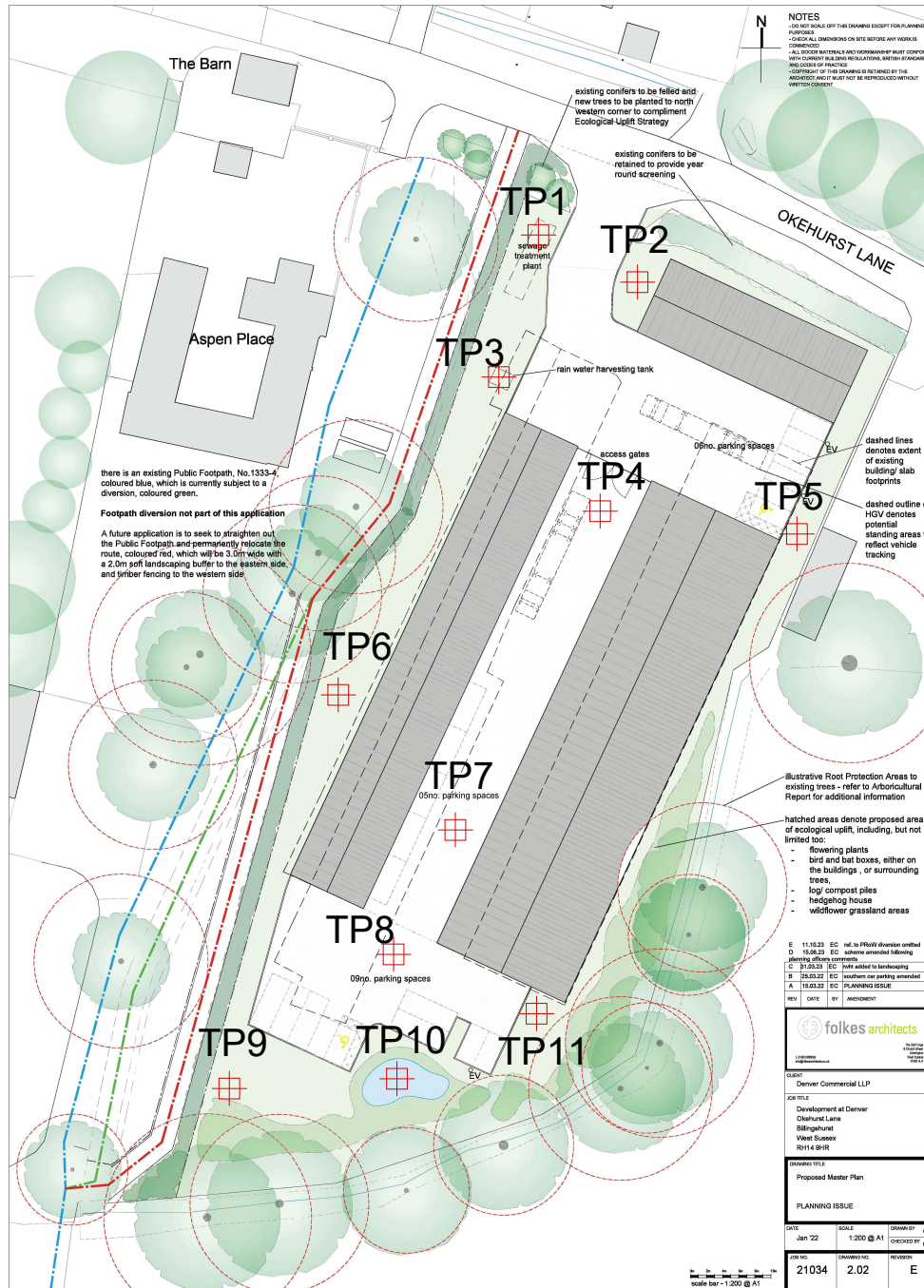
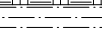
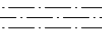
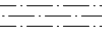
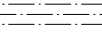


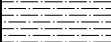
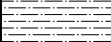
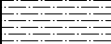
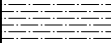
APPENDIX C: **Trial Pit Location Plan**

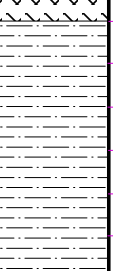
11 Proposed sample locations

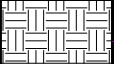
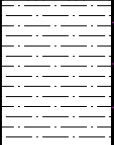
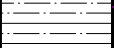


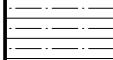
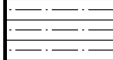
APPENDIX D: **Trial Pit Logs**

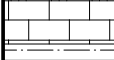
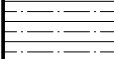
Environmental Assessment Services Limited									
Site: Denver Storage, Billingshurst								Date: 06 Nov. 2024	
Standpipe	Sampling			Strata					
	Type	Depths		Legend	Depth bgl		Strata Description		
		From	To						
	Soil	0.02	0.08		0.02		Road planings		
	Soil	0.25	0.35		0.08		Light brown topsoil with chalk fragments		
							Mid brown clayey soil		
					0.4		Mottled clay		
					0.6		Weald Clay Formation		
							END		
Remarks No ground water						Method	Trial pit		
						Dimensions Dia			
						Made by			
						Job No.	ECE/DenverComLLP		
						Borehole or Trial Pit No.	TP1		

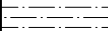
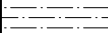
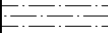
Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl		Strata Description
		From	To				
	Soil	0.05	0.15		0.05		Road planings over dark topsoil
	Soil	0.15	0.25		0.09		Clayey topsoil with brick
							Mottled orange clay Weald Clay Formation
					0.5		END
							
Remarks No ground water						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP2

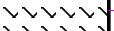
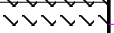
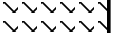
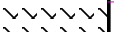
Environmental Assessment Services Limited										
Site: Denver Storage, Billingshurst							Date: 06 Nov. 2024			
Standpipe	Sampling			Strata						
	Type	Depths		Legend	Depth bgl	R L	Strata Description			
		From	To							
	Soil	0.05	0.15		0.2		Dark brown topsoil with brick, metal & slate fragments			
	Soil	Mix	Mix				Light brown clay Fading into Mottled blue/grey clay Weald Clay Formation			
							END			
Remarks No ground water						Method	Trial pit			
						Dimensions Dia				
						Made by				
						Job No.	ECE/DenverComLLP			
						Borehole or Trial Pit No.	TP3			

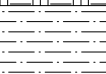
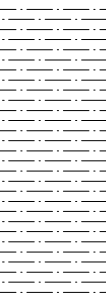
Environmental Assessment Services Limited										
Site: Denver Storage, Billingshurst							Date: 06 Nov. 2024			
Standpipe	Sampling			Strata						
	Type	Depths		Legend	Depth bgl	R L	Strata Description			
		From	To							
	Soil	0.05	0.15		0.15		Mid brown top soil with roots			
	Soil	0.25	0.35				Light brown clay			
							Mottled clay			
							END			
Remarks No ground water						Method	Trial pit			
						Dimensions Dia				
						Made by				
						Job No.	ECE/DenverComLLP			
						Borehole or Trial Pit No.	TP4			

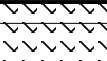
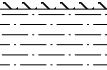
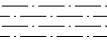
Environmental Assessment Services Limited									
Site: Denver Storage, Billingshurst							Date: 06 Nov. 2024		
Standpipe	Sampling			Strata					
	Type	Depths		Legend	Depth bgl		Strata Description		
		From	To						
	Soil	0.02	0.12		0.07		Loose road planings mixed with dark topsoil		
	Soil	0.15	0.25		0.17		Clayey topsoil		
					0.20		Sand		
					0.55		Weathered clay (orange into mottled brown/blue clay) Weald Caly Formation		
							END		
Remarks No ground water						Method	Trial pit		
						Dimensions Dia			
						Made by			
						Job No.	ECE/DenverComLLP		
						Borehole or Trial Pit No.	TP5		

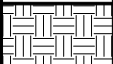
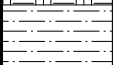
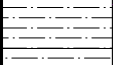
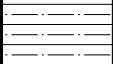
Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl	R L	Strata Description
		From	To				
	Soil	0.05	0.15		0.4 0.5 0.9		Mid brown topsoil
	Soil	0.40	0.45				Chalk
							Weathered orange/brown clay
							Weald Caly Formation
							END
Remarks No ground water						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP6

Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl	R L	Strata Description
		From	To				
	Soil	0.00	0.15		0.05		Topsoil with roots
							Light brown clay
					0.45		Mottled orange/grey clay
					0.65		Weald Clay Formation
							END
Remarks No ground water Cobbles adjacent to nearby hardstanding with drainage pipe						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP7

Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl	R L	Strata Description
		From	To				
	Soil	0.05	0.15		0.15		Dark brown topsoil with roots & brick fragments
	Soil	0.20	0.30				Mid brown orange clayey soil with fine brick fragments
					0.4		Orange weathered clay
					0.6		Grey/orange mottled clay
					0.75		Weald Clay Formation
Remarks No ground water						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP8

Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl	R L	Strata Description
		From	To				
	Soil	0.00	0.06		0.15		Mid brown topsoil with roots
	Soil	0.10	0.20				Light brown clayey soil fading into
							Blue/grey clay Weald Clay Formation
					END		
Remarks No ground water						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP9

Environmental Assessment Services Limited							
Site: Denver Storage, Billingshurst						Date: 06 Nov. 2024	
Standpipe	Sampling			Strata			
	Type	Depths		Legend	Depth bgl	R L	Strata Description
		From	To				
	Soil	0.05	0.15		0.05		Mid brown top soil with roots
	Soil	0.35	0.45		0.55		Mid brown clayey soil with waste materials including carpet and foam underlay
						Mottled orange - blue/grey clay	
						0.80	Weald Clay Formation
							END
Remarks No ground water						Method	Trial pit
						Dimensions Dia	
						Made by	
						Job No.	ECE/DenverComLLP
						Borehole or Trial Pit No.	TP10

Environmental Assessment Services Limited									
Site: Denver Storage, Billingshurst								Date: 06 Nov. 2024	
Standpipe	Sampling			Strata					
	Type	Depths		Legend	Depth bgl	R L	Strata Description		
		From	To						
	Soil	0.05	0.15		0.15		Topsoil		
		0.35	0.45		0.40		Light brown clayey soil with chalk and flint fragments		
					0.75		Weathered mid brown clay Weald Clay Formation		
							END		
Remarks No ground water Unknown subterranean structure - concrete slab and metal runners						Method	Trial pit		
						Dimensions Dia			
						Made by			
						Job No.	ECE/DenverComLLP		
						Borehole or Trial Pit No.	TP11		

APPENDIX E: **Analysis Certificates**

Environmental Assessment Services Ltd
London Road
Hickstead
Haywards Heath
West Sussex
RH17 5LZ

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

e: Nat@easltd.co.uk
info@easltd.co.uk

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-052879

Replaces Analytical Report Number: 24-052879, issue no. 1
Additional analysis undertaken.
Asbestos quantification added to sample 374540 at clients request

Project / Site name:	Denver	Samples received on:	11/11/2024
Your job number:		Samples instructed on/ Analysis started on:	11/11/2024
Your order number:		Analysis completed by:	06/12/2024
Report Issue Number:	2	Report issued on:	09/12/2024
Samples Analysed:	21 soil samples		



Signed:

Adam Fenwick
Key Account Executive
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374526	374527	374528	374529	374530
Sample Reference	TP1	TP1	TP2	TP2	TP3
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.04	0.30	0.10	0.20	0.10
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	42.2	33.7	65.4	< 0.1	58.1
Moisture Content	%	0.01	NONE	6.3	17	4.1	18	8.1
Total mass of sample received	kg	0.1	NONE	0.8	0.8	0.9	0.9	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	-
-------------------------------------	---	-------	-----------	---	---	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	-
---	------	-----	-----------	---	---	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	9.2	7.7	9	8.3	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	790	430	500	2400	2500
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	250	84	71	240	600
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	125	41.7	35.7	120	299
Sulphide	mg/kg	1	MCERTS	11	< 1.0	71	< 1.0	2700
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.8	1.9	4.8	0.9	5.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.06	0.17	0.96	30
Acenaphthylene	mg/kg	0.05	MCERTS	0.05	0.22	0.13	0.13	9.4
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.53	0.31	1.1	87
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.55	0.29	1.3	94
Phenanthrene	mg/kg	0.05	MCERTS	0.31	6.3	2.6	9.2	810
Anthracene	mg/kg	0.05	MCERTS	0.08	1.3	0.62	2	210
Fluoranthene	mg/kg	0.05	MCERTS	0.87	14	4.2	10	920
Pyrene	mg/kg	0.05	MCERTS	0.92	12	3.7	9	770
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.41	5.3	1.6	3.7	350
Chrysene	mg/kg	0.05	MCERTS	0.59	5.9	2	3.9	360
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.71	7.2	1.8	4.1	390
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.31	3.1	0.91	2	200
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.56	6.4	1.7	4.1	380
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.4	3.3	1	2.1	170
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.75	0.26	0.41	37
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.51	3.6	1.2	2.2	180

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374526	374527	374528	374529	374530
Sample Reference	TP1	TP1	TP2	TP2	TP3
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.04	0.30	0.10	0.20	0.10
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	5.74	69.9	22.5	56.4	4980
-----------------------------	-------	-----	-----------	------	------	------	------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	22	7.2	16	9.7
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.1	0.6	1	1.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.7	0.5	0.8	0.7
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	25	13	24	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	21	14	270	54
Lead (aqua regia extractable)	mg/kg	1	MCERTS	25	67	17	190	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	20	9	17	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.5	< 1.0	< 1.0	U/S ^{u/s}
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	84	150	94	300	180

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	8
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	2.4	< 2.0	4	< 2.0	53
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	11	< 8.0	19	18	77
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	210	< 8.0	360	12	180
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	230	< 10	380	30	320

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	1.1	< 1.0	33
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	3.9	6	7.6	290
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	16	20	44	24	1800
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	410	40	760	31	2500
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	430	64	810	62	4700

TPH (EC10 - EC40) _{EH_CU_1D_TOTAL}	mg/kg	10	MCERTS	1200	67	2400	96	5400
---	-------	----	--------	------	----	------	----	------

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374531	374532	374533	374534	374535
Sample Reference	TP3	TP4	TP4	TP5	TP5
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	None Supplied	0.10	0.30	0.07	0.20
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	39.6	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	21	18	16	15
Total mass of sample received	kg	0.1	NONE	0.8	0.8	0.8	0.8	0.9

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN	MJN	MJN
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	-
-------------------------------------	---	-------	-----------	---	---	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	-
---	------	-----	-----------	---	---	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.6	8.7	7.8	8.3	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	2000	750	430	730	560
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	600	60	39	260	42
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	301	29.9	19.7	128	20.8
Sulphide	mg/kg	1	MCERTS	630	7.2	4.1	4.3	< 1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.1	2.7	1.3	3.2	2.8

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	4.7	0.39	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	2.9	0.79	0.16	0.08	0.06
Acenaphthene	mg/kg	0.05	MCERTS	15	1.6	0.07	0.06	< 0.05
Fluorene	mg/kg	0.05	MCERTS	14	1.8	< 0.05	0.07	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	160	17	1.1	0.9	0.47
Anthracene	mg/kg	0.05	MCERTS	43	4.9	0.31	0.22	0.12
Fluoranthene	mg/kg	0.05	MCERTS	270	34	3.9	2.1	1.4
Pyrene	mg/kg	0.05	MCERTS	230	33	3.9	1.9	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	110	15	1.8	0.93	0.61
Chrysene	mg/kg	0.05	MCERTS	110	15	2	1.1	0.66
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	140	18	2.8	1.2	0.76
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	52	8	1.2	0.52	0.48
Benzo(a)pyrene	mg/kg	0.05	MCERTS	130	18	2.7	0.96	0.82
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	59	8.4	1.6	0.61	0.43
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	12	1.7	0.31	0.16	0.08
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	65	8.7	1.8	0.73	0.48

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number				374531	374532	374533	374534	374535
Sample Reference				TP3	TP4	TP4	TP5	TP5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				None Supplied	0.10	0.30	0.07	0.20
Date Sampled				06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1430	185	23.7	11.5	7.61
-----------------------------	-------	-----	-----------	------	-----	------	------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	9.6	17	15	13
Boron (water soluble)	mg/kg	0.2	MCERTS	2	0.8	0.6	0.8	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.4	0.4	< 0.2	0.7	0.5
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	39	43	21	21	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61	20	14	20	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	74	28	38	34	37
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	48	9	12	14	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.5	5.9	< 1.0	1.3	1.6
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	500	110	100	160	120

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	11	2	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	22	11	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	73	49	< 8.0	59	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	110	63	< 10	59	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	11	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	150	21	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	440	210	< 10	11	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	790	340	18	140	13
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	1400	570	18	150	13

TPH (EC10 - EC40) _{EH_CU_1D_TOTAL}	mg/kg	10	MCERTS	1800	670	24	440	16
---	-------	----	--------	------	-----	----	-----	----

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374536	374537	374538	374539	374540
Sample Reference	TP6	TP6	TP7	TP8	TP8
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.15	0.45	0.01	0.01	0.25
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	32.3	< 0.1	< 0.1	54.9	32.5
Moisture Content	%	0.01	NONE	15	17	25	19	14
Total mass of sample received	kg	0.1	NONE	0.9	0.8	0.8	0.8	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Detected
Asbestos Analyst ID	N/A	N/A	N/A	MUA	MUA	MUA	MUA	WEM
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	Detected
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	Detected
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	Detected
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	Not-detected

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	0.002
-------------------------------------	---	-------	-----------	---	---	---	---	-------

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	Loose Fibres
---	------	-----	-----------	---	---	---	---	--------------

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8	7.8	7.8	8.3	9.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	420	560	620	1200	2100
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	37	48	55	660	320
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	18.7	23.9	27.3	332	160
Sulphide	mg/kg	1	MCERTS	< 1.0	1.1	2.1	24000 ⁸⁺	68
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4	0.8	3.1	4.8	1.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.69	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.1	1.8	0.35
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	4.4	0.31
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	3.7	0.27
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.33	0.82	58	4.3
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.07	0.24	14	1.4
Fluoranthene	mg/kg	0.05	MCERTS	0.05	0.7	2.5	85	10
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.65	2.5	73	9.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.27	1.1	34	5.2
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.31	1.2	30	4.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.37	1.8	34	7.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.16	0.67	19	2.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.34	1.7	36	6.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.17	0.89	17	3.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.15	3.7	0.77
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.21	1	18	4.6

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374536	374537	374538	374539	374540
Sample Reference	TP6	TP6	TP7	TP8	TP8
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.15	0.45	0.01	0.01	0.25
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	3.59	14.6	433	62.4
-----------------------------	-------	-----	-----------	--------	------	------	-----	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	3.9	11	3.9	9.1
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.8	2	0.8	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.4	0.3	0.5
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	8	16	13	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	5.9	9.5	14	7.3	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	9.9	42	22	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8.4	7	8.8	3.9	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.4	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	81	60	400	65	100

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	6.3
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	12	31
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	29	30
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10	41	68

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	3.1	1.8
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	61	17
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	12	410	59
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	20	640	130
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	< 10	< 10	32	1100	200

TPH (EC10 - EC40) _{EH_CU_1D_TOTAL}	mg/kg	10	MCERTS	< 10	< 10	32	1200	300
---	-------	----	--------	------	------	----	------	-----

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number	374541	374542	374543	374544	374545
Sample Reference	TP9	TP9	TP10	TP10	TP11
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A	N/A	N/A
Depth (m)	0.01	0.15	0.10	0.40	0.01
Date Sampled	06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	36.8	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	12	21	20	22
Total mass of sample received	kg	0.1	NONE	0.9	0.8	0.8	0.8	0.9

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU	SPU
Actinolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-	-	-
-------------------------------------	---	-------	-----------	---	---	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-	-	-
---	------	-----	-----------	---	---	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.2	8.1	7.2	7.4	7.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	1300	1200	680	1600	780
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	670	590	87	530	280
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	337	293	43.6	266	141
Sulphide	mg/kg	1	MCERTS	17000 ⁸⁺	140	< 1.0	1.3	18
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.5	1.3	3.1	5	3.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	2.3	1	0.06	0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	1.1	0.55	0.1	0.34	0.1
Acenaphthene	mg/kg	0.05	MCERTS	6.1	1.6	< 0.05	0.28	0.11
Fluorene	mg/kg	0.05	MCERTS	4.6	1.8	0.08	0.25	0.09
Phenanthrene	mg/kg	0.05	MCERTS	79	19	1.1	3.8	1.5
Anthracene	mg/kg	0.05	MCERTS	17	4.3	0.26	1.1	0.34
Fluoranthene	mg/kg	0.05	MCERTS	90	27	1.5	10	4.3
Pyrene	mg/kg	0.05	MCERTS	76	24	1.4	9.4	4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	34	9.8	0.63	4.6	1.9
Chrysene	mg/kg	0.05	MCERTS	32	9.5	0.66	4.6	1.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	39	11	0.7	5.7	2.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	15	4.6	0.36	3.2	1.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	37	11	0.64	6.1	2.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	18	5.7	0.31	3.2	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	3.6	1	0.07	0.61	0.23
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	20	6.2	0.34	3.6	1.3

Analytical Report Number: 24-052879
Project / Site name: Denver

Lab Sample Number				374541	374542	374543	374544	374545
Sample Reference				TP9	TP9	TP10	TP10	TP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A	N/A	N/A
Depth (m)				0.01	0.15	0.10	0.40	0.01
Date Sampled				06/11/2024	06/11/2024	06/11/2024	06/11/2024	06/11/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	475	139	8.23	56.8	22.9
-----------------------------	-------	-----	-----------	-----	-----	------	------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.7	15	19	12	18
Boron (water soluble)	mg/kg	0.2	MCERTS	2.7	1	1.1	1.2	2.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	1.8	0.9	0.7
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	18	23	20	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	22	12	59	63	38
Lead (aqua regia extractable)	mg/kg	1	MCERTS	30	31	190	85	54
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	1.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	12	39	16	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	2	1.8	< 1.0	< 1.0	1.8
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	93	860	450	190

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	15	11	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	15	11	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	2	2.1	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	52	21	< 2.0	2.6	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	380	94	< 10	35	24
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	420	72	12	67	47
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	850	190	12	100	71

TPH (EC10 - EC40) _{EH_CU_1D_TOTAL}	mg/kg	10	MCERTS	910	210	23	110	84
---	-------	----	--------	-----	-----	----	-----	----

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	6.5	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-052879

Project / Site name: Denver

Lab Sample Number				374546
Sample Reference				TP11
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.40
Date Sampled				06/11/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	17
Total mass of sample received	kg	0.1	NONE	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU
Actinolite detected	Type	N/A	ISO 17025	-
Amosite detected	Type	N/A	ISO 17025	-
Anthophyllite detected	Type	N/A	ISO 17025	-
Chrysotile detected	Type	N/A	ISO 17025	-
Crocidolite detected	Type	N/A	ISO 17025	-
Tremolite detected	Type	N/A	ISO 17025	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-
-------------------------------------	---	-------	-----------	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-
---	------	-----	-----------	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO ₄	mg/kg	50	MCERTS	890
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	600
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	300
Sulphide	mg/kg	1	MCERTS	< 1.0
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
----------------------------	-------	---	--------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.11
Acenaphthene	mg/kg	0.05	MCERTS	0.1
Fluorene	mg/kg	0.05	MCERTS	0.11
Phenanthrene	mg/kg	0.05	MCERTS	1.5
Anthracene	mg/kg	0.05	MCERTS	0.35
Fluoranthene	mg/kg	0.05	MCERTS	3.4
Pyrene	mg/kg	0.05	MCERTS	3.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.5
Chrysene	mg/kg	0.05	MCERTS	1.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.9
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.96
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.21
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1

Analytical Report Number: 24-052879

Project / Site name: Denver

Lab Sample Number				374546
Sample Reference				TP11
Sample Number				None Supplied
Water Matrix				N/A
Depth (m)				0.40
Date Sampled				06/11/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	18.8
-----------------------------	-------	-----	-----------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	33
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	2.1
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	28
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	66
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	95

TPH (EC10 - EC40) _{EH_CU_1D_TOTAL}	mg/kg	10	MCERTS	100
---	-------	----	--------	-----

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 24-052879
Project / Site name: Denver
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
374540	TP8	0.25	138	Loose Fibres	Amosite & Chrysotile & Crocidolite	0.002	0.002

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 24-052879

Project / Site name: Denver

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
374526	TP1	None Supplied	0.04	Brown loam and sand with vegetation and stones
374527	TP1	None Supplied	0.3	Brown loam and clay with vegetation and stones
374528	TP2	None Supplied	0.1	Brown sandy loam with vegetation and stones
374529	TP2	None Supplied	0.2	Brown clay and sand with gravel
374530	TP3	None Supplied	0.1	Brown loam and sand with vegetation and stones
374531	TP3	None Supplied	None Supplied	Brown loam and sand with vegetation and stones
374532	TP4	None Supplied	0.1	Brown loam and clay with gravel and vegetation
374533	TP4	None Supplied	0.3	Brown loam and clay with gravel and vegetation
374534	TP5	None Supplied	0.07	Brown loam and clay with gravel and vegetation
374535	TP5	None Supplied	0.2	Brown clay and sand with gravel
374536	TP6	None Supplied	0.15	Brown loam and clay with vegetation and stones
374537	TP6	None Supplied	0.45	Brown clay and sand with gravel and chalk
374538	TP7	None Supplied	0.01	Brown loam and clay with gravel and vegetation
374539	TP8	None Supplied	0.01	Brown loam and clay with vegetation and stones
374540	TP8	None Supplied	0.25	Brown sand with stones and vegetation
374541	TP9	None Supplied	0.01	Brown loam and clay with vegetation and stones
374542	TP9	None Supplied	0.15	Brown loam and clay with gravel and vegetation
374543	TP10	None Supplied	0.1	Brown loam and clay with gravel and vegetation
374544	TP10	None Supplied	0.4	Brown loam and clay with gravel and vegetation
374545	TP11	None Supplied	0.01	Brown loam and clay with gravel and vegetation
374546	TP11	None Supplied	0.4	Brown clay and loam with gravel and vegetation

Analytical Report Number : 24-052879

Project / Site name: Denver

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088-PL	D/W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS

Analytical Report Number : 24-052879

Project / Site name: Denver

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)

Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

&+ - Result is above calibration range after the maximum dilution has been applied. The result should be considered the minimum value. The actual result could be significantly higher. This result is not accredited.

*U/S - Unsuitable for analysis due to sample matrix.

APPENDIX F: **Photographs**



Photograph 1: Trial pit 1.



Photograph 2: Trial pit 2.



Photograph 3: Trial pit 3.



Photograph 4. Trial pit 4.



Photograph 5. Trial pit 5.



Photograph 6. Trial pit 6.



Photograph 7. Trial pit 7.



Photograph 8. Trial pit 8.



Photograph 9. Trial pit 9.

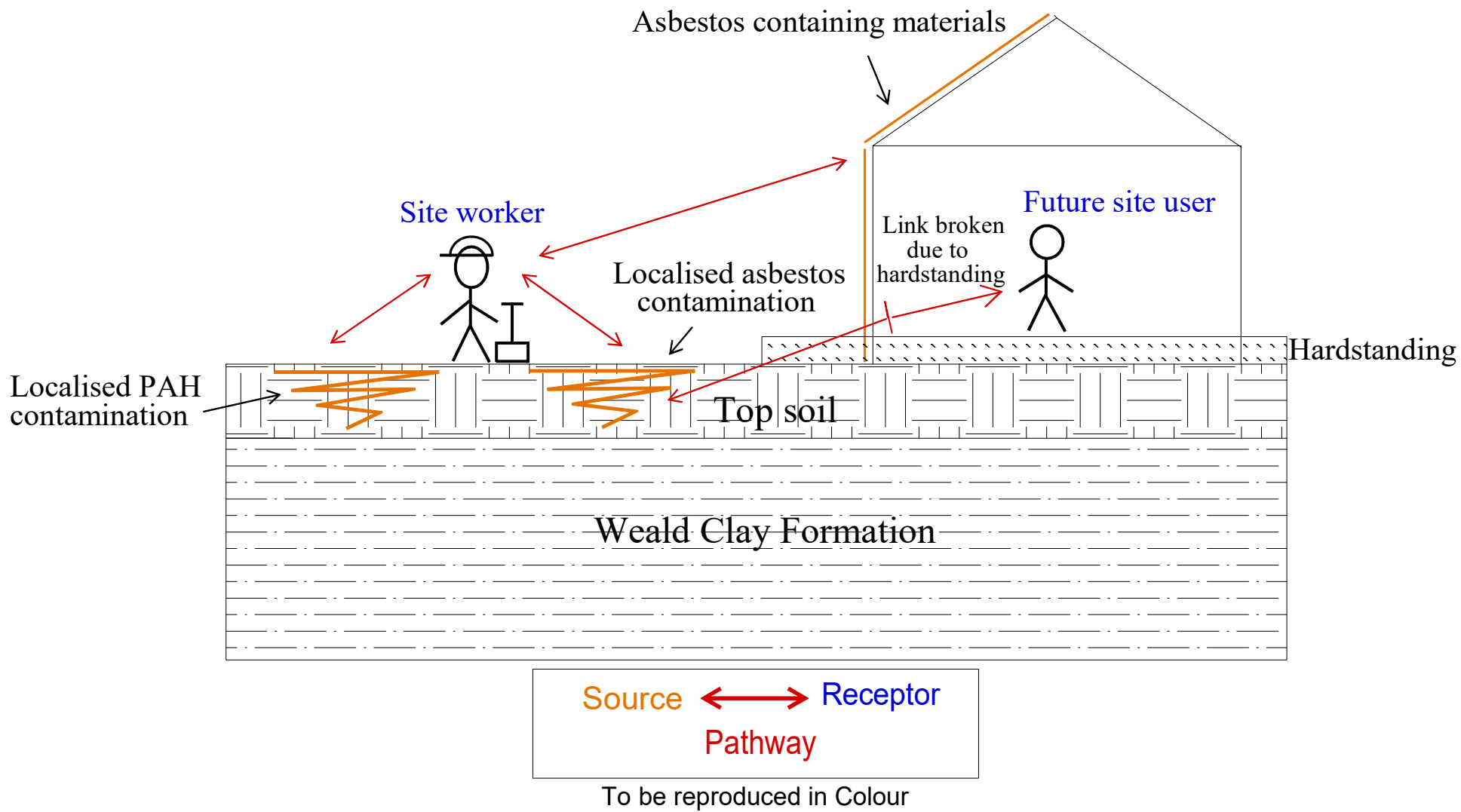


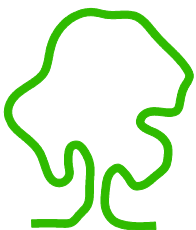
Photograph 10. Trial pit 10.



Photograph 11. Trial pit 11.

APPENDIX G: **Conceptual Model**





eas ltd

Environmental Assessment Services Ltd

Unit 4B, The Courtyard, Holmsted Farm, Staplefield Road, Cuckfield,
West Sussex, RH17 5JT

Phone : +44 (0) 1444 882552

email : info@easltd.co.uk

web site : www.easltd.co.uk