

Attention : Neil Coleman
SEPTTECH PURIFICATION PTY LTD
Level 6, 35 Mail Street
BROADWAY NSW 2007
Phone : 9331 6073
Fax : 9212 6742

AWTS ACCREDITATION PERFORMANCE TESTING AT MOSS VALE STP - FINAL SUMMARY REPORT

In accordance with the NSW Health Department Aerated Wastewater Treatment Systems (AWTS) Accreditation Guideline, September 1998 Part 3, Clause 95B, Local Government Approvals Regulation, 1993.

Microtech Laboratories (NSW) Pty. Ltd. performed independent sampling and analysis of this AWTS system in accordance with the instructions of the AWTS Manufacturers' Association and its members, ensuring that no tampering occurred during the performance testing period.

Microtech provided the following services/staff for this project:

- Microtech Project Manager (Senior Scientist)
- Qualified Microtech Microbiological Sampling Technician to conduct on site sampling
- Therese Fiapper(Alchemy Sciences) under sub-contract to assist with on site sampling and analysis
- Development and documentation of supplementary sampling protocols as necessary
- Design and commissioning of sample collection systems
- Co-ordination and supervision of collection, storage and transfer of samples to the laboratories
- Microbiological analysis of samples (Thermotolerant coliform count)
- Reporting of all analytical data for the project (both chemical and microbiological)
- Provision of all sample containers, eskies, ice etc. for the storage and transport of samples to the laboratory
- Organisation of off-site Chemical analysis of samples by GM Laboratories (BOD5, SS, Ammonia, TKN, etc.)

Sampling Points for each AWTS System were determined through consultation between the AWTS Manufacturers' Association, Quality Assurance Services, and NSW Health.

The body of water in an AWTS system is dynamic and non-homogenous, so the chemical and microbiological data from one sample may not be representative of the entire mass of water or of other samples taken from the same system. Consequently, the data may not validate or verify the performance of the AWTS at the time of sampling.

Chemical analyses were conducted by GM Laboratories, NATA Registration No: 2289;

Date:

James Benson, BSc (Hons), MAIFST, MASM
Microbiologist



Certificate No:

This laboratory is accredited by the National Association of Testing Authorities, Australia.

The test(s) reported herein have been performed in accreditation with its terms of registration.

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MOSS VALE AWTS ACCREDITATION SITE INFLUENT RESULTS

Date Sampled :

Test Parameter	Sample Type		INFLUENT	INFLUENT
	Sampling Time		9.30 AM	10.30 AM
Test Parameter	Method	Units		
BOD5	358	mg/L		
Phosphorous (Total)	472	mgP/L		
Suspended Solids/NFR	128	mgN/L		
Total Nitrogen (as N)	520	mgN/L		

Date Sampled : 04.07.00

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Sampling Time		9.15 AM	9.45 AM	10.15 AM	10.45 AM
Test Parameter	Method	Units				
BOD5	358	mg/L	66	140	130	100
Phosphorous (Total)	472	mgP/L	4.7	4.4	4.8	5.3
Suspended Solids/NFR	128	mgN/L	170	160	170	180
Total Nitrogen (as N)	520	mgN/L	36	40	39	40

Date Sampled : 05.07.00

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Sampling Time		9.30 AM	10.00 AM	10.30 AM	11.00 AM	11.30 AM
Test Parameter	Method	Units					
BOD5	358	mg/L	170	140	120	130	140
Phosphorous (Total)	472	mgP/L	7.1	6	6	7	7.3
Suspended Solids/NFR	128	mgN/L	200	160	170	130	180
Total Nitrogen (as N)	520	mgN/L	43	48	50	54	42

Date Sampled : 06.07.00

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Sampling Time		9.00 AM	9.30 AM	10.00 AM	11.00 AM
Test Parameter	Method	Units				
BOD5	358	mg/L				
Phosphorous (Total)	472	mgP/L				
Suspended Solids/NFR	128	mgN/L				
Total Nitrogen (as N)	520	mgN/L				

Date Sampled :

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Sampling Time		9.30 AM	10.00 AM	10.30 AM	11.00 AM
Test Parameter	Method	Units				
BOD5	358	mg/L	180	150	130	150
Phosphorous (Total)	472	mgP/L	0.9	1.9	1.6	1.7
Suspended Solids/NFR	128	mgN/L	530	180	180	200
Total Nitrogen (as N)	520	mgN/L	70	54	54	49

Source: Sydney\Labrept2000SEPTTECH\MAY\Sept3_Jul.xls

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- Microbiological analysis of samples (Thermotolerant coliform count)
- Reporting of all analytical data for the project (both chemical and microbiological)
- Provision of all sample containers, eskies, ice etc. for the storage and transport of samples to the laboratory
- Organisation of off-site Chemical analysis of samples by GM Laboratories (BOD5, SS, Ammonia, TKN, etc.)

Sampling Points for each AWTS System were determined through consultation between the AWTS Manufacturers' Association, Quality Assurance Services, and NSW Health.

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Chemical analyses were conducted by GM Laboratories, NATA Registration No: 2289;
Report Numbers: G 37697-1; G 37738-1; G 37767-1; G 37780-1; G 37698-1; G 37740-1; G 37781-1; G 37768

Date: 13.06.00

James Benson, BSc (Hons), MAIFST, MASM
Microbiologist



Certificate No: 00.10719SX

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AWTS SYSTEM IDENTIFICATION : SEPT

Date Sampled: 04.07.00

Job No: 00070035

Sample No: 001-015

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	3	ND	ND	22				
Free Chlorine	HachCN70	ppm	0.25	0.3	0.3	0.2	0.3				
BOD 5	GM 358	mg/L	3	3	2	2	5	7	8	8	9
Suspended Solids/NFR	GM 128	mg/L	9	15	14	12	16	14	13	10	20
Dissolved Oxygen	TPS	ppm	7.51	7.33	7.34	7.3	6.91				

Date Sampled: 05.07.00

Job No: 00070083

Sample No: 001-015

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	1	ND				
Free Chlorine	HachCN70	ppm	0.3	0.3	0.9	0.65	0.55				
BOD 5	GM 358	mg/L	3	3	3	4	3	7	7	7	8
Suspended Solids/NFR	GM 128	mg/L	9	5	3	8	8	9	9	9	9
Dissolved Oxygen	TPS	ppm	6.9	7.06	6.65	6.76	6.46				

Date Sampled: 06.07.00

Lab Ref No: 12488SE-12502SE

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	2	ND				
Free Chlorine	HachCN70	ppm	0.35	0.65	0.5	0.5	0.45				
BOD 5	GM 358	mg/L	2	2	2	6	5	7	<6	<6	7
Suspended Solids/NFR	GM 128	mg/L	6	11	7	6	7	5	3	5	9
Dissolved Oxygen	TPS	ppm	6.97	6.87	6.7	6.74	6.67				

Date Sampled: 07.07.00

Lab Ref No: 12789SE-12803SE

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	ND				
Free Chlorine	HachCN70	ppm	0.35	0.4	0.4	0.4	0.4				
BOD 5	GM 358	mg/L	5	6	5	4	8	7	7	8	9
Suspended Solids/NFR	GM 128	mg/L	9	9	9	9	9	6	9	12	9
Dissolved Oxygen	TPS	ppm	6.36	6.76	7.11	6.73	6.95				

Source : Sydney\Labrept2000\SEPTTECH\MAY\Sept3_Jul.xls

Comments :

The DO Readings were taken from the Aeration Chamber of each AWTS system

AWTS SYSTEM IDENTIFICATION : SEPT

Date Sampled: 24.05.00

Lab Ref No: 09867SX-09880SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	1				
Free Chlorine	HachCN70	ppm	0.4	0.5	0.7	0.4	0.4				
BOD 5	GM 358	mg/L	3	2	7	8	18	11	13	15	19
Suspended Solids/NFR	GM 128	mg/L	3	3	3	12	15	7	8	10	16
Dissolved Oxygen	TPS	ppm	6.56	6.3	>2*	>2*	>2*				

Date Sampled: 25.05.00

Lab Ref No: 09940SX-9953SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	29	22	ND	ND	10				
Free Chlorine	HachCN70	ppm	0.6	0.5	0.5	0.4	0.4				
BOD 5	GM 358	mg/L	6	22	9	20	23	22	23	23	24
Suspended Solids/NFR	GM 128	mg/L	13	13	13	9	15	16	13	22	17
Dissolved Oxygen	TPS	ppm	4	4.9	4.8	4.9	4.6				

Date Sampled: 26.05.00

Lab Ref No: 10034SX-10047SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	1	ND				
Free Chlorine	HachCN70	ppm	0.4	0.5	0.5	0.5	0.4				
BOD 5	GM 358	mg/L	4	3	3	3	4	2	15	15	17
Suspended Solids/NFR	GM 128	mg/L	8	9	6	8	9	8	11	10	12
Dissolved Oxygen	TPS	ppm	5.7	5.4	5.4	5.4	5.1				

Date Sampled: 27.05.00

Lab Ref No: 10143-46SX; 10152-56SX; 10106-10SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.15	10.45	11.15	9.15	9.45	10.15	10.45
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	11				
Free Chlorine	HachCN70	ppm	0.4	0.3	0.5	0.4	0.4				
BOD 5	GM 358	mg/L	6	7	7	7	4	6	5	6	6
Suspended Solids/NFR	GM 128	mg/L	19	13	11	12	15	10	13	19	17
Dissolved Oxygen	TPS	ppm	5.4	5.4	5.4	5.4	5.2				

Source : Sydney\\Labrept2000\SEPTTECH\MAY\Sept2_May.xls

Comments :

The DO Readings were taken from the Aeration Chamber of each AWTS system

*Dissolved oxygen meter malfunctioned - Sampling technician conferred with Garry Kimble and both agreed that DO reading would have been greater than 2ppm as required by the guideline.

MOSS VALE AWTS ACCREDITATION SITE INFLUENT RESULTS

Date Sampled : 23.05.00

Lab Ref No:10706SX-70707SX

Test Parameter	Sample Type		INFLUENT	INFLUENT
	Method	Units	9.30 AM	10.30 AM
BOD5	358	mg/L	230	250
Phosphorous (Total)	472	mgP/L	12	12
Suspended Solids/NFR	128	mgN/L	340	310
Total Nitrogen (as N)	520	mgN/L	78	76

Date Sampled : 24.05.00

Lab Ref No: 10708SX-10711SX

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	9.00 AM	10.00 AM	10.30 AM	11.00 AM
BOD5	358	mg/L	170	240	300	260
Phosphorous (Total)	472	mgP/L	12	12	15	13
Suspended Solids/NFR	128	mgN/L	320	310	530	320
Total Nitrogen (as N)	520	mgN/L	78	78	85	80

Date Sampled : 25.05.00

Lab Ref No: 10712SX-10715SX

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	250	240	710	240
Phosphorous (Total)	472	mgP/L	11	11	11	11
Suspended Solids/NFR	128	mgN/L	280	380	340	280
Total Nitrogen (as N)	520	mgN/L	75	75	74	71

Date Sampled : 26.05.00

Lab Ref No: 10716SX-10719SX

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	180	150	170	170
Phosphorous (Total)	472	mgP/L	11	13	12	13
Suspended Solids/NFR	128	mgN/L	270	430	310	290
Total Nitrogen (as N)	520	mgN/L	67	67	70	57

Date Sampled : 27.05.00

Lab Ref No: 10147SX-10151SX

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	100	80	150	140
Phosphorous (Total)	472	mgP/L	11	8	11	12
Suspended Solids/NFR	128	mgN/L	140	460	350	370
Total Nitrogen (as N)	520	mgN/L	74	41	77	74

Source: Sydney\Labrept2000SEPTTECH\MAY\Sept2_May.xls

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WTS ACCREDITATION PERFORMANCE TESTING T MOSS VALE STP - FINAL SUMMARY REPORT

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Chemical analyses were conducted by GM Laboratories, NATA Registration No: 2289;
Report Numbers: G 37697-1; G 37738-1; G 37767-1; G 37780-1; G 37698-1; G 37740-1; G 37741-1

Date: 13.06.00

James Benson, BSc (Hons), MAIFST, MASM
Microbiologist

Certificate No: 00.10719SX



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MOSS VALE AWTS ACCREDITATION SITE INFLUENT R

Date Sampled : 23.05.00

Lab Ref No:10706SX-70707SX

Test Parameter	Sample Type		INFLUENT	INFLUENT
	Method	Units	9.30 AM	10.30 AM
BOD5	358	mg/L	230	250
Phosphorous (Total)	472	mgP/L	12	12
Suspended Solids/NFR	128	mgN/L	340	310
Total Nitrogen (as N)	520	mgN/L	78	76

Date Sampled : 24.05.00

Lab Ref No: 10708SX-10711SX

Test Parameter	Sample Type		NFLUEN	NFLUEN	NFLUEN	NFLUEN
	Method	Units	9.00 AM	10.00 AM	10.30 AM	11.00 AM
BOD5	358	mg/L	170	240	300	260
Phosphorous (Total)	472	mgP/L	12	12	15	13
Suspended Solids/NFR	128	mgN/L	320	310	530	320
Total Nitrogen (as N)	520	mgN/L	78	78	85	80

Date Sampled : 25.05.00

Lab Ref No: 10712SX-10715SX

Test Parameter	Sample Type		NFLUEN	NFLUEN	NFLUEN	NFLUEN
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	250	240	710	240
Phosphorous (Total)	472	mgP/L	11	11	11	11
Suspended Solids/NFR	128	mgN/L	280	380	340	280
Total Nitrogen (as N)	520	mgN/L	75	75	74	71

Date Sampled : 26.05.00

Lab Ref No: 10716SX-10719SX

Test Parameter	Sample Type		NFLUEN	NFLUEN	NFLUEN	NFLUEN
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	180	150	170	170
Phosphorous (Total)	472	mgP/L	11	13	12	13
Suspended Solids/NFR	128	mgN/L	270	430	310	290
Total Nitrogen (as N)	520	mgN/L	67	67	70	57

Date Sampled : 27.05.00

Lab Ref No: 10147SX-10151SX

Test Parameter	Sample Type		NFLUEN	NFLUEN	NFLUEN	NFLUEN
	Method	Units	9.00 AM	9.30 AM	10.00 AM	11.00 AM
BOD5	358	mg/L	100	80	150	140
Phosphorous (Total)	472	mgP/L	11	8	11	12
Suspended Solids/NFR	128	mgN/L	140	460	350	370
Total Nitrogen (as N)	520	mgN/L	74	41	77	74

Source: Sydney\\Labrept2000SEPTTECH\MAY\Sept2_May.xls

AWTS SYSTEM IDENTIFICATION : SEPT

Date Sampled: 24.05.00

Lab Ref No: 09867SX-09880SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.1	10.45	11.15	9.15	9.45	10.1	10.45
Thermotolerant Coliform C	Mic 12.2	cfu/100mls	ND	ND	ND	ND	1				
Free Chlorine	HachCN70	ppm	0.4	0.5	0.7	0.4	0.4				
BOD 5	GM 358	mg/L	3	2	7	8	18	11	13	15	19
Suspended Solids/NFR	GM 128	mg/L	3	3	3	12	15	7	8	10	16
Dissolved Oxygen	TPS	ppm	6.56	6.3	>2*	>2*	>2*				

Date Sampled: 25.05.00

Lab Ref No: 09940SX-9953SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.1	10.45	11.15	9.15	9.45	10.1	10.45
Thermotolerant Coliform C	Mic 12.2	cfu/100mls	29	22	ND	ND	10				
Free Chlorine	HachCN70	ppm	0.6	0.5	0.5	0.4	0.4				
BOD 5	GM 358	mg/L	6	22	9	20	23	22	23	23	24
Suspended Solids/NFR	GM 128	mg/L	13	13	13	9	15	16	13	22	17
Dissolved Oxygen	TPS	ppm	4	4.9	4.8	4.9	4.6				

Date Sampled: 26.05.00

Lab Ref No: 10034SX-10047SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.1	10.45	11.15	9.15	9.45	10.1	10.45
Thermotolerant Coliform C	Mic 12.2	cfu/100mls	ND	ND	ND	1	ND				
Free Chlorine	HachCN70	ppm	0.4	0.5	0.5	0.5	0.4				
BOD 5	GM 358	mg/L	4	3	3	3	4	2	15	15	17
Suspended Solids/NFR	GM 128	mg/L	8	9	6	8	9	8	11	10	12
Dissolved Oxygen	TPS	ppm	5.7	5.4	5.4	5.4	5.1				

Date Sampled: 27.05.00

Lab Ref No: 10143-46SX; 10152-56SX; 10106-10SX

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	9.15	9.45	10.1	10.45	11.15	9.15	9.45	10.1	10.45
Thermotolerant Coliform C	Mic 12.2	cfu/100mls	ND	ND	ND	ND	11				
Free Chlorine	HachCN70	ppm	0.4	0.3	0.5	0.4	0.4				
BOD 5	GM 358	mg/L	6	7	7	7	4	6	5	6	6
Suspended Solids/NFR	GM 128	mg/L	19	13	11	12	15	10	13	19	17
Dissolved Oxygen	TPS	ppm	5.4	5.4	5.4	5.4	5.2				

Source : Sydney\Labrept2000\SEPTTECH\MAY\Sept2_May.x

Comments :

The DO Readings were taken from the Aeration Chamber of each AWTS system

*Dissolved oxygen meter malfunctioned - Sampling technician conferred with Garry Kimble and agreed that DO reading would have been greater than 2ppm as required by the guideline.

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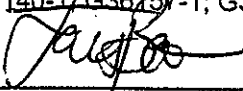
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Co-ordination and supervision of collection, storage and transfer of samples to the laboratories
Microbiological analysis of samples (Thermotolerant coliform count)
Reporting of all analytical data for the project (both chemical and microbiological)
Provision of all sample containers, eskies, ice etc. for the storage and transport of samples to the laboratory
Organisation of off-site Chemical analysis of samples by GM Laboratories (BOD5, SS, Ammonia, TKN, etc.)

Sampling Points for each AWTS System were determined through consultation between the AWTS Manufacturers' Association, Quality Assurance Services, and NSW Health.

The body of water in an AWTS system is dynamic and non-homogenous, so the chemical and microbiological data from one sample may not be representative of the entire mass of water or of other samples taken from the same system. Consequently, the data may not validate or verify the performance of the AWTS at the time of sampling.

Chemical analyses were conducted by GM Laboratories, NATA Registration No: 2289;
Report Numbers: G 36165-1; G 36210-1; G 36244-1; G36283-1
G36140-1; G36157-1; G36205-1; G36238-1; G36267-1



Date: 28.02.00

James Benson, BSc (Hons), MAIFST, MASM
Microbiologist

Certificate No: 00.05332AWS



This laboratory is accredited by the National Association of Testing Authorities, Australia.

The test(s) reported herein have been performed in accreditation with its terms of registration.

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MOSS VALE AWTS ACCREDITATION SITE INFLUENT RESULTS

Date Sampled : 28.02.00

Lab Ref No: 04148AW-04149AW

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	7.45 AM	8.45 AM	9.45 AM	10.45 AM
BOD5	358	mg/L	NR	NR	120	130
Phosphorous (Total)	472	mgP/L	NR	NR	7.6	7.7
Suspended Solids/NFR	128	mgN/L	NR	NR	290	270
Total Nitrogen (as N)	520	mgN/L	NR	NR	51	52

Date Sampled : 29.02.00

Lab Ref No: 03047AW-03050AW

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	7.45 AM	8.45 AM	9.45 AM	10.45 AM
BOD5	358	mg/L	140	140	170	170
Phosphorous (Total)	472	mgP/L	8.5	7.9	9	9.1
Suspended Solids/NFR	128	mgN/L	170	190	240	210
Total Nitrogen (as N)	520	mgN/L	47	48	49	52

Date Sampled : 01.03.00

Lab Ref No: 03236AW-03239AW

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	7.45 AM	8.45 AM	9.45 AM	10.45 AM
BOD5	358	mg/L	160	140	190	150
Phosphorous (Total)	472	mgP/L	8.6	8.4	9.4	9.4
Suspended Solids/NFR	128	mgN/L	180	250	270	240
Total Nitrogen (as N)	520	mgN/L	48	54	55	53

Date Sampled : 02.03.00

Lab Ref No: 03416AW-03419AW

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	7.45 AM	8.45 AM	9.45 AM	10.45 AM
BOD5	358	mg/L	160	150	160	170
Phosphorous (Total)	472	mgP/L	8.5	7.9	8.4	9.9
Suspended Solids/NFR	128	mgN/L	170	190	240	250
Total Nitrogen (as N)	520	mgN/L	41	45	50	52

Date Sampled : 03.03.00

Lab Ref No: 03618AW-03621AW

Test Parameter	Sample Type		INFLUENT	INFLUENT	INFLUENT	INFLUENT
	Method	Units	7.45 AM	8.45 AM	9.45 AM	10.45 AM
BOD5	358	mg/L	170	190	160	180
Phosphorous (Total)	472	mgP/L	7.8	8.3	8.5	9.3
Suspended Solids/NFR	128	mgN/L	200	270	290	250
Total Nitrogen (as N)	520	mgN/L	44	45	49	50

Source: Sydney\Labrept2000SEPTTECH\MAR\Sept1_Mar.xls

FAXED

AWTS SYSTEM IDENTIFICATION : SEPT

Date Sampled: 29.02.00

Lab Ref No: 03032AW-03036AW

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	8:00	8:30	9:00	9:30	10:00	8:00	8:30	9:00	9:30
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	42				
Free Chlorine	HachCN70	ppm	0.9	1.4	1.4	0.8	0.5				
BOD 5	GM 358	mg/L	9	7	7	8	8	8	8	8	10
Suspended Solids/NFR	GM 128	mg/L	5	4	5	5	6	5	6	6	7
Dissolved Oxygen	TPS	ppm	6.4	6.2	6	5.9	5.6				

Date Sampled: 01.03.00

Lab Ref No: 03146AW-03160AW

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	8:00	8:30	9:00	9:30	10:00	8:00	8:30	9:00	9:30
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	ND				
Free Chlorine	HachCN70	ppm	0.85	1.2	0.9	1	1.5				
BOD 5	GM 358	mg/L	10	9	6	<2	<2	19	17	9**	10**
Suspended Solids/NFR	GM 128	mg/L	7	6	6	6	6	6	6	7	6
Dissolved Oxygen	TPS	ppm	5.9	5.4	5.7	5.8	5.9				

Date Sampled: 02.03.00

Lab Ref No: 03401AW-03420AW

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	8:00	8:30	9:00	9:30	10:00	8:00	8:30	9:00	9:30
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	1(est)	ND	3(est)	ND	5(est)				
Free Chlorine	HachCN70	ppm	1	1.1	1.5	1.1	1.2				
BOD 5	GM 358	mg/L	5	3	2	9	3	36*	14	16	18
Suspended Solids/NFR	GM 128	mg/L	2	2	3	4	6	15	3	2	3
Dissolved Oxygen	TPS	ppm	7.2	7	6.9	6.6	6.3				

Date Sampled: 03.03.00

Lab Ref No: 05318AW-05332AW

Test Parameter	Sample Type		Sub Surface of PUMP WELL					Surface of CLARIFIER			
	Method	Units	8:00	8:30	9:00	9:30	10:00	8:00	8:30	9:00	9:30
Thermotolerant Coliform Count	Mic 12.2	cfu/100mls	ND	ND	ND	ND	ND				
Free Chlorine	HachCN70	ppm	0.7	1.2	1.7	1	1.4				
BOD 5	GM 358	mg/L	4	<2	<2	9	8	17	15	13	18
Suspended Solids/NFR	GM 128	mg/L	2	4	5	5	6	7	8	7	7
Dissolved Oxygen	TPS	ppm	5.2	5.1	4.9	4.9	4.6				

Source : Sydney\\Labrept2000\SEPTTECH\MAR\Sept1_Mar.xls

Comments :

The DO Readings were taken from the Aeration Chamber of each AWTS system

**Original Results for Clarifier : 1.3.00, 9.00 am, 22; 9.30 am, 21.

*Retest Results confirmed the original result.

Septech		Loading		Effluent			150 mins	
		Influent	(litres/day)	30 mins	60 mins	90 mins		
Flow Rate	28/02/00	125	1800	300	300	300	600	
BOD	29/02/00	170	2138	9	7	7	8	
<20 mg/L	01/03/00	170	2137	10	9	6	1	
None >30mg/L	02/03/00	165	2138	5	3	2	3	
Pump chamber	03/03/00	170	1462	4	1	1	8	Mean 5.55 Std Dev. 3.25
								9.71 90 Percent
BOD	29/02/00	170	2138	8	8	8	10	
<20 mg/L	01/03/00	170	2137	19	17	9	10	
None >30mg/L	02/03/00	165	2138	36	14	16	18	
Clarifier	03/03/00	170	1462	17	15	13	18	Mean 14.75 Std Dev. 6.93
								23.62 90 Percent
SS	28/02/00	280	1800					
<30 mg/L	29/02/00	203	2138	5	4	5	6	
None > 45mg/L	01/03/00	235	2137	7	6	6	6	
Pump chamber	02/03/00	213	2138	2	2	3	4	
	03/03/00	253	1462	2	4	5	6	Mean 4.75 Std Dev. 1.52
SS	01/01/00	203	2138	5	6	6	7	
<30 mg/L	02/01/00	235	2137	6	6	7	6	
None > 45mg/L	03/01/00	213	2138	15	3	2	3	
Clarifier	04/01/00	253	1462	7	8	7	7	Mean 6.31 Std Dev. 2.87
Faecal Coliform	28/02/00		1800					
<30 cfu/100mL	29/02/00		2138	0	0	0	42	
None >100	01/03/00		2137	0	0	0	0	
	02/03/00		2138	1	0	3	5	
	03/03/00		1462	0	0	0	0	Mean 2.55
Free Chlorine	28/02/00		1800					
	29/02/00		2138	0.9	1.4	1.4	0.8	0.5

>0.2, <2.0mg/L	01/03/00		2137	0.85	1.2	0.9	1	1.5	
	02/03/00		2138	1	1.1	1.5	1.1	1.2	
	03/03/00		1462	0.7	1.2	1.7	1	1.4	Mean 1.12
DO	28/02/00		1800						
	29/02/00		2138	6.4	6.2	6	5.9	5.6	
	01/03/00		2137	5.9	5.4	5.7	5.8	5.9	
	02/03/00		2138	7.2	7	6.9	6.6	6.3	
	03/03/00		1462	5.2	5.1	4.9	4.9	4.6	Mean 5.88
Septech									
Flow Rate	28/02/00	125	1800	300	300	300	300	600	
BOD	29/02/00	155	2138	9	7	7	8		
<20 mg/L	01/03/00	160	2137	10	9	6	1		
None >30mg/L	02/03/00	160	2138	5	3	2	9		
Pump chamber	03/03/00	175	1462	4	1	1	9		
	23/05/00	240	1800						
	24/05/00	243	2138	3	2	7	8		
	25/05/00	360	2137	6	22	9	20		
	26/05/00	168	2138	4	3	3	3		
	27/05/00	118	1462	6	7	7	7		
	03/07/00		1800						
	04/07/00	109	2138	3	3	2	2		
	05/07/00	140	2137	3	3	3	4		
	06/07/00	145	2138	2	2	2	6		Maximum 22
	07/07/00	153	1462	5	6	5	4		Average 5.5
									Std Dev. 4.2
		174.9							10.8 90 Percent
									99.97% < 20 mg/L
Suspended Solids	28/02/00	280	1800						
	29/02/00	203	2138	5	4	5	5		
<30 mg/L	01/03/00	235	2137	7	6	6	6		

