

CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

APPENDIX 5

Groundwater, Leachate and
Surface Water Sampling
Analysis Results

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Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

Date of report Generation:09 August 2020Customer:Fehily TimoneySample Delivery Group (SDG):200731-90Your Reference:P2282Location:New Inn Landfill

Report No: 562381

We received 2 samples on Friday July 31, 2020 and 2 of these samples were scheduled for analysis which was completed on Sunday August 09, 2020. 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 ALSOLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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

IIac-MRA





Validated

SDG: 200731-90 Client Reference: P2282 Report Number: 562381 Location: New Inn Landfill Z2189 Superseded Report: Order Number:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
22583459	SW2 (DS)		0.00 - 0.00	30/07/2020
22583445	SW1 (US)		0.00 - 0.00	30/07/2020

Maximum Sample/Coolbox Temperature (°C):

ISO5667-3 Water quality - Sampling - Part3 -

During Transportation samples shall be stored in a cooling device capable of maintaining

a temperature of (5±3)°C.

16.2

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

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



Validated

562381

CERTIFICATE OF ANALYSIS

ALS

SDG: 200731-90 Client Reference: P2282 Report Number: New Inn Landfill Z2189 Superseded Report: Location: Order Number: Results Legend 22583445 22583459 Lab Sample No(s) X Test No Determination Possible SW1 (US) Customer SW2 (DS) Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00-0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent - 0.00 TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 500ml Plastic (ALE208) 250ml BOD (ALE212) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) Vial (ALE297) H2SO4 (ALE244) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) DW - Drinking Water Non-regulatory 500ml Plastic (ALE208) ۷ial 250ml BOD (ALE212) UNL - Unspecified Liquid (ALE297) SL - Sludge Container G - Gas OTH - Other Sample Type WS Acid Herbicides by GCMS All NDPs: 0 Tests: 2 Х Ammonium Low All NDPs: 0 Tests: 2 Χ Anions by Kone (w) All NDPs: 0 Tests: 2 X BOD True Total All NDPs: 0 Tests: 2 X COD Unfiltered All NDPs: 0 Tests: 2 X Х Conductivity (at 20 deg.C) All NDPs: 0 Tests: 2 Х Х Cyanide Comp/Free/Total/Thiocyanate All NDPs: 0 Tests: 2 Χ Х Dissolved Metals by ICP-MS All NDPs: 0 Tests: 2 X Χ Dissolved Oxygen by Probe All NDPs: 0 Tests: 2 Χ Χ Fluoride All NDPs: 0 Tests: 2 Χ X Mercury Dissolved All NDPs: 0 Tests: 2 X Х Mineral Oil C10-40 Aqueous (W) All NDPs: 0 Tests: 2 X Χ PCB Congeners - Aqueous (W) All NDPs: 0 Tests: 2 Х Х Pesticides (Suite I) by GCMS All NDPs: 0 Tests: 2 Х Х Pesticides (Suite II) by GCMS All NDPs: 0 Tests: 2 X Χ

Validated

562381

CERTIFICATE OF ANALYSIS

ALS

P2282 SDG: 200731-90 Client Reference: Report Number: Location: New Inn Landfill Z2189 Superseded Report: Order Number: Results Legend 22583459 22583445 Lab Sample No(s) X Test No Determination Possible SW1 (US) SW2 (DS) Customer Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate 0.00-PR - Process Water 0.00 - 0.00 SA - Saline Water Depth (m) - 0.00 TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 500ml Plastic (ALE208) 250ml BOD (ALE212) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) Vial (ALE297) H2SO4 (ALE244) 500ml Plastic (ALE208) 250ml BOD (ALE212) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) DW - Drinking Water Non-regulatory Vial (ALE297) UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other Sample Type WS Pesticides (Suite III) by GCMS All NDPs: 0 Tests: 2 X pH Value All NDPs: 0 Tests: 2 X X Phosphate by Kone (w) All NDPs: 0 Tests: 2 X Suspended Solids All NDPs: 0 Tests: 2 X SVOC MS (W) - Aqueous All NDPs: 0 Tests: 2 X Χ VOC MS (W) All NDPs.0 Tests: 2 Χ Χ

ALS

Results Legend		Customa Combina				•		
# ISO17025 accredited. M mCERTS accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)				
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00				
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	for	Sample Type	Surface Water (SW)	Surface Water (S	W)			
accreditation status. ** % recovery of the surrogate standard to check		Date Sampled Sample Time	30/07/2020	30/07/2020				
efficiency of the method. The results of individ compounds within samples aren't corrected for	dual	Date Received	31/07/2020	31/07/2020				
recovery (F) Trigger breach confirmed		SDG Ref Lab Sample No.(s)	200731-90 22583459	200731-90 22583445				
1-3+§@ Sample deviation (see appendix) Component	LOD/Units	AGS Reference Method						
Suspended solids, Total	<2 mg/l	TM022	8.25	5.9				
,	ŭ			#	#			
BOD, unfiltered	<1 mg/l	TM045	<1	<1				
	"			#	#			
Oxygen, dissolved	<0.3 mg/l	TM046	9.41	9.65				
Ammoniacal Nitrogen as N (low	<0.01 mg/l	TM099	0.0319	0.0237				
level)	0.0	1000		#	#			
Fluoride	<0.5 mg/l	TM104	<0.5	<0.5				
COD, unfiltered	<7 mg/l	TM107	17.6	21.8	,,			
Conductivity @ 20 deg.C	<0.02	TM120	0.64	# 0.642	#			
Conductivity (@ 20 deg.C	mS/cm	TIVITZU		# 0.042	#			
Arsenic (diss.filt)	<0.5 µg/l	TM152	<0.5	<0.5				
	ľ		2		2#			
Barium (diss.filt)	<0.2 µg/l	TM152	7.6	7.56				
0 1 : / 1: 610	.0.00	711157	2		2#		-	
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08	<0.08	2#	رق.		
Chromium (diss.filt)	<1 µg/l	TM152	<1	# <1	2#	1000		
Oniomium (diss.iiit)	-1 μg/i	TIVITOZ	2	I .	2#	otherus		
Copper (diss.filt)	<0.3 µg/l	TM152	1.01	0.932		जांभं वाम्		
			2	#	2#	Off Of it		
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2	<0.2	7050 24	20 '		
M (-1: £!4)	42 //	TM450	2	# 420	24			
Manganese (diss.filt)	<3 µg/l	TM152	9.09	# 13,9 P	2#			
Nickel (diss.filt)	<0.4 µg/l	TM152	1.57	# Tipsper 1.883	Ζ π			
, , , , , ,	. 13		2	# Killight	2#			
Phosphorus (diss.filt)	<10 µg/l	TM152	14.2	<10				
0 1 1 (1) 510	4 0	T14450		# 0	2#			
Selenium (diss.filt)	<1 µg/l	TM152	<1 consent 2	´ <1 #	2#			
Thallium (diss.filt)	<2 µg/l	TM152	<u> </u>	<2	2#			
(- 1-5-			#	2#			
Zinc (diss.filt)	<1 µg/l	TM152	2.49	2.07				
				#	2#			
Sodium (Dis.Filt)	<0.076 mg/l	TM152	16	15.7	0.11			
Magnesium (Dis.Filt)	<0.036 mg/l	TM152	4.69	4.62	2#			
Magnesium (Dis.i iii)	10.000 mg/i	1101132	4.03		2#			
Potassium (Dis.Filt)	<0.2 mg/l	TM152	1.67	1.62				
				#	2#			
Calcium (Dis.Filt)	<0.2 mg/l	TM152	134	132	0 "			
Iron (Dis.Filt)	<0.019 mg/l	TM152	0.0501	0.0507	2#		 	
ווטוו (בוט.ו ווגי)	-0.018 HIG/I	1101132	0.0501		2#			
Mineral oil >C10 C40 (aq)	<100 µg/l	TM172	<100	<100	- "			
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01	<0.01				
Phosphate (Ortho as PO4)	<0.05"	TM184	0.052	0.053	2		 	
ו ווטפטוומופ (טונווט מפ דט4)	<0.05 mg/l	11V1104		# 0.053	#			
Sulphate	<2 mg/l	TM184	11.7	11	n'			
<u> </u>				#	#		 	
Chloride	<2 mg/l	TM184	28.1	27.5				
0.11.1.7.1111	4 "	T11161		# 0.07	#		-	
Sulphate (soluble) as S	<1 mg/l	TM184	3.9	3.67	#			
PCB congener 28	<0.015 µg/l	TM197	<0.015	* <0.015	#			
. =g	3.0.0 µg/i		0.010	.0.010				
PCB congener 52	<0.015 µg/l	TM197	<0.015	<0.015				
PCB congener 101	<0.015 µg/l	TM197	<0.015	<0.015				



Results Legend # ISO17025 accredited. M mCERTS accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report accreditation status.	t for	Sample Type Date Sampled	Surface Water (SW) 30/07/2020	Surface Water (SW) 30/07/2020			
** % recovery of the surrogate standard to chec efficiency of the method. The results of indiv compounds within samples aren't corrected	idual	Sample Time Date Received	31/07/2020	31/07/2020			
recovery (F) Trigger breach confirmed	for the	SDG Ref Lab Sample No.(s)	200731-90 22583459	200731-90 22583445			
1-3+§@ Sample deviation (see appendix) Component	LOD/Units	AGS Reference Method					
PCB congener 118	<0.015 µg/l		<0.015	<0.015			
PCB congener 138	<0.015 µg/l	TM197	<0.015	<0.015			
PCB congener 153	<0.015 µg/l	TM197	<0.015	<0.015			
PCB congener 180	<0.015 µg/l	TM197	<0.015	<0.015			
Sum of detected EC7 PCB's	<0.105 µg/l	TM197	<0.105	<0.105			
Cyanide, Total	<0.05 mg/l	TM227	<0.05	<0.05			
pH	<1 pH Units	TM256	7.73 #	7.81 #			
Trifluralin	<0.01 µg/l	TM343	<0.01	<0.01			
alpha-HCH	<0.01 µg/l	TM343	<0.01	<0.01			
gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01	<0.01	offst and other tise.		
Heptachlor	<0.01 µg/l	TM343	<0.01	<0.01	other		
Aldrin	<0.01 µg/l	TM343	<0.01	<0.01	outh au		
beta-HCH	<0.01 µg/l	TM343	<0.01	Out Chi	e ^C		
Isodrin	<0.01 µg/l	TM343	<0.01	(6.01g, 7			
delta-HCH	<0.01 µg/l	TM343	<0.01	THE COUNTY OF STREET			
Heptachlor epoxide	<0.01 µg/l	TM343	O.	े <0.01			
o,p'-DDE	<0.01 µg/l	TM343	<0.01 gril	<0.01			
Endosulphan I	<0.01 µg/l	TM343	<0.01	<0.01			
trans-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01			
cis-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01			
p,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01			
Dieldrin	<0.01 µg/l	TM343	<0.01	<0.01			
o,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01			
Endrin	<0.01 µg/l	TM343	<0.01	<0.01			
o,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.04			
p,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01			
Endosulphan II	<0.02 µg/l	TM343	<0.02	<0.02			
p,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.07			
o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.04			
p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.07			
Endosulphan Sulphate	<0.02 µg/l	TM343	<0.02	<0.04			
Permethrin I	<0.01 µg/l	TM343	<0.01	<0.01			
Permethrin II	<0.01 µg/l	TM343	<0.01	<0.01			
		_				1	



Results Legend		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
# ISO17025 accredited. M mCERTS accredited.		·	3112 (30)	S (65)			
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report accreditation status.	rt for	Sample Type Date Sampled	Surface Water (SW) 30/07/2020	Surface Water (SW) 30/07/2020			
** % recovery of the surrogate standard to che efficiency of the method. The results of indiv		Sample Time					
compounds within samples aren't corrected recovery		Date Received SDG Ref	31/07/2020 200731-90	31/07/2020 200731-90			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583459	22583445			
Component	LOD/Units	Method					
1,3,5-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
Hexachlorobutadiene	<0.01 µg/l	TM344	<0.01	<0.01			
1,2,4-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
Dichlorvos	<0.01 µg/l	TM344	<0.01	<0.01			
Dichlobenil	<0.01 µg/l	TM344	<0.01	<0.01			
Mevinphos	<0.01 µg/l	TM344	<0.01	<0.01			
Tecnazene	<0.01 µg/l	TM344	<0.01	<0.01			
Hexachlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
Demeton-S-methyl	<0.01 µg/l	TM344	<0.01	<0.01	7115°C.		
Phorate	<0.01 µg/l	TM344	<0.01	<0.01	offst and other use.		
Diazinon	<0.01 µg/l	TM344	<0.01	<0.01	only and		
Triallate	<0.01 µg/l	TM344	<0.01	<0.01 post	20		
Atrazine	<0.01 µg/l	TM344	<0.01	56801 ₆ 5, *			
Simazine	<0.01 µg/l	TM344	<0.01	THE COUNTY COUNT			
Disulfoton	<0.01 µg/l	TM344	O.	₹ <0.01			
Propetamphos	<0.01 µg/l	TM344	<0.01 gril	<0.01			
Chlorpyriphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01			
Dimethoate	<0.01 µg/l	TM344	<0.01	<0.01			
Pirimiphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01			
Chlorpyriphos	<0.01 µg/l	TM344	<0.01	<0.01			
Methyl Parathion	<0.01 µg/l	TM344	<0.01	<0.01			
Malathion	<0.01 µg/l	TM344	<0.01	<0.01			
Fenthion	<0.01 µg/l	TM344	<0.01	<0.01			
Fenitrothion	<0.01 µg/l	TM344	<0.01	<0.01			
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01			
Pendimethalin	<0.01 µg/l	TM344	<0.01	<0.01			
Parathion	<0.01 µg/l	TM344	<0.01	<0.01			
Chlorfenvinphos	<0.01 µg/l	TM344	<0.01	<0.01			
trans-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01			
cis-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01			
Ethion	<0.01 µg/l	TM344	<0.01	<0.01			
Carbophenothion	<0.01 µg/l	TM344	<0.01	<0.01			
				I	l	I	



Results Legend		Customer Sample Ref.	CM3 (DC)	CMA (LIC)	<u> </u>	<u> </u>	
# ISO17025 accredited. M mCERTS accredited.		Customer Sample Ker.	SW2 (DS)	SW1 (US)			
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
* Subcontracted - refer to subcontractor re accreditation status.	port for	Sample Type Date Sampled	Surface Water (SW) 30/07/2020	Surface Water (SW) 30/07/2020			
** % recovery of the surrogate standard to deficiency of the method. The results of in	ndividual	Sample Time Date Received	31/07/2020	31/07/2020			
compounds within samples aren't correct recovery (F) Trigger breach confirmed	ted for the	SDG Ref Lab Sample No.(s)	200731-90 22583459	200731-90 22583445			
1-3+§@ Sample deviation (see appendix) Component	LOD/Units	AGS Reference					
Triazophos	<0.01 µg/l		<0.01	<0.01			
Phosalone	<0.01 µg/l	TM344	<0.01	<0.01			
Azinphos methyl	<0.02 µg/l	TM344	<0.02	<0.02			
Azinphos ethyl	<0.02 µg/l	TM344	<0.02	<0.02			
Etridiazole	<0.01 µg/l	TM345	<0.01	<0.02			
Pentachlorobenzene	<0.01 µg/l	TM345	<0.01	<0.01			
Propachlor	<0.01 µg/l	TM345	<0.01	<0.01			
Quintozene (PCNB)	<0.01 µg/l	TM345	<0.01	<0.01			
Omethoate	<0.01 µg/l	TM345	<0.01	<0.01			
Propazine	<0.01 µg/l	TM345	<0.01	<0.01	offst and other tise.		
Propyzamide	<0.01 µg/l	TM345	<0.01	<0.01	other		
Alachlor	<0.01 µg/l	TM345	<0.01	<0.01	only and		
Prometryn	<0.01 µg/l	TM345	<0.01	<0.01 portion (1.00 pt) (1	e ^C		
Telodrin	<0.01 µg/l	TM345	<0.01	ecitorine it			
Terbutryn	<0.01 µg/l	TM345	<0.01	THE COUNTY CO.03			
Chlorothalonil	<0.01 µg/l		O.	જે [°] <0.03			
Etrimphos	<0.01 µg/l		<0.01 ent	<0.01			
Metazachlor	<0.01 µg/l		<0.01	<0.01			
Cyanazine	<0.01 µg/l		<0.01	<0.01			
Trietazine	<0.01 µg/l		<0.01	<0.01			
Coumaphos	<0.01 µg/l		<0.01	<0.01			
Phosphamidon I	<0.01 µg/l		<0.01	<0.02			
Phosphamidon II	<0.01 µg/l		<0.01	<0.02			
Dinitro-o-cresol	<0.1 µg/l	TM411	<0.1	<0.1			
Clopyralid	<0.04 µg/l		<0.04	<0.04			
MCPA	<0.05 µg/l		<0.05	<0.05			
Mecoprop	<0.04 µg/l		<0.04	<0.04			
Dicamba	<0.04 µg/l		<0.04	<0.04			
МСРВ	<0.05 µg/l		<0.05	<0.05			
2,4-DB	<0.1 µg/l	TM411	<0.1	<0.1			
2,3,6-Trichlorobenzoic acid	<0.05 µg/l	TM411	<0.05	<0.05			
Dichlorprop	<0.1 µg/l	TM411	<0.1	<0.1			
Triclopyr	<0.05 µg/l	TM411	<0.05	<0.05			





Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.		Depth (m)	0.00 0.00	0.00 0.00			
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.	46-	Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
* Subcontracted - refer to subcontractor repo accreditation status.		Date Sampled Sample Time	30/07/2020	30/07/2020			
** % recovery of the surrogate standard to che efficiency of the method. The results of indi compounds within samples aren't corrected	vidual	Date Received	31/07/2020	31/07/2020			
recovery	i for the	SDG Ref	200731-90 22583459	200731-90 22583445			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference					
Component Fenoprop (Silvex)	LOD/Units <0.1 μg/l	Method TM411	<0.1	<0.1			
i enoprop (Silvex)	<0.1 μg/i	1101411	~0.1	~ 0.1			
2,4-Dichlorophenoxyacetic acid	<0.05 µg/l	TM411	<0.05	<0.05			
2,4,5-Trichlorophenoxyacetic acid	<0.05 µg/l	TM411	<0.05	<0.05			
Bromoxynil	<0.04 µg/l	TM411	<0.04	<0.04			
Benazolin	<0.04 µg/l	TM411	<0.04	<0.04			
loxynil	<0.05 µg/l	TM411	<0.05	<0.05			
Pentachlorophenol	<0.04 µg/l	TM411	<0.04	<0.04			
Fluoroxypyr	<0.1 µg/l	TM411	<0.1	<0.1			
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SVOC	MS	(W)	- Aqueous
3100	IVIO	V V	- Aqueous

SVOC MS (W) - Aqueous	S	Customer Sample Ref.	0)4(0 (D0)	0144 (110)		1	
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	SW2 (DS)	SW1 (US)			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report accreditation status.	for	Sample Type Date Sampled	Surface Water (SW) 30/07/2020	Surface Water (SW) 30/07/2020			
** % recovery of the surrogate standard to chec efficiency of the method. The results of indivi compounds within samples aren't corrected f	dual	Sample Time Date Received	31/07/2020	31/07/2020			
recovery (F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		SDG Ref Lab Sample No.(s) AGS Reference	200731-90 22583459	200731-90 22583445			
1,2,4-Trichlorobenzene (aq)	LOD/Units <1 μg/l	Method TM176	<8 #	<10 #			
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<10 #			
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<10 #			
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<8 #	<10 #			
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<8 #	<10 #	్డల.		
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<8 #	<10 #	M. of other tree.		
2-Chlorophenol (aq)	<1 µg/l	TM176	<8 #	<10 #	M. Mr.		
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<8 #	<10 °5	ed t		
2-Methylphenol (aq)	<1 µg/l	TM176	<8 #	istold teer			
2-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	insperior #			
2-Nitrophenol (aq)	<1 µg/l	TM176	<8 *	or ⁹⁷ <10 #			
3-Nitroaniline (aq)	<1 µg/l	TM176	<8 strain #	<10 #			
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	€8 **	<10 #			
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
4-Chloroaniline (aq)	<1 µg/l	TM176	<8	<10			
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<8 #	<10 #			
4-Methylphenol (aq)	<1 µg/l	TM176	<8 #	<10 #			
4-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	<10 #			
4-Nitrophenol (aq)	<1 µg/l	TM176	<8	<10			
Azobenzene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Acenaphthylene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Acenaphthene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Anthracene (aq)	<1 µg/l	TM176	<8 #	<10 #			
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<8 #	<10 #			
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<8 #	<10 #			
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<16 #	<20 #			
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<8 #	<10 #			
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<8 #	<10 #			

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SVOC MS (W) - Aqueous	3						
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
 Subcontracted - refer to subcontractor report accreditation status. 	for	Date Sampled	30/07/2020	30/07/2020			
** % recovery of the surrogate standard to check efficiency of the method. The results of individe		Sample Time Date Received	31/07/2020	31/07/2020			
compounds within samples aren't corrected for recovery	or the	SDG Ref	200731-90	200731-90			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583459	22583445			
Component	LOD/Units						
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<8	<10			
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	# <8	*			
Bonzo(k)haoranaiono (aq)	γ μg/i	111170	#	#			
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Carbazole (aq)	<1 µg/l	TM176	<8 #	<10 #			
Chrysene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Dibenzofuran (aq)	<1 µg/l	TM176	<8 #	<10 #			
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<8 #	<10 #			
Diethyl phthalate (aq)	<1 µg/l	TM176	<8 #	<10 #			
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<8 #	<10 #	ilse.		
Dimethyl phthalate (aq)	<1 µg/l	TM176	<8 #	<10 #	offst and other use.		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<40 #	<50	only air,		
Fluoranthene (aq)	<1 µg/l	TM176	<8 #	2017 AM	e ^c		
Fluorene (aq)	<1 µg/l	TM176	<8 #	is the second			
Hexachlorobenzene (aq)	<1 µg/l	TM176	<8 	installing #			
Hexachlorobutadiene (aq)	<1 µg/l	TM176		#			
Pentachlorophenol (aq)	<1 µg/l	TM176	<8 contraction	<10			
Phenol (aq)	<1 µg/l	TM176	₹8	<10			
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<8 #				
Hexachloroethane (aq)	<1 µg/l	TM176	<8 #				
Nitrobenzene (aq)	<1 µg/l	TM176	<8 #	<10 #			
Naphthalene (aq) Isophorone (aq)	<1 µg/l	TM176	<8 #	<10 # <10			
Hexachlorocyclopentadiene (aq)	<1 μg/l	TM176	<8 **	1			
Phenanthrene (aq)	<1 μg/l	TM176	<8	<10			
Indeno(1,2,3-cd)pyrene (aq)	<1 μg/l	TM176		1			
Pyrene (aq)	<1 μg/l	TM176	<8 **	1			
. June (aq)	- 1 μg/i	TIVITO	* 0				

VOC MS (W)

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Results Legend		Customer Sample Ref.	0000 (00)	0144 (110)			
# ISO17025 accredited. M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m)	SW2 (DS)	SW1 (US)			
* Subcontracted - refer to subcontractor report accreditation status. * Wecovery of the surrogate standard to che		Sample Type Date Sampled Sample Time	Surface Water (SW) 30/07/2020	Surface Water (SW) 30/07/2020			
efficiency of the method. The results of indiv compounds within samples aren't corrected	ridual	Date Received SDG Ref	31/07/2020 200731-90	31/07/2020 200731-90			
recovery (F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583459	22583445			
Component Dibromofluoromethane**	LOD/Units %	Method TM208	107	106			
Toluene-d8**	%	TM208	100	100			
4-Bromofluorobenzene**	%	TM208	99.8	99.8			
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #			
Chloromethane	<1 µg/l	TM208	<1 #	<1 #			
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #			
Bromomethane	<1 µg/l	TM208	<1 #	<1 #			
Chloroethane	<1 µg/l	TM208	<1 #	<1 #			
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #			
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1 #	Se.		
Carbon disulphide	<1 µg/l	TM208	<1 #	<1 #	dieduse.		
Dichloromethane	<3 μg/l	TM208	<3 #	<3 #	913 20,		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 05°	20		
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	ingle did #			
1,1-Dichloroethane	<1 µg/l	TM208	<1 #	inglight at #			
cis-1,2-Dichloroethene	<1 µg/l	TM208		#			
2,2-Dichloropropane	<1 µg/l	TM208	<1 chi	<1			
Bromochloromethane	<1 µg/l	TM208	#	<1 #			
Chloroform	<1 µg/l	TM208	<1 #	<1 #			
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 #	<1 #			
1,1-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #			
Carbontetrachloride	<1 µg/l	TM208	<1 #	<1 #			
1,2-Dichloroethane	<1 µg/l	TM208	<1 #	<1 #			
Benzene Trichloroethene	<1 µg/l	TM208	<1 # <1	<1 # <1			
1,2-Dichloropropane	<1 μg/l	TM208	<1 <1	<1 *1			
Dibromomethane	<1 μg/l	TM208	*1 <1	**************************************			
Bromodichloromethane	<1 μg/l	TM208	<1	*1 <1			
cis-1,3-Dichloropropene	<1 μg/l	TM208	<1 <1	*1 *1			
Toluene	<1 μg/l	TM208	<1 <1	<1 *1			
trans-1,3-Dichloropropene	<1 μg/l	TM208	*1 <1	<1			
1,1,2-Trichloroethane	<1 μg/l	TM208	<1	**************************************			
1,3-Dichloropropane	<1 μg/l	TM208	*1 <1	**************************************			
.,o Diomoropropuno	-1 μg/1	1 11/200	* #	#			

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VOC MS (W)							
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
 Subcontracted - refer to subcontractor report accreditation status. 		Date Sampled	30/07/2020	30/07/2020			
** % recovery of the surrogate standard to checlefficiency of the method. The results of indivi-	dual	Sample Time Date Received	31/07/2020	31/07/2020			
compounds within samples aren't corrected for recovery	or the	SDG Ref	200731-90	200731-90			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583459	22583445			
Component	LOD/Units	Method					
Tetrachloroethene	<1 µg/l	TM208	<1	<1 "			
Dibromochloromethane	<1 µg/l	TM208	# <1	* <1			
	"		#	#			
1,2-Dibromoethane	<1 µg/l	TM208	<1	<1			
Chlorobenzene	<1 µg/l	TM208	# <1	# <1			
Oniorobonzone	1 49/1	TIVIZOO	#	1			
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1			
			#	#			
Ethylbenzene	<1 µg/l	TM208	<1 #	<1 #			
m,p-Xylene	<1 µg/l	TM208	<1	<1			
W 7	"		#	1			
o-Xylene	<1 µg/l	TM208	<1	<1			
0.	4 "	T1 1000	#	#			
Styrene	<1 µg/l	TM208	<1 #	<1 #			
Bromoform	<1 µg/l	TM208	<1	<1			
			#	#	1150.		
Isopropylbenzene	<1 µg/l	TM208	<1	<1	inei		
4.4.0.0 Takan akila sa akila sa a	44	TMOOO	#	#	14. 0)		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #	ony and difference.		
1,2,3-Trichloropropane	<1 µg/l	TM208	<1	<1 05.	20		
			#				
Bromobenzene	<1 µg/l	TM208	<1	ison et,			
Dronylhonzono	<1 ug/l	TM208	# <1	60 Mi #			
Propylbenzene	<1 µg/l	I IVIZUO	<u>,</u>	inspired #			
2-Chlorotoluene	<1 µg/l	TM208	<1	oR) <1			
			S#	#			
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 chieff #	<1 "			
4-Chlorotoluene	<1 µg/l	TM208	G012 #	# <1			
4-Officiologidene	ν μ μ μ μ μ	TIVIZOO	*	1			
tert-Butylbenzene	<1 µg/l	TM208	<1	<1			
			#				
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 #	<1 #			
sec-Butylbenzene	<1 µg/l	TM208	<1	<1			
,	"		#	#			
4-iso-Propyltoluene	<1 µg/l	TM208	<1	<1			
4.2 Dishlasshassasa	44	TMOOO	#				
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #			
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	<1			
			#	#			
n-Butylbenzene	<1 µg/l	TM208	<1	<1			
1,2-Dichlorobenzene	<1 µg/l	TM208	# <1	* <1			
1,2-Dictiloroberizerie	ν μ μ μ μ μ	TIVIZOO	, , ,	1			
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	<1			
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 **	<1 #			
Hexachlorobutadiene	<1 µg/l	TM208	# <1	* <1			
		200	#	1		 	
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1	<1			
N. J. a. J.			#	#			
Naphthalene	<1 µg/l	TM208	<1 #	<1 #			
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1	<1			
, ,,,,	. мэ/	200	* #	1		 	
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	<1			

Validated

CERTIFICATE OF ANALYSIS

Report Number: Superseded Report: SDG: 200731-90 P2282 562381 Client Reference: Location: New Inn Landfill Order Number: Z2189

Table of Results - Appendix

	10010 01	Results - Appendix
Method No	Reference	Description
TM022	Method 2540D, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part120 1981;BS EN 872	Determination of total suspended solids in waters
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM343	EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM344	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected besticides (Suite II) by GCMS
TM345	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite III) by GCMS
TM411	Acid_Herbs_GCMS	Acid Herbs in Water by GCMS

Chemical testing (unless subcontracted) performed at ALS Life Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).



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Test Completion Dates

		103
Lab Sample No(s)	22583459	22583445
Customer Sample Ref.	SW2 (DS)	SW1 (US)
AGS Ref.		
Depth	0.00 - 0.00	0.00 - 0.00
Туре	Surface Water	Surface Water
Acid Herbicides by GCMS	07-Aug-2020	07-Aug-2020
Ammonium Low	06-Aug-2020	06-Aug-2020
Anions by Kone (w)	03-Aug-2020	03-Aug-2020
BOD True Total	06-Aug-2020	06-Aug-2020
COD Unfiltered	01-Aug-2020	01-Aug-2020
Conductivity (at 20 deg.C)	05-Aug-2020	05-Aug-2020
Cyanide Comp/Free/Total/Thiocyanate	07-Aug-2020	06-Aug-2020
Dissolved Metals by ICP-MS	07-Aug-2020	07-Aug-2020
Dissolved Oxygen by Probe	02-Aug-2020	02-Aug-2020
Fluoride	04-Aug-2020	04-Aug-2020
Mercury Dissolved	05-Aug-2020	05-Aug-2020
Mineral Oil C10-40 Aqueous (W)	07-Aug-2020	07-Aug-2020
PCB Congeners - Aqueous (W)	07-Aug-2020	07-Aug-2020
Pesticides (Suite I) by GCMS	07-Aug-2020	06-Aug-2020
Pesticides (Suite II) by GCMS	07-Aug-2020	07-Aug-2020
Pesticides (Suite III) by GCMS	06-Aug-2020	05-Aug-2020
pH Value	04-Aug-2020	03-Aug-2020
Phosphate by Kone (w)	04-Aug-2020	04-Aug-2020
Suspended Solids	05-Aug-2020	05-Aug-2020
SVOC MS (W) - Aqueous	09-Aug-2020	09-Aug-2020
VOC MS (W)	04-Aug-2020	04-Aug-2020

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Appendix

General

- 1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to 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. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials 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 (2005).

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, based on HSG 248 (2005).

Asbe stos Type	Common Name		
Chrysof le	White Asbests		
Amosite	BrownAsbestos		
Cro di dolite	Blue Asbe stos		
Fibrous Act nolite	-		
Fib to us Anthop hyll ite	-		
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.

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017)

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.



Unit 7-8 Hawarden Business Park Manor Road (off Manor Lane) Hawarden Deeside

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CH5 3US

email: haward encustomers er vices@alsglobal.com

Website: www.alsenvironmental.co.uk

Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

Date of report Generation:03 September 2020Customer:Fehily TimoneySample Delivery Group (SDG):200826-98Your Reference:P2282Location:New Inn Landfill

Report No: 565823

We received 2 samples on Wednesday August 26, 2020 and 2 of these samples were scheduled for analysis which was completed on Thursday September 03, 2020. 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 ALSCLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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

 SDG:
 200826-98
 Client Reference:
 P2282
 Report Number:
 565823

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
22723236	SW2 (DS)		0.00 - 0.00	25/08/2020
22723227	SW1 (US)		0.00 - 0.00	25/08/2020

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



Validated

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SDG: 200826-98 Client Reference: P2282 Report Number: 565823 New Inn Landfill Z2189 Superseded Report: Location: Order Number: Results Legend 22723236 22723227 Lab Sample No(s) X Test No Determination Possible SW2 (DS) SW1 (US) Customer Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water HNO3 Filtered (ALE204) H2SO4 (ALE244) 500ml Plastic (ALE208) 250ml BOD (ALE212) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) HNO3 Filtered (ALE204) NaOH (ALE245) DW - Drinking Water Non-regulatory NaOH (ALE245) (ALE208) 250ml BOD (ALE212) Vial (ALE297) Vial (ALE297) 500ml Plastic UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other Sample Type WS Acid Herbicides by GCMS All NDPs: 0 Tests: 2 έx Х Ammonium Low All NDPs: 0 Tests: 2 Χ Anions by Kone (w) All NDPs: 0 Tests: 2 X BOD True Total All NDPs: 0 Tests: 2 X COD Unfiltered All NDPs: 0 Tests: 2 X Χ Conductivity (at 20 deg.C) All NDPs: 0 Tests: 2 Х Х Cyanide Comp/Free/Total/Thiocyanate All NDPs: 0 Tests: 2 Х Dissolved Metals by ICP-MS All NDPs: 0 Tests: 2 Χ X Dissolved Oxygen by Probe All NDPs: 0 Tests: 2 Χ Х Fluoride All NDPs: 0 Tests: 2 Χ X Mercury Dissolved All NDPs: 0 Tests: 2 X X Mineral Oil C10-40 Aqueous (W) All NDPs: 0 Tests: 2 Х X PCB Congeners - Aqueous (W) All NDPs: 0 Tests: 2 Х Х Pesticides (Suite I) by GCMS All NDPs: 0 Tests: 2 Х Х Pesticides (Suite II) by GCMS All NDPs: 0 Tests: 2 X Χ

Validated

CERTIFICATE OF ANALYSIS

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	ř	

P2282 SDG: 200826-98 Client Reference: Report Number: 565823 Location: New Inn Landfill Z2189 Superseded Report: Order Number: Results Legend 22723236 22723227 Lab Sample No(s) X Test No Determination Possible SW1 (US) SW2 (DS) Customer Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water HNO3 Filtered (ALE204) H2SO4 (ALE244) 500ml Plastic (ALE208) 250ml BOD (ALE212) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) HNO3 Filtered (ALE204) 500ml Plastic (ALE208) 250ml BOD (ALE212) NaOH (ALE245) NaOH (ALE245) DW - Drinking Water Non-regulatory Vial (ALE297) Vial (ALE297) UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other Sample Type WS Pesticides (Suite III) by GCMS All NDPs: 0 Tests: 2 X pH Value All NDPs: 0 Tests: 2 X X Phosphate by Kone (w) All NDPs: 0 Tests: 2 Х Suspended Solids All NDPs: 0 Tests: 2 Х SVOC MS (W) - Aqueous All NDPs: 0 Tests: 2 Χ Χ VOC MS (W) All NDPs.0 Tests: 2 Х Х

ALS

Results Legend		Constant - Constant - Constant			•		,
# ISO17025 accredited. M mCERTS accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	for	Sample Type	Surface Water (SW)	Surface Water (SW)			
accreditation status. ** % recovery of the surrogate standard to check	k the	Date Sampled Sample Time	25/08/2020	25/08/2020			
efficiency of the method. The results of individ compounds within samples aren't corrected fo		Date Received SDG Ref	26/08/2020 200826-98	26/08/2020 200826-98			
recovery (F) Trigger breach confirmed		Lab Sample No.(s)	22723236	22723227			
1-3+§@ Sample deviation (see appendix) Component	LOD/Units	AGS Reference Method					
Suspended solids, Total	<2 mg/l		3.6	3.75			
			#	#			
BOD, unfiltered	<1 mg/l	TM045	2.97 #	2.67			
Oxygen, dissolved	<0.3 mg/	I TM046	10.9	10			
7,5. 7							
Ammoniacal Nitrogen as N (low	<0.01 mg	/I TM099	0.0861	0.0716			
level) Fluoride	<0 F mg/	I TM104	# -0.5	# ***			
Fluoride	<0.5 mg/	I IMII04	<0.5	<0.5			
COD, unfiltered	<7 mg/l	TM107	61.9	64			
			#	#			
Conductivity @ 20 deg.C	<0.02	TM120	0.367	0.352			
Arsonia (diss filt)	mS/cm <0.5 μg/l	I TM152	1.14	0.91			
Arsenic (diss.filt)	~υ.ο μg/I	1101102	1.14	0.91			
Barium (diss.filt)	<0.2 µg/l	TM152	6.72	6.58			
<u> </u>			#				
Cadmium (diss.filt)	<0.08 µg/	/I TM152	<0.08	<0.08]
Chromium (diss.filt)	<1 ug/l	TM152	1.5	# <1	, 1		
Chromium (diss.iiit)	<1 µg/l	1101132	1.5	"	otherus		
Copper (diss.filt)	<0.3 µg/l	TM152	2.93	3.15	97. Mg		
			#	#_	orly, suy		
Lead (diss.filt)	<0.2 µg/l	I TM152	0.43	0.352	edic		
Manganaga (diga filt)	<2 ua/l	TM152	20	22.47 reg#			
Manganese (diss.filt)	<3 µg/l	1101152	20 #	22.4 P. rest			
Nickel (diss.filt)	<0.4 µg/l	I TM152	3.33	ting Pt 4.47			
, ,			#	Killight #			
Phosphorus (diss.filt)	<10 µg/l	TM152	148	146			
Colonium (diag filt)	<1 ug/l	TM152	<1 **	<1			
Selenium (diss.filt)	<1 µg/l	1101132	<1 contact #	"			
Thallium (diss.filt)	<2 µg/l	TM152	€2	<2			
			#	•			
Zinc (diss.filt)	<1 µg/l	TM152	10.4	8.82			
Sodium (Dis.Filt)	<0.076 mg	g/I TM152	10.7	# 15.1			
Codium (Dis.r iit)	10.0701119	J. 11V1102	#	1			
Magnesium (Dis.Filt)	<0.036 mg	g/I TM152	3.02	3.31			
			#				
Potassium (Dis.Filt)	<0.2 mg/	I TM152	3.06 #	3.07			
Calcium (Dis.Filt)	<0.2 mg/	I TM152	73.2	78			
	J	02	#	I		 	
Iron (Dis.Filt)	<0.019 mg	g/I TM152	0.603	0.545			
Mineral elle 040 040 ()	.400	T144-0	#				
Mineral oil >C10 C40 (aq)	<100 µg/	TM172	<100	<100			
Mercury (diss.filt)	<0.01 µg/	/I TM183	<0.01	<0.01			
Phosphate (Ortho as PO4)	<0.05 mg	/I TM184	0.175	0.161			
Outshada	40//	TN4404	#				
Sulphate	<2 mg/l	TM184	<2 #	<2 #			
Chloride	<2 mg/l	TM184	15	15.5			
	ŭ		#				
Sulphate (soluble) as S	<1 mg/l	TM184	<1	<1			
PCB congener 28	<0.015 µg	ı/l TM197	<0.015	<0.015			
1 OD Willychel 20	~υ.υ 15 μg	yı 11V119/	\0.U.U	\U.U10			
PCB congener 52	<0.015 µg	ı/l TM197	<0.015	<0.015			
PCB congener 101	<0.015 µg	ı/l TM197	<0.015	<0.015			
					<u> </u>		

ALS

Results Legend		Customer Sample Ref.	SW2 (DS)	SW1 (US)		T	
# ISO17025 accredited. M mCERTS accredited.		, , , , , , , , , , , , , , , , , , , ,	SW2 (BS)	3W1 (00)			
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	rt for	Sample Type	Surface Water (SW)	Surface Water (SW)			
accreditation status. ** % recovery of the surrogate standard to che		Date Sampled Sample Time	25/08/2020	25/08/2020			
efficiency of the method. The results of indiv	/idual	Date Received	26/08/2020	26/08/2020			
recovery	for the	SDG Ref	200826-98 22723236	200826-98 22723227			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22123230	22120221			
Component	LOD/Units	Method					
PCB congener 118	<0.015 µg/l	TM197	<0.015	<0.015			
PCB congener 138	<0.015 µg/l	TM197	<0.015	<0.015			
PCB congener 153	<0.015 µg/l	TM197	<0.015	<0.015			
PCB congener 180	<0.015 µg/l	TM197	<0.015	<0.015			
Sum of detected EC7 PCB's	<0.105 µg/l	TM197	<0.105	<0.105			
Cyanide, Total	<0.05 mg/l	TM227	<0.05	<0.05			
pH	<1 pH Units	TM256	7.41 #	7.44 #			
Trifluralin	<0.01 µg/l	TM343	<0.01	<0.01			
alpha-HCH	<0.01 µg/l	TM343	<0.01	<0.01			
gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01	<0.01	7.115e.		
Heptachlor	<0.01 µg/l		<0.01	<0.01	offst and other use.		
Aldrin	<0.01 µg/l	TM343	<0.01	<0.01	only air.		
beta-HCH	<0.01 µg/l	TM343	<0.01	<0.01 control of the	2		
Isodrin	<0.01 µg/l		<0.01	ecitowner *			
delta-HCH	<0.01 µg/l		<0.01	K Tigg			
Heptachlor epoxide	<0.01 µg/l	TM343	<0.01	·			
o,p'-DDE	<0.01 µg/l		<0.01 contraction of the contrac	<0.01 <0.01			
Endosulphan I trans-Chlordane	<0.01 µg/l		<0.01	<0.01			
cis-Chlordane	<0.01 µg/l		<0.01	<0.01			
p,p'-DDE	<0.01 µg/l		<0.01	<0.01			
Dieldrin	<0.01 µg/l		<0.01	<0.01			
o,p'-DDD (TDE)	<0.01 μg/l		<0.01	<0.01			
Endrin	<0.01 μg/l		<0.01	<0.01			
o,p'-DDT	<0.01 μg/l		<0.01	<0.01			
p,p'-DDD (TDE)	<0.01 μg/l		<0.01	<0.01			
Endosulphan II	<0.02 μg/l		<0.02	<0.02			
p,p'-DDT	<0.01 μg/l		<0.01	<0.01			
o,p'-Methoxychlor	<0.01 μg/l		<0.01	<0.01			
p,p'-Methoxychlor	<0.01 µg/l		<0.01	<0.01			
Endosulphan Sulphate	<0.02 µg/l		<0.02	<0.02			
Permethrin I	<0.01 µg/l		<0.01	<0.01			
Permethrin II	<0.01 µg/l		<0.01	<0.01			
15.13.46.03/00/3030							

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Secretary Company Co								
1	M mCERTS accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
Section Sect	diss.filt Dissolved / filtered sample.							
Control Cont	* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled		25/08/2020			
1000 1000	efficiency of the method. The results of indivi-	dual	Date Received		26/08/2020			
Components Colony Methods Colony Colon	(F) Trigger breach confirmed		Lab Sample No.(s)					
Recontronchardere	Component		Method					
1.2.4 Techsbehannere	1,3,5-Trichlorobenzene	<0.01 μg/l	TM344	<0.01	<0.01			
1.2.3 Trickrosobestores	Hexachlorobutadiene	<0.01 µg/l	TM344	<0.01	<0.01			
Denitrons	1,2,4-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
Deliberary Control of the contro	1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01			
Memorphos	Dichlorvos			<0.01				
Terraserne	Dichlobenil							
Headertoroberezere	Mevinphos				<0.01			
Phorate								
Phorate								
Phorate	·					Jise.		
District Color Long TM344 Color Co						other		
Trialize	Diazinon	<0.01 µg/l		<0.01	<0.01	ould au,		
Sinsarine 4001 µg1 TM344 4001	Triallate	<0.01 µg/l	TM344	<0.01	<0.01 70°	z ^C		
Sinsane -0.01 µgl TM344 -0.01	Atrazine	<0.01 µg/l	TM344		STOWNER !			
Disultation	Simazine	<0.01 µg/l	TM344	<0.01	1158 160.01			
Chicrypynphos-methyl Cut Lyn Tim344 Cut Cu	Disulfoton	<0.01 µg/l	TM344	ξ.\	0.01			
Chicrypynphos-methyl Cut Lyn Tim344 Cut Cu				<0.01 chi				
Priniphos-methyl 40.01 µg/l TM344 40.01 40.0				< 0 .01	<0.01			
Chlorypriphos < 0.01 µg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01					<0.01			
Methyl Parathion < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	Pirimiphos-methyl			<0.01				
Malathion < 0.01 μg/l TM344 < 0.01 < 0.01	Chlorpyriphos			<0.01	<0.01			
Fenthion < 0.01 μg/l TM344 < 0.01 < 0.01								
Fenitrothion < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	Malathion			<0.01				
Triadimefon < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0	Fenthion							
Pendimethalin < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01								
Parathion < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	Triadimefon							
Chlorfenvinphos < 0.01 μg/l TM344 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.0	Pendimethalin							
trans-Chlordane								
cis-Chlordane	Chlorfenvinphos			<0.01	<0.01			
Ethion <0.01 μg/l TM344 <0.01 <0.01	trans-Chlordane	<0.01 μg/l		<0.01	<0.01			
	cis-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01			
Carbophenothion <0.01 μg/l TM344 <0.01 <0.01	Ethion	<0.01 µg/l	TM344	<0.01	<0.01			
	Carbophenothion	<0.01 μg/l	TM344	<0.01	<0.01			

ALS

	Results Legend		Customer Sample Ref.	ewa (ne)	CIM4 /HC)		<u> </u>	
# M	ISO17025 accredited. mCERTS accredited.		Customer Sample Ker.	SW2 (DS)	SW1 (US)			
aq diss.filt tot.unfilt	Aqueous / settled sample. Dissolved / filtered sample. Total / unfiltered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
*	Subcontracted - refer to subcontractor report f accreditation status.	for	Sample Type Date Sampled	Surface Water (SW) 25/08/2020	Surface Water (SW) 25/08/2020			
	% recovery of the surrogate standard to check efficiency of the method. The results of individ	lual	Sample Time Date Received	26/08/2020	26/08/2020			
(F)	compounds within samples aren't corrected for recovery Trigger breach confirmed	r the	SDG Ref Lab Sample No.(s)	200826-98 22723236	200826-98 22723227			
	Sample deviation (see appendix)	LOD/Units	AGS Reference					
Triazopi		<0.01 µg/l		<0.01	<0.01			
Phosalo	ne	<0.01 µg/l	TM344	<0.01	<0.01			
Azinpho	s methyl	<0.02 µg/l	TM344	<0.04	<0.04			
Azinpho	s ethyl	<0.02 µg/l	TM344	<0.02	<0.02			
Etridiazo	ole	<0.01 µg/l	TM345	<0.01	<0.01			
Pentach	llorobenzene	<0.01 µg/l	TM345	<0.01	<0.01			
Propach	nlor	<0.01 µg/l	TM345	<0.01	<0.01			
Quintoz	ene (PCNB)	<0.01 µg/l		<0.01	<0.01			
Ometho	ate	<0.01 µg/l		<0.01	<0.01			
Propazii		<0.01 µg/l		<0.01	<0.01	use.		
Propyza		<0.01 µg/l		<0.01	<0.01	offst and other tise.		
Alachlor		<0.01 µg/l		<0.01	<0.01 چي	outh au		
Prometr	yn	<0.01 µg/l		<0.01	<0.01 portion of the control of the	20		
Telodrin	1	<0.01 µg/l		<0.01	ecitorilet it			
Terbutry	/n	<0.01 µg/l		<0.01	THE COUNTY OF TH			
Chloroth	nalonil	<0.01 µg/l		O.				
Etrimph		<0.01 µg/l		<0.01 ent	<0.01			
Metazao		<0.01 µg/l		<0.01	<0.01			
Cyanazi		<0.01 µg/l		<0.01	<0.01			
Trietazir		<0.01 µg/l		<0.01	<0.01			
Coumar		<0.01 µg/l		<0.01	<0.01			
·	amidon I	<0.01 µg/l		<0.01	<0.01			
	amidon II	<0.01 µg/l		<0.01	<0.01			
Dinitro-c		<0.1 µg/l	TM411	<0.1	<0.2			
Clopyral	lid	<0.04 µg/l		<0.04	<0.08			
MCPA		<0.05 µg/l		<0.05	<0.1			
Mecopro		<0.04 µg/l		<0.04	<0.08			
Dicamba	a	<0.04 µg/l		<0.04	<0.08			
МСРВ		<0.05 µg/l		<0.05	<0.1			
2,4-DB		<0.1 µg/l	TM411	<0.1	<0.2			
	ichlorobenzoic acid	<0.05 µg/l		<0.05	<0.1			
Dichlorp		<0.1 µg/l		<0.1	<0.2			
Triclopy	r	<0.05 µg/l	TM411	<0.05	<0.1			





					_		
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00			
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor repo	and for	Sample Type	Surface Water (SW)	Surface Water (SW)			
accreditation status. ** % recovery of the surrogate standard to che		Date Sampled Sample Time	25/08/2020	25/08/2020			
efficiency of the method. The results of indi compounds within samples aren't corrected	ividual	Date Received	26/08/2020	26/08/2020			
recovery (F) Trigger breach confirmed	a lor tile	SDG Ref	200826-98 22723236	200826-98 22723227			
1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference					
Component Fenoprop (Silvex)	LOD/Units <0.1 µg/l		<0.1	<0.2			
T Grioprop (Grivex)	10.1 рул	1101411	-0.1	10.2			
2,4-Dichlorophenoxyacetic acid	<0.05 µg/l	I TM411	<0.05	<0.1			
2,4,5-Trichlorophenoxyacetic acid	<0.05 µg/l	I TM411	<0.1	<0.1			
Bromoxynil	<0.04 µg/l	I TM411	<0.04	<0.08			
Benazolin	<0.04 µg/l	I TM411	<0.04	<0.08			
loxynil	<0.05 µg/l	I TM411	<0.05	<0.1			
Pentachlorophenol	<0.04 µg/l	I TM411	<0.04	<0.08			
Fluoroxypyr	<0.1 µg/l	TM411	<0.1	<0.2			
				of Held whet reading	.15°.		
					other		
				ąe,	only and		
				AUT POS	ed		
				ection of real			
			^	of itight of			
			8	OS			
			consent of				
			C				
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200826-98 New Inn Landfill Report Number: Superseded Report: SDG: Client Reference: P2282 565823 Location: Z2189

Order Number:

SVOC MS (W) - Aqueous	s						
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
* Subcontracted - refer to subcontractor report accreditation status.	for	Date Sampled	25/08/2020	25/08/2020			
** % recovery of the surrogate standard to checlefficiency of the method. The results of indivi-		Sample Time Date Received	26/08/2020	26/08/2020			
compounds within samples aren't corrected for		SDG Ref	200826-98	200826-98			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22723236	22723227			
Component	LOD/Units						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #			
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #			
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #			
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #			
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #			
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #			
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<4 #	<4			
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #			
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<4 #	<4 #			
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<4	0.0		
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<4 #	* <4 #	otter tree.		
2-Chlorophenol (aq)	<1 µg/l	TM176	<4 #	<4 #	ज्याम् वाम्		
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<4	<4 05°	outh, outh office		
2-Methylphenol (aq)	<1 µg/l	TM176	<4 #	tion set it "			
2-Nitroaniline (aq)	<1 µg/l	TM176	<4 #,	inspection #			
2-Nitrophenol (aq)	<1 µg/l	TM176	<4 *	₹ <4			
3-Nitroaniline (aq)	<1 µg/l	TM176	<4 entor	<4 #			
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	€A************************************	<4 #			
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<4 #	<4 #			
4-Chloroaniline (aq)	<1 µg/l	TM176	<4	<4			
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<4 #	<4 #			
4-Methylphenol (aq)	<1 μg/l	TM176	<4 #	<4 #			
4-Nitroaniline (aq)	<1 µg/l	TM176	<4 #	<4 #			
4-Nitrophenol (aq)	<1 µg/l	TM176	<4	<4			
Azobenzene (aq)	<1 µg/l	TM176	<4 #	<4 #			
Acenaphthylene (aq)	<1 µg/l	TM176	<4 #	<4 #			
Acenaphthene (aq)	<1 μg/l	TM176	<4 #	<4 #			
Anthracene (aq)	<1 µg/l	TM176	<4 #	<4 #			
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<4 #	<4 #			
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<4 #	<4 #			
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<8 #	<8 #			
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<4 #	<4 #			
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<4 #	<4 #			

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SVOC MS (W) - Aqueous	S						
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
* Subcontracted - refer to subcontractor report accreditation status.	for	Date Sampled	25/08/2020	25/08/2020			
** % recovery of the surrogate standard to check efficiency of the method. The results of indivi-		Sample Time Date Received	26/08/2020	26/08/2020			
compounds within samples aren't corrected for		SDG Ref	200826-98	200826-98			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22723236	22723227			
Component	LOD/Unit						
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	<4	<4			
			#	#			
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<4 	<4			
Benzo(a)pyrene (aq)	<1 µg/l	TM176	# <4	# <4			
Delizo(a)pyrelie (aq)	\ \ \ μg/i	1101170	#	#			
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<4	<4			
			#	#			
Carbazole (aq)	<1 µg/l	TM176	<4	<4			
Christian (ag)	-1 · · · · //	TM176	#	#			
Chrysene (aq)	<1 µg/l	1101176	<4 #	<4 #			
Dibenzofuran (aq)	<1 µg/l	TM176	<4	<4			
, <i>u</i>			#	1			
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<4	<4			
District ()		T111=0	#	#			
Diethyl phthalate (aq)	<1 µg/l	TM176	<4	<4 #			
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	# <4	# <4			
Dibonzo(u,n)antinacene (uq)	i μg/i	1111170	#		use.		
Dimethyl phthalate (aq)	<1 µg/l	TM176	<4	<4	neil		
			#	#	Ott		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<20	<20	ony and difference.		
Fluorenth and (ca)	44 //	TM470	#	14 05	, , ,		
Fluoranthene (aq)	<1 µg/l	TM176	<4 #	<4 purpose	\$ ^C		
Fluorene (aq)	<1 µg/l	TM176	<4	· 64 × 7004			
(=4)	1 1 1 1 1 1		#	ectionie #			
Hexachlorobenzene (aq)	<1 µg/l	TM176	<4	<4 plants # # Parties # # Parties # # Parties # # Parties # # # Parties # # # # # # # # # # # # # # # # # # #			
		=	. #	#			
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<4	× <4 #			
Pentachlorophenol (aq)	<1 µg/l	TM176	<4	<4			
T official filosophion (uq)	l Hg/i	1111110	<4 chieft				
Phenol (aq)	<1 µg/l	TM176	4	<4			
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<4 	<4 			
Hexachloroethane (aq)	<1 µg/l	TM176	# <4	# <4			
riexacilioroetilarie (aq)	ν μς//	1101170	#	1			
Nitrobenzene (aq)	<1 µg/l	TM176	<4	<4			
			#	#			
Naphthalene (aq)	<1 µg/l	TM176	<4	<4 			
loophorono (og)	<1.ua/l	TM176	# <4	# <4			
Isophorone (aq)	<1 µg/l	TM176	<4 #				
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<4	<4			
Phenanthrene (aq)	<1 µg/l	TM176	<4	<4			
Indeno(1,2,3-cd)pyrene (aq)	<1 ··~"	TM176	# <4	# <4			
mueno(1,2,5-ca)pyrene (aq)	<1 µg/l	IIVII/O	<4 #	<4 #			
Pyrene (aq)	<1 µg/l	TM176	<4	<4			
. , "	,,,,,		#	1			
						-	
						 	
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 SDG:
 200826-98
 Client Reference:
 P2282
 Report Number:
 565823

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

VOC MS (W)							 	
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)				
M mCERTS accredited. aq Aqueous / settled sample.		B. 45 (1)						
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)				
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled	25/08/2020	25/08/2020				
efficiency of the method. The results of indiv	/idual	Sample Time Date Received	26/08/2020	26/08/2020				
compounds within samples aren't corrected recovery	for the	SDG Ref	200826-98 22723236	200826-98 22723227				
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22123230	22123221				
Component	LOD/Units	Method	400	110	_			
Dibromofluoromethane**	%	TM208	120	116				
Toluene-d8**	%	TM208	98.1	97.2				
4-Bromofluorobenzene**	%	TM208	98.4	97.3				
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1	#			
Chloromethane	<1 µg/l	TM208	<1 #	<1	#			
Vinyl chloride	<1 µg/l	TM208	<1 #	<1	#			
Bromomethane	<1 µg/l	TM208	<1 #	<1	#			
Chloroethane	<1 µg/l	TM208	<1 #	<1	#			
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1	#			
1,1-Dichloroethene	<1 µg/l	TM208	<1 #	<1	#	ee.		
Carbon disulphide	<1 µg/l	TM208	<1 #	<1	#	otherita		
Dichloromethane	<3 µg/l	TM208	<3 #	<3	#_	ould, and		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 #	<1 00°		20,		
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 #	ecitor purie	#			
1,1-Dichloroethane	<1 µg/l	TM208 TM208	<1 # <1	inspectant	#			
cis-1,2-Dichloroethene 2,2-Dichloropropane	<1 µg/l	TM208	₩,	00 ³ <1	#			
Bromochloromethane	<1 μg/l	TM208	<1 ST SENT OF	<1	\Box			
Chloroform	<1 µg/l	TM208	**************************************	<1	#			
1,1,1-Trichloroethane	<1 μg/l	TM208	**************************************	1	#			
1,1-Dichloropropene	<1 μg/l	TM208	<1	1	#			
Carbontetrachloride	<1 μg/l	TM208	** <1	<1	#			
1,2-Dichloroethane	<1 μg/l	TM208	<1	<1	#			
Benzene	<1 µg/l	TM208	* <1	<1	#			
Trichloroethene	<1 µg/l	TM208	<1	<1	#			
1,2-Dichloropropane	<1 µg/l	TM208	<1	<1	#			
Dibromomethane	<1 µg/l	TM208	<1 **	<1	#			
Bromodichloromethane	<1 µg/l	TM208	# <1 #	<1	#			
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1	#			
Toluene	<1 µg/l	TM208	<1 #	<1	#			
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1	#			
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 #	<1	#			
1,3-Dichloropropane	<1 µg/l	TM208	<1 #	<1	#			
	-	-		-	_			

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 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

VOC MS (W)							
Results Legend # ISO17025 accredited.		Customer Sample Ref.	SW2 (DS)	SW1 (US)			
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Surface Water (SW)	0.00 - 0.00 Surface Water (SW)			
 Subcontracted - refer to subcontractor report accreditation status. 		Date Sampled	25/08/2020	25/08/2020			
** % recovery of the surrogate standard to chec efficiency of the method. The results of indivi	dual	Sample Time Date Received	26/08/2020	26/08/2020			
compounds within samples aren't corrected f recovery	or the	SDG Ref	200826-98	200826-98			
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22723236	22723227			
Component	LOD/Units	Method					
Tetrachloroethene	<1 µg/l	TM208	<1	<1			
Dibromochloromethane	z1//	TM208	# <1	* <1			
Dibiomocnioromethane	<1 µg/l	1101200	\ \ \ #	#			
1,2-Dibromoethane	<1 µg/l	TM208	<1	<1			
	, ,		#	#			
Chlorobenzene	<1 µg/l	TM208	<1	<1			
		=:	#				
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 #	<1 #			
Ethylbenzene	<1 µg/l	TM208	<1	<1			
241/1561126116	. 49	200	. #	#			
m,p-Xylene	<1 µg/l	TM208	<1	<1			
			#	#			
o-Xylene	<1 µg/l	TM208	<1	<1			
Churana	z1//	TM208	#	#			
Styrene	<1 µg/l	I IVIZUO	<1 #	<1 #			
Bromoform	<1 µg/l	TM208	<1	<1			
	"		#		1150.		
Isopropylbenzene	<1 µg/l	TM208	<1	<1	ony and difference.		
			#	#	100		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 ,,,	<1	only air.		
1,2,3-Trichloropropane	<1 µg/l	TM208	# <1	<1 205	200		
1,2,3-111011010p10pane	\ \ μg/ι	TIVIZOO	- " #		~		
Bromobenzene	<1 µg/l	TM208	<1	ecited of 1804			
			#	ech with #			
Propylbenzene	<1 µg/l	TM208	<1	1118 Ht 21			
0.011	-4 ()	Th 4000	.4	0P <1			
2-Chlorotoluene	<1 µg/l	TM208	S _H	%, <1 #			
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 chieff	<1			
1,0,0 1100.1,150.120.10	. 49	200	A CATASET #	#			
4-Chlorotoluene	<1 µg/l	TM208	ک ا	<1			
			#				
tert-Butylbenzene	<1 µg/l	TM208	<1	<1			
1,2,4-Trimethylbenzene	<1 µg/l	TM208	# <1	* <1			
1,2,4 Trimetryibonzone	γ μg/i	TWZOO	, , , , , , , , , , , , , , , , , , , ,	1			
sec-Butylbenzene	<1 µg/l	TM208	<1	<1			
			#	#			
4-iso-Propyltoluene	<1 µg/l	TM208	<1	<1 ,,,			
1.2 Dishlershannens	z1//	TMOOO	# <1				
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #			
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	<1			
			#	#			
n-Butylbenzene	<1 µg/l	TM208	<1	<1			
408:11		T1 1000	.4				
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #			
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	<1			
1,2 Distanto o anteropropano	l Pg/	1111200	''	, ,			
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	<1			
			#				
Hexachlorobutadiene	<1 µg/l	TM208	<1	<1 "			
tort Amyl mothyl other (TAME)	24//	TMACOO	#				
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #			
Naphthalene	<1 µg/l	TM208	<1	<1			
	F-5		. #	1			
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1	<1			
			. #				
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1	<1			





Report Number: Superseded Report: SDG: 200826-98 P2282 565823 Client Reference: Location: New Inn Landfill Order Number: Z2189

Table of Results - Appendix

Method No	Reference	Description
TM022	Method 2540D, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part120 1981;BS EN 872	Determination of total suspended solids in waters
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM172	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	EPH in Waters
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM343	EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM344	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite II) by GCMS
TM345	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite III) by GCMS Acid Herbs in Water by GCMS
TM411	Acid_Herbs_GCMS	Acid Herbs in Water by GCMS
ot applicable. Il testing (unless	subcontracted) performed at ALS Life Sciences Ltd Hawarder	(Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).



ALS

 SDG:
 200826-98
 Client Reference:
 P2282
 Report Number:
 565823

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Test Completion Dates

16						
Lab Sample No(s)	22723236	22723227				
Customer Sample Ref.	SW2 (DS)	SW1 (US)				
•						
AGS Ref.						
Depth	0.00 - 0.00	0.00 - 0.00				
Туре	Surface Water	Surface Water				
Acid Herbicides by GCMS	03-Sep-2020	28-Aug-2020				
Ammonium Low	03-Sep-2020	03-Sep-2020				
Anions by Kone (w)	27-Aug-2020	27-Aug-2020				
BOD True Total	01-Sep-2020	01-Sep-2020				
COD Unfiltered	30-Aug-2020	30-Aug-2020				
Conductivity (at 20 deg.C)	27-Aug-2020	27-Aug-2020				
Cyanide Comp/Free/Total/Thiocyanate	03-Sep-2020	03-Sep-2020				
Dissolved Metals by ICP-MS	01-Sep-2020	01-Sep-2020				
Dissolved Oxygen by Probe	28-Aug-2020	28-Aug-2020				
Fluoride	01-Sep-2020	01-Sep-2020				
Mercury Dissolved	03-Sep-2020	03-Sep-2020				
Mineral Oil C10-40 Aqueous (W)	02-Sep-2020	02-Sep-2020				
PCB Congeners - Aqueous (W)	03-Sep-2020	03-Sep-2020				
Pesticides (Suite I) by GCMS	01-Sep-2020	01-Sep-2020				
Pesticides (Suite II) by GCMS	01-Sep-2020	01-Sep-2020				
Pesticides (Suite III) by GCMS	01-Sep-2020	01-Sep-2020				
pH Value	27-Aug-2020	27-Aug-2020				
Phosphate by Kone (w)	27-Aug-2020	27-Aug-2020				
Suspended Solids	30-Aug-2020	30-Aug-2020				
SVOC MS (W) - Aqueous	30-Aug-2020	30-Aug-2020				
VOC MS (W)	03-Sep-2020	03-Sep-2020				

Consent of copyright owner required for any other use.



SDG: 200826-98 Client Reference: P2282 Report Number: 565823 Location: New Inn Landfill Order Number: Z2189 Superseded Report:

Appendix

General

- Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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
- 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to For representative sub sample from the received sample.
- 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. OTI
- 12. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. Tentatively Identified Compounds (TICs) are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres wing ALS (Hawarden) in-house method of transmitted/polarised light microscopy and

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of selections.

ALS (Hawarden) in house 1000 and 1000 are 1000 and 1000 and 1000 are 1000 and 1000 an stop dispersion staining, based on HSG 248 (2005).

Asbe stos Type	Common Name		
Chrysof le	White Asbests		
Amosite	BrownAsbesbs		
Cro d dolite	Blue Asbe stos		
Fibrous Act nolite	-		
Fib to us Anthop hyll ite	-		
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

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017).

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.

15:14:22 03/09/2020 Modification Date: 03/09/2020 EPA Export 01-12-2021:02:54:48 Page 16 of 16



Unit 7-8 Hawarden Business Park Manor Road (off Manor Lane) Hawarden Deeside

> Tel: (01244) 528700 Fax: (01244) 528701

CH5 3US

email: hawardencustomerservices@alsglobal.com

Website: www.alsenvironmental.co.uk

Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

07 August 2020 Date of report Generation: Fehily Timoney **Customer:** 200731-88 Sample Delivery Group (SDG): P2282 Your Reference: New Inn Landfill

Location:

562221 Report No:

We received 1 sample on Friday July 31, 2020 and 1 of these samples were scheduled for analysis which was completed on Friday August 07, 2020. 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 ALSCLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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

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**





Validated

SDG: 200731-88 Location: New Inn Landfill

Client Reference: P2282 Z2189 Order Number:

Report Number: Superseded Report: 562221

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date	
22583371	BH2		0.00 - 0.00	30/07/2020	

Maximum Sample/Coolbox Temperature (°C):

ISO5667-3 Water quality - Sampling - Part3 -

During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of $(5\pm3)^{\circ}C$.

16.2

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

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

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Validated

562221

Report Number:

Superseded Report:

CERTIFICATE OF ANALYSIS

ALS

P2282 SDG: 200731-88 Client Reference: Location: New Inn Landfill Z2189 Order Number: Results Legend 22583371 Lab Sample No(s) X Test No Determination Possible Customer BH2 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 500ml Plastic (ALE208) 0.5l glass bottle (ALE227) H2SO4 (ALE244) DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other did bulber to directly any other use. Sample Type 듄 E Ammonium Low All NDPs: 0 Tests: 1 Anions by Kone (w) All NDPs: 0 Tests: 1 Χ BOD True Total All NDPs: 0 Tests: 1 X COD Unfiltered All NDPs: 0 Tests: 1 Conductivity (at 20 deg.C) All NDPs: 0 Tests: 1 Χ Dissolved Metals by ICP-MS All NDPs: 0 Tests: 1 Χ Dissolved Oxygen by Probe All NDPs: 0 Tests: 1 Х Fluoride All NDPs: 0 Tests: 1 Χ Mercury Dissolved All NDPs: 0 Tests: 1 X pH Value All NDPs: 0 Tests: 1 X Phosphate by Kone (w) All NDPs: 0 Tests: 1 X Total Organic and Inorganic Carbon All NDPs: 0 Tests: 1 Χ

ALS

 SDG:
 200731-88
 Client Reference:
 P2282
 Report Number:
 562221

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

# ISO17025 accredited. # ISO17025 accredited. M mCERTS accredited. aq Aquoous / settled sample. diss.fill: Dissolved / filtered sample, tot.unfilt Total / unfiltered sample.		Customer Sample Ref. Depth (m) Sample Type	BH2 0.00 - 0.00 Land Leachate (LE)				
* Subcontracted - refer to subcontractor report f accreditation status.		Date Sampled	30/07/2020				
** % recovery of the surrogate standard to check efficiency of the method. The results of individ compounds within samples aren't corrected fo	lual	Sample Time Date Received	31/07/2020				
recovery (F) Trigger breach confirmed	ir tire	SDG Ref Lab Sample No.(s)	200731-88 22583371				
1-3+§@ Sample deviation (see appendix)	LOD/II-it-	AGS Reference					
Component BOD, unfiltered	LOD/Units <1 mg/l	Method TM045	28.2				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	J		#				
Oxygen, dissolved	<0.3 mg/l	TM046	6.16				
Organic Carbon, Total	<3 mg/l	TM090	12.7				
Ammoniacal Nitrogen as N (low level)	<0.01 mg/l	TM099	22				
Fluoride	<0.5 mg/l	TM104	<0.5				
COD, unfiltered	<7 mg/l	TM107	303 #				
Conductivity @ 20 deg.C	<0.02 mS/cm	TM120	5.88 #				
Arsenic (diss.filt)	<0.5 µg/l	TM152	2.73 2#				
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08 2#				
Chromium (diss.filt)	<1 µg/l	TM152	<1 2#				
Copper (diss.filt)	<0.3 µg/l	TM152	<0.3 2#		die daller use.		
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2 2#	ے	ould au,		
Manganese (diss.filt)	<3 µg/l	TM152	525 2#	nur ose	Safe		
Nickel (diss.filt)	<0.4 µg/l	TM152	55.2 2#	10 of 10			
Phosphorus (diss.filt)	<10 µg/l	TM152	13.6 2#	tinspen or			
Selenium (diss.filt)	<1 µg/l	TM152	2#	OX.			
Zinc (diss.filt)	<1 µg/l	TM152	7.37 2#				
Sodium (Dis.Filt)	<0.076 mg/l		1250				
Magnesium (Dis.Filt)	<0.036 mg/l		28.2				
Potassium (Dis.Filt)	<0.2 mg/l	TM152	25.7				
Iron (Dis.Filt)	<0.019 mg/l		3.87				
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01				
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184	<0.05				
Sulphate	<2 mg/l	TM184	29.4				
Chloride	<2 mg/l	TM184	1720				
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	<0.1				
pH	<1 pH Units	TM256	6.88				





 SDG:
 200731-88
 Client Reference:
 P2282
 Report Number:
 562221

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Table of Results - Appendix

		терине
Method No	Reference	Description
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Life Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).





ALS

 SDG:
 200731-88
 Client Reference:
 P2282
 Report Number:
 562221

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Test Completion Dates

Lab Sample No(s)	22583371
Customer Sample Ref.	BH2
AGS Ref.	
Depth	0.00 - 0.00
Туре	Land Leachate
Ammonium Low	06-Aug-2020
Anions by Kone (w)	04-Aug-2020
BOD True Total	06-Aug-2020
COD Unfiltered	04-Aug-2020
Conductivity (at 20 deg.C)	05-Aug-2020
Dissolved Metals by ICP-MS	07-Aug-2020
Dissolved Oxygen by Probe	04-Aug-2020
Fluoride	04-Aug-2020
Mercury Dissolved	05-Aug-2020
pH Value	04-Aug-2020
Phosphate by Kone (w)	04-Aug-2020
Total Organic and Inorganic Carbon	06-Aug-2020





SDG: 200731-88 Client Reference: P2282 Report Number: 562221 Location: New Inn Landfill Order Number: Z2189 Superseded Report:

Appendix

General

- Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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
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- 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
- 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to For representative sub sample from the received sample.
- 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. OTI
- 12. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. Tentatively Identified Compounds (TICs) are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres wing ALS (Hawarden) in-house method of transmitted/polarised light microscopy and

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of selections.

ALS (Hawarden) in house 1000 and 1000 are 1000 and 1000 and 1000 are 1000 and 1000 an stop dispersion staining, based on HSG 248 (2005).

Asbe stos Type	Common Name		
Chrysof le	White Asbests		
Amosite	BrownAsbesbs		
Cro d dolite	Blue Asbe stos		
Fibrous Act nolite	-		
Fib to us Anthop hyll ite	-		
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

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017).

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.

11:37:13 07/08/2020 Modification Date: 07/08/2020 EPA Export 01-12-2021:02:54:48 Page 7 of 7



Unit 7-8 Hawarden Business Park Manor Road (off Manor Lane) Hawarden Deeside

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CH5 3US

email: haward encustomers er vices@alsglobal.com

Website: www.alsenvironmental.co.uk

Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

Date of report Generation:27 August 2020Customer:Fehily TimoneySample Delivery Group (SDG):200731-89Your Reference:P2282Location:New Inn LandfillReport No:564886

This report has been revised and directly supersedes 562407 in its entirety.

We received 4 samples on Friday July 31, 2020 and 4 of these samples were scheduled for analysis which was completed on Monday August 10, 2020. 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 ALSOLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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







Validated

 SDG:
 200731-89
 Client Reference:
 P2282
 Report Number:
 564886

 Location:
 New Inn Landfill
 Order Number:
 P2282
 Superseded Report:
 562407

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
22583409	BH1		0.00 - 0.00	30/07/2020
22583419	BH4		0.00 - 0.00	30/07/2020
22583387	GW01		0.00 - 0.00	30/07/2020
22583397	GW02		0.00 - 0.00	30/07/2020

Maximum Sample/Coolbox Temperature (°C) :

ISO5667-3 Water quality - Sampling - Part3 -

During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

16.2

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

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



1		

SDG: 200731-89 Client Reference: P2282 Report Number: 564886 New Inn Landfill P2282 Superseded Report: 562407 Location: Order Number: Results Legend 22583409 22583387 22583397 Lab Sample No(s) X Test No Determination Possible Customer GW01 뭔1 뫈 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) NaOH (ALE245) H2SO4 (ALE244) NaOH (ALE245) H2SO4 (ALE244) DW - Drinking Water Non-regulatory 500ml Plastic (ALE208) 500ml Plastic (ALE208) 500ml Plastic (ALE208) Vial (ALE297) Vial (ALE297) Vial (ALE297) 500ml Plastic UNL - Unspecified Liquid (ALE208) SL - Sludge Container G - Gas OTH - Other Sample Type GW Acid Herbicides by GCMS All NDPs: 0 Tests: 4 Х Χ Х Х Alkalinity as CaCO3 NDPs: 0 dioi Tests: 4 X X Χ Χ Ammonium Low All NDPs: 0 Tests: 4 X X X Anions by Kone (w) All NDPs: 0 Tests: 4 X X Х BOD True Total All NDPs: 0 Tests: 4 X Χ X Х COD Unfiltered All NDPs: 0 Tests: 4 X Х Х X All Conductivity (at 20 deg.C) NDPs: 0 Tests: 4 Χ Χ Х Х All Cyanide Comp/Free/Total/Thiocyanate NDPs: 0 Tests: 4 Χ Χ Χ Χ Dissolved Metals by ICP-MS All NDPs: 0 Tests: 4 X X X Dissolved Oxygen by Probe All NDPs: 0 Tests: 4 X X X Χ Faecal Coliforms (W)* All NDPs: 0 Tests: 4 X X X Х Fluoride All NDPs: 0 Tests: 4 Х Χ Х X All Mercury Dissolved NDPs: 0 Tests: 4 X Х Х Х PCB Congeners - Aqueous (W) All NDPs: 0 Tests: 4 Х Х X Х Pesticides (Suite I) by GCMS All NDPs: 0 Tests: 4 Χ X Χ X

Consent of copyright owner required for any other use.

Validated

CERTIFICATE OF ANALYSIS

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P2282 SDG: 200731-89 Client Reference: Report Number: 564886 New Inn Landfill P2282 Superseded Report: 562407 Location: Order Number: Results Legend 22583409 22583419 22583387 22583397 Lab Sample No(s) X Test No Determination Possible Customer GW01 GW02 뭔1 BH4 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate 0.00-PR - Process Water 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) - 0.00 TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 500ml Plastic (ALE208) 0.5l glass bottle (ALE227) 500ml Plastic (ALE208) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) H2SO4 (ALE244) NaOH (ALE245) H2SO4 (ALE244) NaOH (ALE245) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) DW - Drinking Water Non-regulatory 500ml Plastic (ALE208) Vial (ALE297) Vial (ALE297) Vial (ALE297) 500ml Plastic UNL - Unspecified Liquid (ALE208) SL - Sludge Container G - Gas OTH - Other GW GW Sample Type GW GΜ GW GW GW GΜ GW GW GW GΜ GΜ GΜ GW GΜ GW Pesticides (Suite II) by GCMS All NDPs: 0 Tests: 4 X X X X Pesticides (Suite III) by GCMS All NDPs: 0 Tests: 4 X Х X pH Value All NDPs: 0 Tests: 4 X X X Х SVOC MS (W) - Aqueous All NDPs: 0 Tests: 4 Х Х Х Total Coliforms(W)* All NDPs: 0 Tests: 3 Χ X Χ All Total Organic and Inorganic Carbon NDPs Tests: 4 Х Х Χ Х VOC MS (W) All NDPs: 0 Tests: 4 Χ Χ Χ

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Results Legend		Customer Sample Ref.	BH1	BH4	GW01	GW02		Т
# ISO17025 accredited. M mCERTS accredited. ag Agueous / settled sample.								
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
* Subcontracted - refer to subcontractor report	rt for	Sample Type Date Sampled	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020		
** % recovery of the surrogate standard to che efficiency of the method. The results of indiv		Sample Time						
compounds within samples aren't corrected recovery		Date Received SDG Ref	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89		
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583409	22583419	22583387	22583397		
Component	LOD/Units							
Faecal coliforms confirmed	0	SUB	0	0	1	180		
(M7M)*	CFU/100ml	L OUD		-				
Total Coliform Presumptive (M16)*	CFU/100ml	I SUB	2	7	2			
Total Coliform Confirmed (M14)*	CFU/100ml	I SUB	2	7	2			+
,								
Alkalinity, Total as HCO3	<2 mg/l	TM043	451	482	1570	939		
DOD (1)	4 "	T14045				,		
BOD, unfiltered	<1 mg/l	TM045	<1 #	<1 #	<1 #	<1 #		
Oxygen, dissolved	<0.3 mg/l	TM046	9.68	8.64	10	9.5		+
, 5,								
Organic Carbon, Total	<3 mg/l	TM090	<3	3.47	<3	<3		
A 1 1500 210	20:	T1 1000	#	#	#	#		+
Ammoniacal Nitrogen as N (low level)	<0.01 mg/l	TM099	0.0176 #	0.186	0.0283 #	0.544 #		
Fluoride	<0.5 mg/l	TM104	<0.5	<0.5	<0.5	0.908		+
	-0.0 mg/l	1111177	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	40.5	¥	0.300 #	<u> </u>	<u> </u>
COD, unfiltered	<7 mg/l	TM107	28.7	32.3	99.6	162		
	1		#	#	274	#		
Conductivity @ 20 deg.C	<0.02	TM120	0.623	0.794	0.748 et 1 #	1.27		
Arsenic (diss.filt)	mS/cm <0.5 μg/l	TM152	0.521	0.869	0 th #	0.607		+
7 (30 mo (diss.mt)	10.0 µg/1	111102	2#	2 #	of #	2#		
Barium (diss.filt)	<0.2 µg/l	TM152	21.8	33.5	9.12	129		
			2#	111 2 #1	2#	2#		
Boron (diss.filt)	<10 µg/l	TM152	23.7	43,571 rest	<10	180		
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08	2#	2 # <0.08	2 # <0.08		+
Caumum (diss.iiit)	<0.00 μg/i	1101132	<0.00 2#,	11150 (0.08 2#	2#	2#		
Chromium (diss.filt)	<1 µg/l	TM152	<1	087 <1	<1	<1		
			2#	2#	2#	2#		
Copper (diss.filt)	<0.3 µg/l	TM152	4.98 2#	<0.3	0.828	1.97		
Lood (disp filt)	<0.2 ug/l	TM152	<u> </u>	<0.2	2 # <0.2	2 # 0.356	-	+
Lead (diss.filt)	<0.2 µg/l	1101132	2#	1	2#	0.330		
Manganese (diss.filt)	<3 µg/l	TM152	16	115	9.66	8.05		
, , ,			2#	2#	2#	2#		
Nickel (diss.filt)	<0.4 µg/l	TM152	10.5	5.59	3.53	3.47		
Dhaarkania (diaa fili)	440	TN450	2#		2#	2#		
Phosphorus (diss.filt)	<10 µg/l	TM152	<10 2#	<10 2#	<10 2#	16.5 2 #		
Selenium (diss.filt)	<1 µg/l	TM152	<1	<1	<1	33.5		
, ,			2#	2#	2#	2#		
Thallium (diss.filt)	<2 µg/l	TM152	<2	<2	<2	<2		
Zina (dina filt)	2411	TMACO	2#		2 #	2 #	 	+
Zinc (diss.filt)	<1 µg/l	TM152	26.6 2 #	1.95 2 #	3.01 2#	1.98 2#		
Sodium (Dis.Filt)	<0.076 mg/	TM152	6.42	45.8	8.43	226		
` ,			2#		2#	2#		
Magnesium (Dis.Filt)	<0.036 mg/	TM152	10.1	8.08	5.7	28.3		
Detection (Di- Fill)	-0.0 "	TAMEO	2#	2#	2#	2 #		+
Potassium (Dis.Filt)	<0.2 mg/l	TM152	1.18 2#	3.32	1.69 2#	5.26 2 #		
Calcium (Dis.Filt)	<0.2 mg/l	TM152	139	139	143	71.8		
7			2#		2#	2#		
Iron (Dis.Filt)	<0.019 mg/	TM152	<0.019	<0.019	<0.019	<0.019		
AA / P / 600	201	T14465	2#		2#	2#	 	+
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01 2#	<0.01 2#	<0.01 2#	<0.01 2#		
Sulphate	<2 mg/l	TM184	11.8	11.8	9.3	181		+
	g,,		#	#	5.5 #	#		
Chloride	<2 mg/l	TM184	13.5	73.6	22.2	46.4		
	1		#	#	#	#	<u> </u>	
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	1.89	<0.1 #	1.75	0.216 #		
			#	#	#	#		



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# ISC	Results Legend 017025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M mC aq Aqı diss.filt Dis tot.unfilt Tot * Sul	CERTS accredited. ueous / settled sample. solved / filtered sample. tal / unfiltered sample. bcontracted - refer to subcontractor report f	ior	Depth (m) Sample Type Date Sampled	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	
** % r effi cor rec	creditation status. recovery of the surrogate standard to check iciency of the method. The results of individ mpounds within samples aren't corrected fo covery	lual	Sample Time Date Received SDG Ref	31/07/2020 200731-89 22583409	31/07/2020 31/07/2020 200731-89 22583419	31/07/2020 31/07/2020 200731-89 22583387	31/07/2020 200731-89 22583397	
1-3+§@ Sar	gger breach confirmed mple deviation (see appendix)	1.55 11. 11	Lab Sample No.(s) AGS Reference					
PCB conge		LOD/Units <0.015 μg/	_	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 52	<0.015 µg/	/I TM197	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 101	<0.015 µg/	/I TM197	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 118	<0.015 µg/	/I TM197	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 138	<0.015 µg/	/I TM197	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 153	<0.015 µg/	/I TM197	<0.015	<0.015	<0.015	<0.015	
PCB conge	ener 180	<0.015 µg/		<0.015	<0.015	<0.015	<0.015	
	tected EC7 PCB's	<0.105 µg/		<0.105	<0.105	<0.105	<0.105	
Cyanide, T	otal	<0.05 mg/		<0.05	<0.05	<0.05	<0.05	
pН		<1 pH Unit		7.97	7.33 #	7.22 \$\frac{\sigma^{\frac{1}{2}}}{4}	7.85	
Trifluralin		<0.01 µg/l		<0.01	<0.01	<0.01er	<0.01	
alpha-HCH		<0.01 µg/l		<0.01	<0.01	only aled.01	<0.01	
	CH (Lindane)	<0.01 µg/l		<0.01	<0.01 000 000 000 000 000 000 000 000 000	<0.01	<0.01	
Heptachlor		<0.01 µg/l		<0.01	ecitovier ,	<0.01 <0.01	<0.01	
Aldrin beta-HCH		<0.01 µg/l		<0.01	112 (0.01	<0.01	<0.01	
Isodrin		<0.01 μg/l		S. S.	<0.01	<0.01	<0.01	
delta-HCH		<0.01 μg/l		<0.01 cmsont	<0.02	<0.02	<0.02	
Heptachlor		<0.01 μg/l		<0.01	<0.01	<0.01	<0.01	
o,p'-DDE		<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Endosulpha	an I	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
trans-Chlor	rdane	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
cis-Chlorda	ane	<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
p,p'-DDE		<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
Dieldrin		<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
o,p'-DDD (TDE)	<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
Endrin		<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
o,p'-DDT		<0.01 µg/l	I TM343	<0.01	<0.04	<0.04	<0.04	
p,p'-DDD (TDE)	<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
Endosulpha	an II	<0.02 µg/l	I TM343	<0.02	<0.02	<0.02	<0.02	
p,p'-DDT		<0.01 µg/l	I TM343	<0.01	<0.07	<0.07	<0.07	
o,p'-Metho	xychlor	<0.01 µg/l	I TM343	<0.01	<0.04	<0.04	<0.04	
			I TM343	<0.01	<0.07	<0.07	<0.07	+



200731-89 New Inn Landfill P2282 P2282 SDG: Client Reference: Location:

Order Number:

Report Number: Superseded Report: 564886 562407

Results Legend # ISO17025 accredited. M mcERTs accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample. "Subcontracted - refer to subcontractor report accreditation satus." "recovery of the surrogate standard to checlefficiency of the method. The results of individence of the contract of the contr	k the dual	Depth (m) Sample Type Date Sampled Sample Time Date Received	0.00 - 0.00 Ground Water (GW) 30/07/2020 31/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020 31/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020 31/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020 31/07/2020	
compounds within samples aren't corrected for recovery (F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)	or the	SDG Ref Lab Sample No.(s) AGS Reference	200731-89 22583409	200731-89 22583419	200731-89 22583387	200731-89 22583397	
Component Endosulphan Sulphate	LOD/Units <0.02 μg/l	Method TM343	<0.02	<0.04	<0.04	<0.04	
		TM2.42			-0.04		
Permethrin I	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
Permethrin II	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
1,3,5-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Hexachlorobutadiene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
1,2,4-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
1,2,3-Trichlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Dichlorvos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Dichlobenil	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Mevinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Tecnazene	<0.01 µg/l	TM344	<0.01	<0.01	<0.01 te.	<0.01	
Hexachlorobenzene	<0.01 µg/l	TM344	<0.01	<0.01	orly ax0.01	<0.01	
Demeton-S-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Phorate	<0.01 µg/l	TM344	<0.01	<0.01 posting of the control of the	<0.01	<0.01	
Diazinon	<0.01 µg/l	TM344	<0.01	· Institute 0.01	<0.01	<0.01	
Triallate	<0.01 µg/l	TM344	<0.01	₹ <0.01	<0.01	<0.01	
Atrazine	<0.01 µg/l	TM344	<0.01 consent	<0.01	<0.01	<0.01	
Simazine	<0.01 µg/l	TM344	<0:01	<0.01	<0.01	<0.01	
Disulfoton	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Propetamphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Chlorpyriphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Dimethoate	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Pirimiphos-methyl	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Chlorpyriphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Methyl Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Malathion	<0.01 μg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Fenthion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Fenitrothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Triadimefon	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Pendimethalin	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Parathion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Chlorfenvinphos	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
trans-Chlordane	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
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200731-89 New Inn Landfill SDG: Client Reference: Location: Order Number:

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Report Number: Superseded Report:

564886 562407

#	Results Legend ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M aq diss.filt tot.unfilt *	mCERT's accredited. Aqueous / settled sample. Dissolved / filtered sample. Total / unfiltered sample. Subcontracted - refer to subcontractor report if accreditation status.	for	Depth (m) Sample Type Date Sampled	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	0.00 - 0.00 Ground Water (GW) 30/07/2020	
** (F) 1-3 + §@	% recovery of the surrogate standard to check efficiency of the method. The results of individ compounds within samples aren't corrected for recovery Trigger breach confirmed Sample deviation (see appendix)	lual	Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	31/07/2020 200731-89 22583409	31/07/2020 200731-89 22583419	31/07/2020 200731-89 22583387	31/07/2020 200731-89 22583397	
Compo cis-Chlo		LOD/Units <0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Ethion		<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Carboph	nenothion	<0.01 µg/l	TM344	<0.01	<0.01	<0.01	<0.01	
Triazoph		<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Phosalo		<0.01 μg/l		<0.01	<0.01	<0.01	<0.01	
·	s methyl	<0.02 µg/l		<0.02	<0.02	<0.02	<0.02	
Azinpho		<0.02 µg/l		<0.02	<0.02	<0.02	<0.02	
Etridiazo	ble	<0.01 µg/l		<0.01	<0.02	<0.02	<0.02	
Pentach	lorobenzene	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Propach	llor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Quintoze	ene (PCNB)	<0.01 µg/l	TM345	<0.01	<0.01	<0.016	<0.01	
Ometho	ate	<0.01 µg/l	TM345	<0.01	<0.01	7119 at 0.01	<0.01	
Propazir	ne	<0.01 µg/l	TM345	<0.01	<0.01 05.	<0.01	<0.01	
Propyza	mide	<0.01 µg/l	TM345	<0.01	<0.01 politicality (0.01	<0.01	<0.01	
Alachlor		<0.01 µg/l	TM345	<0.01	Instituted.01	<0.01	<0.01	
Prometr	yn	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Telodrin		<0.01 µg/l	TM345	<0.01 ent	<0.01	<0.01	<0.01	
Terbutry	'n	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Chloroth	nalonil	<0.01 µg/l	TM345	<0.01	<0.03	<0.03	<0.03	
Etrimpho	os	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Metazao	chlor	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Cyanazi	ne	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Trietazir	ne	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Coumap	phos	<0.01 µg/l	TM345	<0.01	<0.01	<0.01	<0.01	
Phospha	amidon I	<0.01 µg/l	TM345	<0.01	<0.02	<0.02	<0.02	
·	amidon II	<0.01 µg/l		<0.01	<0.02	<0.02	<0.02	
Dinitro-c		<0.1 µg/l	TM411	<0.1	<0.1	<0.5	<0.5	
Clopyral		<0.04 μg/l		<0.04	<0.04	<0.2	<0.2	
MCPA	·	<0.04 µg/l		<0.05	<0.05	<0.25	<0.25	
	200			<0.05	<0.05	<0.25	<0.25	
Mecopro		<0.04 µg/l						
Dicamba	a	<0.04 µg/l		<0.04	<0.04	<0.2	<0.2	
MCPB		<0.05 µg/l		<0.05	<0.05	<0.25	<0.25	
2,4-DB		<0.1 µg/l	TM411	<0.1	<0.1	<0.5	<0.5	



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	Results Legend		Customer Sample Ref.	BH1	BH4	GW01	GW02	i	
# M	ISO17025 accredited. mCERTS accredited.		customer sample Kei.	BH1	BH4	GW01	GW02		
aq diss.filt	Aqueous / settled sample. Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
tot.unfilt *	Total / unfiltered sample. Subcontracted - refer to subcontractor report	for	Sample Type Date Sampled	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020		
**	accreditation status. % recovery of the surrogate standard to check efficiency of the method. The results of indivi-	k the	Sample Time						
	efficiency of the method. The results of individed compounds within samples aren't corrected for recovery	or the	Date Received SDG Ref	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89		
(F) 1-3 + §@	Trigger breach confirmed Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583409	22583419	22583387	22583397		
Compo		LOD/Units	Method						
2,3,6-Tri	chlorobenzoic acid	<0.05 µg/l	TM411	<0.05	<0.05	<0.25	<0.25		
Dichlorp	гор	<0.1 µg/l	TM411	<0.1	<0.1	<0.5	<0.5		
Triclopy		<0.05 µg/l	TM411	<0.05	<0.05	<0.25	<0.25		
Fenopro	p (Silvex)	<0.1 µg/l	TM411	<0.1	<0.1	<0.5	<0.5		
2,4-Dich	lorophenoxyacetic acid	<0.05 µg/l	TM411	<0.05	<0.05	<0.25	<0.25		
2,4,5-Tri acid	chlorophenoxyacetic	<0.05 µg/l	TM411	<0.05	<0.05	<0.25	<0.25		
Bromoxy	mil	<0.04 µg/l	TM411	<0.04	<0.04	<0.2	<0.2		
Benazol	n	<0.04 µg/l	TM411	<0.04	<0.04	<0.2	<0.2		
loxynil		<0.05 µg/l		<0.05	<0.05	<0.25	<0.25		
	orophenol	<0.04 µg/l	TM411	<0.04	<0.04 <0.1 <0.1 A tingle and a real of the second of the	<0.2	<0.2		
Fluoroxy	pyr	<0.1 µg/l	TM411	<0.1	<0.1	<0.5 tel	<0.5		
					چ	outh air,			
					Quitoo	e			
					Dection Per 1				
				Ŷ	insighte Origin				
				38	or.				
				Consent of					

200731-89 New Inn Landfill P2282 P2282 Report Number: Superseded Report: 564886 562407 SDG: Client Reference: Location: Order Number:

S	V	OC	MS	(W)	- Aqueous
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SVOC MS (W) - Aqueou	s						
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M mCERTS accredited. aq Aqueous / settled sample.		David (c.)	0.00	0.00	0.00	0.00	
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled	30/07/2020	30/07/2020	30/07/2020	30/07/2020	
** % recovery of the surrogate standard to che efficiency of the method. The results of indiv	/idual	Sample Time Date Received	31/07/2020	31/07/2020	31/07/2020	31/07/2020	
compounds within samples aren't corrected recovery	for the	SDG Ref	200731-89	200731-89	200731-89	200731-89	
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583409	22583419	22583387	22583397	
Component	LOD/Units	Method	-0	-0	-40	-40	
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #	
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
			#	#	#	#	
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<8	<8 "	<10	<10	
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	# <8	# <8	<10	* <10	
1, 1 Biomoroponizono (uq)	η μ9/1	1111110	#	1		#	
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
0.40 T : 11	.4 ()	T14470	#	#	#	#	
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #	
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
			#	#	#	#	
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<8	<8 4	<10	<10	
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	# <8	# <8	<10	# <10	
L, r Dimitotolucile (aq)	- μg/ι	TIWIT / U	~ 0 #			×10 #	
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
0.01		T11155	#	#		#	
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 other #	<10 #	
2-Chlorophenol (aq)	<1 µg/l	TM176	<8	<8	Option #	<10	
. , , , ,			#	#_	Office at #	#	
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<8		20 <10	<10	
2-Methylphenol (aq)	<1 µg/l	TM176	# <8		<10	# <10	
Z Metryphenol (ay)	- i μg/i	I IVI I / U	^ 0 #	oction the treat	×10 #	×10 #	
2-Nitroaniline (aq)	<1 µg/l	TM176	<8	1.05 X 48	<10	<10	
0.00		T11155	#	V		#	
2-Nitrophenol (aq)	<1 µg/l	TM176	<8 *	\$\$ ³ <8 #	<10 #	<10 #	
3-Nitroaniline (aq)	<1 µg/l	TM176		<8	<10	<10	
			<8 cmt #	#		#	
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	€8	<8 #	<10	<10	
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	# <8	# <8	* <10	# <10	
. Shioto o montyphonol (aq)	- μg/ι	110170	, , , , , , , , , , , , , , , , , , ,	#	I	×10 #	<u> </u>
4-Chloroaniline (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
4 Chlorophorulahanulahan ()	-4 ,n	T14470	-0	<8	-10	-10	
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #	
4-Methylphenol (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
			#	#		#	
4-Nitroaniline (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #	
4-Nitrophenol (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
[(4])	. 127						
Azobenzene (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
Aconanhthylana (ag)	~1 ,·~/l	TM176	# <8	# <8	* <10	*	
Acenaphthylene (aq)	<1 µg/l	1 IVI 1 / 0	<8 #		I	<10 #	
Acenaphthene (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
			#	#		#	
Anthracene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #	
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
	. 49/1		4			#	
bis(2-Chloroethoxy)methane	<1 µg/l	TM176	<8	<8	<10	<10	
(aq)	ا/م، روح	TM176	# <16	* <16	*	4	
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	1 IVI 1 / 0	<16 #	<16 #		<2U #	
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<8	<8	<10	<10	
			#			#	
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10	<10	
			#	#	#	#	

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SVOC MS (W) - Aqueous	S							
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02		
M mCERTS accredited. aq Aqueous / settled sample.								
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)	0.00 - 0.00 Ground Water (GW)		
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled Sample Time	30/07/2020	30/07/2020	30/07/2020	30/07/2020		
** % recovery of the surrogate standard to check efficiency of the method. The results of individual standard to the standard	dual	Date Received	31/07/2020	31/07/2020	31/07/2020	31/07/2020		
compounds within samples aren't corrected for recovery	or the	SDG Ref	200731-89 22583409	200731-89 22583419	200731-89 22583387	200731-89 22583397		
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22300 100	22330110	2230000	2200001		
Component	LOD/Units		<8	<8	<10	-10		
Benzo(b)fluoranthene (aq)	<1 µg/l	TM176	\ #		×10 #	<10 #		
Benzo(k)fluoranthene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
	, ,		#	#	#	#		
Benzo(a)pyrene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
- () ()			#	#	#	#		
Benzo(g,h,i)perylene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #		
Carbazole (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
232325.2 (4.4)			#	#	#	#	1	
Chrysene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
			#	#	#	#		
Dibenzofuran (aq)	<1 µg/l	TM176	<8 	<8 	<10	<10		
n-Dibuty/ phthalato (ag)	<1 · · · a //	TM176	# <8	# <8	# <10	*		
n-Dibutyl phthalate (aq)	<1 µg/l	1101170	^0 #	~ 0 #	×10 #	×10 #		
Diethyl phthalate (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
			#	#	#	#		
Dibenzo(a,h)anthracene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
5: 4 + 14 + ()	4 "	T14470	#	#	10 5 SE#	#		
Dimethyl phthalate (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 tel	<10 #		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<40	<40	250	<50		
Disself primarate (aq)) P3/		#	#.	orlig are 50	#		
Fluoranthene (aq)	<1 µg/l	TM176	<8	<8 207.	<10	<10		
			#	Daily Can		#		
Fluorene (aq)	<1 µg/l	TM176	<8	ilgg of ,	<10	<10		
Hexachlorobenzene (aq)	<1 µg/l	TM176	# <8	insert es #	# <10	*		
riexaciliolobelizerie (aq)	ν μ μ μ μ μ	1101170	, , , , , , , , , , , , , , , , , , ,	Kilitalit "#	#	*10		
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<8	<8 <8 <	<10	<10		
			S u'	#	#	#		
Pentachlorophenol (aq)	<1 µg/l	TM176	<8 sent of	<8	<10	<10		
Discussion (a.e.)	44 !!	TM470	Contr.	<8	-10	-10		
Phenol (aq)	<1 µg/l	TM176	<0	~ 0	<10	<10		
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
,	, ,		#	#	#	#		
Hexachloroethane (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
API 1 / A	-4 //	T14470	#	#		#		
Nitrobenzene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10 #	<10 #		
Naphthalene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
r · · · · · (***)/			#	#	#	#		<u> </u>
Isophorone (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
11 11 1 1 1 1 1	4	T111-1	#	#	#	#		
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
Phenanthrene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
(wy/	. 49,1		#	#	#	#		<u> </u>
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/l	TM176	<8	<8	<10	<10		
			#	#	#	#		
Pyrene (aq)	<1 µg/l	TM176	<8 #	<8 #	<10	<10		
			#	#	#	#		

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OC.	MS	(M)	

VOCALO (MA)							
VOC MS (W) Results Legend	(Customer Sample Ref.	BH1	BH4	GW01	GW02	
# ISO17025 accredited. M mCERTS accredited.							
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor repor	rt for	Sample Type Date Sampled	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	Ground Water (GW) 30/07/2020	
accreditation status. ** % recovery of the surrogate standard to che		Sample Time					
efficiency of the method. The results of indiv compounds within samples aren't corrected		Date Received SDG Ref	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89	31/07/2020 200731-89	
recovery (F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22583409	22583419	22583387	22583397	
Component	LOD/Units	Method					
Dibromofluoromethane**	%	TM208	108	107	108	107	
Toluene-d8**	%	TM208	99.1	97.2	97.2	96.2	
4-Bromofluorobenzene**	%	TM208	99	99.9	99.9	101	
4-Diomondonenzene	/0	TIVIZOO	55	33.3	33.3	101	
Dichlorodifluoromethane	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Chloromethane	<1 µg/l	TM208	<1	<1	<1	<1	
Mind delada	44//	TM000	#	#	# <1	#	
Vinyl chloride	<1 µg/l	TM208	<1 #	<1 #	< I #	<1 #	
Bromomethane	<1 µg/l	TM208	<1	<1	<1	<1	
	""		#	#	#	#	
Chloroethane	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Trichlorofluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
1,1-Dichloroethene	<1 µg/l	TM208	<1	<1	<1	<1	
1, 1-Dictilor detriene	ν μ9/1	TIVIZOO	#	*	2#	#	
Carbon disulphide	<1 µg/l	TM208	<1	<1	<1 05	<1	
			#	#	<1 cities #	#	
Dichloromethane	<3 µg/l	TM208	<3	<3	413. 411.53	<3	
Mathyd tartians by tyl athar	z1//	TM208	*	<1 <	0° coi	# <1	
Methyl tertiary butyl ether (MTBE)	<1 µg/l	I IVIZUO	<u> </u>		,	- "	
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1	ection pilet real	<1	<1	
,			#	action test #	#	#	
1,1-Dichloroethane	<1 µg/l	TM208	<1	्राइप्रिंग्ध	<1	<1	
		=	Ä	V (1)	. #	#	
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 *	^{ज्रह्म} <1 #	<1 #	<1 #	
2,2-Dichloropropane	<1 µg/l	TM208	<1 3	<1	<1	<1	
2,2 210111010010000110	, pg,	200	n ^{seitt}	· ·	·	·	
Bromochloromethane	<1 µg/l	TM208	<1 consent or	<1	<1	<1	
			#	#	#	#	
Chloroform	<1 µg/l	TM208	<1	<1	<1	3.44	
1,1,1-Trichloroethane	<1 µg/l	TM208	*	# <1	# <1	# <1	
1,1,1 Thomorocalanc	1 μg/1	1101200	#	#	#	#	
1,1-Dichloropropene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Carbontetrachloride	<1 µg/l	TM208	<1	<1	<1	<1	
1,2-Dichloroethane	z1	TM208	*	# <1	# <1	# <1	
1,2-DIGHIOLOGUIANE	<1 µg/l	i IVI∠UO	<1 #	<u> </u>	<1 #	<u> </u>	
Benzene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Trichloroethene	<1 µg/l	TM208	<1	<1	<1	<1	
40.00	4 "	T14000	#	#	#	#	
1,2-Dichloropropane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
Dibromomethane	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Bromodichloromethane	<1 µg/l	TM208	<1	<1	<1	1.16	
			#	#	#	#	
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
Toluene	<1 µg/l	TM208	*	# <1	# <1	# <1	
Tolucio	, μg/i	i IVIZUU	<u> </u>	- "	-1 #	- "	
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
1,1,2-Trichloroethane	<1 µg/l	TM208	<1	<1	<1	<1	
1.3 Dichloropropos	المن 1	TM208	* <1	# <1	# <1	# <1	
1,3-Dichloropropane	<1 µg/l	i IVI∠UO	<1 #	<u> </u>	<1 #	<i #<="" td=""><td> </td></i>	
t	1			"			

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VOC MS (W)								
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02		
M mCERTS accredited. aq Aqueous / settled sample.								
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Ground Water (GW)					
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled Sample Time	30/07/2020	30/07/2020	30/07/2020	30/07/2020	1	
** % recovery of the surrogate standard to chec efficiency of the method. The results of indivi compounds within samples aren't corrected f	dual	Date Received	31/07/2020	31/07/2020	31/07/2020	31/07/2020		
recovery (F) Trigger breach confirmed	or tile	SDG Ref Lab Sample No.(s)	200731-89 22583409	200731-89 22583419	200731-89 22583387	200731-89 22583397		
1-3◆§@ Sample deviation (see appendix)		AGS Reference						
Component Tetrachloroethene	LOD/Units <1 µg/l	Method TM208	<1	<1	<1	<1		
Totadomorodatorio	l ri pg/	1111200	#	#	#	#		
Dibromochloromethane	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
1,2-Dibromoethane	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Chlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
	13		#	#	#	#		
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1	<1	<1		
Ethydhansana	-1//	TM208	# <1	# <1	# <1	# <1		
Ethylbenzene	<1 µg/l	TIVIZUO	- "	<u> </u>	"#	- "		
m,p-Xylene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
o-Xylene	<1 µg/l	TM208	<1	<1	<1 "	<1		
Styrene	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
Styrene	γιμg/i	TIVIZOO	#	, , ,	#	*		
Bromoform	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	J.S.	#		
Isopropylbenzene	<1 µg/l	TM208	<1	<1	<1 other #	<1		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	# <1	# <1	30 00 #	# <1		
1,1,2,2 10114011101001114110	1 pg/	TIVIZOO	#	#.	जारि या रे1 #	#		
1,2,3-Trichloropropane	<1 µg/l	TM208	<1	<1 .05	<1	<1		
			#	Quit Cui		#		
Bromobenzene	<1 µg/l	TM208	<1 #	cital net?	<1 #	<1 #		
Propylbenzene	<1 µg/l	TM208	<1	institut ?1	# <1	# <1		
			#G	KITTER #	#	#		
2-Chlorotoluene	<1 µg/l	TM208	<1	.o?' <1	<1	<1		
4057: " "	.4 ()	T14000	4		#	#		
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 consent	<1 #	<1 #	<1 #		
4-Chlorotoluene	<1 µg/l	TM208	Q	<1	<1	<1		
			#	#	#	#		
tert-Butylbenzene	<1 µg/l	TM208	<1	<1	<1 "	<1		
1,2,4-Trimethylbenzene	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
1,2,1 11		200	. #	. #	. #	. #		
sec-Butylbenzene	<1 µg/l	TM208	<1	<1	<1	<1		
41. 5. 11.	4 "	T1 1000	#	#	#	#		
4-iso-Propyltoluene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
1,3-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
1,4-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
n-Butylbenzene	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
n-butylbenzene	γιμg/i	TIVIZOO	#	, , ,	#	*		
1,2-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	<1	<1	<1		
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
Hexachlorobutadiene	<1 µg/l	TM208	<1	<1	<1	<1		
fort Amyd modified attack (TARE)	-4 "	T14000	#	#	#	#		
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #		
Naphthalene	<1 µg/l	TM208	<1	<1	<1	<1		
·			#	#	#	#		
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1	<1 "	<1	<1 "		
1,3,5-Trichlorobenzene	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
1,0,0-11101110100001120110	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	I IVIZUO	`'	`'	`'	`'		
	-				:			

Validated

CERTIFICATE OF ANALYSIS

Report Number: Superseded Report: SDG: 200731-89 Client Reference: P2282 564886 Location: New Inn Landfill Order Number: P2282 562407

Table of Results - Appendix

Method No	Reference	Description
SUB		Subcontracted Test
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM343	EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM344	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite II) by GCMS
TM345	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite III) by GCMS
TM411	Acid_Herbs_GCMS	Add Herbs in Water by GCMS
ot applicable. al testing (unless		O The
	subcontracted) performed at ALS Life Sciences Ltd Hawarden	



ALS

 SDG:
 200731-89
 Client Reference:
 P2282
 Report Number:
 564886

 Location:
 New Inn Landfill
 Order Number:
 P2282
 Superseded Report:
 562407

Test Completion Dates

	_			Pictio
Lab Sample No(s)	22583409	22583419	22583387	22583397
Customer Sample Ref	BH1	BH4	GW01	GW02
AGS Ref				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Туре	Ground Water	Ground Water	Ground Water	Ground Water
Acid Herbicides by GCMS	07-Aug-2020	07-Aug-2020	07-Aug-2020	07-Aug-2020
Alkalinity as CaCO3	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
Ammonium Low	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
Anions by Kone (w)	04-Aug-2020	04-Aug-2020	04-Aug-2020	04-Aug-2020
BOD True Total	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
COD Unfiltered	01-Aug-2020	01-Aug-2020	01-Aug-2020	04-Aug-2020
Conductivity (at 20 deg.C)	05-Aug-2020	05-Aug-2020	05-Aug-2020	05-Aug-2020
Cyanide Comp/Free/Total/Thiocyanate	07-Aug-2020	06-Aug-2020	07-Aug-2020	07-Aug-2020
Dissolved Metals by ICP-MS	07-Aug-2020	07-Aug-2020	07-Aug-2020	07-Aug-2020
Dissolved Oxygen by Probe	02-Aug-2020	02-Aug-2020	04-Aug-2020	02-Aug-2020
Faecal Coliforms (W)*	10-Aug-2020	10-Aug-2020	10-Aug-2020	10-Aug-2020
Fluoride	04-Aug-2020	04-Aug-2020	04-Aug-2020	04-Aug-2020
Mercury Dissolved	05-Aug-2020	05-Aug-2020	07-Aug-2020	05-Aug-2020
PCB Congeners - Aqueous (W)	10-Aug-2020	10-Aug-2020	10-Aug-2020	10-Aug-2020
Pesticides (Suite I) by GCMS	07-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
Pesticides (Suite II) by GCMS	07-Aug-2020	07-Aug-2020	07-Aug-2020	07-Aug-2020
Pesticides (Suite III) by GCMS	06-Aug-2020	05-Aug-2020	05-Aug-2020	05-Aug-2020
pH Value	03-Aug-2020	03-Aug-2020	04-Aug-2020	04-Aug-2020
SVOC MS (W) - Aqueous	09-Aug-2020	09-Aug-2020	09-Aug-2020	09-Aug-2020
Total Coliforms(W)*	10-Aug-2020	10-Aug-2020	10-Aug-2020	
Total Organic and Inorganic Carbon	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
VOC MS (W)	04-Aug-2020	05-Aug-2020	05-Aug-2020	05-Aug-2020

U5-Aug-2020 05-Aug-2020 05-Aug



ALS Environmental Ltd Torrington Avenue Coventry CV4 9GU ALS Life Sciences Limited

T: +44 (0)24 7642 1213 F: +44 (0)24 7685 6575 www.alsenvironmental.co.uk

08 August 2020

Test Report: COV/1904559/2020

Dear Subcon Results

Subcon Results

Torrington Avenue

Tile Hill CV4 9GU

Analysis of your sample(s) received on 01 August 2020 is now complete and we have pleasure in enclosing the appropriate test report(s)

An invoice for the analysis carried out will be sent under separate cover.

Should you have any queries regarding this report(s) or any part of our service, please contact Customer Services on +44 (0)24 7642 1213 who will be happy to discuss your requirements.

If you would like to arrange any further analysis, please contact Customer Services. To arrange container delivery or sample collection, please call the Couriers Department directly on 024 7685 6562.

Thank you for using ALS Environmental Ltd and we look forward to receiving your next samples.

Yours Sincerely,

Signed:

Name: B. Paige

Title: Microbiology Team Leader



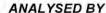




This communication has been sent to you by ALS Environmental Ltd. Registered in England and Wales. Registration No.02148934. Registered Office: ALS Environmental Limited, Torrington Avenue, Coventry, CV4 9GU.

Report Summary

Hawarden Subcon Results ALS Life Sciences Limited Torrington Avenue Tile Hill CV4 9GU







Date of Issue: 08 August 2020

Report Number: COV/1904559/2020

Issue 1

This issue replaces all previous issues

Consent of copyright owner required for Job Description: 2020 Analysis

Job Location: 200731-89

Number of Samples

included in this report 7

Number of Test Results included in this report 10 Job Received:

01 August 2020

Analysis Commenced: 01 August 2020

Signed:

Name: B. Paige

Date: 08 August 2020

Title:

Microbiology Team Leader

ALS Environmental Ltd was not responsible for sampling unless otherwise stated

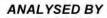
Information on the methods of analysis and performance characteristics are available on request.

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. The results relate only to the items tested and where relevant sampled.

Tests marked 'Not UKAS Accredited' in this Report/Certificate are not included in the UKAS Accreditation Schedule for our laboratory. This test report is not a statement of conformity to any specification or standard.

This communication has been sent to you by ALS Environmental Ltd. Registered in England and Wales. Registration No. 02148934. Registered Office: ALS Environmental Limited, Torrington Avenue, Coventry, CV4 9GU.

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Report Number:

COV/1904559/2020

Laboratory Number:

19545545

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584586 BH1

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020 01 August 2020

Sample Received: Analysis Complete:

08 August 2020

200731-89

Sample Reference:

BH1

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
Faecal coliforms confirmed	0	cfu/100m	08/08/2020	N	Cov	W57

Analyst Comments for 19545545:

This sample has been analysed for Paedal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited Machine Machi

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO2), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected volume of sample filtered. I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Name:

B. Paige

Date: 08 August 2020

Signed: /

Title:

Microbiology Team Leader

ANALYSED BY





Report Number:

COV/1904559/2020

Laboratory Number:

19545546

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584591 BH1

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020

Sample Received: Analysis Complete: 01 August 2020 08 August 2020

200731-89

Sample Reference:

BH1

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
Total Coliform presump	2	cfu/100m	02/08/2020	Υ	Cov	W10
Total Coliforms confirmed	2	(100ml	02/08/2020	Υ	Cov	W10

Analyst Comments for 19545546:

This sample has been analyse for Total Coliforms confirmed, Total Coliform presump outside recommended stability times it is therefore possible that the results provided may be compromised. Total coliforms identified as Racultella terrigena and Lelliottia amnigena.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS,

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2SW), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD); WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dryweight.

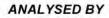
Name: B. Paige

Date: 08 August 2020

Signed:

Title:

Microbiology Team Leader







Report Number:

COV/1904559/2020

Laboratory Number:

19545547

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584606 BH4

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020 01 August 2020

Sample Received: Analysis Complete:

08 August 2020

200731-89

Sample Reference:

BH4

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
Faecal coliforms confirmed	0	cfu/100m	08/08/2020	N	Cov	W57

Analyst Comments for 19545547:

This sample has been analysed for Pacoal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited Machine Machi

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO2), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

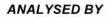
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected volume of sample filtered. I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Name:

B. Paige

Date: 08 August 2020

Signed:







Report Number:

COV/1904559/2020

Laboratory Number:

19545548

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584607 BH4

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020

Sample Received: Analysis Complete: 01 August 2020 08 August 2020

200731-89

Sample Reference:

BH4

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
Total Coliform presump	7	cfu/100mp	02/08/2020	Υ	Cov	W10
Total Coliforms confirmed	7	010/100ml	02/08/2020	Υ	Cov	W10

Analyst Comments for 19545548:

This sample has been analyse for Total Coliforms confirmed, Total Coliform presump outside recommended stability times therefore possible that the results provided may be compromised. Total coliforms identified as Servatia fonticola, Lelliottia amnigena and Citrobacter gillenii.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accedited, M = MCERTS,

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2SW), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

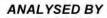
For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected in volume of sample filtered.

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Name: B. Paige

Date: 08 August 2020

Signed: /







Report Number:

COV/1904559/2020

Laboratory Number:

19545549

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584572 GW01

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020

Sample Received:

01 August 2020

Analysis Complete:

08 August 2020

200731-89

Sample Reference:

GW01

Test Description	Result	Units	Analysis Date	Accreditation	Method
Faecal coliforms confirmed	1	cfu/100m	08/08/2020	N Cov	W57

Analyst Comments for 19545549:

This sample has been analysed for Paedal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited Machine Machi

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO2), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected volume of sample filtered. I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Name:

B. Paige

Date: 08 August 2020

Signed: / spaige

ANALYSED BY





Report Number:

COV/1904559/2020

Laboratory Number:

19545550

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description:

22584573 GW01

Sample Matrix:

Ground Water

Sample Date/Time:

30 July 2020

Sample Received:

01 August 2020

Analysis Complete:

08 August 2020

200731-89

Sample Reference:

GW01

Test Description	Result	Units	Analysis Date	Accre	ditation	Method
Total Coliform presump	2	cfu/100m	02/08/2020	Υ	Cov	W10
Total Coliforms confirmed	2	610/100ml	02/08/2020	Υ	Cov	W10

Analyst Comments for 19545550:

This sample has been analyse for Total Coliforms confirmed, Total Coliform presump outside recommended stability times it is therefore possible that the results provided may be compromised. Total coliforms identified as Citrobacter gillenii.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited, M = MCERTS,

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO21 2SW), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Noc Detected in volume of sample filtered.

I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dny weight.

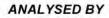
Name: B. Paige

Date: 08 August 2020

Signed:

Title: Microbiology Team Leader

EPA Export 01-12-2021:02:54:48







Report Number:

COV/1904559/2020

Laboratory Number:

19545551

Issue

Sample

of 7

Sample Source:

ALS Life Sciences Limited

Sample Point Description:

Sample Description: Sample Matrix:

22584574 GW02

Sample Date/Time:

Ground Water 30 July 2020

Sample Received:

01 August 2020

Analysis Complete:

08 August 2020

200731-89

Sample Reference:

GW02

Test Description	Result	Units	Analysis Date	Accreditation	Method
Faecal coliforms confirmed	180	cfu/100m	08/08/2020	N Cov	W57

Analyst Comments for 19545551:

This sample has been analysed for Paedal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.

This issue replaces all previous issues

Accreditation Codes: Y = UKAS / ISO17025 Accredited, N = Not UKAS / ISO17025 Accredited Machine Machi

Analysed at: CHE = Chester(CH5 3US), COV = Coventry(CV4 9GU), OTT = Otterbourne(SO2), S = Subcontracted, TRB = Subcontracted to Trowbridge(BA14 0XD), WAK = Wakefield(WF5 9TG), F = Data supplied by customer.

For Microbiological determinands 0 or ND=Not Detected, For Legionella ND=Not Detected volume of sample filtered. I/S=Insufficient sample For soil/sludge samples: AR=As received, DW=Dry weight.

Name:

B. Paige

Date: 08 August 2020

Signed: / spaige



ANALYST COMMENTS FOR REPORT COV/1904559/2020

Issue '

This issue replaces all previous issues

Date of Issue: 08 August 2020

Sample No	Analysis Comments				
19545545	This sample has been analysed for Faecal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.				
19545546	This sample has been analysed for Total Coliforms confirmed, Total Coliform presump outside recommended stability times. It is therefore possible that the results provided may be compromised. Total coliforms identified as Raoultella terrigena and Lelliottia amnigena.				
19545547	This sample has been analysed for Faecal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.				
19545548	This sample has been analysed for Total Coliforms confirmed, Total Coliform presump outside recommended stability times. It is therefore possible that the results provided may be compromised. Total coliforms identified as Serratia fonticola, Lelliottia amnigena and Citrobacter gillenii.				
19545549	This sample has been analysed for Faecal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.				
19545550	This sample has been analysed for Total Coliforms confirmed, Total Coliform presump outside recommended stability times. It is therefore possible that the results provided may be compromised. Total coliforms identified as Citrobacter gillenii.				
19545551	This sample has been analysed for Faecal coliforms confirmed outside recommended stability times. It is therefore possible that the results provided may be compromised.				

Signed:

Name: B. Paige

Date: 08 August 2020

Title: Micrebiology Team Leader

Consent of convinger outer required for the convinger outer requir



DETERMINAND COMMENTS FOR REPORT COV/1904559/2020

Date of Issue: 08 August 2020

This issue replaces all previous issues

Sample No	Description	Determinand	Comments
19545546	22584591 BH1	Total Coliforms confirmed	Total coliforms identified as Raoultella terrigena and Lelliottia amnigena.
19545548	22584607 BH4	Total Coliforms confirmed	Total coliforms identified as Serratia fonticola, Lelliottia amnigena and Citrobacter gillenii.
19545550	22584573 GW01	Total Coliforms confirmed	Total coliforms identified as Citrobacter gillenii.

Name: B. Paige Date: 08 August 2020 Signed: / spaige

Title: Microbiology Team Leader

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 SDG:
 200731-89
 Client Reference:
 P2282
 Report Number:
 564886

 Location:
 New Inn Landfill
 Order Number:
 P2282
 Superseded Report:
 562407

Appendix

General

- 1. Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to 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. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials 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 (2005).

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, based on HSG 248 (2005).

Asbe stos Type	Common Name		
Chrysof le	White Asbests		
Amosite	BrownAsbests		
Cro d dolite	Blue Asbe stos		
Fibrous Act nolite	-		
Fib to us Anthop hyll ite	-		
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 μ m diameter, longer than 5 μ m 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.

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017)

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.

17:21:58 27/08/2020 Page 30 of 30 Modification Date: 27/08/2020 Page 30 of 30 EPA Export 01-12-2021:02:54:48



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Website: www.alsenvironmental.co.uk

Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

Date of report Generation:04 September 2020Customer:Fehily TimoneySample Delivery Group (SDG):200826-90Your Reference:P2282Location:New Inn Landfill

Report No: 566041

This report has been revised and directly supersedes 565825 in its entirety.

We received 4 samples on Wednesday August 26, 2020 and 4 of these samples were scheduled for analysis which was completed on Friday September 04, 2020. 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 ALSCLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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

lac-MRA





SDG:

Location:

CERTIFICATE OF ANALYSIS

Client Reference:

Order Number:

P2282 Z2189

Report Number: Superseded Report: 566041 565825 Validated

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
22723005	BH1		0.00 - 0.00	25/08/2020
22723016	BH4		0.00 - 0.00	25/08/2020
22722980	GW01		0.00 - 0.00	25/08/2020
22722991	GW02		0.00 - 0.00	25/08/2020

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

200826-90

New Inn Landfill



1		
	TE	

SDG: 200826-90 Client Reference: P2282 Report Number: 566041 New Inn Landfill Z2189 Superseded Report: 565825 Location: Order Number: Results Legend 22723005 22723016 22722980 22722991 Lab Sample No(s) X Test No Determination Possible Customer 뭔1 BH4 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) H2SO4 (ALE244) H2SO4 (ALE244) NaOH (ALE245) HNO3 Filtered (ALE204) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) DW - Drinking Water Non-regulatory 500ml Plastic (ALE208) 500ml Plastic (ALE208) 500ml Plastic (ALE208) 500ml Plastic Vial (ALE297) Vial (ALE297) Vial (ALE297) UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other Sample Type GW Acid Herbicides by GCMS All NDPs: 0 Tests: 4 Х Х Χ Х Alkalinity as CaCO3 NDPs: 0 dioi Tests: 4 X X Χ Χ Ammonium Low All NDPs: 0 Tests: 4 X Χ Х Anions by Kone (w) All NDPs: 0 Tests: 4 X Χ Х BOD True Total All NDPs: 0 Tests: 4 X Χ Χ Χ COD Unfiltered All NDPs: 0 Tests: 4 X X X Х All Coliforms (W) NDPs: 0 Tests: 4 Χ Х Χ Х All Conductivity (at 20 deg.C) NDPs: 0 Tests: 4 Χ Х Χ Х Cyanide Comp/Free/Total/Thiocyanate All NDPs: 0 Tests: 4 X Χ X Dissolved Metals by ICP-MS All NDPs: 0 Tests: 4 X X X Χ Dissolved Oxygen by Probe All NDPs: 2 N N Tests: 2 Х Χ Fluoride All NDPs: 0 Tests: 4 Х Χ Χ Χ All Mercury Dissolved NDPs: 0 Tests: 4 Х Χ Х Х PCB Congeners - Aqueous (W) All NDPs: 0 Tests: 4 Х Х X Х Pesticides (Suite I) by GCMS All NDPs: 0 Tests: 4 Χ Χ Χ Χ

	22722991
	GW02
	0.00 - 0.00
NaOH (ALE245)	Vial (ALE297)
GW	GW
X	

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Validated

CERTIFICATE OF ANALYSIS

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1	1		=	1

P2282 SDG: 200826-90 Client Reference: Report Number: 566041 New Inn Landfill Z2189 Superseded Report: 565825 Location: Order Number: Results Legend 22722991 22723005 22723016 22722980 Lab Sample No(s) X Test No Determination Possible Customer GW01 GW02 뭔1 BH4 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water 500ml Plastic (ALE208) 0.5l glass bottle (ALE227) 500ml Plastic (ALE208) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) 0.5l glass bottle (ALE227) H2SO4 (ALE244) H2SO4 (ALE244) H2SO4 (ALE244) NaOH (ALE245) HNO3 Filtered (ALE204) H2SO4 (ALE244) NaOH (ALE245) NaOH (ALE245) 500ml Plastic (ALE208) 500ml Plastic (ALE208) DW - Drinking Water Non-regulatory Vial (ALE297) Vial (ALE297) Vial (ALE297) UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other GW Sample Type GW GΜ GW GW GW GΜ GW GW GW G۷ GW GΜ GΜ GW GΝ GΜ GW GW Pesticides (Suite II) by GCMS All NDPs: 0 Tests: 4 Χ X X Χ Pesticides (Suite III) by GCMS All NDPs: 0 Tests: 4 X X X pH Value All NDPs: 0 Tests: 4 X X X SVOC MS (W) - Aqueous All NDPs: 0 Tests: 4 Χ Χ Χ Total Organic and Inorganic Carbon All NDPs: 0 Tests: 4 Х Х Χ Х VOC MS (W) All NDPs.0 Tests: 4 Χ Х Х

<	NaOH (ALE245) GW			
٧	Vial (ALE297) GV	0.00 - 0.00	GW02	22722991

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Results Legend		Customer Sample Ref	Bu.	200	91494	01100	
# ISO17025 accredited. M mCERTS accredited.	, and the second	Customer Sample Ref.	BH1	BH4	GW01	GW02	
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	for	Sample Type Date Sampled	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	
accreditation status. ** % recovery of the surrogate standard to check		Sample Time					
efficiency of the method. The results of individ compounds within samples aren't corrected for		Date Received SDG Ref	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90	
recovery (F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22723005	22723016	22722980	22722991	
Component	LOD/Units	Method					
Coliforms, Total*	MPN/100ml	SUB	<1	<1	2	488	
Coliforms, Faecal*	CFU/100ml	SUB	<1	<1	<1	10	
Alkalinity, Total as HCO3	<2 mg/l	TM043	427	434	2280	1230	
BOD, unfiltered	<1 mg/l	TM045	<1 #	<1 #	2.29	2.2	
Oxygen, dissolved	<0.3 mg/l	TM046		8.34		9.51	
Organic Carbon, Total	<3 mg/l	TM090	<3 #	3.63 #	3.46	3.83	
Ammoniacal Nitrogen as N (low level)	<0.01 mg/l	TM099	0.0202	0.558	0.0438 #	0.526 #	
Fluoride	<0.5 mg/l	TM104	0.786	0.79	<0.5 #	0.968	
COD, unfiltered	<7 mg/l	TM107	8.83	13.4 #	342 #	106 #	
Conductivity @ 20 deg.C	<0.02 mS/cm	TM120	0.643 #	0.798	0.727 #	1.45 #	
Arsenic (diss.filt)	<0.5 µg/l	TM152	<0.5	2.96	<0.5 et 1	0.541 2 #	
Barium (diss.filt)	<0.2 µg/l	TM152	36.9 2#	41.8	of 2#	111 2#	
Boron (diss.filt)	<10 µg/l	TM152	64.3 2#	136	348	193 2 #	
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08 2#	<0008 recit	<0.08 2#	<0.08 2 #	
Chromium (diss.filt)	<1 µg/l	TM152	<1 2#	inspectant #	<1 2#	<1 2#	
Copper (diss.filt)	<0.3 µg/l	TM152	7.55 × 2#	0.618	1.15 2#	1 2#	
Lead (diss.filt)	<0.2 µg/l	TM152	0.616 2#	1.52 #	<0.2 2#	<0.2 2#	
Manganese (diss.filt)	<3 µg/l	TM152	25.8 2#	105 #	<3 2#	14.9 2#	
Nickel (diss.filt)	<0.4 µg/l	TM152	8.5 2#		2.71 2#	3.44 2 #	
Phosphorus (diss.filt)	<10 µg/l	TM152	<10 2#	30.7 #	<10 2#	11.4 2#	
Selenium (diss.filt)	<1 µg/l	TM152	<1 2#	<1 #	<1 2#	2.77 2#	
Thallium (diss.filt)	<2 µg/l	TM152	<2 2#		<2 2#	<2 2#	
Zinc (diss.filt)	<1 µg/l	TM152	10 2#	5.81 #	862 2#	<1 2#	
Sodium (Dis.Filt)	<0.076 mg/l		10.6	46.5	19.3	222 2 #	
Magnesium (Dis.Filt)	<0.036 mg/l		18.9		7.94	35.6 2 #	
Potassium (Dis.Filt)	<0.2 mg/l	TM152	1.58	4.5	0.627	5.49 2 #	
Calcium (Dis.Filt)	<0.2 mg/l	TM152	109 2#		138 2 #	64.5	
Iron (Dis.Filt)	<0.019 mg/l		0.0509		<0.019	0.0304	
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01	<0.01 #	<0.01 2 #	<0.01 2 #	
Sulphate	<2 mg/l	TM184	12.5	11.8 #	16.9 #	235 #	
Chloride Total Ovidicad Nitragon as N	<2 mg/l	TM184	16.1 #	66 #	23.1 #	55.6 #	
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	0.573 #	0.282	1.98 #	<0.1 #	
PCB congener 28	<0.015 µg/l	TM197	<0.015	<0.015	<0.015	<0.015	



Compared 101	Results Legend		Customer Sample Ref.	BH1	BH4	GW01	GW02	
Part			,	5	5	0	01102	
Part	diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.							
Part	accreditation status.		Date Sampled			25/08/2020		
	efficiency of the method. The results of indi- compounds within samples aren't corrected	vidual	Date Received			26/08/2020		
Compared LOBOURSE Marie Compared C	(F) Trigger breach confirmed		Lab Sample No.(s)					
PCB cargerer 108	Component	<u> </u>	Method	2.2.5		2215	2217	
PCB congener 139	PCB congener 52	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
PCB congress 138	PCB congener 101	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
PCB congreen 153	PCB congener 118	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
Per Per	PCB congener 138	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
March Marc	PCB congener 153	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
Property Formats Property Fo	PCB congener 180	<0.015 µg/l	I TM197	<0.015	<0.015	<0.015	<0.015	
March Marc	Sum of detected EC7 PCB's	<0.105 µg/l	I TM197	<0.105	<0.105	<0.105	<0.105	
Trituralin	•	ľ		#	#	#	#	
alphe HCH 4001 µgl TMS43 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001 <001	pH	<1 pH Units	s TM256					
September Color March Color March Color	Trifluralin	<0.01 µg/l	TM343	<0.01	<0.01	150.	<0.01	
Heptachlor 4001 µgh TM343 4001 400	alpha-HCH	<0.01 µg/l	TM343	<0.01	<0.01	<0.011e1	<0.01	
Marin Mari	gamma-HCH (Lindane)	<0.01 µg/l	TM343	<0.01		only a 20.01	<0.01	
Marin Mari	Heptachlor	<0.01 µg/l	TM343	<0.01	<0.01 post	<0.01	<0.01	
Seddin	Aldrin	<0.01 µg/l	TM343		Citables ,	<0.01	<0.01	
Sodin	beta-HCH	<0.01 µg/l	TM343	<0.01	instituted.01	<0.01	<0.01	
Heptachior epoxide QD I μg/I IMM43 QD I	Isodrin	<0.01 µg/l	TM343	ę (₹ <0.01	<0.01	<0.01	
Heptachior epoxide QD I μg/I IMM43 QD I				<0.01 cm				
Endosulphan I <0.01 μg/I TM343 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <td></td> <td></td> <td></td> <td><0.01</td> <td></td> <td></td> <td></td> <td></td>				<0.01				
trans-Chlordane < 0.01 μg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	'							
cis-Chlordane < 0.01 µg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 p.p-DDE < 0.01 µg/l	Endosulphan I							
P.PDDE < 0.01 μg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	trans-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
Dieldrin < 0.01 μg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 ο,ρ'-DDD (TDE) < 0.01 μg/l	cis-Chlordane	<0.01 µg/l	TM343	<0.01	<0.01	<0.01		
cop-DDD (TDE) < 0.01 µg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	p,p'-DDE	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
Endrin < 0.01 μg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 <	Dieldrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
c,p'-DDT < 0.01 µg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 <								
P,p'-DDD (TDE) CO.01 μg/l TM343 <0.01 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 </td <td>Endrin</td> <td><0.01 µg/l</td> <td>TM343</td> <td><0.01</td> <td><0.01</td> <td><0.01</td> <td></td> <td></td>	Endrin	<0.01 µg/l	TM343	<0.01	<0.01	<0.01		
Endosulphan II < 0.02 μg/I TM343 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.02 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	o,p'-DDT	<0.01 μg/l	TM343	<0.01	<0.01	<0.01	<0.01	
p.p'-DDT < 0.01 μg/l TM343 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	p,p'-DDD (TDE)	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
O,p'-Methoxychlor <0.01 μg/l TM343 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.0	Endosulphan II	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02	
p,p'-Methoxychlor <0.01 µg/l TM343 <0.01 <0.01 <0.01 <0.01 <0.01	p,p'-DDT	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
	o,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
F	p,p'-Methoxychlor	<0.01 µg/l	TM343	<0.01	<0.01	<0.01	<0.01	
Endosuipnan Suipnate <0.02 µg/i 1 M343 <0.02 <0.02 <0.02 <0.02	Endosulphan Sulphate	<0.02 µg/l	TM343	<0.02	<0.02	<0.02	<0.02	



	Results Legend		Customer Sample Ref.	BH1	DUA	CW01	GW02	
# M	ISO17025 accredited. mCERTS accredited.		oustomer sample Ker.	BH1	BH4	GW01	GW02	
aq diss.filt tot.unfilt	Aqueous / settled sample. Dissolved / filtered sample. Total / unfiltered sample. Subcontracted - refer to subcontractor report f		Depth (m) Sample Type	0.00 - 0.00 Ground Water (GW)				
	accreditation status. % recovery of the surrogate standard to check	the	Date Sampled Sample Time	25/08/2020	25/08/2020	25/08/2020	25/08/2020	
	efficiency of the method. The results of individ compounds within samples aren't corrected fo recovery		Date Received SDG Ref	26/08/2020 200826-90 22723005	26/08/2020 200826-90 22723016	26/08/2020 200826-90 22722980	26/08/2020 200826-90 22722991	
	Trigger breach confirmed Sample deviation (see appendix)	LOD/Units	Lab Sample No.(s) AGS Reference Method	22123003	22723010	22122300	22122551	
Permeth		<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Permeth	nrin II	<0.01 µg/l	I TM343	<0.01	<0.01	<0.01	<0.01	
1,3,5-Tri	ichlorobenzene	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Hexachl	orobutadiene	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
1,2,4-Tri	ichlorobenzene	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
1,2,3-Tri	ichlorobenzene	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Dichlorv	OS	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Dichlobe		<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Mevinph	10S	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Tecnaze	ene	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Hexachl	orobenzene	<0.01 µg/l		<0.01	<0.01	<0.01e1	<0.01	
Demeto	n-S-methyl	<0.01 µg/l		<0.01	<0.01	off of a 20.01	<0.01	
Phorate		<0.01 µg/l		<0.01	<0.01 post	<0.01	<0.01	
Diazinor	1	<0.01 µg/l		<0.01	116001 et 1	<0.01	<0.01	
Triallate		<0.01 µg/l	I TM344		. Its hed.01	<0.01	<0.01	
Atrazine	•	<0.01 µg/l	I TM344	X '	<0.01	<0.01	<0.01	
Simazin		<0.01 µg/l		<0.01 sent	<0.01	<0.01	<0.01	
Disulfoto	n	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Propeta	mphos	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Chlorpyi	riphos-methyl	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Dimetho	ate	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Pirimiph	os-methyl	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Chlorpyi	riphos	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Methyl F	Parathion	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Malathic		<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Fenthior	1	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Fenitroth	nion	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Triadime	efon	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Pendime	ethalin	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Parathio	on	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Chlorfer	vinphos	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
trans-Ch	nlordane	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
cis-Chlo	rdane	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
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#	Results Legend ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M aq diss.filt	mCERTS accredited. Aqueous / settled sample. Dissolved / filtered sample. Total / unfiltered sample. Subcontracted - refer to subcontractor report f	for	Depth (m) Sample Type Date Sampled	0.00 - 0.00 Ground Water (GW) 25/08/2020	0.00 - 0.00 Ground Water (GW) 25/08/2020	0.00 - 0.00 Ground Water (GW) 25/08/2020	0.00 - 0.00 Ground Water (GW) 25/08/2020	
	accreditation status. **recovery of the surrogate standard to check efficiency of the method. The results of individ compounds within samples aren't corrected fo recovery.	lual	Sample Time Date Received SDG Ref Lab Sample No.(s)	26/08/2020 200826-90 22723005	26/08/2020 26/08/2020 200826-90 22723016	26/08/2020 200826-90 22722980	26/08/2020 200826-90 22722991	
1-3 + §@	Trigger breach confirmed Sample deviation (see appendix)	I OD/II-it-	AGS Reference					
Compor Ethion	nent	LOD/Units <0.01 μg/l		<0.01	<0.01	<0.01	<0.01	
Carboph	enothion	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Triazoph	ios	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Phosalor	ne	<0.01 µg/l	I TM344	<0.01	<0.01	<0.01	<0.01	
Azinphos	s methyl	<0.02 µg/l	I TM344	<0.04	<0.04	<0.04	<0.04	
Azinphos	s ethyl	<0.02 µg/l	I TM344	<0.02	<0.02	<0.02	<0.02	
Etridiazo	le	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Pentachl	orobenzene	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Propach	lor	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Quintoze	ene (PCNB)	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Omethoa	ate	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01e1	<0.01	
Propazin	ne	<0.01 µg/l	I TM345	<0.01	<0.01	only a 20.01	<0.01	
Propyzai	mide	<0.01 µg/l	I TM345	<0.01	<0.01 positi	<0.01	<0.01	
Alachlor		<0.01 µg/l	I TM345	<0.01	11001 Tet	<0.01	<0.01	
Prometry	/n	<0.01 µg/l	I TM345	<0.01	instruction of the contract of	<0.01	<0.01	
Telodrin		<0.01 µg/l	I TM345	<0.01	S <0.01	<0.01	<0.01	
Terbutry	n	<0.01 µg/l	I TM345	<0.01 ent	<0.01	<0.01	<0.01	
Chloroth	alonil	<0.01 µg/l	I TM345	<0.02	<0.02	<0.02	<0.02	
Etrimpho	os	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Metazac	hlor	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Cyanazii	ne	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Trietazin	е	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Coumap	hos	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Phospha	amidon I	<0.01 µg/l	I TM345	<0.01	<0.01	<0.01	<0.01	
Phospha	ımidon II	<0.01 µg/l		<0.01	<0.01	<0.01	<0.01	
Dinitro-o	-cresol	<0.1 µg/l	TM411	<0.1	<0.2	<0.2	<0.2	
Clopyrali	id	<0.04 µg/l	I TM411	<0.04	<0.08	<0.08	<0.08	
MCPA		<0.05 µg/l	I TM411	<0.05	<0.1	<0.1	<0.1	
Mecopro	p	<0.04 µg/l	I TM411	<0.04	<0.08	<0.08	<0.08	
Dicamba	1	<0.04 µg/l	I TM411	<0.04	<0.08	<0.08	<0.08	
MCPB		<0.05 µg/l	I TM411	<0.05	<0.1	<0.1	<0.1	
2,4-DB		<0.1 µg/l	TM411	<0.1	<0.2	<0.2	<0.2	
2,3,6-Tri	chlorobenzoic acid	<0.05 µg/	I TM411	<0.05	<0.1	<0.1	<0.1	





Results Legend		Customer Sample Ref.	BH1	BH4	GW01	GW02	1	T
# ISO17025 accredited. M mCERTS accredited.			Jill I	O. I.T.	O.I.V.	01102	I	
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor	report for	Sample Type Date Sampled	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020		
accreditation status. ** % recovery of the surrogate standard to	check the	Sample Time						
efficiency of the method. The results of compounds within samples aren't corre		Date Received SDG Ref	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90		
recovery (F) Trigger breach confirmed		Lab Sample No.(s) AGS Reference	22723005	22723016	22722980	22722991		
1-3+§@ Sample deviation (see appendix) Component	LOD/Units							
Dichlorprop	<0.1 µg/		<0.1	<0.2	<0.2	<0.2		
Triclopyr	<0.05 µg	/I TM411	<0.05	<0.1	<0.1	<0.1		
Fenoprop (Silvex)	<0.1 µg/	TM411	<0.1	<0.2	<0.2	<0.2		
Tolloprop (Olivox)	-0.1 pg/		-0.1	0.2	10.2	-0.2		
2,4-Dichlorophenoxyacetic acid	<0.05 µg	/I TM411	<0.05	<0.1	<0.1	<0.1		
2,4,5-Trichlorophenoxyacetic	<0.05 µg	/I TM411	<0.1	<0.1	<0.1	<0.1		
acid Bromoxynil	<0.04 µg	/I TM411	<0.08	<0.08	<0.08	<0.08		
Diomoxymii	νο.οτ μα	// ////	٧٥.٥٥	10.00	٧٥.٥٥	٧٥.٥٥		
Benazolin	<0.04 µg	/I TM411	<0.08	<0.08	<0.08	<0.08		
loxynil	<0.05 µg	/I TM411	<0.1	<0.1	<0.1	<0.1		
Pontachlorophonal	~0.04··-	/I TMA444	~n no	>n no	~n no	~n no	-	
Pentachlorophenol	<0.04 µg	/I TM411	<0.08	<0.08	<0.08	<0.08		
Fluoroxypyr	<0.1 µg/	TM411	<0.2	<0.2	<0.2	<0.2		
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SVOC	MS ((W)	- Aqueous

SVOC MS (W) - Aqueous	S	0					
# ISO17025 accredited. M mCERTS accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
aq Aqueous / settled sample. diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	1
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	for	Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	1
accreditation status. ** % recovery of the surrogate standard to check	k the	Date Sampled Sample Time	25/08/2020	25/08/2020	25/08/2020	25/08/2020	ı
efficiency of the method. The results of individ compounds within samples aren't corrected for		Date Received SDG Ref	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90	26/08/2020 200826-90	1
recovery (F) Trigger breach confirmed		Lab Sample No.(s)	22723005	22723016	22722980	22722991	1
1-3+§@ Sample deviation (see appendix) Component	LOD/Units	AGS Reference Method					1
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
			#	#	#	#	
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	1
4.2 Diablambanana (an)	44 //	TN4470	* <1	# <1	400	# <10	
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<u> </u>	<u> </u>	<20 #	×10 #	1
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
. , ,			#	#	#	#	
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	1
0.40.T:11	.4 //	T14470	#	#	#	#	
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 #	<1 #	<20 #	<10 #	1
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
			#	#	#	#	
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
0.4.00	4 "	71470	#	#	#	#	
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 #	<1 #	<20 #	<10 #	1
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
2,0 2 (44)	. 49		. #	. #	##	#	1
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1	<1	<20 cite #	<10	
			#	#	office #	#	
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 "	<1	of #	<10	1
2-Methylnaphthalene (aq)	<1 µg/l	TM176	* <1	<1 <	0° cos #	# <10	
2 Mottymaphalaiono (aq)	l Pg/	1111110	#		#	#	1
2-Methylphenol (aq)	<1 µg/l	TM176	<1	citox puriou	<20	<10	
			#	ectionine #	#	#	
2-Nitroaniline (aq)	<1 µg/l	TM176	<1	158 AL @1	<20	<10	1
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 **	07 ³ <1	# <20	*	
2 1111 0 p 110 110 1 (44)	. 49		#	. ************************************	#	#	1
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 cm #	<1	<20	<10	
15 1 11 11 ()	4 "	71470	EFISO #	#	#	#	
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	€ 1 #	<1 #	<20 #	<10 #	1
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
· omoro o moury,priono: (aq)	. 49		. #	. #	#	#	1
4-Chloroaniline (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
100	4 "	71470			20	40	
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 #	<1 #	<20 #	<10 #	1
4-Methylphenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
71	"		#	#	#	#	
4-Nitroaniline (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
4 1 1 1 1 1 1	4 0	71470	#	#	#	#	
4-Nitrophenol (aq)	<1 µg/l	TM176	<1	<1	<20	<10	1
Azobenzene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
(. 4)	13		#	#	#	#	
Acenaphthylene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
		=	#	#	#	#	
Acenaphthene (aq)	<1 µg/l	TM176	<1 #	<1 #	<20 #	<10 #	1
Anthracene (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
	. Mai		#	#	·20 #	#	
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
			#	#	#	#	
bis(2-Chloroethoxy)methane	<1 µg/l	TM176	<1 #	<1 #	<20	<10	1
(aq) bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<2	# <2	# <40	4	
Sie Langinoxyn primidiate (aq)	-2 μg/1	1101170	~ 2	\#	40 #	~20 #	ı l
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1	<1	<20	<10	
			#	#	#	#	
Benzo(a)anthracene (aq)	<1 µg/l	TM176	<1 #	<1 #	<20 #	<10 #	ı l
			#	#	#	#	

ALS

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 Z2189
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 565825

SVOC MS (W) - Aqueous	3						
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m)	0.00 - 0.00 Cround Water (CM)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00 Cround Water (CW)	
* Subcontracted - refer to subcontractor report accreditation status.	for	Sample Type Date Sampled	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	
** % recovery of the surrogate standard to check efficiency of the method. The results of individ		Sample Time	26/08/2020		26/08/2020	26/08/2020	
compounds within samples aren't corrected for		Date Received SDG Ref	200826-90	26/08/2020 200826-90	200826-90	200826-90	
(F) Trigger breach confirmed		Lab Sample No.(s)	22723005	22723016	22722980	22722991	
1-3+§@ Sample deviation (see appendix) Component	LOD/Uni	AGS Reference ts Method					
Benzo(b)fluoranthene (aq)	<1 µg/		<1	<1	<20	<10	
			#	#	#	#	
Benzo(k)fluoranthene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#	#	#	#	
Benzo(a)pyrene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#		#	#	
Benzo(g,h,i)perylene (aq)	<1 µg/	TM176	<1	<1 ,,,	<20	<10	
Corbonals (as)	-1a/	TM176	#		# -20	# -10	
Carbazole (aq)	<1 µg/	TM176	<1 #	<1 #	<20 #	<10 #	
Chrysene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
Chilyconic (dq)	1 P9		#	1	#	#	
Dibenzofuran (aq)	<1 µg/	TM176	<1	<1	<20	<10	
. "			#	1	#	#	
n-Dibutyl phthalate (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#	#	#	#	
Diethyl phthalate (aq)	<1 µg/	'I TM176	<1	<1	<20	<10	
			#		#	#	
Dibenzo(a,h)anthracene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#		35#	#	
Dimethyl phthalate (aq)	<1 µg/	TM176	<1	<1	<20 her #	<10	
Di da di da	·F	T T 1470	#			#	
n-Dioctyl phthalate (aq)	<5 µg/	TM176	<5 #	<5 #	odly ale 100 #	<50 #	
Elugranthono (ag)	<1 ua/	TM176	# <1	-1 05	z 200	<10	
Fluoranthene (aq)	<1 µg/	1 1101176	<u> </u>	<1 purposition	~20 #	×10 #	
Fluorene (aq)	<1 µg/	TM176	<1	Decided International	<20	<10	
1 100.0110 (04)	. 49		#	ectioniner #	#	#	
Hexachlorobenzene (aq)	<1 µg/	'I TM176	<1	inspired #	<20	<10	
			#	4 1185 #	#	#	
Hexachlorobutadiene (aq)	<1 µg/	'I TM176	<1 ′	1 0% · <1	<20	<10	
			₩		#	#	
Pentachlorophenol (aq)	<1 µg/	'I TM176	<1 consent	<1	<20	<10	
Di III			Cotte		22	40	
Phenol (aq)	<1 µg/	TM176	A	<1	<20	<10	
n-Nitroso-n-dipropylamine (aq)	<1 µg/	TM176	<1	<1	<20	<10	
11-Milioso-II-dipropylamine (aq)	- ι μg/	1 1101170	- "	1	_20 #	10 #	
Hexachloroethane (aq)	<1 µg/	TM176	<1	<1	<20	<10	
(-4)	"		#	1		#	
Nitrobenzene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#	#	#	#	
Naphthalene (aq)	<1 µg/	'I TM176	<1	<1	<20	<10	
			#		#	#	
Isophorone (aq)	<1 µg/	TM176	<1	<1	<20	<10	
			#			#	
Hexachlorocyclopentadiene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
Phenanthrene (aq)	<1 ug/	TM176	<1	<1	<20	<10	
Filenantinene (aq)	<1 µg/	1 1101176	- "	1	_20 #	×10 #	
Indeno(1,2,3-cd)pyrene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
111dono(1,2,0 dd)pyrono (dd)	1 P9		#	1	#	#	
Pyrene (aq)	<1 µg/	TM176	<1	<1	<20	<10	
3 (- 1)	"		#	1	#	#	
]
				1			
				-			
				 			

200826-90 New Inn Landfill Report Number: Superseded Report: 566041 565825 SDG: Client Reference: P2282 Location: Order Number: Z2189

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<i>,</i> 00	IVIO	(77)	

VOC MS (W)								
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02		
M mCERTS accredited. aq Aqueous / settled sample.								
diss.filt Dissolved / filtered sample.		Depth (m)	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00		
tot.unfilt Total / unfiltered sample. * Subcontracted - refer to subcontractor report	for	Sample Type Date Sampled	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020	Ground Water (GW) 25/08/2020		
accreditation status. ** % recovery of the surrogate standard to check	k the	Sample Time	25/06/2020	23/00/2020	23/00/2020	25/06/2020		
efficiency of the method. The results of individ compounds within samples aren't corrected for		Date Received	26/08/2020	26/08/2020	26/08/2020	26/08/2020		
recovery		SDG Ref Lab Sample No.(s)	200826-90 22723005	200826-90 22723016	200826-90 22722980	200826-90 22722991		
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		AGS Reference						
Component	LOD/Units	Method						
Dibromofluoromethane**	%	TM208	120	119	120	118		
Toluene-d8**	%	TM208	99.3	99.4	98.8	98.9		
10 0 1 2	0/	T1 1000		22.2	07.7	22.4		
4-Bromofluorobenzene**	%	TM208	96	98.3	97.7	96.4		
D: 11 1'0 11	-4 //	T14000		.4	.4	.4		
Dichlorodifluoromethane	<1 µg/l	TM208	<1 #	<1 #	<1 *#	<1 *#		
Chlaramathana	ا/مید 4	TMOOO	#	# <1	# <1	#		
Chloromethane	<1 µg/l	TM208	<1 #	<u> </u>	- "	<1 #		
Vinyl chloride	<1 µg/l	TM208	<1	<1	<1	<1		
Viriyi Cilionae	- 1 μg/i	1101200	- "	- " #	*	-1 #		
Bromomethane	<1 µg/l	TM208	<1	<1	<1	<1		
Diomonietiane	ν μ μ μ μ	1101200	#	#	#	*		
Chloroethane	<1 µg/l	TM208	<1	<1	<1	<1		
Siloroditatio	1 µg/i	1 141200	#	- " #	-1 #	-1 #		
Trichlorofluoromethane	<1 µg/l	TM208	<1	<1	<1	<1		
onorongoronogiano	1 µg/i	1 141200	- "	- " #	*	-1 #		
1,1-Dichloroethene	<1 µg/l	TM208	<1	<1	<1	<1		
,, =			#	#	.2#	#		
Carbon disulphide	<1 µg/l	TM208	<1	<1	<1 ct	<1		
	""		#	#	gille #	#		
Dichloromethane	<3 µg/l	TM208	<3		14. 12×3	<3		
			#	#.	भू कार्य विकास विकास के किए	#		
Methyl tertiary butyl ether	<1 µg/l	TM208	<1	<1 05E	<1	<1		
(MTBE)			#	ali Pari	#	#		
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1	ecitor Pilite 14	<1	<1		
			#	cito net #	#	#		
1,1-Dichloroethane	<1 µg/l	TM208	<1	inspect of #	<1	<1		
			#	K11.10/11 #	#	#		
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 🗡	OPY <1 #	<1	<1		
			\tag{\psi}	#	#	#		
2,2-Dichloropropane	<1 µg/l	TM208	<1 cht	<1	<1	<1		
			COUSE					
Bromochloromethane	<1 µg/l	TM208	€P.	<1	<1	<1		
au r	4 0	T1 1000	#	#	#	#		
Chloroform	<1 µg/l	TM208	<1	<1	<1	2.24		
1,1,1-Trichloroethane	44	TM208	# <1	# <1	# <1	# <1		
1, 1, 1- mchloroethane	<1 µg/l	I IVIZUO						
1,1-Dichloropropene	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
i, i-Dioliloroproperie	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	I IVIZUO	- "	<u> </u>	- "	- "		
Carbontetrachloride	<1 µg/l	TM208	<1	<1	<1	<1		
	. 49"	250	#	#	#	#		
1,2-Dichloroethane	<1 µg/l	TM208	<1	<1	<1	<1		
,	1 1 2 1		#	#	#	#		
Benzene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#	<u> </u>	<u> </u>
Trichloroethene	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
1,2-Dichloropropane	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
Dibromomethane	<1 µg/l	TM208	<1	<1	<1	<1]
			#	#	#	#		
Bromodichloromethane	<1 µg/l	TM208	<1	<1	<1	<1		
			#	#	#	#		
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1	<1	<1	<1		
T.		T1 1000	#	#	#	#		
Toluene	<1 µg/l	TM208	<1	<1	<1	<1		
hama 4.2 Dial I	.4 0	T14000	#	#	#	#		
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 **	<1 #	<1 #	<1 #		
1,1,2-Trichloroethane	<1 µg/l	TM208	# <1	# <1	# <1	# <1		
1, 1,4-111011010ettlane	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	I IVIZUO	<u> </u>	<u> </u>		<u> </u>		
1,3-Dichloropropane	<1 µg/l	TM208	<1	<1	<1	<1		$\overline{}$
י,ט־טוטווטוטיטאווט	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	I IVIZUO	<u> </u>	- " #	- "	- "		
		_	π	, m	, m	π		

ALS

 SDG:
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 566041

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VOC MS (W)							
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH1	BH4	GW01	GW02	
M mCERTS accredited. aq Aqueous / settled sample.							
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Ground Water (GW)				
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled Sample Time	25/08/2020	25/08/2020	25/08/2020	25/08/2020	
** % recovery of the surrogate standard to checi efficiency of the method. The results of indivi compounds within samples aren't corrected for the standard of the surrogate standard to check the surrogate standard the surrogate st	dual	Date Received	26/08/2020	26/08/2020	26/08/2020	26/08/2020	
recovery (F) Trigger breach confirmed	or tile	SDG Ref Lab Sample No.(s)	200826-90 22723005	200826-90 22723016	200826-90 22722980	200826-90 22722991	
1-3+§@ Sample deviation (see appendix)		AGS Reference					
Component Tetrachloroethene	LOD/Units <1 µg/l	Method TM208	<1	<1	<1	<1	
Totadomorodatorio	1 49/1	1111200	#	#	#	#	
Dibromochloromethane	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
1,2-Dibromoethane	<1 µg/l	TM208	<1	<1	<1	<1	
Chlorobenzene	<1 µg/l	TM208	# <1	# <1	# <1	# <1	
Onioroponizono	1 49/1	1111200	#	#	#	#	
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Ethylbenzene	<1 µg/l	TM208	<1	<1	<1	<1	
m,p-Xylene	<1 µg/l	TM208	# <1	# <1	# <1	# <1	
m,p Aylono	1 49/1	1111200	#	#	#	#	
o-Xylene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Styrene	<1 µg/l	TM208	<1	<1	<1	<1	
Bromoform	<1 µg/l	TM208	# <1	# <1	# <1	# <1	
Biomolomi	1 49/1	TWIZOO	#	#	, s ^e #	#	
Isopropylbenzene	<1 µg/l	TM208	<1	<1	<1 other #	<1	
			#	#	, ou #	#	
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1	<1	ज्योत्र था है। #	<1	
1,2,3-Trichloropropane	<1 µg/l	TM208	# <1	<1 205.0	20 <1	# <1	
1,2,0-111011010p10pane	ν μ9/1	TIVIZOO	#	7117 141	- " #	*	
Bromobenzene	<1 µg/l	TM208	<1	ecited of rect	<1	<1	
			#	ecitative #	#	#	
Propylbenzene	<1 µg/l	TM208	<1	1112/11/51	<1	<1	
2-Chlorotoluene	<1 µg/l	TM208	<1	6R) <1	# <1	# <1	
2 onlorototaono	1 49/1	1111200	SH _C		#	#	
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 consent	<1	<1	<1	
			COIIS #	#	#	#	
4-Chlorotoluene	<1 µg/l	TM208	₹1	<1	<1	<1	
tert-Butylbenzene	<1 µg/l	TM208	# <1	# <1	# <1	# <1	
tore Butyibonizono	1 49/1	1111200	#	#	#	#	
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
sec-Butylbenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
4-iso-Propyltoluene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	 <u> </u>
1,3-Dichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1	
1.4 Diebleret	-A "	TNADOO	# <1	# <1	# <1	# <1	
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
n-Butylbenzene	<1 µg/l	TM208	<1	<1	<1	<1	
,	, ,		#	#	#	#	
1,2-Dichlorobenzene	<1 µg/l	TM208	<1	<1 "	<1	<1	
40.0%	-4 ()	T14000	#	#	#	#	
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1	
			#	#	#	#	
Hexachlorobutadiene	<1 µg/l	TM208	<1	<1	<1	<1]
test Amid method office (TANE)	z4	TN4000	#	#	#	#	
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 #	<1 #	<1 #	<1 #	
Naphthalene	<1 µg/l	TM208	<1	<1	<1	<1	
	1.5		#	#	#	#	
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1	<1	<1	<1	
1.2.5 Triphlombaneans	24 · · - · · ·	TMOOO	# <1	#	# <1	#	
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<u>``</u>	<1	<u>``</u>	<1	

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 New Inn Landfill
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Notification of NDPs (No determination possible)

Date Received: 26/08/2020 12:34:28

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
22722980	GW01	0.00 - 0.00	Dissolved Oxygen by Probe	Insufficient Sample
22723005	BH1	0.00 - 0.00	Dissolved Oxygen by Probe	Insufficient Sample

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Validated



200826-90 Client Reference: P2282 566041 SDG: Report Number: Location: New Inn Landfill Order Number: Z2189 Superseded Report: 565825

Table of Results - Appendix

Method No	Reference	Description
SUB		Subcontracted Test
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM343	EPA 8270D - Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of Selected Pesticides (Suite I) in Liquids by GCMS
TM344	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite II) by GCMS
TM345	EPA 8270D – Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of selected pesticides (Suite III) by GCMS
TM411	Acid_Herbs_GCMS	. Rodd-Herbs in Water by GCMS
ot applicable. al testing (unless	subcontracted) performed at ALS Life Sciences Ltd Hawarden	(Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).
	Cottes	



ALS

 SDG:
 200826-90
 Client Reference:
 P2282
 Report Number:
 566041

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:
 565825

Test Completion Dates

		103	ot Ooiii	pietioi
Lab Sample No(s)	22723005	22723016	22722980	22722991
Customer Sample Ref.	BH1	BH4	GW01	GW02
AGS Ref.				
Depth	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00	0.00 - 0.00
Туре	Ground Water	Ground Water	Ground Water	Ground Water
Acid Herbicides by GCMS	03-Sep-2020	03-Sep-2020	03-Sep-2020	03-Sep-2020
Alkalinity as CaCO3	29-Aug-2020	29-Aug-2020	29-Aug-2020	29-Aug-2020
Ammonium Low	03-Sep-2020	02-Sep-2020	03-Sep-2020	02-Sep-2020
Anions by Kone (w)	31-Aug-2020	31-Aug-2020	31-Aug-2020	31-Aug-2020
BOD True Total	01-Sep-2020	01-Sep-2020	01-Sep-2020	01-Sep-2020
COD Unfiltered	30-Aug-2020	28-Aug-2020	30-Aug-2020	28-Aug-2020
Coliforms (W)	04-Sep-2020	04-Sep-2020	04-Sep-2020	04-Sep-2020
Conductivity (at 20 deg.C)	27-Aug-2020	27-Aug-2020	27-Aug-2020	27-Aug-2020
Cyanide Comp/Free/Total/Thiocyanate	03-Sep-2020	03-Sep-2020	03-Sep-2020	03-Sep-2020
Dissolved Metals by ICP-MS	02-Sep-2020	01-Sep-2020	02-Sep-2020	01-Sep-2020
Dissolved Oxygen by Probe		28-Aug-2020		28-Aug-2020
Fluoride	01-Sep-2020	01-Sep-2020	01-Sep-2020	01-Sep-2020
Mercury Dissolved	02-Sep-2020	03-Sep-2020	02-Sep-2020	03-Sep-2020
PCB Congeners - Aqueous (W)	03-Sep-2020	03-Sep-2020	03-Sep-2020	03-Sep-2020
Pesticides (Suite I) by GCMS	01-Sep-2020	01-Sep-2020	01-Sep-2020	01-Sep-2020
Pesticides (Suite II) by GCMS	01-Sep-2020	01-Sep-2020	01-Sep-2020	01-Sep-2020
Pesticides (Suite III) by GCMS	01-Sep-2020	01-Sep-2020	01-Sep-2020	01-Sep-2020
pH Value	27-Aug-2020	27-Aug-2020	27-Aug-2020	27-Aug-2020
SVOC MS (W) - Aqueous	30-Aug-2020	30-Aug-2020	30-Aug-2020	30-Aug-2020
Total Organic and Inorganic Carbon	29-Aug-2020	29-Aug-2020	02-Sep-2020	29-Aug-2020
VOC MS (W)	03-Sep-2020	03-Sep-2020	03-Sep-2020	03-Sep-2020

23-Sep-2020 02-Sep-2020 29-Aug-2020 03-Sep-2020 03-Sep





City Analysts Limited, Pigeon House Road, Ringsend, Dublin 4.

Tel: (01) 613 6003 Fax: (01) 613 6008

Email:

reports@cityanalysts.ie

www.cityanalysts.ie

Customer

Customer Services ALS Life Sciences Hawarden Business Park Manor Lane Hawarden, Deeside UK CH5 3US

Certificate Of Analysis

20-82835 Job Number:

Issue Number: 2

4 September 2020 Report Date:

Reason for re-issuing report: Final Report

Site: Fehily Timoney ALS GLOBAL PO Number:

Date Samples Received: 27/08/2020

For inspection buffores only any other use. Please find attached the results for the samples received at our laboratory on 27/08/2020.

Should you have any queries regarding the report or require any further services, we would be happy to discuss your requirements. For additional information about the company please log-on to our website at the above address.

Thank you for choosing City Analysts Limited. We look forward to assisting you again.

Authorised By:

Authorised Date:

1 September 2020

Louise Morrow

Laure MORROW

Notes are not INAB accredited

Results relate only to the items tested. Information on methods of analysis and uncertainty of measurement is available on request. Any opinions or interpretations indicated are outside the scope of our INAB accreditation. This test report shall not be reproduced except in full or with written approval of City Analysts Limited.

> Template: 1146 Revision: 018 Page 1 of 5





City Analysts Limited, Pigeon House Road, Ringsend. Dublin 4.

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Certificate Of Analysis

Customer

Customer Services ALS Life Sciences Hawarden Business Park Manor Lane Hawarden, Deeside UK CH5 3US

Report Reference: 20-82835

Report Version: 2

Fehily Timoney Site:

GW01 -NEW INN Date of Sampling: 26/08/2020 Sample Description: Sample Type: Ground Date Sample Received: 27/08/2020

Lab Reference Number: 529044

Site / Method Ref.	Analysis Start Date	Parameter	ad od other Result	Units	PV Value (Drinking Water Only)
D/D1201#	27/08/2020	Coliforms	2.0	MPN/100ml	154
D/D3221#	27/08/2020	Faecal Coliforms	1 <1	cfu/100ml	
		Faecal Coliforms For inspection with the Color of the Color of Co			

= INAB Accredited, U = UKAS Accredited, * = Subcontracted

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water

samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers. TVC - Total viable count





Report Reference: 20-82835

Report Version: 2

City Analysts Limited, Pigeon House Road, Ringsend. Dublin 4.

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Certificate Of Analysis

Customer

Customer Services ALS Life Sciences Hawarden Business Park Manor Lane Hawarden, Deeside UK CH5 3US

Site: Fehily Timoney

GW02 - NEW INN Date of Sampling: 26/08/2020 Sample Description: Sample Type: Ground Date Sample Received: 27/08/2020

Lab Reference Number: 529045

Site / Method Ref.	Analysis Start Date	Parameter	nd offet Result	Units	PV Value (Drinking Water Only
D/D1201#	27/08/2020	Coliforms	488.4	MPN/100ml	134
D/D3221#	27/08/2020		10	cfu/100ml	
		Consent of copyright owners			

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PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers. TVC - Total viable count





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Certificate Of Analysis

Customer

Customer Services ALS Life Sciences Hawarden Business Park Manor Lane Hawarden, Deeside UK CH5 3US

Report Reference: 20-82835

Report Version: 2

Fehily Timoney Site:

BH1 - NEW INN Date of Sampling: 26/08/2020 Sample Description: Sample Type: Ground Date Sample Received: 27/08/2020

Lab Reference Number: 529046

Site / Method Ref.	Analysis Start Date	Parameter	ad and direct Result	Units	PV Value (Drinking Water Only
D/D1201#	27/08/2020	Coliforms	25 For 18 < 1.0	MPN/100ml	134
D/D3221#	27/08/2020	Faecal Coliforms	<1	cfu/100ml	
		Faecal Coliforms For inspection wife to copyright owner to consent of copyright owner.			

= INAB Accredited, U = UKAS Accredited, * = Subcontracted

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers. TVC - Total viable count





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Certificate Of Analysis

Customer

Customer Services ALS Life Sciences Hawarden Business Park Manor Lane Hawarden, Deeside UK CH5 3US

Report Reference: 20-82835

Report Version: 2

Fehily Timoney Site:

BH4-NEW INN Date of Sampling: 26/08/2020 Sample Description: Sample Type: Ground Date Sample Received: 27/08/2020

Lab Reference Number: 529047

Site / Method Ref.	Analysis Start Date	Parameter	ad of differ Result	Units	PV Value (Drinking Water Only)
D/D1201#	27/08/2020	Coliforms	50 For < 1.0	MPN/100ml	135
D/D3221#	27/08/2020	Faecal Coliforms	o	cfu/100ml	
		Faecal Coliforms For inspection wife to copyright owner to copyright			

= INAB Accredited, U = UKAS Accredited, * = Subcontracted

PV Value is the parametric value, taken from European Communities, (Drinking Water) Regulations, 2014. S.I. No. 122 of 2014 and relates only to drinking water

samples.

For queries on results, please contact us within two weeks of the report date to ensure that we can accommodate your query as samples cannot be stored indefinitely.

NAC & ATC - No abnormal change and acceptable to customers. TVC - Total viable count



SDG: 200826-90 Client Reference: P2282 Report Number: 566041 Location: New Inn Landfill Order Number: Z2189 Superseded Report: 565825

Appendix

General

- Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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
- 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to For representative sub sample from the received sample.
- 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. OTI
- 12. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. Tentatively Identified Compounds (TICs) are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres wing ALS (Hawarden) in-house method of transmitted/polarised light microscopy and

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of selections.

ALS (Hawarden) in house 1000 and 1000 are 1000 and 1000 and 1000 are 1000 and 1000 an stop dispersion staining, based on HSG 248 (2005).

Asbe stos Type	Common Name
Chrysof le	White Asbesbs
Amosite	BrownAsbests
Cro d dolite	Blue Asbe stos
Fibrous Act nolite	-
Fib to us Anthop hyll ite	-
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

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017).

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.

17:07:07 04/09/2020 Modification Date: 04/09/2020 Page 24 of 24



Unit 7-8 Hawarden Business Park Manor Road (off Manor Lane) Hawarden Deeside CH5 3US

> Tel: (01244) 528700 Fax: (01244) 528701

email: haward encustomers er vices@alsglobal.com

Website: www.alsenvironmental.co.uk

Fehily Timoney 3rd Floor North Park Offices North Park Business Park North Road Dublin Dublin 11

Attention: Daniel Hayden

CERTIFICATE OF ANALYSIS

Date of report Generation:03 September 2020Customer:Fehily TimoneySample Delivery Group (SDG):200826-96Your Reference:P2282Location:New Inn Landfill

Report No: 565743

We received 1 sample on Wednesday August 26, 2020 and 1 of these samples were scheduled for analysis which was completed on Thursday September 03, 2020. 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 ALSCLife Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).

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

IIAC-MRA





ALS

 SDG:
 200826-96

 Location:
 New Inn Landfill

Client Reference: Order Number: P2282 Z2189 Report Number: Superseded Report: 565743

Validated

Received Sample Overview

 Lab Sample No(s)
 Customer Sample Ref.
 AGS Ref.
 Depth (m)
 Sampled Date

 22723184
 BH2
 0.00 - 0.00
 25/08/2020

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

Consent of copyright owner required for any other use.

Validated

565743

Report Number:

Superseded Report:

CERTIFICATE OF ANALYSIS

ALS

P2282 SDG: 200826-96 Client Reference: Location: New Inn Landfill Z2189 Order Number: Results Legend 22723184 Lab Sample No(s) X Test No Determination Possible Customer BH2 Sample Reference Sample Types -S - Soil/Solid UNS - Unspecified Solid GW - Ground Water **AGS Reference** SW - Surface Water LE - Land Leachate PL - Prepared Leachate PR - Process Water 0.00 - 0.00 SA - Saline Water Depth (m) TE - Trade Effluent TS - Treated Sewage US - Untreated Sewage RE - Recreational Water H2SO4 (ALE244) 500ml Plastic (ALE208) 250ml BOD (ALE212) DW - Drinking Water Non-regulatory UNL - Unspecified Liquid SL - Sludge Container G - Gas OTH - Other 2010 Met teelifted for any other use. Sample Type 듄 \mathbb{H} Ammonium Low All NDPs: 0 Tests: 1 Anions by Kone (w) All NDPs: 0 Tests: 1 Χ BOD True Total All NDPs: 0 Tests: 1 X oring COD Unfiltered All NDPs: 0 Tests: 1 Conductivity (at 20 deg.C) All NDPs: 0 Tests: 1 Χ Dissolved Metals by ICP-MS All NDPs: 0 Tests: 1 Χ Dissolved Oxygen by Probe All NDPs: 0 Tests: 1 Х Fluoride All NDPs: 0 Tests: 1 Χ Mercury Dissolved All NDPs: 0 Tests: 1 X pH Value All NDPs: 0 Tests: 1 X Phosphate by Kone (w) All NDPs: 0 Tests: 1 X Total Organic and Inorganic Carbon All NDPs: 0 Tests: 1 Χ

ALS

 SDG:
 200826-96
 Client Reference:
 P2282
 Report Number:
 565743

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

(2.00)								
Results Legend # ISO17025 accredited.		Customer Sample Ref.	BH2					
M mCERTS accredited. aq Aqueous / settled sample.		- " ()						
diss.filt Dissolved / filtered sample. tot.unfilt Total / unfiltered sample.		Depth (m) Sample Type	0.00 - 0.00 Land Leachate (LE)					
* Subcontracted - refer to subcontractor report accreditation status.		Date Sampled	25/08/2020					
** % recovery of the surrogate standard to check efficiency of the method. The results of individuals are supported in the surrogate standard to check the surrogate standard the surrow su	dual	Sample Time Date Received	26/08/2020					
compounds within samples aren't corrected for recovery	or the	SDG Ref	200826-96					
(F) Trigger breach confirmed 1-3+§@ Sample deviation (see appendix)		Lab Sample No.(s) AGS Reference	22723184					
Component	LOD/Units	Method						
BOD, unfiltered	<1 mg/l	TM045	30.4 #					
Oxygen, dissolved	<0.3 mg/l	TM046	3.95					
Organic Carbon, Total	<3 mg/l	TM090	12.6					
Ammoniacal Nitrogen as N (low level)	<0.01 mg/	I TM099	10.8					
Fluoride	<0.5 mg/l	TM104	<0.5					
COD, unfiltered	<7 mg/l	TM107	101 #					
Conductivity @ 20 deg.C	<0.02 mS/cm	TM120	3.03					
Arsenic (diss.filt)	<0.5 µg/l	TM152	3.55					
Cadmium (diss.filt)	<0.08 µg/	I TM152	<0.08					
Chromium (diss.filt)	<1 µg/l	TM152	2 # <1					
Copper (diss.filt)	<0.3 µg/l	TM152	2 # 0.622		other tise.			
Lead (diss.filt)	<0.2 µg/l	TM152	2 # <0.2		912, 200			
Manganese (diss.filt)	<3 µg/l	TM152	2 # 465	a inspection with the difference of the control of	or corr			
Nickel (diss.filt)	<0.4 µg/l	TM152	2 # 52.7	on piroqui				
Phosphorus (diss.filt)	<10 µg/l	TM152	2 # 13.4	aspection net				
Selenium (diss.filt)	<1 μg/l	TM152	2 # <1	OPTIGH				
Zinc (diss.filt)	<1 μg/l	TM152	0.44	()>				
Sodium (Dis.Filt)	<0.076 mg		6.14 6.14 2#					
	<0.076 mg.		2#					
Magnesium (Dis.Filt)			14.2					
Potassium (Dis.Filt)	<0.2 mg/l		14.7					
Iron (Dis.Filt)	<0.019 mg		3.79					
Mercury (diss.filt)	<0.01 µg/l		<0.01 2#					
Phosphate (Ortho as PO4)	<0.05 mg/		<0.05					
Sulphate	<2 mg/l	TM184	23.9					
Chloride	<2 mg/l	TM184	740					
Total Oxidised Nitrogen as N	<0.1 mg/l	TM184	0.266					
pH	<1 pH Unit	s TM256	6.74 #					
-				•		•	-	





 SDG:
 200826-96
 Client Reference:
 P2282
 Report Number:
 565743

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Table of Results - Appendix

		receive / ipperion.
Method No	Reference	Description
TM045	MEWAM BOD5 2nd Ed.HMSO 1988 / Method 5210B, AWWA/APHA, 20th Ed., 1999; SCA Blue Book 130	Determination of BOD5 (ATU) Filtered by Oxygen Meter on liquids
TM046	Method 4500G, AWWA/APHA, 20th Ed., 1999	Measurement of Dissolved Oxygen by Oxygen Meter
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM107	ISO 6060-1989	Determination of Chemical Oxygen Demand using COD Dr Lange Kit
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Life Sciences Ltd Hawarden (Method codes TM) or ALS Life Sciences Ltd Aberdeen (Method codes S).





ALS

 SDG:
 200826-96
 Client Reference:
 P2282
 Report Number:
 565743

 Location:
 New Inn Landfill
 Order Number:
 Z2189
 Superseded Report:

Test Completion Dates

Lab Sample No(s)	22723184
Customer Sample Ref.	BH2
AGS Ref.	
Depth	0.00 - 0.00
Туре	Land Leachate
Ammonium Low	02-Sep-2020
Anions by Kone (w)	31-Aug-2020
BOD True Total	01-Sep-2020
COD Unfiltered	28-Aug-2020
Conductivity (at 20 deg.C)	27-Aug-2020
Dissolved Metals by ICP-MS	01-Sep-2020
Dissolved Oxygen by Probe	28-Aug-2020
Fluoride	01-Sep-2020
Mercury Dissolved	03-Sep-2020
pH Value	27-Aug-2020
Phosphate by Kone (w)	27-Aug-2020
Total Organic and Inorganic Carbon	30-Aug-2020





SDG: 200826-96 Client Reference: P2282 Report Number: 565743 Location: New Inn Landfill Order Number: Z2189 Superseded Report:

Appendix

General

- Results are expressed on a dry weight basis (dried at 35°C) for all soil analyses except for the following: NRA and CEN 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
- 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 affect.
- 10. Stones/debris are not routinely removed. We always endeavour to For representative sub sample from the received sample.
- 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. OTI
- 12. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.
- 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. Tentatively Identified Compounds (TICs) are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% 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.

18. 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
§	Sampled on date not provided
•	Sample holding time exceeded in laboratory
@	Sample holding time exceeded due to late arrival of instructions or samples

19. 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 (2005), which is accredited to ISO17025. 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

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres wing ALS (Hawarden) in-house method of transmitted/polarised light microscopy and

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of selections.

ALS (Hawarden) in house 1000 and 1000 are 1000 and 1000 and 1000 are 1000 and 1000 an stop dispersion staining, based on HSG 248 (2005).

Asbe stos Type	Common Name	
Chrysof le	White Asbests	
Amosite	BrownAsbests	
Cro d dolite	Blue Asbe stos	
Fibrous Act nolite	-	
Fib to us Anthop hyll ite	-	
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

Standing Committee of Analysts, The Quantification of Asbestos in Soil (2017).

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.

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