

# Appendix 11.7

**Thorntons**

recycling

## Groundwater: Analytical Results

### GROUNDWATER QUALITY

(Sheet 1 of 16) Monitoring Point/ Grid Reference: BH 2\_251944E 245686N

Parameter	Statutory Limits	Results 10/03/04	Results 28/04/04	Normal Analytical Range	Analysis method / technique
pH		6.98	7.06	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.716	0.728	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		<0.2	<0.2	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.3	4.4	0.1 and above	Probe
Total Solids (mg/l)		440	404	5 and above	Gravimetric
Calcium Ca (mg/l)		159.20	141.60	0.05 and above	ICP
Cadmium Cd (ug/l)	5.0 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	50 Note 2	<1	4	1 and above	ICP
Chloride Cl (mg/l)	250 Note 2	11	11	1 and above	Spectroscopy
Copper Cu (ug/l)	0 Note 4	5	6	5 and above	ICP
Cyanide Cn, total (mg/l)		<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	200 Note 2	33	50	1 and above	ICP
Lead Pb (ug/l)	10 Note 2	<5	<5	5 and above	ICP
Magnesium Mg (mg/l)		5.85	4.83	0.05 and above	ICP
Manganese Mn (ug/l)	50 Note 2 & 3	91	77	1 and above	ICP
Mercury Hg (ug/l)	1 Note 2	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)	0 Note 4	27	27	10 and above	ICP
Potassium K (mg/l)		0.4	0.4	0.2 and above	Flame Photo.
Sodium Na (mg/l)	200 Note 2	8.2	7.1	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	0.05 and above	Spectroscopy

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### GROUNDWATER QUALITY (SHEET 2 OF 16) BH2 CONTINUED

Parameter	Statutory Limits	Results 10/03/04	Results 28/04/04	Normal Analytical Range	Analysis method / technique
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	50	38	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	9	7	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		370	380	1 and above	Titration
Total organic carbon TOC (mg/l)		14	13	2 and above	IR
Arsenic As (ug/l)	10 Note 2	<0.3	0.6	0.3 and above	KONE
Barium Ba (mg/l)		<0.05	<2	5 and above	Hydride A.A.S
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0 / 1.5 Note 4	0.2	0.3	0.5 and above	KONE
Phenol (mg/l)		0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		<0.05	<0.05	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	3	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	5	5	1 and above	Count
Water level (m)		3.57	3.55		

NOTE 1: No data available  
NOTE 2: Drinking Water Directive (98/83/EC)  
NOTE 3: Surface Water Regulations (SI N<sup>o</sup>. 294/1989 EC)  
NOTE 4: EC Drinking Water Regulations (SI N<sup>o</sup>. 439/2000)  
NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

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GROUNDWATER QUALITY (SHEET 3 of 16) Monitoring Point<sup>1</sup>/ Grid Reference: BH 3\_252091E 245659N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		7.07	7.36	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.648	0.654	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		<0.2	<0.2	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.1	4.7	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		397	343	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	139.60	125.50	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	1	1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	10	10	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	149	167	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	4.62	3.85	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	202	174	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		11	<10	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.4	0.6	0.2 and above	Flame Photo.
Sodium Na (mg/l)		7.3	6.0	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

## GROUNDWATER QUALITY (SHEET 4 OF 16) BH3 CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	27	33	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	<5	<5	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		330	330	1 and above	Titration
Total organic carbon TOC (mg/l)		14	12	2 and above	IR
Total oxidised nitrogen TON (mg/l)		0.6	0.7	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		<0.05	<0.05	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0/1.5 Note 4	0.2	0.3	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		0.06	<0.05	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	6	6	1 and above	Count
Water level (m)		2.43	2.52		

NOTE 1: No data available

NOTE 2: Drinking Water Directive (98/83/EC)

NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)

NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)

NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

GROUNDWATER QUALITY (SHEET 5 of 16) Monitoring Point / Grid Reference: BH 4A\_251833E\_245803N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		6.69	7.09	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.654	0.684	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		3.6	3.8	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.2	4.0	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		442	381	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	138.8	134.7	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	2	1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	10	10	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	2411	948	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	4.45	3.80	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	291	235	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		<10	<10	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.6	0.6	0.2 and above	Flame Photo.
Sodium Na (mg/l)		7.5	6.5	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

ENVIRONMENTAL IMPACT STATEMENT

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GROUNDWATER QUALITY (SHEET 6 OF 16) BH4A CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	<3	<3	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	<5	<5	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		410	370	1 and above	Titration
Total organic carbon TOC (mg/l)		62	27	2 and above	IR
Total oxidised nitrogen TON (mg/l)		<0.3	<0.3	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		0.06	0.05	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0 / 1.5 Note 4	0.3	0.8	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		<0.05	0.10	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	30	30	1 and above	Count
Water level (m)		3.64	3.64		

NOTE 1: No data available  
 NOTE 2: Drinking Water Directive (98/83/EC)  
 NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)  
 NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)  
 NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

## GROUNDWATER QUALITY (SHEET 7 of 16) Monitoring Point / Grid Reference: BH 5\_251920E 245802N

Parameter	Statutory Limits	Results 10/03/04	Results 28/04/04	Normal Analytical Range	Analysis method / technique
pH		7.01	7.31	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.578	0.587	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		2.5	2.9	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.4	7.6	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		399	345	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	117.7	112.3	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	8	2	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	11	11	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	6205	3268	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	4.71	4.01	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	320	298	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		<10	<10	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.4	0.4	0.2 and above	Flame Photo.
Sodium Na (mg/l)		7.7	6.7	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

## GROUNDWATER QUALITY (SHEET 8 OF 16) BHs CONTINUED

Parameter	Statutory Limits	Results 10/03/04	Results 28/04/04	Normal Analytical Range	Analysis method / technique
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	<3	<3	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	<5	<5	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		320	330	1 and above	Titration
Total organic carbon TOC (mg/l)		57	25	2 and above	IR
Total oxidised nitrogen TON (mg/l)		<0.3	<0.3	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	2	5 and above	Hydride AAS
Barium Ba (mg/l)		0.08	0.06	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0 / 1.5 Note 4	0.3	0.9	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		0.17	0.13	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	50	50	1 and above	Count
Water level (m)		4.42	4.41		

NOTE 1: No data available

NOTE 2: Drinking Water Directive (98/83/EC)

NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)

NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)

NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

GROUNDWATER QUALITY (SHEET 9 of 16) Monitoring Point<sup>1</sup>/ Grid Reference: BH 6\_252032E 245760N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		6.85	7.16	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.738	0.706	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		<0.2	<0.2	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.8	8.0	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		469	458	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	158.4	144.1	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	<1	<1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	13	11	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	490	101	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	5.71	4.73	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	229	234	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		11	11	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.8	0.6	0.2 and above	Flame Photo.
Sodium Na (mg/l)		8.9	7.0	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

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GROUNDWATER QUALITY (SHEET 10 of 16) BH6 CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	35	33	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	7	8	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		390	370	1 and above	Titration
Total organic carbon TOC (mg/l)		16	13	2 and above	IR
Total oxidised nitrogen TON (mg/l)		<0.3	<0.3	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		<0.05	<0.05	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0/1.5 Note 4	0.2	0.3	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		0.06	0.06	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	2	<2	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	55	55	1 and above	Count
Water level (m)		3.72	3.70		

NOTE 1: No data available  
 NOTE 2: Drinking Water Directive (98/83/EC)  
 NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)  
 NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)  
 NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

GROUNDWATER QUALITY (SHEET 11 of 16) Monitoring Point<sup>1</sup>/ Grid Reference: BH 7\_252168E 245717N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		7.0	7.21	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.735	0.783	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		<0.2	<0.2	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.6	8.0	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		478	551	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	158.8	150.9	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	<1	<1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	11	11	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	9	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	20	9	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	5.79	5.12	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	107	87	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		13	14	10 and above	ICP
Potassium K (mg/l)	200 Note 2	1.0	1.0	0.2 and above	Flame Photo.
Sodium Na (mg/l)		8.5	7.4	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

## GROUNDWATER QUALITY (SHEET 12 OF 16) BH7 CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	46	49	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	7	6	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		370	370	1 and above	Titration
Total organic carbon TOC (mg/l)		58	9	2 and above	IR
Total oxidised nitrogen TON (mg/l)		3.2	2.7	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		<0.05	<0.05	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0/1.5 Note 4	0.2	0.3	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		0.11	0.05	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	3	3	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	10	10	1 and above	Count
Water level (m)		2.26	2.26		

NOTE 1: No data available

NOTE 2: Drinking Water Directive (98/83/EC)

NOTE 3: Surface Water Regulations (SI N<sup>o</sup>: 294/1989 EC)NOTE 4: EC Drinking Water Regulations (SI N<sup>o</sup>: 439/2000)

NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

GROUNDWATER QUALITY (SHEET 13 of 16) Monitoring Point<sup>1</sup>/ Grid Reference: BH 8\_252001E 245852N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		7.04	7.2	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.630	0.607	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		4.0	4.0	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		5.8	2.9	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		425	427	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 1	123.20	118.5	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	2	<1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	10	9	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cn, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	4695	534	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	4.62	4.01	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	478	465	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		<10	<10	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.4	0.6	0.2 and above	Flame Photo.
Sodium Na (mg/l)		7.3	6.4	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

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GROUNDWATER QUALITY (SHEET 14 of 16) BH8 CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	<3	<3	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	<5	<5	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		400	380	1 and above	Titration
Total organic carbon TOC (mg/l)		11	20	2 and above	IR
Total oxidised nitrogen TON (mg/l)		<0.3	<0.3	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		0.10	0.08	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0/1.5 Note 4	0.3	0.5	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		<0.05	0.09	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	3	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	1	1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	3	3	1 and above	Count
Water level (m)		3.85	3.83		

NOTE 1: No data available  
 NOTE 2: Drinking Water Directive (98/83/EC)  
 NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)  
 NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)  
 NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)

GROUNDWATER QUALITY (SHEET 15 of 16) Monitoring Point<sup>1</sup>/ Grid Reference: BH 9\_252142E 245822N

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
pH		6.75	7.20	0 to 14	Probe
Temperature		Note 1	Note 1	n/a	Probe
Electrical conductivity EC @ 25° C (mS/cm)		0.680	0.688	n/a	Probe
Ammoniacal nitrogen as N (mg/l)		0.5	0.4	0.2 and above	Spectroscopy
Dissolved oxygen DO (mg/l)		6.7	3.9	0.1 and above	Probe
Residue on evaporation (mg/l)		n/a	n/a	n/a	n/a
Total Solids (mg/l)		433	458	5 and above	Gravimetric
Calcium Ca (mg/l)	5.0 Note 2	142.30	135.9	0.05 and above	ICP
Cadmium Cd (ug/l)	50 Note 2	<0.4	<0.4	0.4 and above	ICP
Chromium Cr (ug/l)	250 Note 2	<1	<1	1 and above	ICP
Chloride Cl (mg/l)	0 Note 4	10	11	1 and above	Spectroscopy
Copper Cu (ug/l)		<5	<5	5 and above	ICP
Cyanide Cu, total (mg/l)	200 Note 2	<0.05	<0.05	0.05 and above	Spectroscopy
Iron Fe (ug/l)	10 Note 2	584	68	1 and above	ICP
Lead Pb (ug/l)		<5	<5	5 and above	ICP
Magnesium Mg (mg/l)	50 Note 2 & 5	5.51	4.84	0.05 and above	ICP
Manganese Mn (ug/l)	1 Note 2	232	213	1 and above	ICP
Mercury Hg (ug/l)	0 Note 4	<0.05	<0.05	0.05 and above	AAS
Nickel Ni (ug/l)		<10	<10	10 and above	ICP
Potassium K (mg/l)	200 Note 2	0.4	0.4	0.2 and above	Flame Photo.
Sodium Na (mg/l)		7.2	6.1	0.2 and above	Flame Photo.
Phosphate PO4 (mg/l)		n/a	n/a	n/a	n/a

## GROUNDWATER QUALITY (SHEET 16 of 16) BH9 CONTINUED

Parameter	Statutory Limits	Results	Results	Normal Analytical Range	Analysis method / technique
		10/03/04	28/04/04		
Sulphate SO <sub>4</sub> (mg/l)	200 Note 2	20	25	3 and above	Spectroscopy
Zinc Zn (ug/l)	3000 Note 3	<5	<5	5 and above	ICP
Total alkalinity (as CaCO <sub>3</sub> ) (mg/l)		370	380	1 and above	Titration
Total organic carbon TOC (mg/l)		13	11	2 and above	IR
Total oxidised nitrogen TON (mg/l)		<0.3	<0.3	0.3 and above	KONE
Arsenic As (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AAS
Barium Ba (mg/l)		0.06	0.05	0.05 and above	ICP
Boron B (mg/l)	1 Note 2	<0.05	<0.05	0.05 and above	ICP
Fluoride F (mg/l)	1.0 / 1.5 Note 4	0.2	0.3	0.5 and above	KONE
Phenol (mg/l)		<0.01	<0.01	0.01 and above	HPLC
Dissolved Phosphorus P (mg/l)		<0.05	0.06	0.05 and above	ICP
Selenium Se (ug/l)	10 Note 2	<2	<2	5 and above	Hydride AA
Silver Ag (ug/l)		<10	<10	10 and above	ICP
Nitrite NO <sub>2</sub>		n/a	n/a	n/a	n/a
Nitrate NO <sub>3</sub>		n/a	n/a	n/a	n/a
Faecal coliforms (cfu /100mls)	0 Note 2	<1	<1	1 and above	Count
Total coliforms (cfu /100mls)	0 Note 2	1	1	1 and above	Count
Water level (m)		2.78	2.77		

NOTE1: No data available

NOTE 2: Drinking Water Directive (98/83/EC)

NOTE 3: Surface Water Regulations (SI N°: 294/1989 EC)

NOTE 4: EC Drinking Water Regulations (SI N°: 439/2000)

NOTE 5: Manganese is non-toxic, but the limit value applies due to aesthetic value objections (staining of water)





### ALcontrol Laboratories Ireland Test Schedule

Ref Number: 04-B01114/01  
Client: Enviro (Dublin)  
Date of Receipt: 10/03/2004

Sample Type: WATER  
Location:  
Client Contact: Enda Hoey  
Client Ref: TH 071

Alcontrol Reference	Sample Identity	Other ID	P / V	Detection Method																
				UKAS Accredited	5 DAY ATU	AA	AA	CV AA	Filtration	Filtration	FLUVE PHOTO	FLUVE PHOTO	GRAVIMETRIC	HPLC	ICP	ICP	ICP	ICP		
				BOD Unfiltered			Disolved Aromatic Low Level	Disolved Selenium Low Level	Disolved Mercury Low Level	Faecal Coliforms	Total Coliforms	Potassium	Sodium	Total Solids	Total Phospho by HPLC	Disolved Barium	Disolved Boron	Disolved Calcium	Disolved Magnesium	
04-B01114-50013-406	BH 5	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50013-408	BH 5	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50013-410	BH 5	UNKNOWN	Glass Bottle																	
04-B01114-50013-412	BH 5	UNKNOWN	Glass Bottle																	
04-B01114-50013-401	BH 6	UNKNOWN	250ml Sterile																	
04-B01114-50014-404	BH 6	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50014-406	BH 6	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50014-408	BH 6	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50014-410	BH 6	UNKNOWN	Plastic Bottle																	
04-B01114-50014-412	BH 6	UNKNOWN	Glass Bottle																	
04-B01114-50015-401	BH 7	UNKNOWN	250ml Sterile																	
04-B01114-50015-403	BH 7	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50015-405	BH 7	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50015-407	BH 7	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50015-409	BH 7	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50015-411	BH 7	UNKNOWN	Plastic Bottle																	
04-B01114-50015-413	BH 7	UNKNOWN	Glass Bottle																	
04-B01114-50016-401	BH 8	UNKNOWN	250ml Sterile																	
04-B01114-50016-403	BH 8	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50016-405	BH 8	UNKNOWN	Plastic Bottle - 250ml																	

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

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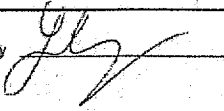
### ALcontrol Laboratories Ireland Test Schedule

Ref Number: 04-B01114/01  
Client: Enviro (Dublin)  
Date of Receipt: 10/03/2004

Sample Type: WATER  
Location:  
Client Contact: Enda Hoey  
Client Ref: TH 071

Alcontrol Reference	Sample Identity	Other ID	P / V	Detection Method																
				UKAS Accredited	5 DAY ATU	AA	AA	CV AA	Filtration	Filtration	FLUVE PHOTO	FLUVE PHOTO	GRAVIMETRIC	HPLC	ICP	ICP	ICP	ICP		
				BOD Unfiltered			Disolved Aromatic Low Level	Disolved Selenium Low Level	Disolved Mercury Low Level	Faecal Coliforms	Total Coliforms	Potassium	Sodium	Total Solids	Total Phospho by HPLC	Disolved Barium	Disolved Boron	Disolved Calcium	Disolved Magnesium	
04-B01114-50016-410	BH 8	UNKNOWN	Plastic Bottle																	
04-B01114-50016-412	BH 8	UNKNOWN	Glass Bottle																	
04-B01114-50017-401	BH 9A	UNKNOWN	250ml Sterile																	
04-B01114-50017-403	BH 9A	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50017-405	BH 9A	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50017-407	BH 9A	UNKNOWN	Plastic Bottle - 250ml																	
04-B01114-50017-410	BH 9A	UNKNOWN	Plastic Bottle																	
04-B01114-50017-412	BH 9A	UNKNOWN	Glass Bottle																	
04-B01114-50018-401	SW 4A	UNKNOWN	Plastic Bottle																	
04-B01114-50018-403	SW 4A	UNKNOWN	Plastic Bottle																	
04-B01114-50018-417	SW 4A	UNKNOWN	Glass Bottle																	

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By 



# ALcontrol Laboratories Ireland

## Test Schedule

Ref Number: 04-B01114/01

Client: Enviro (Dublin)

Date of Receipt: 10/03/2004

Sample Type: WATER

Location:

Client Contact: Enda Hoey

Client Ref: TH 071

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method											IR	KONE	KONE	KONE
				UKAS Accredited	ICP	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN				
				Disolved Phosphorus	Disolved Calcium Low Level	Disolved Chromium Low Level	Disolved Copper Low Level	Disolved Iron Low Level	Disolved Lead Low Level	Disolved Manganese Low Level	Disolved Nickel Low Level	Disolved Silver Low Level	Disolved Zinc Low Level	Total Organic Carbon	Chloride	Fluoride	Sulphate	
04-B01114-50014-A01	BH 2	UNKNOWN	250ml Sterile															
04-B01114-50016-A01	BH 2	UNKNOWN	Plastic Bottle - F250															
04-B01114-50018-A06	BH 2	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A10	BH 2	UNKNOWN	Plastic Bottle	X														
04-B01114-50019-A26	BH 2	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 2	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 2	UNKNOWN	250ml Sterile															
04-B01114-50019-A26	BH 3	UNKNOWN	Plastic Bottle - F250															
04-B01114-50019-A26	BH 3	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 3	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 3	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 3	UNKNOWN	Plastic Bottle	X														
04-B01114-50019-A26	BH 3	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 3	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 3	UNKNOWN	250ml Sterile															
04-B01114-50019-A26	BH 4A	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 4A	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 4A	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 4A	UNKNOWN	Plastic Bottle - A400															
04-B01114-50019-A26	BH 4A	UNKNOWN	Plastic Bottle	X														
04-B01114-50019-A26	BH 4A	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 4A	UNKNOWN	Glass Bottle		X													
04-B01114-50019-A26	BH 5	UNKNOWN	250ml Sterile															
04-B01114-50019-A26	BH 5	UNKNOWN	Plastic Bottle - A400															

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

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Printed at 10:05 on 15/03/2004

\* SUBCONTRACTED TO OTHER LABORATORY / \*\* SAMPLES ANALYSED AT THE CHESTER LABORATORY

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ENVIRONMENTAL IMPACT STATEMENT

# ALcontrol Laboratories Ireland

## Test Schedule

Ref Number: 04-B01114/01

Client: Enviro (Dublin)

Date of Receipt: 10/03/2004

Sample Type: WATER

Location:

Client Contact: Enda Hoey

Client Ref: TH 071

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method											IR	KONE	KONE	KONE
				UKAS Accredited	ICP	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN	ICP USN				
				Disolved Phosphorus	Disolved Calcium Low Level	Disolved Chromium Low Level	Disolved Copper Low Level	Disolved Iron Low Level	Disolved Lead Low Level	Disolved Manganese Low Level	Disolved Nickel Low Level	Disolved Silver Low Level	Disolved Zinc Low Level	Total Organic Carbon	Chloride	Fluoride	Sulphate	
04-B01114-50013-A06	BH 5	UNKNOWN	Plastic Bottle - A400															
04-B01114-50013-A06	BH 5	UNKNOWN	Plastic Bottle - A400															
04-B01114-50013-A10	BH 5	UNKNOWN	Plastic Bottle	X														
04-B01114-50013-A26	BH 5	UNKNOWN	Glass Bottle		X													
04-B01114-50014-A01	BH 6	UNKNOWN	250ml Sterile															
04-B01114-50014-A01	BH 6	UNKNOWN	Plastic Bottle - A400															
04-B01114-50014-A06	BH 6	UNKNOWN	Plastic Bottle - A400															
04-B01114-50014-A10	BH 6	UNKNOWN	Plastic Bottle	X														
04-B01114-50014-A26	BH 6	UNKNOWN	Glass Bottle		X													
04-B01114-50015-A01	BH 7	UNKNOWN	250ml Sterile															
04-B01114-50015-A01	BH 7	UNKNOWN	Plastic Bottle - A400															
04-B01114-50015-A06	BH 7	UNKNOWN	Plastic Bottle - A400															
04-B01114-50015-A10	BH 7	UNKNOWN	Plastic Bottle - A400															
04-B01114-50015-A26	BH 7	UNKNOWN	Plastic Bottle	X														
04-B01114-50015-A26	BH 7	UNKNOWN	Glass Bottle		X													
04-B01114-50015-A26	BH 8	UNKNOWN	250ml Sterile															
04-B01114-50015-A26	BH 8	UNKNOWN	Plastic Bottle - A400															
04-B01114-50015-A26	BH 8	UNKNOWN	Plastic Bottle - A400															
04-B01114-50015-A26	BH 8	UNKNOWN	Plastic Bottle - A400															

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By *JLS*

Printed at 10:05 on 15/03/2004

\* SUBCONTRACTED TO OTHER LABORATORY / \*\* SAMPLES ANALYSED AT THE CHESTER LABORATORY

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AM1 7-11

### ALcontrol Laboratories Ireland Test Schedule

**Ref Number: 04-B01114/01**      **Sample Type: WATER**  
**Client: Enviro (Dublin)**      **Location:**  
**Date of Receipt: 10/03/2004**      **Client Contact: Enda Hoey**  
**Client Ref: TH 071**

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method											TR	KONE	KONE	KONE
				UKAS Accredited	TCP	TCP USN	TCP USH	TCP USN	TCP USN	TCP USN	TCP USN	TCP USH	TCP USN	TCP USN				
				Disolved Phosphorus														
				Disolved Calcium Low Level														
				Disolved Chromium Low Level														
				Disolved Copper Low Level														
				Disolved Iron Low Level														
				Disolved Lead Low Level														
				Disolved Manganese Low Level														
				Disolved Nickel Low Level														
				Disolved Silver Low Level														
				Disolved Zinc Low Level														
				Total Organic Carbon														
				Chloride														
				Fluoride														
				Sulphate														
04-B01114-50016-A10	BH B	UNKNOWN	Plastic Bottle	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50016-A35	BH B	UNKNOWN	Glass Bottle															
04-B01114-50017-A01	BH 9A	UNKNOWN	250ml Sterile															
04-B01114-50017-A04	BH 9A	UNKNOWN	Plastic Bottle + 250ml															
04-B01114-50017-A05	BH 9A	UNKNOWN	Plastic Bottle + 250ml															
04-B01114-50017-A08	BH 9A	UNKNOWN	Plastic Bottle + 250ml															
04-B01114-50017-A10	BH 9A	UNKNOWN	Plastic Bottle	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50017-A28	BH 9A	UNKNOWN	Glass Bottle															
04-B01114-50018-A01	SW 4A	UNKNOWN	Plastic Bottle + 100ml	On Hold														
04-B01114-50018-A02	SW 4A	UNKNOWN	Plastic Bottle		X	X	X	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50018-A17	SW 4A	UNKNOWN	Glass Bottle															

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By 

### ALcontrol Laboratories Ireland Test Schedule

**Ref Number: 04-B01114/01**      **Sample Type: WATER**  
**Client: Enviro (Dublin)**      **Location:**  
**Date of Receipt: 10/03/2004**      **Client Contact: Enda Hoey**  
**Client Ref: TH 071**

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method										
				UKAS Accredited	KONE	METER	METER	METER	SPECTRO	SPECTRO	SPECTRO	TITRATION		
				Total Oxidised Nitrogen										
				Conductivity										
				Disolved Oxygen										
				pH (Liquid)										
				Ammoniacal Nitrogen										
				COD Settled										
				Total Cyanide										
				Total Alkalinity										
04-B01114-50016-A01	BH 2	UNKNOWN	250ml Sterile											
04-B01114-50016-A04	BH 2	UNKNOWN	Water Bottle + 250ml											
04-B01114-50016-A06	BH 2	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A08	BH 2	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A10	BH 2	UNKNOWN	Plastic Bottle	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50016-A20	BH 2	UNKNOWN	Glass Bottle											
04-B01114-50016-A30	BH 3	UNKNOWN	250ml Sterile											
04-B01114-50016-A09	BH 3	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A05	BH 3	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A08	BH 3	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A10	BH 3	UNKNOWN	Plastic Bottle	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50016-A26	BH 3	UNKNOWN	Glass Bottle											
04-B01114-50016-A07	BH 4A	UNKNOWN	250ml Sterile											
04-B01114-50016-A09	BH 4A	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A06	BH 4A	UNKNOWN	Plastic Bottle + 250ml											
04-B01114-50016-A10	BH 4A	UNKNOWN	Plastic Bottle	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50016-A26	BH 4A	UNKNOWN	Glass Bottle											
04-B01114-50016-A01	BH 5	UNKNOWN	250ml Sterile											
04-B01114-50016-A04	BH 5	UNKNOWN	Plastic Bottle + 250ml											

Notes : NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By 



**ALcontrol Laboratories Ireland**  
Test Schedule

Ref Number: 04-B01114/01  
Client: Enviro (Dublin)  
Date of Receipt: 10/03/2004

Sample Type: WATER  
Location:  
Client Contact: Enda Hoey  
Client Ref: TH 071

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method												
				UKAS Accredited	KONE	METER	METER	METER	SPECTRO	SPECTRO	SPECTRO	TITRATION				
				Total Dissolved Nitrogen	Conductivity	Dissolved Oxygen	pH (Liquid)	Ammoniacal Nitrogen	COD Settled	Total Cranite	Total Alkalinity					
04-B01114-50013-A03	BH 5	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50013-A04	BH 5	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50013-A05	BH 5	UNKNOWN	Glass Bottle	X												
04-B01114-50013-A06	BH 6	UNKNOWN	250ml Sterile	X												
04-B01114-50014-A04	BH 6	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50014-A05	BH 6	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50014-A06	BH 6	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50014-A10	BH 6	UNKNOWN	Plastic Bottle	X												
04-B01114-50014-A25	BH 6	UNKNOWN	Glass Bottle	X												
04-B01114-50015-A20	BH 7	UNKNOWN	250ml Sterile	X												
04-B01114-50015-A04	BH 7	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50015-A06	BH 7	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50015-A08	BH 7	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50015-A10	BH 7	UNKNOWN	Plastic Bottle	X												
04-B01114-50015-A25	BH 7	UNKNOWN	Glass Bottle	X												
04-B01114-50016-A01	BH 8	UNKNOWN	250ml Sterile	X												
04-B01114-50016-A04	BH 8	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50016-A05	BH 8	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50016-A25	BH 8	UNKNOWN	Glass Bottle	X												

Notes: NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By 

ENVIRONMENTAL IMPACT STATEMENT

**ALcontrol Laboratories Ireland**  
Test Schedule

Ref Number: 04-B01114/01  
Client: Enviro (Dublin)  
Date of Receipt: 10/03/2004

Sample Type: WATER  
Location:  
Client Contact: Enda Hoey  
Client Ref: TH 071

ALcontrol Reference	Sample Identity	Other ID	P / V	Detection Method												
				UKAS Accredited	KONE	METER	METER	METER	SPECTRO	SPECTRO	SPECTRO	TITRATION				
				Total Dissolved Nitrogen	Conductivity	Dissolved Oxygen	pH (Liquid)	Ammoniacal Nitrogen	COD Settled	Total Cranite	Total Alkalinity					
04-B01114-50016-A10	BH 8	UNKNOWN	Plastic Bottle	X	X	X	X									
04-B01114-50016-A25	BH 8	UNKNOWN	Glass Bottle	X												
04-B01114-50017-A01	BH 9A	UNKNOWN	250ml Sterile	X												
04-B01114-50017-A04	BH 9A	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50017-A06	BH 9A	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50017-A08	BH 9A	UNKNOWN	Plastic Bottle - 100ml	X												
04-B01114-50017-A10	BH 9A	UNKNOWN	Plastic Bottle	X												
04-B01114-50017-A20	BH 9A	UNKNOWN	Glass Bottle	X												
04-B01114-50018-A01	SW 4A	UNKNOWN	Plastic Bottle - 100ml	On Hold												
04-B01114-50018-A02	SW 4A	UNKNOWN	Plastic Bottle - 100ml	X	X	X	X	X	X	X	X	X	X	X	X	X
04-B01114-50018-A17	SW 4A	UNKNOWN	Glass Bottle	X												

Notes: NUMERIC VALUES INDICATE ADDITIONAL SCHEDULING

Checked By 

A11.7-13

ALcontrol Laboratories Ireland Table Of Results

Interim Validated

Ref Number: 04-B01114/01 Client: Enviro (Dublin) Date of Receipt: 10/03/2004

Sample Type: WATER Location: Client Contact: Enda Hoey Client Ref: TH 071

Table with columns: Detection Method, Method Detection Limit, 5 DAY ATU, AA, AA, CV AA, Filtration, Filtration, FUME PACTO, FLAME PHOTO, GRAVIMETRIC, HPLC, ICP, ICP, ICP, ICP, ICP. Rows include sample IDs like 04-B01114-S0010 to 04-B01114-S0018.

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. NDP = NO DETERMINATION POSSIBLE. NFP = NO FIBRES PRESENT.

Checked By: Dylan Halpin

ENVIRONMENTAL IMPACT STATEMENT

ALcontrol Laboratories Ireland Table Of Results

Interim Validated

Ref Number: 04-B01114/01 Client: Enviro (Dublin) Date of Receipt: 10/03/2004

Sample Type: WATER Location: Client Contact: Enda Hoey Client Ref: TH 071

Table with columns: Detection Method, Method Detection Limit, ICP USN, ICP USN, ICP USN, ICP USN, ICP USN, ICP USN, ICP USN, ICP USN, ICP USN, TR, KONE, KONE, KONE, KONE, METER. Rows include sample IDs like 04-B01114-S0010 to 04-B01114-S0018.

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL. NDP = NO DETERMINATION POSSIBLE. NFP = NO FIBRES PRESENT.

Checked By: Dylan Halpin



Interim  
 Validated

ALcontrol Laboratories Ireland  
Table Of Results

Ref Number: 04-B01114/01  
Client: Enviros (Dublin)  
Date of Receipt: 10/03/2004  
(of first sample)

Sample Type: WATER  
Location:  
Client Contact: Enda Hoey  
Client Ref: TH 071

Alcontrol Reference	Sample Identity	Other ID	METER		SPECTRO	SPECTRO	SPECTRO	TITRATION
			Method	Detection Limit	<0.1mg/l	<0.2mg/l	<15mg/l	<0.05mg/l
			Dissolved Oxygen					
			pH					
					Ammoniacal Nitrogen as N			
					COD settled			
					Total Cyanide			
					Total Alkalinity as CaCO3			
			mg/l	pH Units	mg/l	mg/l	mg/l	mg/l
04-B01114-S0010	BH 2	UNKNOWN	6.3	6.98	<0.2		<0.05	370
04-B01114-S0011	BH 3	UNKNOWN	6.1	7.07	<0.2		<0.05	330
04-B01114-S0012	BH 4A	UNKNOWN	6.2	6.69	3.6		<0.05	410
04-B01114-S0013	BH 5	UNKNOWN	6.4	7.01	2.5		<0.05	320
04-B01114-S0014	BH 6	UNKNOWN	6.8	6.85	<0.2		<0.05	390
04-B01114-S0015	BH 7	UNKNOWN	6.6	7.00	<0.2		<0.05	370
04-B01114-S0016	BH 8	UNKNOWN	6.8	7.04	4.0		<0.05	400
04-B01114-S0017	BH 9A	UNKNOWN	6.7	6.75	0.5		<0.05	370
04-B01114-S0018	SW 4A	UNKNOWN	6.6	7.62	<0.2	<15		406

Notes: METHOD DETECTION LIMITS ARE NOT ALWAYS ACHIEVABLE DUE TO VARIOUS CIRCUMSTANCES BEYOND OUR CONTROL.

NDP = NO DETERMINATION POSSIBLE

NFP = NO FIBRES PRESENT

Checked By Dylan Halpin Dylan Halpin

Printed at 16:14 on 26/03/2004

\* SUBCONTRACTED TO OTHER LABORATORY / \*\* SAMPLES ANALYSED AT THE CHESTER LABORATORY

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APPENDIX

- Results are expressed as mg/kg dry weight (dried at 35°C) on all soil analyses except for the following:  
NFA Leach tests, flash point, and ammoniacal N<sub>2</sub> by the BRE method.
- Samples will be run in duplicate upon request, but an additional charge may be incurred.
- A sub sample of all samples received will be retained free of charge for one month for soils and one month for waters (sample size permitting) but may then be discarded 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.
- 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.
- 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.
- When requested, an asbestos screen is done in-house on soils and if no fibres are found will be reported as NFD - no fibres detected. If asbestos is detected, then identification and quantification is carried out by Alcontrol Technichem. If a sample is suspected of containing asbestos, then drying and crushing will be suspended on that sample until the asbestos results is known. If asbestos is present, then no analysis requiring dry sample will be undertaken.
- If no separate volatile sample is supplied by the client, the integrity of the data may be compromised if the laboratory is required to create a sub-sample from the bulk sample - similarly, if a headspace is present in the volatile sample.
- NDP - No determination possible due to insufficient/unusable sample.
- Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.
- A table containing the date of analysis for each parameter is not routinely included with the report, but is available upon request.  
Last updated January 2004