

SECTION 9

Monitoring Location G5
Certified Laboratory Results for 2009 and 2010.

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CERTIFICATE OF ANALYSIS

Page 1 of 5

Project Description: Analysis of Aqueous Samples

Attention: Mr. Seamus Breslin
cc: Breege Kilkenny

Lab ID: 77851, 77853

Date Sampled: 12.01.2009

Company: Wicklow County Council
Address: County Building,
Wicklow Town,
Co. Wicklow

Certificate No: L/09/0244

Date Rec'd: 13.01.2009

Issue Date: 04.02.2009

Our Ref: WS-23430, 153713
COV/575742/2009

Project Summary: Two samples were analysed for a range of determinands. Please see page 2-5 for results. Terms & Conditions and methods used are outlined in the attached appendix.

No. of Pages: Results page 2-5

Mr. Mark Bowkett
Chief Executive

Ms Breda Moore
Technical Manager



Analysis of Aqueous Samples

Date Sampled :12.01.2009
 Date Received : 13.01.2009
 Date Analysis Commenced: 14.01.2009
 Our Ref.: WS-23430, 153713,COV/575742/2009
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/09/0244

	Sample ID	G5
DETERMINAND	Lab ID	77853
Alkalinity	n/a	25
Ammoniacal Nitrogen	n/a	<0.08
Boron	++	0.03
Cadmium (ug/l)#	**	17
Calcium	**	26
Chloride	**	13
Conductivity(uS/cm @ 20'C)	**	337
Copper(ug/l)	++	730
Cyanide	n/a	<0.01
Dissolved Oxygen	**	9.9
Fluoride	**	0.48
Ground Water Level (m)	on-site	not recorded
Iron #	**	0.09
Lead (ug/l)#	**	25
Magnesium	**	11
Manganese #	**	1.12
Mercury(ug/l)	++	<0.05
Odour	n/a	Odourless
Orthophosphate	**	<1
pH	**	4.5
Potassium	**	1
Residue on Evaporation @180'C	n/a	240
Sodium	**	10
Sulphate	**	140
Temperature, 'C	on-site	not recorded
TOC	n/a	1.2
Chromium	**	<1
Total Oxidised Nitrogen	**	4
Total Phenols by Colourimetry	n/a	<0.05
Total Phosphorus	n/a	0.53
Visual	n/a	Bright brown, cloudy
Zinc #	**	5.6
Faecal Coliforms (cfu/100mls)	n/a	0
Total Coliforms (cfu/100mls)	n/a	1

Concentrations are expressed as mg/l (ppm)
 unless otherwise specified.

Analysis of metals are performed on the filtered sample

** = INAB Accredited Tests ++ = Subcontracted Tests n/a = Non-INAB Accredited Tests

The above results relate only to the sample tested

This report should not be regenerated except in full and with the consent of T.E. Laboratories Ltd.



Analysis of Aqueous Samples

Date Sampled : 12.01.2009
 Date Received : 13.01.2009
 Date Analysis Commenced: 14.01.2009
 Our Ref.: WS-23430, 153713, COV/575742/2009
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/09/0244

Volatile Organic Compounds ++

DETERMINAND	Sample ID	L05-10	G5
	Lab ID	77851	77853
1,1,1,2-Tetrachloroethane	ug/l	<1	<1
1,1,1-Trichloroethane	ug/l	<1	<1
1,1,2,2-Tetrachloroethane	ug/l	<1	<1
1,1,2-Trichloroethane	ug/l	<1	<1
1,1,2-Trichloroethylene	ug/l	<1	<1
1,1-Dichloroethane	ug/l	<1	<1
1,1-Dichloroethylene	ug/l	<1	<1
1,1-Dichloropropene	ug/l	<1	<1
1,2,3-Trichloropropane	ug/l	<1	<1
1,2,4-Trimethylbenzene	ug/l	28	<1
1,2-dibromoethane	ug/l	<1	<1
1,2-Dichlorobenzene	ug/l	<1	<1
1,2-Dichloroethane	ug/l	<1	<1
1,2-Dichloropropane	ug/l	<1	<1
1,3,5-Trimethylbenzene	ug/l	8	<1
1,3-Dichlorobenzene	ug/l	<1	<1
1,3-Dichloropropane	ug/l	<1	<1
1,4-Dichlorobenzene	ug/l	<1	<1
2,2-Dichloropropane	ug/l	<1	<1
2-Chlorotoluene	ug/l	<1	<1
4-Chlorotoluene	ug/l	<1	<1
Benzene	ug/l	1	<1
Bromobenzene	ug/l	<1	<1
Bromochloromethane	ug/l	<1	<1
Bromodichloromethane	ug/l	<1	<1
Bromoform	ug/l	<1	<1
Bromomethane	ug/l	<1	<1
Carbon tetrachloride	ug/l	<1	<1
Chlorobenzene	ug/l	<1	<1
Chlorodibromomethane	ug/l	<1	<1
Chloroethane	ug/l	<1	<1
Chloroform	ug/l	<1	<1
Chloromethane	ug/l	<1	<1
Cis-1,2-Dichloroethylene	ug/l	8	<1
Cis-1,3-Dichloropropene	ug/l	<1	<1
Dibromomethane	ug/l	<1	<1
EthylBenzene	ug/l	15	<1
Meta/Para-Xylene	ug/l	13	<1
Ortho-Xylene	ug/l	14	<1
Styrene	ug/l	<1	<1
Tetrachloroethylene	ug/l	<1	<1
Toluene	ug/l	17	<1
Trans-1,2-Dichloroethylene	ug/l	<1	<1
Trichlorofluoromethane	ug/l	<1	<1
Vinyl chloride monomer	ug/l	<1	<1

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T.E. Laboratories



Analysis of Aqueous Samples

Date Sampled : 12.01.2009
 Date Received : 13.01.2009
 Date Analysis Commenced: 14.01.2009
 Our Ref.: WS-23430, 153713, COV/575742/2009
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/09/0244

Semi-volatile Organic Compounds ug/L ++

DETERMINAND	Sample ID	L05-10	G5	Blank
	Lab ID	77851	77853	
1,2,4-Trichlorobenzene	ug/l	<1	<1	<1
1,2-Dichlorobenzene	ug/l	<1	<1	<1
1,3-Dichlorobenzene	ug/l	<1	<1	<1
1,4-Dichlorobenzene	ug/l	8	<1	<1
2,4,5-Trichlorophenol	ug/l	<1	<1	<1
2,4,6-Trichlorophenol	ug/l	<1	<1	<1
2,4-Dichlorophenol	ug/l	<1	<1	<1
2,4-Dimethylphenol	ug/l	6	<1	<1
2,4-Dinitrophenol	ug/l	<5	<5	<5
2,4-Dinitrotoluene	ug/l	<1	<1	<1
2,6-Dinitrotoluene	ug/l	<1	<1	<1
2-Chloronaphthalene	ug/l	<1	<1	<1
2-Chlorophenol	ug/l	<1	<1	<1
2-methyl phenol	ug/l	2	<1	<1
2-Methylnaphthalene	ug/l	10	<1	<1
2-Nitroaniline	ug/l	<1	<1	<1
2-Nitrophenol	ug/l	<1	<1	<1
3-Nitroaniline	ug/l	<1	<1	<1
3/4-Methylphenol	ug/l	3	<1	<1
4-Bromophenyl phenylether	ug/l	<1	<1	<1
4-Chloro-3-methylphenol	ug/l	<1	<1	<1
4-Chloroaniline	ug/l	<1	<1	<1
4-Chlorophenyl phenylether	ug/l	<1	<1	<1
4-Nitroaniline	ug/l	<1	<1	<1
4-Nitrophenol	ug/l	<5	<5	<5
Acenaphthene	ug/l	<1	<1	<1
Acenaphthylene	ug/l	<1	<1	<1
Anthracene	ug/l	<1	<1	<1
Azobenzene	ug/l	<1	<1	<1
Benzo(a)Anthracene	ug/l	<1	<1	<1
Benzo(a)Pyrene	ug/l	<1	<1	<1
Benzo(b/k)Fluoranthene	ug/l	<1	<1	<1
Benzo(ghi)Perylene	ug/l	<1	<1	<1
Bis (2-chloroethoxy) methane	ug/l	<1	<1	<1
Bis (2-chloroethyl) ether	ug/l	<1	<1	<1
Bis (2-chloroisopropyl) ether	ug/l	<1	<1	<1
Bis (2-ethylhexyl)phthalate	ug/l	180	3	2
Butyl benzylphthalate	ug/l	<1	<1	<1
Carbazole	ug/l	<1	<1	<1
Chrysene	ug/l	<1	<1	<1
Di-n-butylphthalate	ug/l	<1	<1	<1
Di-n-octylphthalate	ug/l	<1	<1	<1
Dibenzo(ah)Anthracene	ug/l	<1	<1	<1
Dibenzofuran	ug/l	<1	<1	<1
Diethyl phthalate	ug/l	<1	<1	<1
Dimethyl phthalate	ug/l	<1	<1	<1
Fluoranthene	ug/l	<1	<1	<1
Fluorene	ug/l	<1	<1	<1
Hexachlorobenzene	ug/l	<1	<1	<1
Hexachlorobutadiene	ug/l	<1	<1	<1
Hexachlorocyclopentadiene	ug/l	<1	<1	<1
Hexachloroethane	ug/l	<1	<1	<1
Indeno(123-cd)Pyrene	ug/l	<1	<1	<1
Isophorone	ug/l	<1	<1	<1
Naphthalene	ug/l	12	7	<1
Nitrobenzene	ug/l	<1	<1	<1
Pentachlorophenol	ug/l	<5	<5	<5
Phenanthrene	ug/l	<1	<1	<1
Phenol	ug/l	<5	<5	<5
Pyrene	ug/l	<1	<1	<1

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T.E. Laboratories



Analysis of Aqueous Samples

Date Sampled : 12.01.2009

Date Received : 13.01.2009

Date Analysis Commenced: 14.01.2009

Our Ref.: WS-23430, 153713, COV/575742/2009

Your Ref : Ballymurtagh Landfill

Certificate No: L/09/0244

ORGANOCHLORINE PESTICIDES (ug/L) ++

	Sample ID	L05-10	G5
Determinand	Lab ID	77851	77853
1,2,3-Trichlorobenzene		<0.060	<0.003
1,2,4,-Trichlorobenzene		0.095	<0.003
1,2,5-Trichlorobenzene		<0.060	<0.003
Aldrin		<0.06	<0.003
Cis Chlordane		<0.020	<0.001
DDE (op)		<0.020	<0.001
DDE (pp)		<0.020	<0.001
DDT (op)		<0.020	<0.001
DDT (pp)		<0.020	<0.001
Dichlobenill		0.135	<0.001
Dieldrin		<0.080	<0.003
Endosulphan A		<0.060	<0.003
Endosulphan B		<0.060	<0.003
Endrin		<0.060	<0.003
HCH - alpha		<0.020	<0.001
HCH - beta		<0.020	<0.001
HCH - gamma		<0.020	<0.001
HCH - delta		<0.200	<0.010
Heptachlor		<0.020	<0.001
Heptachlor Epoxide		<0.020	<0.001
Hexachlorobenzene		<0.020	<0.001
Hexachlorobutadiene		<0.020	<0.001
Isodrin		<0.060	<0.003
Tecnazene		<0.100	<0.005
Trans Chlordane		<0.020	<0.001
Triallate		<0.100	<0.005
Trifluralin		<0.100	<0.005
TDE (op)		<0.020	<0.001
TDE (pp)		<0.020	<0.001

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T.E. LABORATORIES LIMITED
Trading as



Loughmartin Business Park, Tullow, Co. Carlow
Phone: 059-9152881 Fax: 059-9152886

CERTIFICATE OF ANALYSIS

Page 1 of 9

Project Description: Analysis of Aqueous Samples

Attention: Mr. Seamus Breslin **Lab ID:** 90131-90133

Company: Wicklow County Council **Date Sampled:** Various
Address: County Building,
Wicklow Town,
Co. Wicklow

Certificate No: L/10/1652 **Date Rec'd:** 03.08.2010

Issue Date: 24.08.2010 **Our Ref:** WS-27685, 10-40431,
COV/714944/2010

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Project Summary: Three samples were analysed for a range of determinands.
Please see page 2-9 for results. Terms & Conditions and methods
used are outlined in the attached appendix.

No. of Pages: Results page 2-9

Mr. Mark Bowkett
Chief Executive

Ms Breda Moore
Technical Manager



ANALYSIS OF SURFACE WATER SAMPLES.

Date Sampled : 03.08.2010
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

	Sample ID	SW3	SW4
DETERMINAND	Lab ID	90132	90133
Alkalinity	n/a	<0.5	15
Ammoniacal Nitrogen	n/a	8.9	<0.08
BOD	n/a	8	<2
COD	n/a	12	10
Chloride	**	35	9
Conductivity (uS/cm @20°C)	**	1970	102
Calcium	**	327	8
Cadmium #(ug/l)	**	16	0.58
Copper #(ug/l)	++	310	19
Dissolved Oxygen	n/a	7.4	9.9
Iron #	**	75(n/a)	0.61
Lead #(ug/l)	**	279(n/a)	6.8
Magnesium	**	89	3
Manganese #	**	7.0	0.1
Mercury (ug/l)	++	<0.05	<0.05
pH	**	4.9	6.4
Orthophosphate	**	<5	<1
Potassium	**	10	<1
Sulphate	**	1338	21
Sodium	**	20	7
Suspended Slids	n/a	2	4
Total Phosphorus	n/a	0.06	0.05
Total Chromium	n/a	<1	<1
Temperature °C	on-site	12	15
TON	**	<0.31	<0.84
Zinc #	**	7.8	0.27

Concentrations expressed in mg/l (ppm)
 unless otherwise stated.

** = INAB Accredited Tests ++ = Subcontracted Tests n/a = Non-INAB Accredited Tests

Analysis of metals are performed on the filtered sample.

The above results relate only to the sample tested

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ANALYSIS OF LEACHATE SAMPLES.

Date Sampled : 03.08.2010
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

Volatile Organic Compounds ug/l ++

DETERMINAND	Sample ID	SW3	SW4
	Lab ID	90132	90133
Total VOC's	ug/l	< 1	< 1
1,1 Dichloroethylene	ug/l	< 1	< 1
Methylene Chloride	ug/l	< 1	< 1
Trans-1,2-dichloroethylene	ug/l	< 1	< 1
1,1-dichloroethane	ug/l	< 1	< 1
2,2-dichloropropane+1,2-dichloro	ug/l	< 1	< 1
Bromochloromethane	ug/l	< 1	< 1
Chloroform	ug/l	< 1	< 1
1,1,1-trichloroethane	ug/l	< 1	< 1
1,1-dichloropropene	ug/l	< 1	< 1
Carbon tetrachloride	ug/l	< 1	< 1
Benzene	ug/l	< 1	< 1
1,2-dichloroethane	ug/l	< 1	< 1
Trichloroethylene	ug/l	< 1	< 1
1,2-dichloropropane	ug/l	< 1	< 1
Dibromomethane	ug/l	< 1	< 1
Bromodichloromethane	ug/l	< 1	< 1
cis-1,3-dichloropropene	ug/l	< 1	< 1
Toluene	ug/l	< 1	< 1
trans-1,3-dichloropropene	ug/l	< 1	< 1
1,1,2-trichloroethane	ug/l	< 1	< 1
Tetrachloroethylene	ug/l	< 1	< 1
1,3-dichloropropane	ug/l	< 1	< 1
Dibromochloromethane	ug/l	< 1	< 1
1,2-dibromoethane	ug/l	< 1	< 1
Chlorobenzene	ug/l	< 1	< 1
1,1,1,2-tetrachloroethane	ug/l	< 1	< 1
Ethylbenzene	ug/l	< 1	< 1
m+p-Xylene	ug/l	< 1	< 1
o-Xylene	ug/l	< 1	< 1
Styrene	ug/l	< 1	< 1
Bromoform	ug/l	< 1	< 1
Isopropylbenzene	ug/l	< 1	< 1
Bromobenzene	ug/l	< 1	< 1
1,2,3-trichloropropane	ug/l	< 1	< 1
n-propylbenzene	ug/l	< 1	< 1
2-chlorotoluene	ug/l	< 1	< 1
1,3,5-trimethylbenzene	ug/l	< 1	< 1
4-chlorotoluene	ug/l	< 1	< 1
Tert-butylbenzene	ug/l	< 1	< 1
1,2,4-trimethylbenzene	ug/l	< 1	< 1
sec-butylbenzene	ug/l	< 1	< 1
p-isopropyltoluene	ug/l	< 1	< 1
1,3-dichlorobenzene	ug/l	< 1	< 1
1,4-dichlorobenzene	ug/l	< 1	< 1
n-butylbenzene	ug/l	< 1	< 1
1,2-dichlorobenzene	ug/l	< 1	< 1
1,2-dibromo-3-chloropropane	ug/l	< 1	< 1
1,2,4-trichlorobenzene	ug/l	< 1	< 1
Hexachlorobutadiene	ug/l	< 1	< 1
Naphthalene	ug/l	< 1	< 1
1,2,3-trichlorobenzene	ug/l	< 1	< 1

Concentrations expressed in ug/l (ppb)
 unless otherwise stated.

** = INAB Accredited Tests ++ = Subcontracted Tests n/a = Non-INAB Accredited Tests

Analysis of metals are performed on the filtered sample.

The above results relate only to the sample tested
 This report should not be regenerated except in full and with the consent of T.E. Laboratories Ltd.



Analysis of Aqueous Samples

Date Sampled : 03.08.2010
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

Semi-volatile Organic Compounds ug/L ++

DETERMINAND	Sample ID	SW3	SW4
	Lab ID	90132	90133
Aniline	ug/l	<1.0	<1.0
Bis(2-chloroethyl)ether	ug/l	<1.0	<1.0
Phenol	ug/l	<1.0	<1.0
2-Chlorophenol	ug/l	<1.0	<1.0
Benzyl Alcohol	ug/l	<1.0	<1.0
2-Methylphenol	ug/l	<1.0	<1.0
3& 4-Methylphenol	ug/l	<1.0	<1.0
2,4-dimethylphenol	ug/l	<1.0	<1.0
Bis-(dichloroethoxy)methane	ug/l	<1.0	<1.0
2,4-Dichlorophenol	ug/l	<1.0	<1.0
1,2,4-Trichlorobenzene	ug/l	<1.0	<1.0
Naphthalene	ug/l	<1.0	<1.0
4-Chloro-3-methylphenol	ug/l	<1.0	<1.0
2-Methylnaphthalene	ug/l	<1.0	<1.0
Hexachlorocyclopentadiene	ug/l	<1.0	<1.0
2,4,6 Trichlorophenol	ug/l	<1.0	<1.0
2,4,5 Trichlorophenol	ug/l	<1.0	<1.0
2-Chloronaphthalene	ug/l	<1.0	<1.0
2-Nitroaniline	ug/l	<1.0	<1.0
1,4-dinitrobenzene	ug/l	<1.0	<1.0
Dimethyl phthalate	ug/l	<1.0	<1.0
1,3-dinitrobenzene	ug/l	<1.0	<1.0
Acenaphthylene	ug/l	<1.0	<1.0
2,6-Dinitrotoluene	ug/l	<1.0	<1.0
1,2-Dinitrobenzene	ug/l	<1.0	<1.0
3-Nitroaniline	ug/l	<1.0	<1.0
Acenaphthene	ug/l	<1.0	<1.0
Dibenzofuran	ug/l	<1.0	<1.0
2,4-Dinitrotoluene	ug/l	<1.0	<1.0
4-Nitrophenol	ug/l	<1.0	<1.0
2,3,4,6-Tetrachlorophenol	ug/l	<1.0	<1.0
2,3,5,6-Tetrachlorophenol	ug/l	<1.0	<1.0
Diethylphthalate	ug/l	<1.0	<1.0
Fluorene	ug/l	<1.0	<1.0
4-Chlorophenyl phenyl ether	ug/l	<1.0	<1.0
4-Nitroaniline	ug/l	<1.0	<1.0
Diphenylamine/4,6-Dinitro-2-methylphenol	ug/l	<1.0	<1.0
Azobenzene	ug/l	<1.0	<1.0
4-Bromophenyl phenyl ether	ug/l	<1.0	<1.0
Hexachlorobenzene	ug/l	<1.0	<1.0
Pentachlorophenol	ug/l	<1.0	<1.0
Phenanthrene	ug/l	<1.0	<1.0
Anthracene	ug/l	<1.0	<1.0
Carbazole	ug/l	<1.0	<1.0
Di-n-butylphthalate	ug/l	<1.0	<1.0
Benzyl butyl phthalate	ug/l	<1.0	<1.0
Bis(2-ethylhexyl)ester	ug/l	<1.0	<1.0
Fluoranthene	ug/l	<1.0	<1.0
Pyrene	ug/l	<1.0	<1.0
Benzo(a)anthracene	ug/l	<1.0	<1.0
Chrysene	ug/l	<1.0	<1.0
Di-n-octyl phthalate	ug/l	<1.0	<1.0
Benzo(b)fluoranthene	ug/l	<1.0	<1.0
Benzo(k)fluoranthene	ug/l	<1.0	<1.0
Benzo(a)pyrene	ug/l	<1.0	<1.0
Indeno(1,2,3-cd)pyrene	ug/l	<1.0	<1.0
Dibenz(a,h)anthracene	ug/l	<1.0	<1.0
Benzo(ghi)pyrene	ug/l	<1.0	<1.0

Results expressed as ug/l (ppb)
 unless stated otherwise

** = INAB Accredited Tests ++ = Subcontracted Tests n/a = Non-INAB Accredited Tests

The above results relate only to the sample tested
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ANALYSIS OF GROUNDWATER SAMPLES.

Date Sampled : 03.08.2010
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

ORGANOCHLORINE PESTICIDES (ng/L) ++

	Sample ID	SW3	SW4
DETERMINAND	LAB ID	90132	90133
1,2,3- Trichlorobenzene	++	<20	<20
1,2,4- Trichlorobenzene	++	<20	<20
1,3,5- Trichlorobenzene	++	<20	<20
Aldrin	++	<8	<8
alpha-Endosulphan	++	<8	<8
alpha-HCH	++	<6	<6
beta-Endosulphan	++	<8	<8
beta-HCH	++	<6	<6
alpha-Chlordane	++	<8	<8
Dichlobenil	++	<4	<4
Dieldrin	++	<8	<8
Endrin	++	<8	<8
gamma-HCH	++	<6	<6
Heptachlor Epoxide	++	<4	<4
Hexachlorobenzene	++	<4	<4
Hexachlorobutadiene	++	<14	<14
Isodrin	++	<8	<8
o,p - DDE	++	<4	<4
p,p - DDE	++	<4	<4
o,p - TDE	++	<4	<4
p,p - TDE	++	<4	<4
o,p - DDT	++	<4	<4
p,p - DDT	++	<4	<4
Tecnazene	++	<20	<20
gamma-Chlordane	++	<4	<4
Triallate	++	<20	<20
Trifluralin	++	<60	<60

Concentrations expressed in ng/l
 unless otherwise stated.

** = INAB Accredited Tests ++ = Subcontracted Tests n/a = Non-INAB Accredited Tests

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ANALYSIS OF SURFACE WATER SAMPLES.

Date Sampled : 03.08.2010# and 04.08.2010
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

	Sample ID	G5#
	Lab ID	90131
Alkalinity	n/a	<0.5
Ammoniacal Nitrogen	n/a	<0.08
Boron (ug/l)	++	110
Chloride	**	14
Conductivity (uS/cm @20°C)	**	326
Cyanide	n/a	<0.01
Calcium	**	22
Cadmium #(ug/l)	**	15
Copper #(ug/l)	++	740
Dissolved Oxygen	n/a	9.7
Groundwater Level (m)	on-site	8.92
Iron #	**	0.27
Fluoride	**	0.55
Lead #(ug/l)	**	29
Magnesium	**	10
Manganese #	**	0.98
Mercury (ug/l)	++	<0.05
Odour	n/a	Odourless
pH	**	4.7
Orthophosphate	**	<1
Potassium	**	1
Residue on Evaporation @ 180°C	n/a	272
Sulphate	**	124
Sodium	**	10
Total Phosphorus	n/a	1.5
Total Chromium	n/a	<1
Total Phenols	n/a	<0.05
Temperature °C	on-site	14
TOC	n/a	0.37
TON	**	4.9
Visual	n/a	Brown, Turbid, lots of Suspended Solids
Zinc #	**	5.0
Total Coliforms (cfu/100ml)	n/a	43
Faecal Coliforms (cfu/100ml)	n/a	0

Concentrations expressed in mg/l (ppm)
 unless otherwise stated.

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Analysis of metals are performed on the filtered sample.

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ANALYSIS OF LEACHATE SAMPLES.

Date Sampled :03.08.2010 and 04.08.2010 #
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

Volatile Organic Compounds ug/l ++

	Sample ID	G5#
DETERMINAND	Lab ID	90131
Total VOC's	ug/l	< 1
1,1 Dichloroethylene	ug/l	< 1
Methylene Chloride	ug/l	< 1
Trans-1,2-dichloroethylene	ug/l	< 1
1,1-dichloroethane	ug/l	< 1
2,2-dichloropropane+1,2-dichloroethane	ug/l	< 1
Bromochloromethane	ug/l	< 1
Chloroform	ug/l	< 1
1,1,1-trichloroethane	ug/l	< 1
1,1-dichloropropene	ug/l	< 1
Carbon tetrachloride	ug/l	< 1
Benzene	ug/l	< 1
1,2-dichloroethane	ug/l	< 1
Trichloroethylene	ug/l	< 1
1,2-dichloropropane	ug/l	< 1
Dibromomethane	ug/l	< 1
Bromodichloromethane	ug/l	< 1
cis-1,3-dichloropropene	ug/l	< 1
Toluene	ug/l	< 1
trans-1,3-dichloropropene	ug/l	< 1
1,1,2-trichloroethane	ug/l	< 1
Tetrachloroethylene	ug/l	< 1
1,3-dichloropropane	ug/l	< 1
Dibromochloromethane	ug/l	< 1
1,2-dibromoethane	ug/l	< 1
Chlorobenzene	ug/l	< 1
1,1,1,2-tetrachloroethane	ug/l	< 1
Ethylbenzene	ug/l	< 1
m+p-Xylene	ug/l	< 1
o-Xylene	ug/l	< 1
Styrene	ug/l	< 1
Bromoform	ug/l	< 1
Isopropylbenzene	ug/l	< 1
Bromobenzene	ug/l	< 1
1,2,3-trichloropropane	ug/l	< 1
n-propylbenzene	ug/l	< 1
2-chlorotoluene	ug/l	< 1
1,3,5-trimethylbenzene	ug/l	< 1
4-chlorotoluene	ug/l	< 1
Tert-butylbenzene	ug/l	< 1
1,2,4-trimethylbenzene	ug/l	< 1
sec-butylbenzene	ug/l	< 1
p-isopropyltoluene	ug/l	< 1
1,3-dichlorobenzene	ug/l	< 1
1,4-dichlorobenzene	ug/l	< 1
n-butylbenzene	ug/l	< 1
1,2-dichlorobenzene	ug/l	< 1
1,2-dibromo-3-chloropropane	ug/l	< 1
1,2,4-trichlorobenzene	ug/l	< 1
Hexachlorobutadiene	ug/l	< 1
Naphthalene	ug/l	< 1
1,2,3-trichlorobenzene	ug/l	< 1

Concentrations expressed in ug/l (ppb)
 unless otherwise stated.

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Analysis of metals are performed on the filtered sample.

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Analysis of Aqueous Samples

Date Sampled : 03.08.2010 and 04.08.2010 #
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

Semi-volatile Organic Compounds ug/L ++

DETERMINAND	Sample ID Lab ID	G5# 90131
Aniline	ug/l	<1.0
Bis(2-chloroethyl)ether	ug/l	<1.0
Phenol	ug/l	<1.0
2-Chlorophenol	ug/l	<1.0
Benzyl Alcohol	ug/l	<1.0
2-Methylphenol	ug/l	<1.0
3& 4-Methylphenol	ug/l	<1.0
2,4-dimethylphenol	ug/l	<1.0
Bis-(dichloroethoxy)methane	ug/l	<1.0
2,4-Dichlorophenol	ug/l	<1.0
1,2,4-Trichlorobenzene	ug/l	<1.0
Naphthalene	ug/l	<1.0
4-Chloro-3-methylphenol	ug/l	<1.0
2-Methylnaphthalene	ug/l	<1.0
Hexachlorocyclopentadiene	ug/l	<1.0
2,4,6 Trichlorophenol	ug/l	<1.0
2,4,5 Trichlorophenol	ug/l	<1.0
2-Chloronaphthalene	ug/l	<1.0
2-Nitroaniline	ug/l	<1.0
1,4-dinitrobenzene	ug/l	<1.0
Dimethyl phthalate	ug/l	<1.0
1,3-dinitrobenzene	ug/l	<1.0
Acenaphthylene	ug/l	<1.0
2,6-Dinitrotoluene	ug/l	<1.0
1,2-Dinitrobenzene	ug/l	<1.0
3-Nitroaniline	ug/l	<1.0
Acenaphthene	ug/l	<1.0
Dibenzofuran	ug/l	<1.0
2,4-Dinitrotoluene	ug/l	<1.0
4-Nitrophenol	ug/l	<1.0
2,3,4,6-Tetrachlorophenol	ug/l	<1.0
2,3,5,6-Tetrachlorophenol	ug/l	<1.0
Diethylphthalate	ug/l	<1.0
Fluorene	ug/l	<1.0
4-Chlorophenyl phenyl ether	ug/l	<1.0
4-Nitroaniline	ug/l	<1.0
Diphenylamine/4,6-Dinitro-2-methylphenol	ug/l	<1.0
Azobenzene	ug/l	<1.0
4-Bromophenyl phenyl ether	ug/l	<1.0
Hexachlorobenzene	ug/l	<1.0
Pentachlorophenol	ug/l	<1.0
Phenanthrene	ug/l	<1.0
Anthracene	ug/l	<1.0
Carbazole	ug/l	<1.0
Di-n-butylphthalate	ug/l	<1.0
Benzyl butyl phthalate	ug/l	<1.0
Bis(2-ethylhexyl)ester	ug/l	<1.0
Fluoranthene	ug/l	<1.0
Pyrene	ug/l	<1.0
Benzo(a)anthracene	ug/l	<1.0
Chrysene	ug/l	<1.0
Di-n-octyl phthalate	ug/l	<1.0
Benzo(b)fluoranthene	ug/l	<1.0
Benzo(k)fluoranthene	ug/l	<1.0
Benzo(a)pyrene	ug/l	<1.0
Indeno(1,2,3-cd)pyrene	ug/l	<1.0
Dibenz(a,h)anthracene	ug/l	<1.0
Benzo(ghi)pyrene	ug/l	<1.0

Results expressed as ug/l (ppb)
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ANALYSIS OF GROUNDWATER SAMPLES.

Date Sampled : 03.08.2010 and 04.08.2010#
 Date Received : 03.08.2010
 Date Analysis Commenced:03.08.2010
 Our Ref.: WS-27685, 10-40431, COV/714944/2010
 Your Ref : Ballymurtagh Landfill
 Certificate No: L/10/1652

ORGANOCHLORINE PESTICIDES (ng/L) ++

	CLIENT ID	G5#
DETERMINAND	LAB ID	90131
1,2,3- Trichlorobenzene	++	<20
1,2,4- Trichlorobenzene	++	<20
1,3,5- Trichlorobenzene	++	<20
Aldrin	++	<8
alpha-Endosulphan	++	<8
alpha-HCH	++	<6
beta-Endosulphan	++	<8
beta-HCH	++	<6
alpha-Chlordane	++	<8
Dichlobenil	++	<4
Dieldrin	++	<8
Endrin	++	<8
gamma-HCH	++	<6
Heptachlor Epoxide	++	<4
Hexachlorobenzene	++	<4
Hexachlorobutadiene	++	<14
Isodrin	++	<8
o,p - DDE	++	<4
p,p - DDE	++	<4
o,p - TDE	++	<4
p,p - TDE	++	<4
o,p - DDT	++	<4
p,p - DDT	++	<4
Tecnazene	++	<4
gamma-Chlordane	++	<4
Triallate	++	<4
Trifluralin	++	<4

Concentrations expressed in ng/l
 unless otherwise stated.

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