

Appendix A

Emerging Water Discovery

Appendix A1 - BAM Report on initial Cheetham Hill Culvert

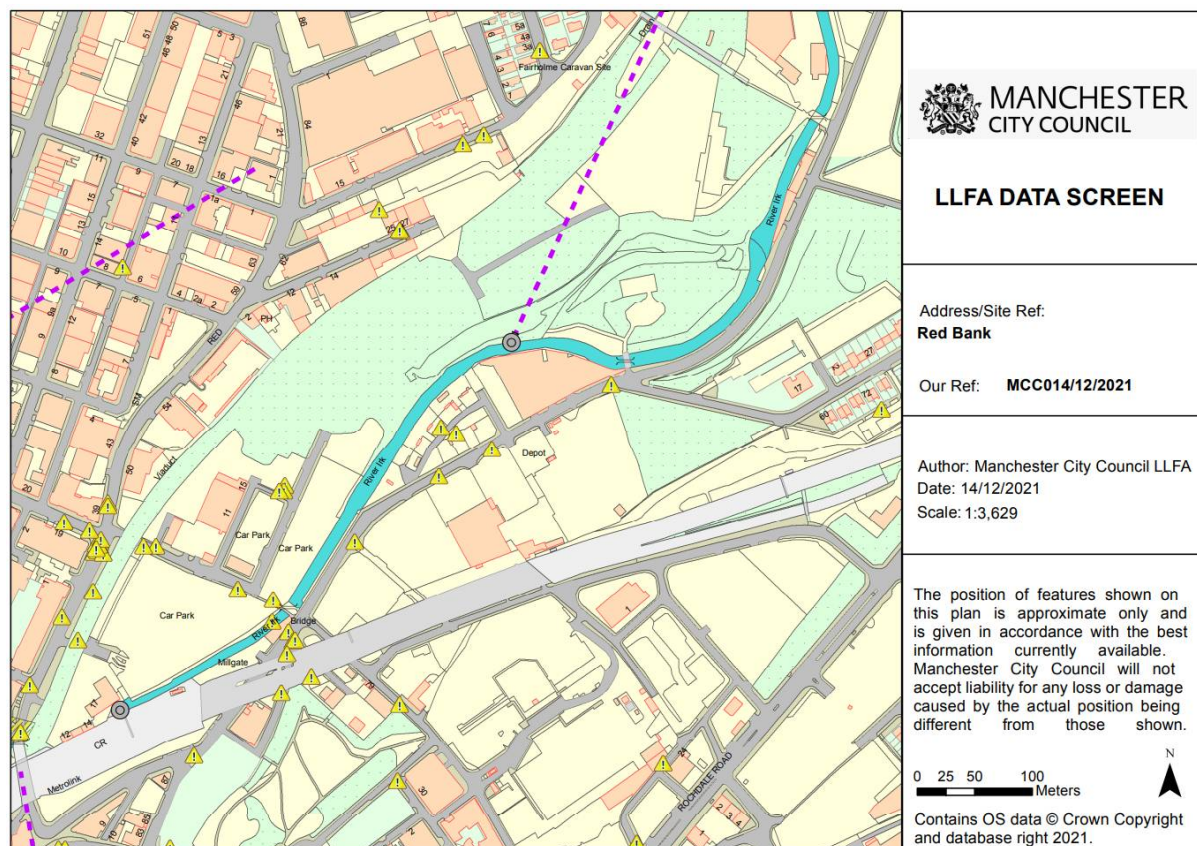
On site investigation works to attempt to locate the believed route of Cheetham hill culvert

Following the receipt of the below information of the possible route of the Cheetham Hill Culvert across the development site investigation works were undertaken to locate and plot the position.

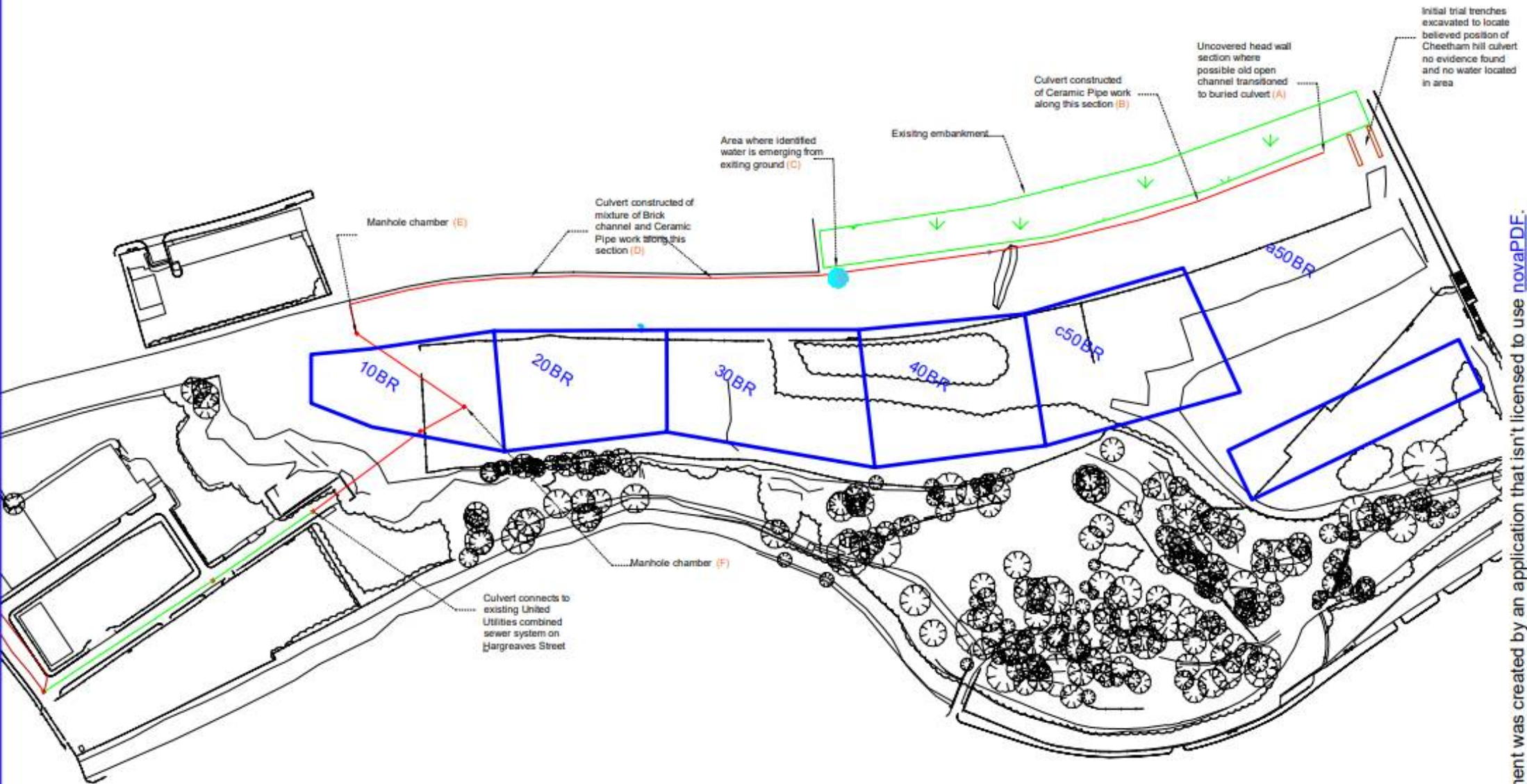
As can be seen on the enclosed drawing and photographs an existing drainage system was identified across the site which eventually connected to the UU combined drainage system in Hargreaves Street.

Historical Information

The below drawing was initially provided in an aid to the location of the Culvert. Surveys of existing drainage system to locate any connections to the culvert were undertaken without success.



Identified drainage system across development area



Photographs of investigation works undertaken

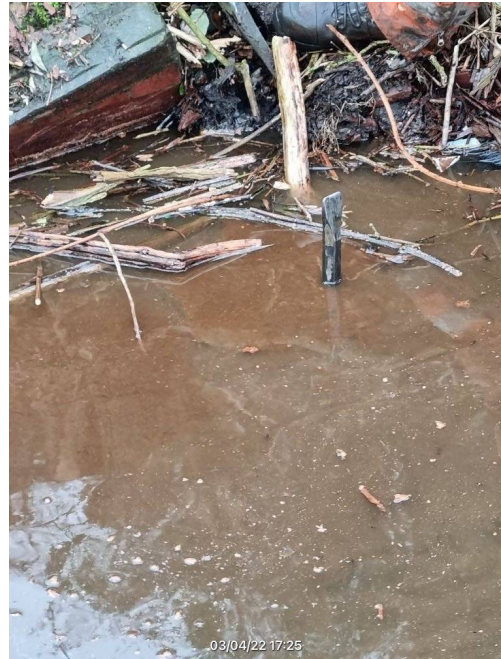
A. Headwall uncovered



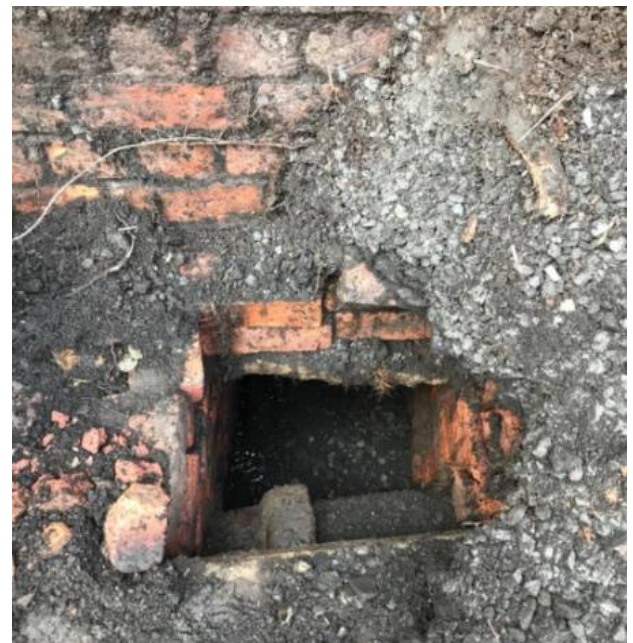
B. Clay pipe work of culverted section of drain



C. Area where water emerges from existing ground



D. Identified areas of culvert/drain construction



E. Manhole chamber



F. Manhole Chamber

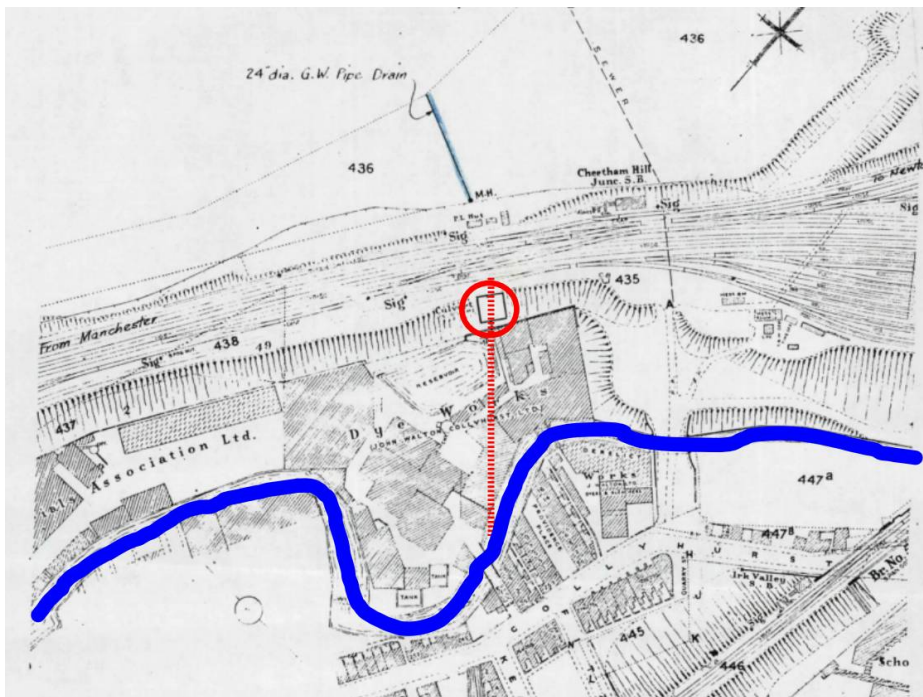
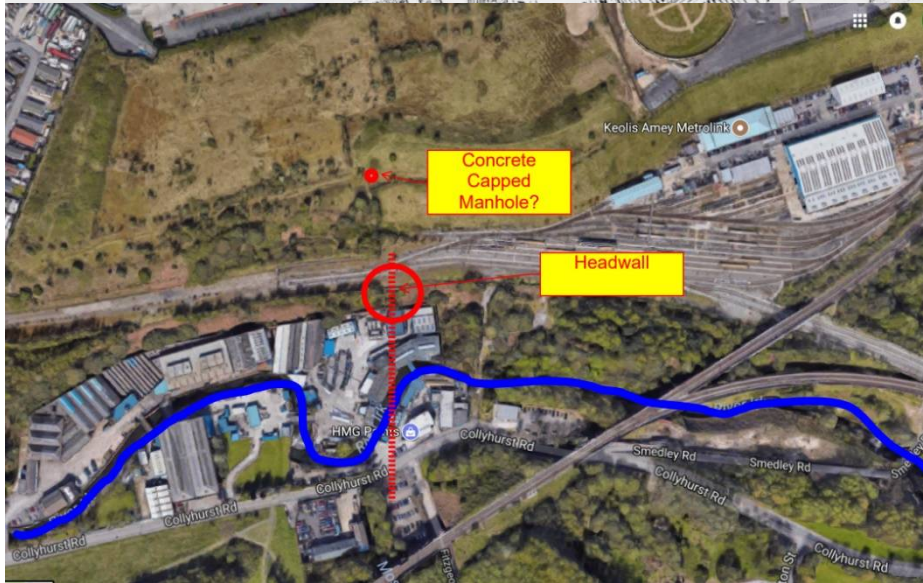


Located alignment of Culvert

Following investigations and research on previous works undertaken in the wider area it has been discovered that the Cheetham hill culvert does not enter the Victoria North site area.

It was identified that the culvert now runs through the Packaging products site and outfalls into the river irk as shown below upstream of the Victoria North site area.





Head wall (original photos taken)



Outfall present day overgrown

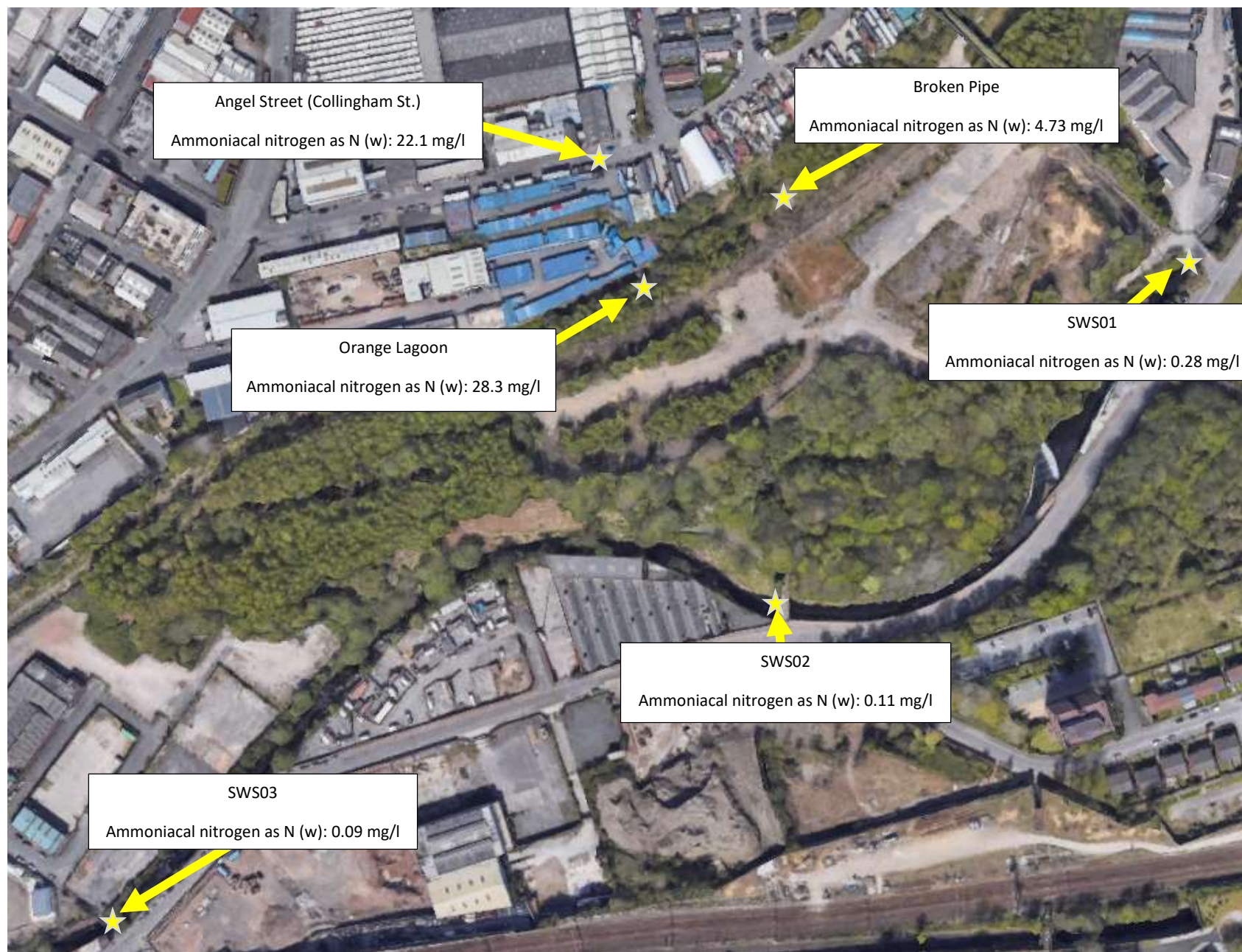


Photos taken 2022 Showing route of culvert to river outfall



Google Earth screen shots showing location of Cheetham hill Culvert entering River Irk





FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 22/03772
Issue Number: 1

Date: 05 May, 2022

Client: BAM Ritchies Warrington
Unit 5
Taurus Park
Europa Boulevard
Warrington
UK
WA5 7ZT

Project Manager: Andy Bird
Project Name: Victoria North HIF
Project Ref: 326R
Order No: RIT 262 915 759
Date Samples Received: 14/04/22
Date Instructions Received: 20/04/22
Date Analysis Completed: 05/05/22

Approved by:



Sophie France
Client Service Manager

Envirolab Job Number: 22/03772

Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAG00.N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
pH (w) _A [#]	7.58	7.66	7.79	7.15	6.75			pH	0.01	A-T-031w
COD (settled) _A [#]	16	17	27	21	40			mg/l	5	A-T-034w
BOD (settled, 5 day) _A	2	<1	1	15	14			mg/l	1	A-T-048
Hardness Total _A [#]	185	156	147	447	683			mg/l Ca CO3	2	A-T-049w
Total Suspended Solids (w) _A [#]	<10	<10	<10	14	71			mg/l	10	A-T-036w
Ammoniacal nitrogen as N (w) _A [#]	0.28	0.11	0.09	4.73	28.3			mg/l	0.02	A-T-033w
Chloride (w) _A [#]	84	85	84	36	34			mg/l	1	A-T-026w
Cyanide (free) (w) _A [#]	<0.005	<0.005	<0.005	0.005	<0.005			mg/l	0.005	A-T-042wFCN
Cyanide (total) (w) _A [#]	<0.005	<0.005	<0.005	0.008	0.008			mg/l	0.005	A-T-042wTCN
Cyanide (complex) _A [#]	<0.005	<0.005	<0.005	<0.005	0.008			mg/l	0.005	A-T-042wCCN
Thiocyanate (w) _A	0.3	0.3	0.2	0.1	0.1			mg/l	0.1	A-T-041w
Phenols - Total by HPLC (w) _A	<0.01	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-050w
DOC (w) _A [#]	3.6	3.3	3.3	5.5	5.6			mg/l	2	A-T-032w
Antimony (dissolved) _A	2	2	2	1	<5			µg/l	1	A-T-025w
Arsenic (dissolved) _A [#]	3	2	3	2	9			µg/l	1	A-T-025w
Beryllium (dissolved) _A [#]	<1	<1	<1	<1	<5			µg/l	1	A-T-025w
Cadmium (dissolved) _A [#]	<0.2	<0.2	<0.2	<0.2	<1.0			µg/l	0.2	A-T-025w
Calcium (dissolved) _A [#]	61	49	47	135	222			mg/l	1	A-T-049w
Copper (dissolved) _A [#]	9	4	7	8	26			µg/l	1	A-T-025w
Chromium (dissolved) _A [#]	21	22	21	1	<5			µg/l	1	A-T-025w
Chromium (hexavalent) (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/l	0.01	A-T-040w
Iron (dissolved) _A [#]	681	355	549	3160	76800			µg/l	10	A-T-025w
Lead (dissolved) _A [#]	6	<1	3	52	21			µg/l	1	A-T-025w
Manganese (dissolved) _A [#]	74	51	56	746	693			µg/l	1	A-T-025w
Mercury (dissolved) _A [#]	<0.1	<0.1	<0.1	<0.1	<0.5			µg/l	0.1	A-T-025w
Nickel (dissolved) _A [#]	3	2	3	7	<5			µg/l	1	A-T-025w
Selenium (dissolved) _A [#]	<1	<1	<1	<1	<5			µg/l	1	A-T-025w
Vanadium (dissolved) _A [#]	<1	<1	<1	2	6			µg/l	1	A-T-025w
Zinc (dissolved) _A [#]	44	28	34	50	59			µg/l	1	A-T-025w

Envirolab Job Number: 22/03772

Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOO N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
Acid Herbicides Suite 3+ (w)										
2,3,6-TBA (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
2,4-D (w) _A	0.06	0.05	0.05	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
2,4-DB (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
2,4,5-T (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
2,4,5-TP; (Fenoprop); (Silvex) (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
4-CPA (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Benazolin (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Bentazone (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Bromacil (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Bromoxynil (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Clopyralid (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Dicamba (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
2,4-DP; (Dichlorprop) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Diclofop (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Flamprop (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Flamprop-isopropyl (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Fluroxypyr (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Ioxynil (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
MCPA (w) _A	0.04	0.04	0.04	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
MCPB (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
MCPB; (Mecoprop) (w) _A	0.12	0.11	0.10	0.02	0.02			µg/l	0.02	Subcon RPS MH
PCP; (Pentachlorophenol) (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Picloram (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Triclopyr (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH

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Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
Carb+Urea(w)HerbsSuite1										
Carbetamide (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Chlorbufam (w) _A	<1	<1	<1	<1	<1			µg/l	0.1	Subcon RPS MH
Chloroxuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Chlorpropham (w) _A	<1	<1	<1	<1	<1			µg/l	0.1	Subcon RPS MH
Chlortoluron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Diflufenuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Dimefuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Diuron (w) _A	<0.05	0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Ethiofencarb (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Isoproturon (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Linuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Methabenzthiazuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Metoxuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Monolinuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Monuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Pencycuron (w) _A	<0.05	<0.05	<0.05	<0.05	<0.05			µg/l	0.05	Subcon RPS MH
Phenmedipham (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Pirimicarb (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Propham (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
OCP+OPP Combined Pest Suite (incl. Atrazine+Simazine) (w)										
Dichlobenil (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Tecnazene (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Trifluralin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
alpha-Hexachlorocyclohexane (HCH) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Hexachlorobenzene (HCB) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Simazine (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Atrazine (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w

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Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
beta-Hexachlorocyclohexane (HCH) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Quintozone (PCNB) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Triallate (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
delta-Hexachlorocyclohexane (HCH) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Chlorothalonil (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Heptachlor (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Aldrin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Triadimefon (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Telodrin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Isodrin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Pendimethalin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Heptachlor epoxide (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
trans-Chlordane (Gamma) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
o,p-DDE (2,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endosulphan I (Alpha) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
cis-Chlordane (Alpha) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
p,p-DDE (4,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Dieldrin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
o,p-DDD (2,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endrin (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endosulphan II (Beta) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
p,p-DDD (4,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
o,p-DDT (2,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endrin Aldehyde (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endosulphan Sulphate (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
p,p-DDT (4,4) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
o,p-Methoxychlor (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Endrin Ketone (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
p,p-Methoxychlor (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Permethrin I (cis) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Permethrin II (trans) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Dichlorvos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Mevinphos (w) _A	<1.0	<1.0	<1.0	<1.0	<1.0			µg/l	0.5	A-T-056w

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Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
Demeton-S (w) _A	<1.0	<1.0	<1.0	<1.0	<1.0			µg/l	0.5	A-T-056w
Phorate (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Dimethoate (w) _A	<1.0	<1.0	<1.0	<1.0	<1.0			µg/l	0.5	A-T-056w
Demeton-O (w) _A	<1.0	<1.0	<1.0	<1.0	<1.0			µg/l	0.5	A-T-056w
Propetamphos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Diazinon (Dimpylate) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Disulfoton (w) _A	<1.0	<1.0	<1.0	<1.0	<1.0			µg/l	0.5	A-T-056w
Chlorpyrifos-methyl (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Methyl Parathion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Pirimiphos-methyl (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Fenitrothion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Malathion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Chlorpyrifos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Fenthion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Parathion (Ethyl Parathion) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Trichloronate (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Chlorfenvinphos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Fensulphothion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Prothiofos (Tokuthion) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Ethion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Triazophos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Carbophenothion (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Phosalone (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Azinphos-methyl (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Azinphos-ethyl (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
Coumaphos (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w
gamma-Hexachlorocyclohexane (HCH / Lindane) (w) _A	<0.2	<0.2	<0.2	<0.2	<0.2			µg/l	0.1	A-T-056w

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Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAG00N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
ONP (Triazine Herbicides x11) (w)										
Ametryne (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Atraton (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Atrazine (w) _A	<0.02	<0.02	<0.02	0.05	<0.02			µg/l	0.02	Subcon RPS MH
Cyanazine (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Prometon (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Prometryn (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Propazine (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Simazine (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Simetryn (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Terbuthylazine (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH
Terbutryn (w) _A	<0.02	<0.02	<0.02	<0.02	<0.02			µg/l	0.02	Subcon RPS MH

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Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAG00N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
PAH 16MS (w)										
Acenaphthene (w) _A [#]	0.01	0.01	0.02	<0.01	0.13			µg/l	0.01	A-T-019w
Acenaphthylene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Anthracene (w) _A [#]	<0.01	<0.01	<0.01	0.07	0.01			µg/l	0.01	A-T-019w
Benzo(a)anthracene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(a)pyrene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(b)fluoranthene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(ghi)perylene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Benzo(k)fluoranthene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Chrysene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Dibenzo(ah)anthracene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Fluoranthene (w) _A [#]	0.01	<0.01	0.03	<0.01	0.03			µg/l	0.01	A-T-019w
Fluorene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	0.05			µg/l	0.01	A-T-019w
Indeno(123-cd)pyrene (w) _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			µg/l	0.01	A-T-019w
Naphthalene (w) _A [#]	0.01	0.02	0.07	<0.01	0.01			µg/l	0.01	A-T-019w
Phenanthrene (w) _A [#]	<0.01	<0.01	0.02	<0.01	0.05			µg/l	0.01	A-T-019w
Pyrene (w) _A [#]	0.01	0.01	0.03	<0.01	0.02			µg/l	0.01	A-T-019w
Total PAH 16MS (w) _A [#]	0.04	0.04	0.17	0.07	0.30			µg/l	0.01	A-T-019w
Pyrethroids (x6) (w)										
Cyfluthrin (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Cyhalothrin-lambda (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Cypermethrin (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Deltamethrin (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Fenvalerate (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH
Permethrin (w) _A	<0.1	<0.1	<0.1	<0.1	<0.1			µg/l	0.1	Subcon RPS MH

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Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
Speciated PCB-WHO12 (w)										
PCB BZ 81 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 105 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 114 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 118 (w) _A [#]	<0.002	<0.002	<0.002	<0.002	<0.002			µg/l	0.002	A-T-004w
PCB BZ 123 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 126 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 156 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 157 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 167 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 169 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 189 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
PCB BZ 77 (w) _A	<0.001	<0.001	<0.001	<0.001	<0.001			µg/l	0.001	A-T-004w
Total Speciated PCB-WHO12 (w) _A	<0.002	<0.002	<0.002	<0.002	<0.002			µg/l	0.001	A-T-004w

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Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAG00.N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
SVOC (excluding PAH-16) (w)										
2,4,5-Trichlorophenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2,4,6-Trichlorophenol (w) _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2,4-Dichlorophenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2,4-Dimethylphenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2,4-Dinitrotoluene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2,6-Dinitrotoluene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2-Chloronaphthalene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2-Chlorophenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2-Methylnaphthalene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2-Methylphenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
2-Nitrophenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
4-Bromophenyl phenyl ether _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
4-Chloro-3-methylphenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Bis(2-chloroisopropyl)ether _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
3+4-Methylphenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
4-Nitrophenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Bis(2-chloroethyl)ether _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Bis(2-chloroethoxy)methane _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Bis(2-ethylhexyl)phthalate _A	<10	<10	<10	<10	<10			µg/l	10	A-T-052w
Butylbenzyl phthalate _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Carbazole _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Dibenzofuran _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
n-Dibutylphthalate _A	<4	<1	<1	<1	<1			µg/l	1	A-T-052w
n-Dioctylphthalate _A	<10	<10	<10	<10	<10			µg/l	10	A-T-052w
n-Nitroso-n-dipropylamine _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Diethyl phthalate _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Dimethyl phthalate _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Hexachlorobenzene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Pentachlorophenol (SVOC) _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Phenol _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Hexachloroethane _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w
Nitrobenzene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-052w

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Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A			µg/l	1	A-T-052w
Isophorone _A	<1	<1	<1	<1	<1					
Hexachlorocyclopentadiene _A	<1	<1	<1	<1	<1					
Perylene _A	<1	<1	<1	<1	<1					

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Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01. EW04	326R.SWS02. EW04	326R.SWS03. EW04	326R.LP01.E W01	326R.LAGOO N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
VOC (w)										
Dichlorodifluoromethane _A	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Chloromethane _A	<10	<10	<10	<10	<10			µg/l	10	A-T-006w
Vinyl Chloride _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Bromomethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Chloroethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Trichlorofluoromethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
trans 1,2-Dichloroethene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Dichloromethane _A	<5	<5	<5	<5	<5			µg/l	5	A-T-006w
Carbon Disulphide _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,1-Dichloroethene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,1-Dichloroethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
cis 1,2-Dichloroethene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Bromochloromethane _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-006w
Chloroform _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
2,2-Dichloropropane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2-Dichloroethane _A [#]	<2	<2	<2	<2	<2			µg/l	2	A-T-006w
1,1,1-Trichloroethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,1-Dichloropropene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Benzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Carbon Tetrachloride _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Dibromomethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2-Dichloropropane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Bromodichloromethane _A [#]	<10	<10	<10	<10	<10			µg/l	10	A-T-006w
Trichloroethene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
cis 1,3-Dichloropropene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
trans 1,3-Dichloropropene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,1,2-Trichloroethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Toluene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,3-Dichloropropane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Dibromochloromethane _A [#]	<3	<3	<3	<3	<3			µg/l	3	A-T-006w
1,2-Dibromoethane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Tetrachloroethene _A	<1	<1	<1	<1	<1			µg/l	1	A-T-006w

Envirolab Job Number: 22/03772

Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
1,1,1,2-Tetrachloroethane _A	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Chlorobenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Ethylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
m & p Xylene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Bromoform _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Styrene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,1,2,2-Tetrachloroethane _A	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
o-Xylene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2,3-Trichloropropane _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Isopropylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
Bromobenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
2-Chlorotoluene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
n-propylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
4-Chlorotoluene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2,4-Trimethylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
4-Isopropyltoluene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,3,5-Trimethylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2-Dichlorobenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,4-Dichlorobenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
sec-Butylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
tert-Butylbenzene _A [#]	<2	<2	<2	<2	<2			µg/l	2	A-T-006w
1,3-Dichlorobenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
n-butylbenzene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w
1,2-Dibromo-3-chloropropane _A [#]	<2	<2	<2	<2	<2			µg/l	2	A-T-006w
1,2,4-Trichlorobenzene _A [#]	<3	<3	<3	<3	<3			µg/l	3	A-T-006w
1,2,3-Trichlorobenzene _A [#]	<3	<3	<3	<3	<3			µg/l	3	A-T-006w
Hexachlorobutadiene _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-006w

Envirolab Job Number: 22/03772

Client Project Name: Victoria North HIF

Client Project Ref: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5			Units	Limit of Detection	Method ref
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAG00N.EW01					
Client Sample ID	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON					
Depth to Top										
Depth To Bottom										
Date Sampled	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22	13-Apr-22					
Sample Type	Water - EW	Water - EW	Water - EW	Water - EW	Water - EW					
Sample Matrix Code	N/A	N/A	N/A	N/A	N/A					
TPH UKCWG (w) with Clean Up *C1										
Ali >C5-C6 (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
Ali >C6-C8 (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
Ali >C8-C10 (w) _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Ali >C10-C12 (w) _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Ali >C12-C16 (w) _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Ali >C16-C21 (w) _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Ali >C21-C35 (w) _A [#]	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Ali >C35-C44 (w) _A	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Total Aliphatics (w) _A	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Aro >C5-C7 (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
Aro >C7-C8 (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
Aro >C8-C10 (w) _A	<5	<5	<5	<5	6			µg/l	5	A-T-055w
Aro >C10-C12 (w) _A [#]	<5	<5	<5	<5	7			µg/l	5	A-T-055w
Aro >C12-C16 (w) _A [#]	<5	<5	<5	<5	8			µg/l	5	A-T-055w
Aro >C16-C21 (w) _A [#]	8	8	10	15	13			µg/l	5	A-T-055w
Aro >C21-C35 (w) _A	<10	<10	<10	<10	<10			µg/l	10	A-T-055w
Aro >C35-C44 (w) _A	<5	<5	<5	<5	<5			µg/l	5	A-T-055w
Total Aromatics (w) _A	<10	<10	10	15	34			µg/l	10	A-T-055w
TPH (Ali & Aro >C5-C44) (w) _A	<10	<10	10	15	34			µg/l	10	A-T-055w
BTEX - Benzene (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - Toluene (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - Ethyl Benzene (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - m & p Xylene (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
BTEX - o Xylene (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w
MTBE (w) _A [#]	<1	<1	<1	<1	<1			µg/l	1	A-T-022w

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample, 9 = INCINERATOR ASH.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

EPH CWG results have humics mathematically subtracted through instrument calculation

TPH results "with Cleanup" indicates results cleaned up with Silica during extraction

EPH CWG GCxGC ID from TPH CWG

Where we have identified humic substances in any ID's from TPH CWG with Clean Up please note that the concentration of these humic substances is not included in the quantified results and are included in the ID for information.

Please contact us if you need any further information.

Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: BAM Ritchies Warrington, Unit 5, Taurus Park, Europa Boulevard, Warrington, UK, WA5 7ZT

Project No: 22/03772

Date Received: 20/04/2022 (am)

Project: Victoria North HIF

Cool Box Temperatures (°C): 10.7 - 11.2

Clients Project No: 326R

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01
Client Sample ID/Depth	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON
Date Sampled	13/04/22	13/04/22	13/04/22	13/04/22	13/04/22
Deviation Code					
F	✓	✓	✓	✓	✓

Key

F

Maximum holding time exceeded between sampling date and analysis for analytes listed below

HOLDING TIME EXCEEDANCES

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01
Client Sample ID/Depth	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON
Date Sampled	13/04/22	13/04/22	13/04/22	13/04/22	13/04/22
Acid Herbicides Suite 3+ (w)	✓	✓	✓	✓	✓
Pyrethroids (x6) (w)	✓	✓	✓	✓	✓
BOD (settled, 5 day)	✓	✓	✓	✓	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	22/03772/1	22/03772/2	22/03772/3	22/03772/4	22/03772/5
Client Sample No	326R.SWS01.EW04	326R.SWS02.EW04	326R.SWS03.EW04	326R.LP01.EW01	326R.LAGOON.EW01
Client Sample ID/Depth	SWS01	SWS02	SWS03	LEAKING PIPE01	ORANGE LAGOON
Date Sampled	13/04/22	13/04/22	13/04/22	13/04/22	13/04/22
A-T-004w	25/04/2022	25/04/2022	25/04/2022	25/04/2022	25/04/2022
A-T-006w	25/04/2022	25/04/2022	25/04/2022	25/04/2022	25/04/2022
A-T-019w	25/04/2022	25/04/2022	25/04/2022	25/04/2022	25/04/2022
A-T-022w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-025w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-026w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-031w	21/04/2022	21/04/2022	21/04/2022	21/04/2022	21/04/2022
A-T-032w	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-033w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-034w	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-036w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-040w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-041w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-042wCCN	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-042wFCN	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-042wTCN	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-048	25/04/2022	25/04/2022	25/04/2022	25/04/2022	25/04/2022
A-T-049w	25/04/2022	25/04/2022	25/04/2022	25/04/2022	25/04/2022
A-T-050w	22/04/2022	22/04/2022	22/04/2022	22/04/2022	22/04/2022
A-T-052w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-055w	26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
A-T-056w	27/04/2022	27/04/2022	27/04/2022	27/04/2022	27/04/2022

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

Appendix A2 - BAM Report on further investigations of the standing water

1. Standing water backing up towards Lowry Bridge, coming from a pipe under Lowry Bridge and a pipe under Showman's guild.



2. The water has been running into an underground channel via this 800mm x 400mm grate. The channel consists of a brick and Yorkshire Stone slab construction, consistent with what we have seen elsewhere on site. We believe this channel would have been the original carrier of the water, but it became derelict and damaged at some stage leading the water to spout out of the surface.



3. From the grate, the underground channel leads to a chamber which has been built on to the combined sewer run which travels across site. We believe the reference number for this on UU drawings is 6605. Upon discovery, this chamber was covered with 2no Yorkshire stone slabs. The invert level in the chamber is 1.5m.



4. This image shows a view of the inside of the chamber. There are 2 ceramic pipes coming in from the South West, and the channel coming in from the North East. We have not investigated these pipes further as they are blocked although one appears to run under Honey Street Wall. The sewer comes from under the wall and is a 700mm round brick construction.



5. Approximately 13m downstream there is a 4m vertical shaft. This shaft does not go up to the surface.



6. This photo shows the sewer from ground level, immediately before the drop shaft. We plan to continue our investigations to identify if there are any clashes between this sewer and the proposed highway and surface water drainage system in this area.



7. A further 11m downstream, there is a chamber that has been buried since we started on site. It is approximately 6.7m deep to invert. This chamber was uncharted on UU records.



8. A further 35m downstream, there is another chamber which we suspect is UU chamber reference 6602. This chamber is approximately 12m deep. From here, the run continues to the 13m deep manhole at the top of the embankment which is uncharted by UU. It then proceeds to the CSO chamber adjacent to the river and eventually ends up in the sewer in Dantzic Street.



Appendix A3 – Initial PFAS analysis data from the standing water



EnviroLab
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Attention: Subcon EnviroLab

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528777
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

CERTIFICATE OF ANALYSIS

Date of report Generation:	27 October 2022
Customer:	EnviroLab
Sample Delivery Group (SDG):	221021-71
Your Reference:	22/10268
Location:	11777
Report No:	666251
Order Number:	P0750164

We received 7 samples on Friday October 21, 2022 and 7 of these samples were scheduled for analysis which was completed on Thursday October 27, 2022. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden.

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.

Incorrect sampling dates and/or sample information will affect the validity of results.

The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:

Sonia McWhan
Operations Manager



ALS Laboratories (UK) Limited. Registered Office: Torrington Avenue, Coventry CV4 9GU. Registered in England and Wales No. 02391955.

Version: 3.4 Version Issued: 27/10/2022

**CERTIFICATE OF ANALYSIS**

Validated

SDG: 221021-71
Client Ref.: 22/10268Report Number: 666251
Location: 11777

Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
27054444	22/10268/1 SW01			17/10/2022
27054445	22/10268/2 SW02			17/10/2022
27054446	22/10268/3 SW03			17/10/2022
27054449	22/10268/4 SW04			17/10/2022
27054450	22/10268/5 SW05			17/10/2022
27054451	22/10268/6 SW06			17/10/2022
27054452	22/10268/7 SW07			17/10/2022

Only received samples which have had analysis scheduled will be shown on the following pages.



CERTIFICATE OF ANALYSIS

Validated

SDG: 221021-71
Client Ref.: 22/10268

Report Number: 666251
Location: 11777

Superseded Report:

Results Legend <div> <div>X</div> Test </div> <div> <div>N</div> No Determination Possible </div> Sample Types - S - Soil/Solid UNS - Unspecified Solid GW - Ground Water SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water SA - Saline Water TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge G - Gas OTH - Other	Lab Sample No(s)		2705444	2705445	2705446	2705449	2705450	2705451	2705452
	Customer Sample Reference		22/102681 SW01	22/102682 SW02	22/102683 SW03	22/102684 SW04	22/102685 SW05	22/102686 SW06	22/102687 SW07
	AGS Reference								
	Depth (m)								
	Container		1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)	1000ml glass bottles (ALE220)
	Sample Type		SW	SW	SW	SW	SW	SW	SW
PFAS Liquids	All	NDPs: 0 Tests: 7	X	X	X	X	X	X	X

SDG: 221021-71
Client Ref.: 22/10268

Report Number: 686251
Location: 11777

Superseded Report:

[illegible]

SDG: 221021-71
Client Ref.: 22/10268

Report Number: 686251
Location: 11777

Superseded Report:

[illegible]



CERTIFICATE OF ANALYSIS

Validated

SDG: 221021-71
Client Ref.: 22/10288

Report Number: 666251
Location: 11777

Superseded Report:

Table of Results - Appendix

Method No	Reference	Description
TM337	PFAS in Environmental Water Matrices	Analysis of PFAS

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Laboratories (UK) Limited Hawarden (Method codes TM).



CERTIFICATE OF ANALYSIS

Validated

SDG: 221021-71
Client Ref.: 22/10268

Report Number: 666251
Location: 11777

Superseded Report:

Test Completion Dates

Lab Sample No(s)	27054444	27054445	27054446	27054449	27054450	27054451	27054452
Customer Sample Ref.	22/102681 SW01	22/102682 SW02	22/102683 SW03	22/102684 SW04	22/102685 SW05	22/102686 SW06	22/102687 SW07
AGS Ref.							
Depth							
Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
PFAS Liquids	27-Oct-2022	27-Oct-2022	27-Oct-2022	27-Oct-2022	27-Oct-2022	27-Oct-2022	27-Oct-2022

**CERTIFICATE OF ANALYSIS**

Validated

SDG: 221021-71
Client Ref.: 22/10268Report Number: 666251
Location: 11777

Superseded Report:

ASSOCIATED AQC DATA**PFAS Liquids**

Component	Method Code	QC 2730	QC 2736
Perfluoro-1-butanedisulfonate	TM337	93.75 58.95 : 133.73	90.63 58.95 : 133.73
Perfluoro-1-heptadisulfonate	TM337	90.87 54.69 : 144.16	89.5 54.69 : 144.16
Perfluoro-1-hexadisulfonate	TM337	95.63 67.55 : 114.13	93.13 67.55 : 114.13
Perfluoro-1-octadisulfonate	TM337	100.13 67.93 : 114.13	95.75 67.93 : 114.13
Perfluoro-n-butanolic acid	TM337	94.25 58.88 : 133.65	96.0 58.88 : 133.65
Perfluoro-n-decadisulfonate	TM337	89.88 53.68 : 141.43	102.0 53.68 : 141.43
Perfluoro-n-decanoic acid	TM337	89.75 61.18 : 121.03	92.88 61.18 : 121.03
Perfluoro-n-dodecanoic acid	TM337	93.38 66.38 : 114.15	94.88 66.38 : 114.15
Perfluoro-n-heptanoic acid	TM337	103.0 53.11 : 138.39	102.5 53.11 : 138.39
Perfluoro-n-hexanoic acid	TM337	96.63 70.19 : 123.96	91.13 70.19 : 123.96
Perfluoro-n-nonanoic acid	TM337	92.13 70.31 : 115.61	91.88 70.31 : 115.61
Perfluoro-n-octanoic acid	TM337	103.63 66.70 : 113.95	99.63 66.70 : 113.95
Perfluoro-n-pentadisulfonate	TM337	96.0 55.00 : 120.70	90.75 55.00 : 120.70
Perfluoro-n-pentanoic acid	TM337	86.5 55.25 : 127.03	84.25 55.25 : 127.03
Perfluoro-n-undecanoic acid	TM337	88.5 68.19 : 119.41	85.63 68.19 : 119.41
Perfluoro-octane sulfonate 6:2	TM337	101.0 68.34 : 123.46	97.88 68.34 : 123.46
Perfluoro-octanesulfonamide	TM337	86.13 67.41 : 114.44	87.75 67.41 : 114.44

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.

The figure detailed is the percentage recovery result for the AQC.

The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.



CERTIFICATE OF ANALYSIS

SDG: 221021-71
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Appendix

1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and GEN Leach tests, flash point LOI, pH, ammonium as NH₄ by the BRE method, VOC TICs and SVOC TICs.

2. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

3. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

4. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

5. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

6. NDP - No determination possible due to insufficient/unsuitable sample.

7. Results relate only to the items tested.

8. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

9. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix effect.

10. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

11. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

12. For dried and crushed preparations of soils volatile loss may occur e.g volatile mercury.

13. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

14. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

15. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

16. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

17 Data retention. All records, communications and reports pertaining to the analysis are archived for seven years from the date of issue of the final report.

General

18. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD and SVOC are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as "mixed hydrocarbons". Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

19. Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	Container with headspace provided for volatiles analysis
2	Incorrect container received
3	Deviation from method
4	Matrix interference
+	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples
\$	Sampled on date not provided

20. Asbestos

When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2021), which is accredited to ISO 17025. If a specific asbestos fibre type is not found this will be reported as "Not detected". If no asbestos fibre types are found all will be reported as "Not detected" and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials and soils are obtained from supplied bulk materials and soils which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2021).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining.

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Respirable Fibres

Respirable fibres are defined as fibres of <3 µm diameter, longer than 5 µm and with aspect ratios of at least 3:1 that can be inhaled into the lower regions of the lung and are generally acknowledged to be most important predictor of hazard and risk for cancers of the lung.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.