - Carlton Colliery
	Reference SP2
	Date 9th April 2019
	Originator MJML
	Environmental Consultants **AA Environmental Limited** Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com

Comment Demolition arisings Identified potential ACM	**Project** 173367 - Carlton Colliery
	Reference SP3
	Date 9th April 2019
	Originator MJML
	Environmental Consultants **AA Environmental Limited** Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com

Comment Material appears to be top and sub-soil with some Made Ground	**Project** 173367 - Carlton Colliery
	Reference SP4
	Date 9th April 2019
	Originator MJML
	Environmental Consultants **AA Environmental Limited** Units 4-8 Cholswell Court Shippon, Abingdon OX13 6HX T: (01235) 536042 F: (01235) 523849 info@aae-llp.com www.aae-llp.com

APPENDIX B
Certificates of Analysis

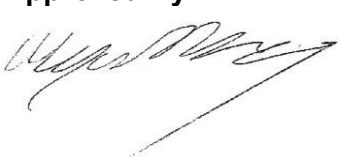
Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	19-12605-1
Initial Date of Issue:	17-Apr-2019
Client	AA Environmental Ltd
Client Address:	Units 4 to 8 Cholswell Court Shippon Abingdon Oxfordshire OX136HX
Contact(s):	Ed Brown Henry Austin Ioannis Markidis Jack Taylor John McCusker Mark Anderson Matthew Lawman Richard Heath Sam Muir Tomos Eaves
Project	173367 - Carlton Colliery, Shaw Lane

Quotation No.:		**Date Received:**	11-Apr-2019
Order No.:		**Date Instructed:**	11-Apr-2019
No. of Samples:	14		
Turnaround (Wkdays):	4	**Results Due:**	16-Apr-2019
Date Approved:	17-Apr-2019		

Approved By:



Details: Glynn Harvey, Laboratory Manager

Chemtest
The right chemistry to deliver results

Results - Leachate

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd			**Chemtest Job No.:**		19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:			**Chemtest Sample ID.:**		809362	809364	809366	809367	809368	809369	809370	809375
			Client Sample ID.:		TP101	TP102	TP104	TP104	TP105	TP105	TP106	TP108
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.50	1.00	0.50	1.00	0.00	1.00	0.00	0.00
			Bottom Depth (m):		1.25	1.50	1.00	1.80	1.00	1.80	2.00	1.30
			Date Sampled:		09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Sulphate	U	1220	mg/l	1.0	26	43	33	74	170	830	24	310
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Arsenic (Dissolved)	U	1450	µg/l	1.0	< 1.0	1.5	3.3	1.4	< 1.0	< 1.0	< 1.0	< 1.0
Boron (Dissolved)	U	1450	µg/l	20	< 20	40	23	< 20	< 20	< 20	< 20	< 20
Cadmium (Dissolved)	U	1450	µg/l	0.080	< 0.080	< 0.080	< 0.080	< 0.080	0.096	< 0.080	< 0.080	< 0.080
Copper (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	9.5	< 1.0	< 1.0	4.1
Lead (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Selenium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	38	12	< 1.0	5.3
Chromium (Trivalent)	N	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Chromium (Hexavalent)	U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20

Chemtest
The right chemistry to deliver results

Results - Soil

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd			**Chemtest Job No.:**		19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:			**Chemtest Sample ID.:**		809362	809363	809364	809365	809366	809367	809368	809369	809370
			Client Sample ID.:		TP101	TP102	TP102	TP103	TP104	TP104	TP105	TP105	TP106
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.50	0.50	1.00	0.00	0.50	1.00	0.00	1.00	0.00
			Bottom Depth (m):		1.25	1.00	1.50	0.50	1.00	1.80	1.00	1.80	2.00
			Date Sampled:		09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
			Asbestos Lab:		DURHAM	DURHAM		DURHAM	DURHAM		DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
ACM Type	U	2192		N/A	-	-		-	Fibres/Clumps		-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected		No Asbestos Detected	Amosite		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-		-	Stereo Microscopy		-	-	-
Asbestos by Gravimetry	U	2192	%	0.001					<0.001				
Total Asbestos	N	2192	%	0.001					<0.001				
Moisture	N	2030	%	0.020	14	8.7	28	12	13	8.9	9.2	14	21
Soil Colour	N	2040		N/A	Black,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,	Brown,
Other Material	N	2040		N/A	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,	Stones,
Soil Texture	N	2040		N/A	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,	Sand,
pH	M	2010		N/A	7.9	11.6		9.5	8.2		6.0	7.6	8.7
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	1.3	1.2	1.5	1.6	1.0	< 0.40	1.1	0.68	0.94
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.21	0.71	0.34	0.73	0.12	0.18	0.34	1.2	0.18
Calorific Value	N	2140	MJ/kg	0.10	21	0.48	5.2		4.3	< 0.10	8.6	0.74	0.23
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	1.5	19		2.9	10		5.6	3.9	15
Arsenic	M	2450	mg/kg	1.0	61	13	40	23	39	9.7	25	22	13
Cadmium	M	2450	mg/kg	0.10	0.15	0.24	0.23	0.78	0.53	< 0.10	0.14	< 0.10	0.14
Chromium	M	2450	mg/kg	1.0	8.9	33		45	24		24	14	460
Copper	M	2450	mg/kg	0.50	46	37	58	32	96	27	67	41	34
Mercury	M	2450	mg/kg	0.10	0.20	0.10	< 0.10	0.13	0.12	< 0.10	< 0.10	< 0.10	0.27
Nickel	M	2450	mg/kg	0.50	21	23	28	24	48	20	45	25	34
Lead	M	2450	mg/kg	0.50	59	98	110	65	61	8.7	56	13	31
Selenium	M	2450	mg/kg	0.20	1.6	< 0.20	0.84	< 0.20	0.62	< 0.20	0.57	0.41	0.54
Vanadium	U	2450	mg/kg	5.0	20	30	33	29	40	22	43	29	90
Zinc	M	2450	mg/kg	0.50	48	100	67	86	160	22	59	60	83
Chromium (Trivalent)	N	2490	mg/kg	1.0			17			8.8			
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	48	5.1		3.2	18		20	3.2	2.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	[C] < 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	[C] < 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	4.3	[C] < 1.0		< 1.0	< 1.0		8.6	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	1.7	[C] < 1.0		< 1.0	< 1.0		3.8	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	1.4	[C] < 1.0		< 1.0	< 1.0		8.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	1.5	[C] < 1.0		< 1.0	< 1.0		16	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	[C] 59		< 1.0	< 1.0		170	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	[C] < 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0

Chemtest
The right chemistry to deliver results

Results - Soil

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd					**Chemtest Job No.:**	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:					**Chemtest Sample ID.:**	809362	809363	809364	809365	809366	809367	809368	809369	809370
					Client Sample ID.:	TP101	TP102	TP102	TP103	TP104	TP104	TP105	TP105	TP106
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.50	0.50	1.00	0.00	0.50	1.00	0.00	1.00	0.00
					Bottom Depth (m):	1.25	1.00	1.50	0.50	1.00	1.80	1.00	1.80	2.00
					Date Sampled:	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
					Asbestos Lab:	DURHAM	DURHAM		DURHAM	DURHAM		DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	8.8	[C] 59		< 5.0	< 5.0		200	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	[C] < 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	[C] < 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	3.9	[C] < 1.0		< 1.0	< 1.0		8.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	1.5	[C] < 1.0		< 1.0	< 1.0		1.6	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	2.0	[C] 4.3		< 1.0	< 1.0		6.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	[C] 110		< 1.0	< 1.0		4.3	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	[C] 390		< 1.0	< 1.0		89	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	[C] 22		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	7.4	[C] 530		< 5.0	< 5.0		110	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	16	[C] 590		< 10	< 10		310	< 10	< 10
Naphthalene	M	2700	mg/kg	0.10	< 0.10	1.9		< 0.10	8.2		< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	0.59		< 0.10	1.3		< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	0.67		< 0.10	0.36		< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	1.0		< 0.10	1.9		< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	20		< 0.10	3.0		< 0.10	0.54	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	3.7		< 0.10	0.32		< 0.10	0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	25		< 0.10	1.3		< 0.10	0.37	0.56
Pyrene	M	2700	mg/kg	0.10	< 0.10	23		< 0.10	1.6		< 0.10	0.47	0.64
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	9.0		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	9.4		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	4.0		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	7.4		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	4.7		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	1.3		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	4.8		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	130		< 2.0	18		< 2.0	< 2.0	< 2.0
Benzene	M	2760	µg/kg	1.0	< 1.0	[C] < 1.0			< 1.0		37	< 1.0	
Toluene	M	2760	µg/kg	1.0	< 1.0	[C] < 1.0			< 1.0		110	< 1.0	
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	[C] < 1.0			< 1.0		9.7	< 1.0	
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	[C] < 1.0			< 1.0		62	< 1.0	
o-Xylene	M	2760	µg/kg	1.0	< 1.0	[C] < 1.0			< 1.0		26	< 1.0	
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30		< 0.30	< 0.30		< 0.30	< 0.30	< 0.30

Chemtest
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Results - Soil

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd			**Chemtest Job No.:**		19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:			**Chemtest Sample ID.:**		809371	809372	809373	809374	809375
			Client Sample ID.:		TP106	TP107(Tar)	TP107	TP107	TP108
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		2.00	0.00	0.25	1.20	0.00
			Bottom Depth (m):		2.20	0.50	0.75	2.00	1.30
			Date Sampled:		09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
			Asbestos Lab:		DURHAM		DURHAM	DURHAM	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**					
ACM Type	U	2192		N/A	-		-	-	
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected		No Asbestos Detected	No Asbestos Detected	
ACM Detection Stage	U	2192		N/A	-		-	-	
Asbestos by Gravimetry	U	2192	%	0.001					
Total Asbestos	N	2192	%	0.001					
Moisture	N	2030	%	0.020	8.4	< 0.020	11	12	11
Soil Colour	N	2040		N/A	Brown,	Brown	Brown,	Brown,	Black,
Other Material	N	2040		N/A	Stones,	Stones	Stones,	Stones,	Stones,
Soil Texture	N	2040		N/A	Sand,	Sand	Sand,	Sand,	Sand,
pH	M	2010		N/A	6.1		9.0	8.4	
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	0.61		0.75	0.82	0.63
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.13		0.085	0.060	0.43
Calorific Value	N	2140	MJ/kg	0.10	2.5		1.8	0.88	5.5
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50		0.80	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	2.5		6.4	4.4	
Arsenic	M	2450	mg/kg	1.0	12		27	22	16
Cadmium	M	2450	mg/kg	0.10	< 0.10		1.1	0.35	0.24
Chromium	M	2450	mg/kg	1.0	28		34	20	
Copper	M	2450	mg/kg	0.50	41		79	49	52
Mercury	M	2450	mg/kg	0.10	< 0.10		0.23	0.12	< 0.10
Nickel	M	2450	mg/kg	0.50	31		40	31	45
Lead	M	2450	mg/kg	0.50	18		140	52	32
Selenium	M	2450	mg/kg	0.20	0.31		0.25	0.49	0.45
Vanadium	U	2450	mg/kg	5.0	18		24	21	17
Zinc	M	2450	mg/kg	0.50	73		230	110	110
Chromium (Trivalent)	N	2490	mg/kg	1.0					18
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	4.9		8.0	8.6	
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	10	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	10	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	27	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	3300	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	23000	36	< 1.0	4.4
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	1700	< 1.0	< 1.0	< 1.0

Chemtest
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Results - Soil

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd			**Chemtest Job No.:**		19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:			**Chemtest Sample ID.:**		809371	809372	809373	809374	809375
			Client Sample ID.:		TP106	TP107(Tar)	TP107	TP107	TP108
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		2.00	0.00	0.25	1.20	0.00
			Bottom Depth (m):		2.20	0.50	0.75	2.00	1.30
			Date Sampled:		09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
			Asbestos Lab:		DURHAM		DURHAM	DURHAM	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**					
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	28000	36	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	20	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	35	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	700	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	2700	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	83000	68	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	11000	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	98000	68	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	130000	100	< 10	< 10
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.53	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.99	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Benzene	M	2760	µg/kg	1.0	< 1.0				
Toluene	M	2760	µg/kg	1.0	< 1.0				
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0				
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0				
o-Xylene	M	2760	µg/kg	1.0	< 1.0				
Total Phenols	M	2920	mg/kg	0.30	< 0.30		< 0.30	< 0.30	

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
809363		TP102		09-Apr-2019	C	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
1450	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2140	Calorific Value	Calorific Value	Bomb Calorimeter
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.

Test Methods

SOP	Title	Parameters included	Method summary
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX B
Consolidated contamination results

Consolidated Soil Results - Residential with Homegrown Produce

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8	WS9	WS10	WS11	TP35	TP36	TP37	TP38	TP39	TP40	TP41	TP42	TP43	TP44	SU1	SU2	TP1	TP2	TP3	TP4	TP5	TP7
							Sample Ref	E855	E856	E857	E858	E859	E860	E861	E862	E863	E864	E865	E866	E867	E868	E869	E870	E871	E872	E873	E874	E875	E876	E877	E534	E535	E536	E537	E538	E540
							Depth (top)	0.2	1.6	2.2	0.2	1	0.5	1.9	0.1	1.2	0.5	0.5	0.5	1.2	0.5	1.6	0.7	0.3	1.4	0.8	0.5	2.1	GL	GL	2.1	0.9	0.4	1	1	0.2
							Depth (bottom)	0.4	1.8	2.4	0.4	1.2	0.7	2.1	0.3	1.9	0.7	0.7																	
							Lab Report	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1102	1102	1102	1102	1102	1102
							Sample Date																													
							Originator																													
							Strata	TS	NAT-CL	NAT	NAT	MG	MG	MG	MG	MG	NAT-CL	MG		NAT-CL	MG	MG	MG	TS	NAT-CL	NAT-CL		NAT			NAT	NAT-CL	NAT-CL	NAT-CL	NAT-CL	TS
pH	pH unit	0.1	6 to 9																																	
Boron (Hot Water Soluble)	mg/kg	0.4	290	1.6	13																															
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	**5**	**5**	5	5
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10																															
Arsenic	mg/kg	1	37	260	69	16	33	**64**	8	27	**68**	8	9	19	32	6	28	6	9	**45**	23	**39**	22	9	**56**	8	7	**84**	**120**	3	26	36	22	2	8
Cadmium	mg/kg	0.1	11	7.5	69		0.9	4.8	4	0.7	0.9	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	1.4	0.5	0.6	0.5	0.5	1	0.5	0.5	1.1	1.5	0.5	1.7	1.4	0.7	0.5	0.5
Chromium	mg/kg	1	910	460	66		17	49	26	22	7	9	8	8	7	7	2	10	9	10	14	10	9	7	17	13	20	7	21	2	10	61	22	14	25
Copper	mg/kg	0.5	2400	820	69		66	180	74	52	61	100	45	84	52	14	71	14	15	820	46	53	61	15	68	12	28	73	18	75	25	170	43	42	20
Mercury	mg/kg	0.1	1.2	0.6	69		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
Nickel	mg/kg	0.5	180	180	69		18	180	72	18	25	42	30	36	19	11	20	17	9	26	27	15	25	8	31	10	36	32	6	21	32	110	16	18	22
Lead	mg/kg	0.5	200	1670	69	3	90	160	53	64	35	44	28	18	36	21	66	17	25	**1670**	140	41	120	30	89	24	20	54	33	14	42	71	40	11	19
Selenium	mg/kg	0.2	250	22	69		4	22	10	1.9	1.5	2.9	1.6	2.6	2.1	2.2	3.6	1.5	1.4	2	1.9	2.3	1.9	1.4	1.9	1.7	1.3	2.6	0.6	1	1.7	9.3	3.5	0.8	0.7
Vanadium	mg/kg	5	410	90	13																															
Zinc	mg/kg	0.5	3700	850	69		180	190	160	71	35	20	91	70	68	68	93	46	57	850	83	69	51	66	140	43	81	77	12	9	19	130	32	39	73
Chromium (Hexavalent)	mg/kg	0.5	6	0.5	13																															
Total Organic Carbon	%	0.2	3	48	10	9																														
Aliphatic TPH >C5-C6	mg/kg	0.1	42	1	11																															
Aliphatic TPH >C6-C8	mg/kg	0.1	100	1	11																															
Aliphatic TPH >C8-C10	mg/kg	0.1	27	10	11																															
Aliphatic TPH >C10-C12	mg/kg	1	130	10	11																															
Aliphatic TPH >C12-C16	mg/kg	1	1100	27	11																															
Aliphatic TPH >C16-C21	mg/kg	1	65000	3300	11																															
Aliphatic TPH >C21-C35	mg/kg	1	65000	23000	11																															
Aliphatic TPH >C35-C44	mg/kg	1	65000	1700	11																															
Total Aliphatic Hydrocarbons	mg/kg	5		28000	11																															
Aromatic TPH >C5-C7	mg/kg	0.1	70	1	11																															
Aromatic TPH >C7-C8	mg/kg	0.1	130	1	11																															
Aromatic TPH >C8-C10	mg/kg	0.1	34	20	11																															
Aromatic TPH >C10-C12	mg/kg	1	74	35	11																															
Aromatic TPH >C12-C16	mg/kg	1	140	700	11	1																														
Aromatic TPH >C16-C21	mg/kg	1	260	2700	11	1																														
Aromatic TPH >C21-C35	mg/kg	1	1100	83000	11	1																														
Aromatic TPH >C35-C44	mg/kg	1	1100	11000	11	1																														
Total Aromatic Hydrocarbons	mg/kg	5		98000	11																															
TPH C6-C10	mg/kg	1																																		
TPH C10-C21	mg/kg	1																																		
TPH C21-C40	mg/kg	1																																		
Total Petroleum Hydrocarbons	mg/kg	10		130000	67		20	20	20	20	20	20	20	59	20	20	56	20	20	58	73	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Naphthalene	mg/kg	0.1	2.3	8.2	15	1																														
Acenaphthylene	mg/kg	0.1	170	1.3	15																															
Acenaphthene	mg/kg	0.1	210	0.67	15																															
Fluorene	mg/kg	0.1	170	1.9	15																															
Phenanthrene	mg/kg	0.1	95	20	15																															
Anthracene	mg/kg	0.1	2400	3.7	15																															
Fluoranthene	mg/kg	0.1	280	25	15																															
Pyrene	mg/kg	0.1	620	23	15																															
Benzo[a]anthracene	mg/kg	0.1	7.2	9	15	1																														
Chrysene	mg/kg	0.1	15	9.4	15																															
Benzo[b]fluoranthene	mg/kg	0.1	2.6	10	15	1																														
Benzo[k]fluoranthene	mg/kg	0.1	77	4	15																															
Benzo[a]pyrene	mg/kg	0.1	2.2	7.4	15	1																														
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	27	4.7	15																															
Dibenz(a,h)Anthracene	mg/kg	0.1	0.24	1.3	15	1																														
Benzo[g,h,i]perylene	mg/kg	0.1	320	4.8	15																															
Total Of 16 PAH's	mg/kg	2		130	24									20			20			20	20															
Total Phenols	mg/kg	0.3	280	280	66		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Asbestos	Type	If present	Detected			1	NAD								NAD		NAD	NAD	NAD		NAD		NAD										NAD	0		NAD
Asbestos % (if present)	%	0.001		0.001	1																															
Benzene	mg/kg	0.1	0.087	37	13	13																											**2**				
Toluene	mg/kg	0.1	130	110	13																												2				
Ethylbenzene	mg/kg	0.1	47	9.7	13																												9				
M-Xylene	mg/kg	0.1	59	62	13	1																											13				
P-Xylene	mg/kg	0.1	56	62	13	1																											13				
O-Xylene	mg/kg	0.1	60	26	13																												6				

Consolidated Soil Results - Residential with Homegrown Produce

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17	TP18	TP19	TP20	TP21	TP22	TP23	TP24	TP25	TP26	TP27	TP28	TP29	TP30	TP31	TP32	TP33	TP34	TP101	TP102
							Sample Ref	E541	E542	E543	E544	E545	E546	E547	E548	E549	E550	E551	E552	E553	E554	E555	E557	E558	E559	E560	E561	E562	E563	E564	E565	E566	E567	E568	809362	809363
							Depth (top)	2.9	0.2	2.6	2.1	0.5	1.4	3	1.3	1.9	0.4	1.6	2.6	0.5	1	1	2.6	0.5	1.3	2.8	3.2	0.5	0.4	1.2	0.5	1	3.5	0.4	0.50	0.50
							Depth (bottom)																												1.25	1.00
							Lab Report	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	19-12605	19-12605
							Sample Date																												9/4/19	9/4/19
							Originator																													
							Strata	NAT-CL	MG	NAT	NAT	MG	MG	MG	MG	MG	TS	MG	NAT-GR	TS	MG	MG	MG	TS	MG	NAT-CL	NAT-GR	MG	MG	MG	MG	MG	MG	MG	MG	MG
pH	pH unit	0.1	6 to 9																																	
Boron (Hot Water Soluble)	mg/kg	0.4	290	1.6	13																														1.3	1.2
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	*0.5*	*0.5*
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10																														1.5	19
Arsenic	mg/kg	1	37	260	69	16	8	11	8	6	32	12	17	33	20	36	32	35	**58**	36	22	**260**	**38**	33	13	15	30	**42**	36	**51**	27	30	**40**	**61**	13
Cadmium	mg/kg	0.1	11	7.5	69		0.7	0.5	0.5	0.5	1.3	0.5	0.6	7.5	0.6	2.2	0.8	1	2.6	1.4	0.7	7.2	1.2	1	0.7	0.7	1.6	1.2	1	1.6	0.8	1	1.1	0.15	0.24
Chromium	mg/kg	1	910	460	66		24	12	18	11	13	7	15	14	5	15	15	17	19	61	22	5	13	11	24	24	22	14	7	12	10	8	10	8.9	33
Copper	mg/kg	0.5	2400	820	69		30	21	26	15	100	38	150	89	43	99	110	59	150	170	43	56	100	63	60	35	100	330	37	93	63	55	57	46	37
Mercury	mg/kg	0.1	1.2	0.6	69		0.3	0.3	0.3	0.3	0.3	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	*0.1*
Nickel	mg/kg	0.5	180	180	69		49	16	24	21	34	24	36	34	17	33	30	38	53	110	16	35	40	30	52	52	43	140	12	38	27	28	28	21	23
Lead	mg/kg	0.5	200	1670	69	3	52	14	19	16	**370**	82	180	**220**	39	45	10	19	67	71	40	74	96	35	66	84	67	150	29	79	45	140	36	59	98
Selenium	mg/kg	0.2	250	22	69		0.5	1	0.5	0.8	1.8	1	1	1.2	1.6	1.3	0.7	0.5	0.6	9.3	3.5	3.3	1.8	1.3	1.6	0.5	0.9	2.7	1.7	1.8	1.5	3.5	1.8	1.6	*0.2*
Vanadium	mg/kg	5	410	90	13																														20	30
Zinc	mg/kg	0.5	3700	850	69		130	28	39	38	230	80	170	370	27	170	89	34	240	130	32	55	120	100	200	190	140	93	27	110	85	79	84	48	100
Chromium (Hexavalent)	mg/kg	0.5	6	0.5	13																														*0.5*	*0.5*
Total Organic Carbon	%	0.2	3	48	10	9																													**48**	**5.1**
Aliphatic TPH >C5-C6	mg/kg	0.1	42	1	11																														1	**[C] 1.0**
Aliphatic TPH >C6-C8	mg/kg	0.1	100	1	11																														1	**[C] 1.0**
Aliphatic TPH >C8-C10	mg/kg	0.1	27	10	11																														4.3	**[C] 1.0**
Aliphatic TPH >C10-C12	mg/kg	1	130	10	11																														1.7	**[C] 1.0**
Aliphatic TPH >C12-C16	mg/kg	1	1100	27	11																														1.4	**[C] 1.0**
Aliphatic TPH >C16-C21	mg/kg	1	65000	3300	11																														1.5	**[C] 1.0**
Aliphatic TPH >C21-C35	mg/kg	1	65000	23000	11																														*1*	**[C] 59**
Aliphatic TPH >C35-C44	mg/kg	1	65000	1700	11																														*1*	**[C] 1.0**
Total Aliphatic Hydrocarbons	mg/kg	5		28000	11																														8.8	[C] 59
Aromatic TPH >C5-C7	mg/kg	0.1	70	1	11																														1	**[C] 1.0**
Aromatic TPH >C7-C8	mg/kg	0.1	130	1	11																														1	[C] 1.0
Aromatic TPH >C8-C10	mg/kg	0.1	34	20	11																														3.9	[C] 1.0
Aromatic TPH >C10-C12	mg/kg	1	74	35	11																														1.5	[C] 1.0
Aromatic TPH >C12-C16	mg/kg	1	140	700	11	1																													2	[C] 4.3
Aromatic TPH >C16-C21	mg/kg	1	260	2700	11	1																													*1*	[C] 110
Aromatic TPH >C21-C35	mg/kg	1	1100	83000	11	1																													*1*	[C] 390
Aromatic TPH >C35-C44	mg/kg	1	1100	11000	11	1																													*1*	[C] 22
Total Aromatic Hydrocarbons	mg/kg	5		98000	11																														7.4	[C] 530
TPH C6-C10	mg/kg	1																																		
TPH C10-C21	mg/kg	1																																		
TPH C21-C40	mg/kg	1																																		
Total Petroleum Hydrocarbons	mg/kg	10		130000	67		20	20	20	110	20	20	92	150	11900	41	20	20	20	20	20	20	20	20	20	20	110	170	20	20	55	34	20	16	[C] 590
Naphthalene	mg/kg	0.1	2.3	8.2	15	1							1.6		1.4											0.13								*0.1*	1.9
Acenaphthylene	mg/kg	0.1	170	1.3	15								*0.019*		*0.01*											*0.01*								*0.1*	0.59
Acenaphthene	mg/kg	0.1	210	0.67	15								*0.083*		0.11											*0.01*								*0.1*	0.67
Fluorene	mg/kg	0.1	170	1.9	15								0.14		0.35											*0.026*								*0.1*	1
Phenanthrene	mg/kg	0.1	95	20	15								1.5		2.2											0.11								*0.1*	20
Anthracene	mg/kg	0.1	2400	3.7	15								0.13		0.57											*0.1*								*0.1*	3.7
Fluoranthene	mg/kg	0.1	280	25	15								0.85		1.4											*0.01*								*0.1*	25
Pyrene	mg/kg	0.1	620	23	15								0.71		1.2											*0.01*								*0.1*	23
Benzo[a]anthracene	mg/kg	0.1	7.2	9	15	1							0.28		0.56											*0.01*								*0.1*	9
Chrysene	mg/kg	0.1	15	9.4	15								0.51		1.3											*0.037*								*0.1*	9.4
Benzo[b]fluoranthene	mg/kg	0.1	2.6	10	15	1							0.16		*0.01*											*0.01*								*0.1*	10
Benzo[k]fluoranthene	mg/kg	0.1	77	4	15								*0.097*		*0.01*											*0.01*								*0.1*	4
Benzo[a]pyrene	mg/kg	0.1	2.2	7.4	15	1							0.14		*0.01*											*0.01*								*0.1*	7.4
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	27	4.7	15								*0.098*		*0.01*											*0.01*								*0.1*	4.7
Dibenz(a,h)Anthracene	mg/kg	0.1	0.24	1.3	15	1							*0.01*		*0.01*											*0.01*								*0.1*	1.3
Benzo[g,h,i]perylene	mg/kg	0.1	320	4.8	15								0.16		*0.01*											*0.01*								*0.1*	4.8
Total Of 16 PAH's	mg/kg	2		130	24					20			6.487	20	9.16											*0.503*	20	20			20			*2*	130
Total Phenols	mg/kg	0.3	280	280	66		3	3	3	3	3	3	30	3	280	3	3.9	9.6	3	3	3	3	3	3	3	10	3	3	3	3	3	3	3	*0.3*	*0.3*
Asbestos	Type	If present	Detected			1		NAD				NAD			NAD			NAD				NAD	NAD		NAD						NAD				NAD	NAD	NAD
Asbestos % (if present)	%	0.001		0.001	1																															
Benzene	mg/kg	0.1	0.087	37	13	13		2		2			2		2				2			2				2									1	[C] 1.0
Toluene	mg/kg	0.1	130	110	13			2		2			2		2				2			6				2									1	[C] 1.0
Ethylbenzene	mg/kg	0.1	47	9.7	13			2		2			4		7				7			5				2									1	[C] 1.0
M-Xylene	mg/kg	0.1	59	62	13	1		2		2			8		10				15			12				5									1	[C] 1.0
P-Xylene	mg/kg	0.1	56	62	13	1		2		2			8		10				15			12				5									1	[C] 1.0
O-Xylene	mg/kg	0.1	60	26	13			2		2			5		6				5			5				3									1	[C] 1.0

Consolidated Soil Results - Residential with Homegrown Produce

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP102	TP103	TP104	TP104	TP105	TP105	TP106	TP106	TP107(Tar)	TP107	TP107	TP108
							Sample Ref	809364	809365	809366	809367	809368	809369	809370	809371	809372	809373	809374	809375
							Depth (top)	1.00	0.00	0.50	1.00	0.00	1.00	0.00	2.00	0.00	0.25	1.20	0.00
							Depth (bottom)	1.50	0.50	1.00	1.80	1.00	1.80	2.00	2.20	0.50	0.75	2.00	1.30
							Lab Report	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605
							Sample Date	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19
							Originator												
							Strata	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG
pH	pH unit	0.1	6 to 9																
Boron (Hot Water Soluble)	mg/kg	0.4	290	1.6	13			1.5	1.6	1	*0.4*	1.1	0.68	0.94	0.61		0.75	0.82	0.63
Cyanide (Total)	mg/kg	0.5	34	5	69			*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*		0.8	*0.5*	*0.5*
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10				2.9	10		5.6	3.9	15	2.5		6.4	4.4	
Arsenic	mg/kg	1	37	260	69	16		**40**	23	**39**	9.7	25	22	13	12		27	22	16
Cadmium	mg/kg	0.1	11	7.5	69			0.23	0.78	0.53	*0.1*	0.14	*0.1*	0.14	*0.1*		1.1	0.35	0.24
Chromium	mg/kg	1	910	460	66				45	24		24	14	460	28		34	20	
Copper	mg/kg	0.5	2400	820	69			58	32	96	27	67	41	34	41		79	49	52
Mercury	mg/kg	0.1	1.2	0.6	69			*0.1*	0.13	0.12	*0.1*	*0.1*	*0.1*	0.27	*0.1*		0.23	0.12	*0.1*
Nickel	mg/kg	0.5	180	180	69			28	24	48	20	45	25	34	31		40	31	45
Lead	mg/kg	0.5	200	1670	69	3		110	65	61	8.7	56	13	31	18		140	52	32
Selenium	mg/kg	0.2	250	22	69			0.84	*0.2*	0.62	*0.2*	0.57	0.41	0.54	0.31		0.25	0.49	0.45
Vanadium	mg/kg	5	410	90	13			33	29	40	22	43	29	90	18		24	21	17
Zinc	mg/kg	0.5	3700	850	69			67	86	160	22	59	60	83	73		230	110	110
Chromium (Hexavalent)	mg/kg	0.5	6	0.5	13			*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*		*0.5*	*0.5*	*0.5*
Total Organic Carbon	%	0.2	3	48	10	9			**3.2**	**18**		**20**	**3.2**	2	**4.9**		**8**	**8.6**	
Aliphatic TPH >C5-C6	mg/kg	0.1	42	1	11				1	1		1	1	1	1	1	1	1	1
Aliphatic TPH >C6-C8	mg/kg	0.1	100	1	11				1	1		1	1	1	1	1	1	1	1
Aliphatic TPH >C8-C10	mg/kg	0.1	27	10	11				1	1		8.6	1	1	1	10	1	1	1
Aliphatic TPH >C10-C12	mg/kg	1	130	10	11				*1*	*1*		3.8	*1*	*1*	*1*	10	*1*	*1*	*1*
Aliphatic TPH >C12-C16	mg/kg	1	1100	27	11				*1*	*1*		8	*1*	*1*	*1*	27	*1*	*1*	*1*
Aliphatic TPH >C16-C21	mg/kg	1	65000	3300	11				*1*	*1*		16	*1*	*1*	*1*	3300	*1*	*1*	*1*
Aliphatic TPH >C21-C35	mg/kg	1	65000	23000	11				*1*	*1*		170	*1*	*1*	*1*	23000	36	*1*	4.4
Aliphatic TPH >C35-C44	mg/kg	1	65000	1700	11				*1*	*1*		*1*	*1*	*1*	*1*	1700	*1*	*1*	*1*
Total Aliphatic Hydrocarbons	mg/kg	5		28000	11				*5*	*5*		200	*5*	*5*	*5*	28000	36	*5*	*5*
Aromatic TPH >C5-C7	mg/kg	0.1	70	1	11				1	1		1	1	1	1	1	1	1	1
Aromatic TPH >C7-C8	mg/kg	0.1	130	1	11				1	1		1	1	1	1	1	1	1	1
Aromatic TPH >C8-C10	mg/kg	0.1	34	20	11				1	1		8	1	1	1	20	1	1	1
Aromatic TPH >C10-C12	mg/kg	1	74	35	11				*1*	*1*		1.6	*1*	*1*	*1*	35	*1*	*1*	*1*
Aromatic TPH >C12-C16	mg/kg	1	140	700	11	1			*1*	*1*		6	*1*	*1*	*1*	700	*1*	*1*	*1*
Aromatic TPH >C16-C21	mg/kg	1	260	2700	11	1			*1*	*1*		4.3	*1*	*1*	*1*	2700	*1*	*1*	*1*
Aromatic TPH >C21-C35	mg/kg	1	1100	83000	11	1			*1*	*1*		89	*1*	*1*	*1*	83000	68	*1*	*1*
Aromatic TPH >C35-C44	mg/kg	1	1100	11000	11	1			*1*	*1*		*1*	*1*	*1*	*1*	11000	*1*	*1*	*1*
Total Aromatic Hydrocarbons	mg/kg	5		98000	11				*5*	*5*		110	*5*	*5*	*5*	98000	68	*5*	*5*
TPH C6-C10	mg/kg	1																	
TPH C10-C21	mg/kg	1																	
TPH C21-C40	mg/kg	1																	
Total Petroleum Hydrocarbons	mg/kg	10		130000	67				*10*	*10*		310	*10*	*10*	*10*	130000	100	*10*	*10*
Naphthalene	mg/kg	0.1	2.3	8.2	15	1			*0.1*	8.2		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Acenaphthylene	mg/kg	0.1	170	1.3	15				*0.1*	1.3		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Acenaphthene	mg/kg	0.1	210	0.67	15				*0.1*	0.36		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Fluorene	mg/kg	0.1	170	1.9	15				*0.1*	1.9		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Phenanthrene	mg/kg	0.1	95	20	15				*0.1*	3		*0.1*	0.54	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Anthracene	mg/kg	0.1	2400	3.7	15				*0.1*	0.32		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Fluoranthene	mg/kg	0.1	280	25	15				*0.1*	1.3		*0.1*	0.37	0.56	*0.1*	*0.1*	*0.1*	0.53	*0.1*
Pyrene	mg/kg	0.1	620	23	15				*0.1*	1.6		*0.1*	0.47	0.64	*0.1*	*0.1*	*0.1*	0.99	*0.1*
Benzo[a]anthracene	mg/kg	0.1	7.2	9	15	1			*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Chrysene	mg/kg	0.1	15	9.4	15				*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Benzo[b]fluoranthene	mg/kg	0.1	2.6	10	15	1			*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Benzo[k]fluoranthene	mg/kg	0.1	77	4	15				*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Benzo[a]pyrene	mg/kg	0.1	2.2	7.4	15	1			*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	27	4.7	15				*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Dibenz(a,h)Anthracene	mg/kg	0.1	0.24	1.3	15	1			*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Benzo[g,h,i]perylene	mg/kg	0.1	320	4.8	15				*0.1*	*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Total Of 16 PAH's	mg/kg	2		130	24				*2*	18		*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Total Phenols	mg/kg	0.3	280	280	66				*0.3*	*0.3*		*0.3*	*0.3*	*0.3*	*0.3*		*0.3*	*0.3*	
Asbestos	Type	If present	Detected			1	N/T	NAD	**Detected**	N/T	NAD	NAD	NAD	NAD	N/T	NAD	NAD	N/T	
Asbestos % (if present)	%	0.001		0.001	1				0.001										
Benzene	mg/kg	0.1	0.087	37	13	13			1		37	1		1					
Toluene	mg/kg	0.1	130	110	13				1		110	1		1					
Ethylbenzene	mg/kg	0.1	47	9.7	13				1		9.7	1		1					
M-Xylene	mg/kg	0.1	59	62	13	1			1		62	1		1					
P-Xylene	mg/kg	0.1	56	62	13	1			1		62	1		1					
O-Xylene	mg/kg	0.1	60	26	13				1		26	1		1					

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8	WS9	WS10	WS11	TP35
Sample Location							WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8	WS9	WS10	WS11	TP35
Sample Ref							E855	E856	E857	E858	E859	E860	E861	E862	E863	E864	E865	E866
Depth (top)							0.2	1.6	2.2	0.2	1	0.5	1.9	0.1	1.2	0.5	0.5	0.5
Depth (bottom)							0.4	1.8	2.4	0.4	1.2	0.7	2.1	0.3	1.9	0.7	0.7	
Lab Report							1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152
Sample Date																		
Originator																		
Strata							TS	NAT-CL	NAT	NAT	MG	MG	MG	MG	MG	NAT-CL	MG	
pH	pH unit	0.1	6 to 9															
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13													
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10													
Arsenic	mg/kg	1	79	260	69	3	33	64	8	27	68	8	9	19	32	6	28	6
Cadmium	mg/kg	0.1	120	7.5	69		0.9	4.8	4	0.7	0.9	0.5	0.5	0.5	0.5	0.5	0.6	0.5
Chromium	mg/kg	1	1500	460	66		17	49	26	22	7	9	8	8	7	7	2	10
Copper	mg/kg	0.5	12000	820	69		66	180	74	52	61	100	45	84	52	14	71	14
Mercury	mg/kg	0.1	16	0.6	69		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nickel	mg/kg	0.5	230	180	69		18	180	72	18	25	42	30	36	19	11	20	17
Lead	mg/kg	0.5	630	1670	69	1	90	160	53	64	35	44	28	18	36	21	66	17
Selenium	mg/kg	0.2	1100	22	69		4	22	10	1.9	1.5	2.9	1.6	2.6	2.1	2.2	3.6	1.5
Vanadium	mg/kg	5	2000	90	13													
Zinc	mg/kg	0.5	81000	850	69		180	190	160	71	35	20	91	70	68	68	93	46
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13													
Total Organic Carbon	%	0.2	3	48	10	9												
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12													
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12													
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12													
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12													
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12													
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12													
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12													
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12													
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12													
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12													
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12													
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12													
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12													
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12													
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12													
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1												
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1												
Total Aromatic Hydrocarbons	mg/kg	5		98000	12													
TPH C6-C10	mg/kg	1																
TPH C10-C21	mg/kg	1																
TPH C21-C40	mg/kg	1																

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8	WS9	WS10	WS11	TP35
Sample Location							WS1	WS2	WS3	WS4	WS5	WS6	WS7	WS8	WS9	WS10	WS11	TP35
Sample Ref							E855	E856	E857	E858	E859	E860	E861	E862	E863	E864	E865	E866
Depth (top)							0.2	1.6	2.2	0.2	1	0.5	1.9	0.1	1.2	0.5	0.5	0.5
Depth (bottom)							0.4	1.8	2.4	0.4	1.2	0.7	2.1	0.3	1.9	0.7	0.7	
Lab Report							1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152
Sample Date																		
Originator																		
Strata							TS	NAT-CL	NAT	NAT	MG	MG	MG	MG	MG	NAT-CL	MG	
Total Petroleum Hydrocarbons	mg/kg	10		130000	68		20	20	20	20	20	20	20	59	20	20	56	20
Naphthalene	mg/kg	0.1	4900	8.2	15													
Acenaphthylene	mg/kg	0.1	15000	1.3	15													
Acenaphthene	mg/kg	0.1	15000	0.67	15													
Fluorene	mg/kg	0.1	9900	1.9	15													
Phenanthrene	mg/kg	0.1	3100	20	15													
Anthracene	mg/kg	0.1	74000	3.7	15													
Fluoranthene	mg/kg	0.1	3100	25	15													
Pyrene	mg/kg	0.1	7400	23	15													
Benzo[a]anthracene	mg/kg	0.1	29	9	15													
Chrysene	mg/kg	0.1	57	9.4	15													
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1												
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15													
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1												
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15													
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1												
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15													
Total Of 16 PAH's	mg/kg	2		130	24									20			20	
Total Phenols	mg/kg	0.3	760	280	66		3	3	3	3	3	3	3	3	3	3	3	3
Asbestos	Type	If present	Detected			1	NAD							NAD		NAD	NAD	NAD
Asbestos % (if present)	%	0.001		0.001	1													
Benzene	mg/kg	0.1	72	37	14													
Toluene	mg/kg	0.1	56000	110	13													
Ethylbenzene	mg/kg	0.1	24000	9.7	13													
M-Xylene	mg/kg	0.1	41000	62	13													
P-Xylene	mg/kg	0.1	41000	62	13													
O-Xylene	mg/kg	0.1	41000	26	13													

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP36	TP37	TP38	TP39	TP40	TP41	TP42	TP43	TP44	SU1	SU2	TP1
Sample Location							TP36	TP37	TP38	TP39	TP40	TP41	TP42	TP43	TP44	SU1	SU2	TP1
Sample Ref							E867	E868	E869	E870	E871	E872	E873	E874	E875	E876	E877	E534
Depth (top)							1.2	0.5	1.6	0.7	0.3	1.4	0.8	0.5	2.1	GL	GL	2.1
Depth (bottom)																		
Lab Report							1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1102
Sample Date																		
Originator																		
Strata							NAT-CL	MG	MG	MG	TS	NAT-CL	NAT-CL		NAT			NAT
pH	pH unit	0.1	6 to 9															
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13													
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10													
Arsenic	mg/kg	1	79	260	69	3	9	45	23	39	22	9	56	8	7	**84**	**120**	3
Cadmium	mg/kg	0.1	120	7.5	69		0.5	1.4	0.5	0.6	0.5	0.5	1	0.5	0.5	1.1	1.5	0.5
Chromium	mg/kg	1	1500	460	66		9	10	14	10	9	7	17	13	20	7	21	2
Copper	mg/kg	0.5	12000	820	69		15	820	46	53	61	15	68	12	28	73	18	75
Mercury	mg/kg	0.1	16	0.6	69		0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nickel	mg/kg	0.5	230	180	69		9	26	27	15	25	8	31	10	36	32	6	21
Lead	mg/kg	0.5	630	1670	69	1	25	**1670**	140	41	120	30	89	24	20	54	33	14
Selenium	mg/kg	0.2	1100	22	69		1.4	2	1.9	2.3	1.9	1.4	1.9	1.7	1.3	2.6	0.6	1
Vanadium	mg/kg	5	2000	90	13													
Zinc	mg/kg	0.5	81000	850	69		57	850	83	69	51	66	140	43	81	77	12	9
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13													
Total Organic Carbon	%	0.2	3	48	10	9												
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12													
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12													
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12													
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12													
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12													
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12													
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12													
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12													
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12													
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12													
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12													
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12													
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12													
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12													
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12													
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1												
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1												
Total Aromatic Hydrocarbons	mg/kg	5		98000	12													
TPH C6-C10	mg/kg	1																
TPH C10-C21	mg/kg	1																
TPH C21-C40	mg/kg	1																

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP36	TP37	TP38	TP39	TP40	TP41	TP42	TP43	TP44	SU1	SU2	TP1
Sample Location							TP36	TP37	TP38	TP39	TP40	TP41	TP42	TP43	TP44	SU1	SU2	TP1
Sample Ref							E867	E868	E869	E870	E871	E872	E873	E874	E875	E876	E877	E534
Depth (top)							1.2	0.5	1.6	0.7	0.3	1.4	0.8	0.5	2.1	GL	GL	2.1
Depth (bottom)																		
Lab Report							1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1152	1102
Sample Date																		
Originator																		
Strata							NAT-CL	MG	MG	MG	TS	NAT-CL	NAT-CL		NAT			NAT
Total Petroleum Hydrocarbons	mg/kg	10		130000	68		20	58	73	20	20	20	20	20	20	20	20	20
Naphthalene	mg/kg	0.1	4900	8.2	15													
Acenaphthylene	mg/kg	0.1	15000	1.3	15													
Acenaphthene	mg/kg	0.1	15000	0.67	15													
Fluorene	mg/kg	0.1	9900	1.9	15													
Phenanthrene	mg/kg	0.1	3100	20	15													
Anthracene	mg/kg	0.1	74000	3.7	15													
Fluoranthene	mg/kg	0.1	3100	25	15													
Pyrene	mg/kg	0.1	7400	23	15													
Benzo[a]anthracene	mg/kg	0.1	29	9	15													
Chrysene	mg/kg	0.1	57	9.4	15													
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1												
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15													
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1												
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15													
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1												
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15													
Total Of 16 PAH's	mg/kg	2		130	24			20	20									
Total Phenols	mg/kg	0.3	760	280	66		3	3	3	3	3	3	3	3	3	3	3	3
Asbestos	Type	If present	Detected			1		NAD		NAD								
Asbestos % (if present)	%	0.001		0.001	1													
Benzene	mg/kg	0.1	72	37	14													
Toluene	mg/kg	0.1	56000	110	13													
Ethylbenzene	mg/kg	0.1	24000	9.7	13													
M-Xylene	mg/kg	0.1	41000	62	13													
P-Xylene	mg/kg	0.1	41000	62	13													
O-Xylene	mg/kg	0.1	41000	26	13													

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP2	TP3	TP4	TP5	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Sample Location							TP2	TP3	TP4	TP5	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Sample Ref							E535	E536	E537	E538	E540	E541	E542	E543	E544	E545	E546	E547
Depth (top)							0.9	0.4	1	1	0.2	2.9	0.2	2.6	2.1	0.5	1.4	3
Depth (bottom)																		
Lab Report							1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102
Sample Date																		
Originator																		
Strata							NAT-CL	NAT-CL	NAT-CL	NAT-CL	TS	NAT-CL	MG	NAT	NAT	MG	MG	MG
pH	pH unit	0.1	6 to 9															
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13													
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10													
Arsenic	mg/kg	1	79	260	69	3	26	36	22	2	8	8	11	8	6	32	12	17
Cadmium	mg/kg	0.1	120	7.5	69		1.7	1.4	*0.7*	0.5	0.5	0.7	0.5	0.5	0.5	1.3	0.5	0.6
Chromium	mg/kg	1	1500	460	66		10	61	22	14	25	24	12	18	11	13	7	15
Copper	mg/kg	0.5	12000	820	69		25	170	43	42	20	30	21	26	15	100	38	150
Mercury	mg/kg	0.1	16	0.6	69		0.5	0.3	*0.3*	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.5
Nickel	mg/kg	0.5	230	180	69		32	110	16	18	22	49	16	24	21	34	24	36
Lead	mg/kg	0.5	630	1670	69	1	42	71	40	11	19	52	14	19	16	370	82	180
Selenium	mg/kg	0.2	1100	22	69		1.7	9.3	3.5	0.8	0.7	0.5	1	0.5	0.8	1.8	1	1
Vanadium	mg/kg	5	2000	90	13													
Zinc	mg/kg	0.5	81000	850	69		19	130	32	39	73	130	28	39	38	230	80	170
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13													
Total Organic Carbon	%	0.2	3	48	10	9												
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12													
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12													
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12													
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12													
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12													
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12													
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12													
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12													
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12													
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12													
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12													
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12													
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12													
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12													
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12													
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1												
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1												
Total Aromatic Hydrocarbons	mg/kg	5		98000	12													
TPH C6-C10	mg/kg	1																
TPH C10-C21	mg/kg	1																
TPH C21-C40	mg/kg	1																

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP2	TP3	TP4	TP5	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Sample Location							TP2	TP3	TP4	TP5	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Sample Ref							E535	E536	E537	E538	E540	E541	E542	E543	E544	E545	E546	E547
Depth (top)							0.9	0.4	1	1	0.2	2.9	0.2	2.6	2.1	0.5	1.4	3
Depth (bottom)																		
Lab Report							1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102
Sample Date																		
Originator																		
Strata							NAT-CL	NAT-CL	NAT-CL	NAT-CL	TS	NAT-CL	MG	NAT	NAT	MG	MG	MG
Total Petroleum Hydrocarbons	mg/kg	10		130000	68		20	20	20	20	20	20	20	20	110	20	20	92
Naphthalene	mg/kg	0.1	4900	8.2	15													1.6
Acenaphthylene	mg/kg	0.1	15000	1.3	15													*0.019*
Acenaphthene	mg/kg	0.1	15000	0.67	15													*0.083*
Fluorene	mg/kg	0.1	9900	1.9	15													0.14
Phenanthrene	mg/kg	0.1	3100	20	15													1.5
Anthracene	mg/kg	0.1	74000	3.7	15													0.13
Fluoranthene	mg/kg	0.1	3100	25	15													0.85
Pyrene	mg/kg	0.1	7400	23	15													0.71
Benzo[a]anthracene	mg/kg	0.1	29	9	15													0.28
Chrysene	mg/kg	0.1	57	9.4	15													0.51
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1												0.16
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15													*0.097*
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1												0.14
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15													*0.098*
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1												*0.01*
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15													0.16
Total Of 16 PAH's	mg/kg	2		130	24										20			6.487
Total Phenols	mg/kg	0.3	760	280	66		3	3	3	3	3	3	3	3	3	3	3	30
Asbestos	Type	If present	Detected			1		NAD			NAD		NAD			NAD		
Asbestos % (if present)	%	0.001		0.001	1													
Benzene	mg/kg	0.1	72	37	14		2						2		2			2
Toluene	mg/kg	0.1	56000	110	13		2						2		2			2
Ethylbenzene	mg/kg	0.1	24000	9.7	13		9						2		2			4
M-Xylene	mg/kg	0.1	41000	62	13		13						2		2			8
P-Xylene	mg/kg	0.1	41000	62	13		13						2		2			8
O-Xylene	mg/kg	0.1	41000	26	13		6						2		2			5

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	TP15	TP16	TP17	TP18	TP19	TP20	TP21	TP22	TP23	TP24	TP25	TP26
Sample Location							**TP15**	**TP16**	**TP17**	**TP18**	**TP19**	**TP20**	**TP21**	**TP22**	**TP23**	**TP24**	**TP25**	**TP26**
Sample Ref							E548	E549	E550	E551	E552	E553	E554	E555	E557	E558	E559	E560
Depth (top)							1.3	1.9	0.4	1.6	2.6	0.5	1	1	2.6	0.5	1.3	2.8
Depth (bottom)																		
Lab Report							1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102
Sample Date																		
Originator																		
Strata							MG	MG	TS	MG	NAT-GR	TS	MG	MG	MG	TS	MG	NAT-CL
pH	pH unit	0.1	6 to 9															
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13													
Cyanide (Total)	mg/kg	0.5	34	5	69		5	5	5	5	5	5	5	5	5	5	5	5
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10													
Arsenic	mg/kg	1	79	260	69	3	33	20	36	32	35	58	36	22	**260**	38	33	13
Cadmium	mg/kg	0.1	120	7.5	69		7.5	0.6	2.2	0.8	1	2.6	1.4	0.7	7.2	1.2	1	0.7
Chromium	mg/kg	1	1500	460	66		14	5	15	15	17	19	61	22	5	13	11	24
Copper	mg/kg	0.5	12000	820	69		89	43	99	110	59	150	170	43	56	100	63	60
Mercury	mg/kg	0.1	16	0.6	69		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
Nickel	mg/kg	0.5	230	180	69		34	17	33	30	38	53	110	16	35	40	30	52
Lead	mg/kg	0.5	630	1670	69	1	220	39	45	10	19	67	71	40	74	96	35	66
Selenium	mg/kg	0.2	1100	22	69		1.2	1.6	1.3	0.7	0.5	0.6	9.3	3.5	3.3	1.8	1.3	1.6
Vanadium	mg/kg	5	2000	90	13													
Zinc	mg/kg	0.5	81000	850	69		370	27	170	89	34	240	130	32	55	120	100	200
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13													
Total Organic Carbon	%	0.2	3	48	10	9												
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12													
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12													
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12													
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12													
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12													
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12													
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12													
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12													
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12													
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12													
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12													
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12													
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12													
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12													
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12													
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1												
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1												
Total Aromatic Hydrocarbons	mg/kg	5		98000	12													
TPH C6-C10	mg/kg	1																
TPH C10-C21	mg/kg	1																
TPH C21-C40	mg/kg	1																

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP15	TP16	TP17	TP18	TP19	TP20	TP21	TP22	TP23	TP24	TP25	TP26
							Sample Ref	E548	E549	E550	E551	E552	E553	E554	E555	E557	E558	E559	E560
							Depth (top)	1.3	1.9	0.4	1.6	2.6	0.5	1	1	2.6	0.5	1.3	2.8
							Depth (bottom)												
							Lab Report	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102	1102
							Sample Date												
							Originator												
							Strata	MG	MG	TS	MG	NAT-GR	TS	MG	MG	MG	TS	MG	NAT-CL
Total Petroleum Hydrocarbons	mg/kg	10		130000	68			150	11900	41	20	20	20	20	20	20	20	20	20
Naphthalene	mg/kg	0.1	4900	8.2	15				1.4										
Acenaphthylene	mg/kg	0.1	15000	1.3	15				*0.01*										
Acenaphthene	mg/kg	0.1	15000	0.67	15				0.11										
Fluorene	mg/kg	0.1	9900	1.9	15				0.35										
Phenanthrene	mg/kg	0.1	3100	20	15				2.2										
Anthracene	mg/kg	0.1	74000	3.7	15				0.57										
Fluoranthene	mg/kg	0.1	3100	25	15				1.4										
Pyrene	mg/kg	0.1	7400	23	15				1.2										
Benzo[a]anthracene	mg/kg	0.1	29	9	15				0.56										
Chrysene	mg/kg	0.1	57	9.4	15				1.3										
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1			*0.01*										
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15				*0.01*										
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1			*0.01*										
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15				*0.01*										
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1			*0.01*										
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15				*0.01*										
Total Of 16 PAH's	mg/kg	2		130	24		20	9.16											
Total Phenols	mg/kg	0.3	760	280	66		3	280	3	3.9	9.6	3	3	3	3	3	3	3	3
Asbestos	Type	If present	Detected			1	NAD		NAD			NAD	NAD		NAD				
Asbestos % (if present)	%	0.001		0.001	1														
Benzene	mg/kg	0.1	72	37	14			2				2			2				
Toluene	mg/kg	0.1	56000	110	13			2				2			6				
Ethylbenzene	mg/kg	0.1	24000	9.7	13			7				7			5				
M-Xylene	mg/kg	0.1	41000	62	13			10				15			12				
P-Xylene	mg/kg	0.1	41000	62	13			10				15			12				
O-Xylene	mg/kg	0.1	41000	26	13			6				5			5				

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP27	TP28	TP29	TP30	TP31	TP32	TP33	TP34	TP101	TP102	TP102	TP103
							Sample Ref	E561	E562	E563	E564	E565	E566	E567	E568	809362	809363	809364	809365
							Depth (top)	3.2	0.5	0.4	1.2	0.5	1	3.5	0.4	0.50	0.50	1.00	0.00
							Depth (bottom)									1.25	1.00	1.50	0.50
							Lab Report	1102	1102	1102	1102	1102	1102	1102	1102	19-12605	19-12605	19-12605	19-12605
							Sample Date									9/4/19	9/4/19	9/4/19	9/4/19
							Originator												
							Strata	NAT-GR	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG
pH	pH unit	0.1	6 to 9																
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13											1.3	1.2	1.5	1.6
Cyanide (Total)	mg/kg	0.5	34	5	69			5	5	5	5	5	5	5	5	*0.5*	*0.5*	*0.5*	*0.5*
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10											1.5	19		2.9
Arsenic	mg/kg	1	79	260	69	3		15	30	42	36	51	27	30	40	61	13	40	23
Cadmium	mg/kg	0.1	120	7.5	69			0.7	1.6	1.2	1	1.6	0.8	1	1.1	0.15	0.24	0.23	0.78
Chromium	mg/kg	1	1500	460	66			24	22	14	7	12	10	8	10	8.9	33		45
Copper	mg/kg	0.5	12000	820	69			35	100	330	37	93	63	55	57	46	37	58	32
Mercury	mg/kg	0.1	16	0.6	69			0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	*0.1*	*0.1*	0.13
Nickel	mg/kg	0.5	230	180	69			52	43	140	12	38	27	28	28	21	23	28	24
Lead	mg/kg	0.5	630	1670	69	1		84	67	150	29	79	45	140	36	59	98	110	65
Selenium	mg/kg	0.2	1100	22	69			0.5	0.9	2.7	1.7	1.8	1.5	3.5	1.8	1.6	*0.2*	0.84	*0.2*
Vanadium	mg/kg	5	2000	90	13											20	30	33	29
Zinc	mg/kg	0.5	81000	850	69			190	140	93	27	110	85	79	84	48	100	67	86
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13											*0.5*	*0.5*	*0.5*	*0.5*
Total Organic Carbon	%	0.2	3	48	10	9										**48**	**5.1**		**3.2**
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12											1	1		1
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12											1	1		1
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12											4.3	1		1
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12											1.7	*1*		*1*
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12											1.4	*1*		*1*
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12											1.5	*1*		*1*
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12											*1*	59		*1*
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12											*1*	*1*		*1*
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12											8.8	59		*5*
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12											1	1		1
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12											1	1		1
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12											3.9	1		1
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12											1.5	*1*		*1*
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12											2	4.3		*1*
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12											*1*	110		*1*
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1										*1*	390		*1*
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1										*1*	22		*1*
Total Aromatic Hydrocarbons	mg/kg	5		98000	12											7.4	530		*5*
TPH C6-C10	mg/kg	1																	
TPH C10-C21	mg/kg	1																	
TPH C21-C40	mg/kg	1																	

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP27	TP28	TP29	TP30	TP31	TP32	TP33	TP34	TP101	TP102	TP102	TP103
							Sample Ref	E561	E562	E563	E564	E565	E566	E567	E568	809362	809363	809364	809365
							Depth (top)	3.2	0.5	0.4	1.2	0.5	1	3.5	0.4	0.50	0.50	1.00	0.00
							Depth (bottom)									1.25	1.00	1.50	0.50
							Lab Report	1102	1102	1102	1102	1102	1102	1102	1102	19-12605	19-12605	19-12605	19-12605
							Sample Date									9/4/19	9/4/19	9/4/19	9/4/19
							Originator												
							Strata	NAT-GR	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG
Total Petroleum Hydrocarbons	mg/kg	10		130000	68			20	110	170	20	20	55	34	20	16	590		*10*
Naphthalene	mg/kg	0.1	4900	8.2	15			0.13								*0.1*	1.9		*0.1*
Acenaphthylene	mg/kg	0.1	15000	1.3	15			*0.01*								*0.1*	0.59		*0.1*
Acenaphthene	mg/kg	0.1	15000	0.67	15			*0.01*								*0.1*	0.67		*0.1*
Fluorene	mg/kg	0.1	9900	1.9	15			*0.026*								*0.1*	1		*0.1*
Phenanthrene	mg/kg	0.1	3100	20	15			0.11								*0.1*	20		*0.1*
Anthracene	mg/kg	0.1	74000	3.7	15			*0.1*								*0.1*	3.7		*0.1*
Fluoranthene	mg/kg	0.1	3100	25	15			*0.01*								*0.1*	25		*0.1*
Pyrene	mg/kg	0.1	7400	23	15			*0.01*								*0.1*	23		*0.1*
Benzo[a]anthracene	mg/kg	0.1	29	9	15			*0.01*								*0.1*	9		*0.1*
Chrysene	mg/kg	0.1	57	9.4	15			*0.037*								*0.1*	9.4		*0.1*
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1		*0.01*								*0.1*	10		*0.1*
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15			*0.01*								*0.1*	4		*0.1*
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1		*0.01*								*0.1*	7.4		*0.1*
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15			*0.01*								*0.1*	4.7		*0.1*
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1		*0.01*								*0.1*	1.3		*0.1*
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15			*0.01*								*0.1*	4.8		*0.1*
Total Of 16 PAH's	mg/kg	2		130	24			*0.503*	20	20			20			*2*	130		*2*
Total Phenols	mg/kg	0.3	760	280	66			10	3	3	3	3	3	3	3	*0.3*	*0.3*		*0.3*
Asbestos	Type	If present	Detected			1				NAD		NAD			NAD	NAD	NAD	N/T	NAD
Asbestos % (if present)	%	0.001		0.001	1														
Benzene	mg/kg	0.1	72	37	14			2								1	1		
Toluene	mg/kg	0.1	56000	110	13			2								1	[C] 1.0		
Ethylbenzene	mg/kg	0.1	24000	9.7	13			2								1	[C] 1.0		
M-Xylene	mg/kg	0.1	41000	62	13			5								1	[C] 1.0		
P-Xylene	mg/kg	0.1	41000	62	13			5								1	[C] 1.0		
O-Xylene	mg/kg	0.1	41000	26	13			3								1	[C] 1.0		

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP104	TP104	TP105	TP105	TP106	TP106	TP107(Tar)	TP107	TP107	TP108		
							Sample Ref	809366	809367	809368	809369	809370	809371	809372	809373	809374	809375		
							Depth (top)	0.50	1.00	0.00	1.00	0.00	2.00	0.00	0.25	1.20	0.00		
							Depth (bottom)	1.00	1.80	1.00	1.80	2.00	2.20	0.50	0.75	2.00	1.30		
							Lab Report	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605		
							Sample Date	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19		
							Originator												
							Strata	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG		
pH	pH unit	0.1	6 to 9																
Boron (Hot Water Soluble)	mg/kg	0.4	21000	1.6	13		1	*0.4*	1.1	0.68	0.94	0.61		0.75	0.82	0.63			
Cyanide (Total)	mg/kg	0.5	34	5	69		*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*		0.8	*0.5*	*0.5*			
Sulphide (Easily Liberatable)	mg/kg	0.5		19	10		10		5.6	3.9	15	2.5		6.4	4.4				
Arsenic	mg/kg	1	79	260	69	3	39	9.7	25	22	13	12		27	22	16			
Cadmium	mg/kg	0.1	120	7.5	69		0.53	*0.1*	0.14	*0.1*	0.14	*0.1*		1.1	0.35	0.24			
Chromium	mg/kg	1	1500	460	66		24		24	14	460	28		34	20				
Copper	mg/kg	0.5	12000	820	69		96	27	67	41	34	41		79	49	52			
Mercury	mg/kg	0.1	16	0.6	69		0.12	*0.1*	*0.1*	*0.1*	0.27	*0.1*		0.23	0.12	*0.1*			
Nickel	mg/kg	0.5	230	180	69		48	20	45	25	34	31		40	31	45			
Lead	mg/kg	0.5	630	1670	69	1	61	8.7	56	13	31	18		140	52	32			
Selenium	mg/kg	0.2	1100	22	69		0.62	*0.2*	0.57	0.41	0.54	0.31		0.25	0.49	0.45			
Vanadium	mg/kg	5	2000	90	13		40	22	43	29	90	18		24	21	17			
Zinc	mg/kg	0.5	81000	850	69		160	22	59	60	83	73		230	110	110			
Chromium (Hexavalent)	mg/kg	0.5	7.7	0.5	13		*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*		*0.5*	*0.5*	*0.5*			
Total Organic Carbon	%	0.2	3	48	10	9	**18**		**20**	**3.2**	2	**4.9**		**8**	**8.6**				
Aliphatic TPH >C5-C6	mg/kg	0.1	570000	1	12		1		1	1	1	1	1	1	1	1			
Aliphatic TPH >C6-C8	mg/kg	0.1	600000	1	12		1		1	1	1	1	1	1	1	1			
Aliphatic TPH >C8-C10	mg/kg	0.1	13000	10	12		1		8.6	1	1	1	10	1	1	1			
Aliphatic TPH >C10-C12	mg/kg	1	13000	10	12		*1*		3.8	*1*	*1*	*1*	10	*1*	*1*	*1*			
Aliphatic TPH >C12-C16	mg/kg	1	13000	27	12		*1*		8	*1*	*1*	*1*	27	*1*	*1*	*1*			
Aliphatic TPH >C16-C21	mg/kg	1	250000	3300	12		*1*		16	*1*	*1*	*1*	3300	*1*	*1*	*1*			
Aliphatic TPH >C21-C35	mg/kg	1	250000	23000	12		*1*		170	*1*	*1*	*1*	23000	36	*1*	4.4			
Aliphatic TPH >C35-C44	mg/kg	1	250000	1700	12		*1*		*1*	*1*	*1*	*1*	1700	*1*	*1*	*1*			
Total Aliphatic Hydrocarbons	mg/kg	5		28000	12		*5*		200	*5*	*5*	*5*	28000	36	*5*	*5*			
Aromatic TPH >C5-C7	mg/kg	0.1	72	1	12		1		1	1	1	1	1	1	1	1			
Aromatic TPH >C7-C8	mg/kg	0.1	56000	1	12		1		1	1	1	1	1	1	1	1			
Aromatic TPH >C8-C10	mg/kg	0.1	5000	20	12		1		8	1	1	1	20	1	1	1			
Aromatic TPH >C10-C12	mg/kg	1	5000	35	12		*1*		1.6	*1*	*1*	*1*	35	*1*	*1*	*1*			
Aromatic TPH >C12-C16	mg/kg	1	5100	700	12		*1*		6	*1*	*1*	*1*	700	*1*	*1*	*1*			
Aromatic TPH >C16-C21	mg/kg	1	3800	2700	12		*1*		4.3	*1*	*1*	*1*	2700	*1*	*1*	*1*			
Aromatic TPH >C21-C35	mg/kg	1	3800	83000	12	1	*1*		89	*1*	*1*	*1*	83000	68	*1*	*1*			
Aromatic TPH >C35-C44	mg/kg	1	3800	11000	12	1	*1*		*1*	*1*	*1*	*1*	11000	*1*	*1*	*1*			
Total Aromatic Hydrocarbons	mg/kg	5		98000	12		*5*		110	*5*	*5*	*5*	98000	68	*5*	*5*			
TPH C6-C10	mg/kg	1																	
TPH C10-C21	mg/kg	1																	
TPH C21-C40	mg/kg	1																	

Consolidated Soil Results - Public Open Space (POS) Residential

Site: Carlton Colliery
Project Reference: 173367
Client: Unconfirmed
Strata: ALL Strata
Notes:

KEY
Exceedance of SGV
Below Limit of Detection

Determinant	Units	LOD	SGV	Max	Number	No. Exceedances	Sample Location	TP104	TP104	TP105	TP105	TP106	TP106	TP107(Tar)	TP107	TP107	TP108		
							Sample Ref	809366	809367	809368	809369	809370	809371	809372	809373	809374	809375		
							Depth (top)	0.50	1.00	0.00	1.00	0.00	2.00	0.00	0.25	1.20	0.00		
							Depth (bottom)	1.00	1.80	1.00	1.80	2.00	2.20	0.50	0.75	2.00	1.30		
							Lab Report	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605		
							Sample Date	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19	9/4/19		
							Originator												
							Strata	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG		
Total Petroleum Hydrocarbons	mg/kg	10		130000	68			*10*		310	*10*	*10*	*10*	130000	100	*10*	*10*		
Naphthalene	mg/kg	0.1	4900	8.2	15			8.2		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Acenaphthylene	mg/kg	0.1	15000	1.3	15			1.3		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Acenaphthene	mg/kg	0.1	15000	0.67	15			0.36		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Fluorene	mg/kg	0.1	9900	1.9	15			1.9		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Phenanthrene	mg/kg	0.1	3100	20	15			3		*0.1*	0.54	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Anthracene	mg/kg	0.1	74000	3.7	15			0.32		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Fluoranthene	mg/kg	0.1	3100	25	15			1.3		*0.1*	0.37	0.56	*0.1*	*0.1*	*0.1*	0.53	*0.1*		
Pyrene	mg/kg	0.1	7400	23	15			1.6		*0.1*	0.47	0.64	*0.1*	*0.1*	*0.1*	0.99	*0.1*		
Benzo[a]anthracene	mg/kg	0.1	29	9	15			*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Chrysene	mg/kg	0.1	57	9.4	15			*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Benzo[b]fluoranthene	mg/kg	0.1	7.1	10	15	1		*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Benzo[k]fluoranthene	mg/kg	0.1	190	4	15			*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Benzo[a]pyrene	mg/kg	0.1	5.7	7.4	15	1		*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Indeno(1,2,3-c,d)Pyrene	mg/kg	0.1	82	4.7	15			*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Dibenz(a,h)Anthracene	mg/kg	0.1	0.57	1.3	15	1		*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Benzo[g,h,i]perylene	mg/kg	0.1	640	4.8	15			*0.1*		*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*		
Total Of 16 PAH's	mg/kg	2		130	24			18		*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*		
Total Phenols	mg/kg	0.3	760	280	66			*0.3*		*0.3*	*0.3*	*0.3*	*0.3*		*0.3*	*0.3*			
Asbestos	Type	If present	Detected			1		**Detected**	N/T	NAD	NAD	NAD	NAD	N/T	NAD	NAD	N/T		
Asbestos % (if present)	%	0.001		0.001	1			0.001											
Benzene	mg/kg	0.1	72	37	14			1		37	1		1						
Toluene	mg/kg	0.1	56000	110	13			1		110	1		1						
Ethylbenzene	mg/kg	0.1	24000	9.7	13			1		9.7	1		1						
M-Xylene	mg/kg	0.1	41000	62	13			1		62	1		1						
P-Xylene	mg/kg	0.1	41000	62	13			1		62	1		1						
O-Xylene	mg/kg	0.1	41000	26	13			1		26	1		1						

Chemtest
The right chemistry to deliver results

Results - Leachate

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd		**Chemtest Job No.:**			**Surface Water EQS (µg/l)**	19-12605	19-12605	19-12605	19-12605	19-12605	19-12605
Quotation No.:		**Chemtest Sample ID.:**				809362	809364	809366	809367	809368	809369
		Client Sample ID.:				TP101	TP102	TP104	TP104	TP105	TP105
		Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):				0.50	1.00	0.50	1.00	0.00	1.00
		Bottom Depth (m):				1.25	1.50	1.00	1.80	1.00	1.80
		Date Sampled:				09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
Determinand	**Accred.**	**SOP**	**Units**	**LOD**							
Sulphate	U	1220	mg/l	1.0	400 (mg/l)	26	43	33	74	170	830
Cyanide (Total)	U	1300	mg/l	0.050	0.001 (mg/l)	0.05	0.05	0.05	0.05	0.05	0.05
Arsenic (Dissolved)	U	1450	µg/l	1.0	50	1	1.5	3.3	1.4	1	1
Boron (Dissolved)	U	1450	µg/l	20	2000	20	40	23	20	20	20
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.08-0.25*	0.08	0.08	0.08	0.08	0.096	0.08
Copper (Dissolved)	U	1450	µg/l	1.0	1	1	1	1	1	1	1
Mercury (Dissolved)	U	1450	µg/l	0.50	1	0.5	0.5	0.5	0.5	0.5	0.5
Nickel (Dissolved)	U	1450	µg/l	1.0	4	1	1	1	1	9.5	1
Lead (Dissolved)	U	1450	µg/l	1.0	1.2	1	1	1	1	1	1
Selenium (Dissolved)	U	1450	µg/l	1.0		1	1	1	1	1	1
Vanadium (Dissolved)	U	1450	µg/l	1.0	20	1	1	1	1	1	1
Zinc (Dissolved)	U	1450	µg/l	1.0	10.9	1	1	1	1	38	12
Chromium (Trivalent)	N	1490	µg/l	20	4.7	20	20	20	20	20	20
Chromium (Hexavalent)	U	1490	µg/l	20		20	20	20	20	20	20

Chemtest
The right chemistry to deliver results

Results - Leachate

Project: 173367 - Carlton Colliery, Shaw Lane

Client: AA Environmental Ltd			**Chemtest Job No.:**		19-12605	19-12605
Quotation No.:			**Chemtest Sample ID.:**		809370	809375
			Client Sample ID.:		TP106	TP108
			Sample Type:		SOIL	SOIL
			Top Depth (m):		0.00	0.00
			Bottom Depth (m):		2.00	1.30
			Date Sampled:		09-Apr-2019	09-Apr-2019
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Sulphate	U	1220	mg/l	1.0	24	310
Cyanide (Total)	U	1300	mg/l	0.050	0.05	0.05
Arsenic (Dissolved)	U	1450	µg/l	1.0	1	1
Boron (Dissolved)	U	1450	µg/l	20	20	20
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.08	0.08
Copper (Dissolved)	U	1450	µg/l	1.0	1	1
Mercury (Dissolved)	U	1450	µg/l	0.50	0.5	0.5
Nickel (Dissolved)	U	1450	µg/l	1.0	1	4.1
Lead (Dissolved)	U	1450	µg/l	1.0	1	1
Selenium (Dissolved)	U	1450	µg/l	1.0	1	1
Vanadium (Dissolved)	U	1450	µg/l	1.0	1	1
Zinc (Dissolved)	U	1450	µg/l	1.0	1	5.3
Chromium (Trivalent)	N	1490	µg/l	20	20	20
Chromium (Hexavalent)	U	1490	µg/l	20	20	20

APPENDIX C
Controlled Waters Risk Assessment