Virginia Innovative Approval Sampling Results

13 Palmer Street, Greenville, VA 24440 Henry Miller Class IV Soils

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 2 bdrm
Occupants: 2
Start-up: March 2003
Location: Augusta County
Designer / Engineer: Soil Services, Inc.
Contractor / Installer: Valley Nature Systems
Regulating Authority: Augusta County Health Dept
Design Flows: 300 gpd
System Configuration: AX20 Mode 3b
Processc tank: 1500 gallon 2 Compartment (Rockingham Precast)
Discharge Tank: 1000 gallon (Rockingham precast)
Disposal Treatment System: 3) 55'x3' infiltrator trenches

Notes:
Class IV Soils
Pod # 200936
MVP Panel, 9.5 min off, 30 sec on
Washer/Dryer installed 4/30/04
Discharge pump capable of 38 gpm, 50 gal. Per dose, 6 cycles per day

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = ######

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shown were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank													AdvanTex Effluent														Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
10/21/2003	Quarterly		2.4	4	6	4.8	0.45	39	43.8	6.9	19.8	104	62		1	2	1.8	9	5	0.23	45.5	50.5	7.3	18	103.5	57.8		1																		
11/4/2003	Monthly																																48.5	1												
11/25/2003	Monthly																																	1												
1/19/2004	Quarterly		18	103	2.4	13.3	4.65			6.7	9.5	149	14.3		200	4.5		1.8	11.6	5.04			6.7	9.5	159	11		*200*													1					
2/17/2004	Monthly											167			*47*										183			20					31.5	1												
3/17/2004	Monthly											175			2419										160			1																		
6/10/2004	Quarterly					15.7	2.33	24.2	43.7	6.6	16.5	112.5	94.3		*2419*				9.5	1.92	29.3	39.07	6.7	16.8	123.5	78.2		*2419*																		
6/10/2004	Monthly											108			31										116			58					25	10						Dry	Dry				Dry	Dry
7/28/2004	Quarterly		4.6	8.7	5.5	6.3	1.44	36.3	43.06	6.5	23	166	92		*1*	2	12.4	5.6	5.3	1.07	36.9	42.33	6.6	23	157	64.4		*1*																		
7/28/2004	Monthly											114.5			*387.3*										118			137.6					Dry	Dry						68	1				Dry	Dry
8/23/2004	Quarterly		6	6	1.17	1.8	1	32.6		6.8	24	82	88		*59*	3	3	0.77	0.1	0.1	34.4		6.5	23.7	84	66		188					Dry	Dry						Dry	Dry				Dry	Dry
9/20/2004	Monthly											71			*1600*										69			*1600*					Dry	Dry						Dry	Dry				Dry	Dry
10/11/2004	Monthly											74			*1600*										73			220					Dry	Dry						Dry	Dry				Dry	Dry
11/8/2004	Quarterly		10	29	3.39	4.2	1.8	26.8	34.51	6.5	17	88	88		*1600*	3	2	2.25	1.1	0.1	31.8	33.03	6.6	16.8	89	76		1600					1	2						Dry	Dry				1	2
12/29/2004	Monthly											93			2										92			8					Dry	Dry						Dry	Dry				Dry	Dry
1/17/2005	Monthly											110			1600										114			16					Dry	Dry						1	4				1	2
2/21/2005	Quarterly		31	44	12.3	5.5	2	27.5	38.14	6.3	13.7	88	52		*160000*	2	2	0.87	1	0.3	41.4	42.4	6.2	11.9	94	32		280					Dry	Dry						Dry	Dry				Dry	Dry
3/7/2005	Monthly											80			1400										91			400					Dry	Dry						Dry	Dry				Dry	Dry
4/11/2005	Monthly											105			18800										102			800					Dry	Dry						1	2				1	2
5/9/2005	Quarterly			97	17.4	9.6	2.7	15.3		6.2	18.7	82	158		6000	2	2	2.11	1	0.1	24.7		6.2	19.8	82	60		60					Dry	Dry						1	2				1	2
AVE:			**12**	**42**	**7**	**8**	**2**	**29**	**41**		**18**	**109**	**81**		***365***	**3**	**4**	**3**	**4**	**1**	**35**	**41**		**17**	**112**	**56**		***75***					**27**	**2**						**18**	**2**				**1**	**2**

Virginia Innovative Approval Sampling Results

46 Cedar Creek Lane, Mount Sidney, VA 24467 Brett Liskey Class IV Soils

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.

In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm 2 bath

Occupants: 4
Start-up: October 2003
Location: Mount Sidney
Designer / Engineer: Soil Services, Inc
Contractor / Installer: Eddie's Excavation
Regulating Authority: Augusta County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode3b-CW-MVP
Processing Tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: 4) 100' trenches, 3' width installed, system has been restricted to 3)100' lines until aft testing and monitoring is complete, after which the 4th line will be activated.

Notes: Pod # 201737
MVP Panel 9.5 min off, 30 sec on
Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
9/20/2004	Monthly											33			*1600*
10/11/2004	Monthly											27			*1600*
11/8/2004	Quarterly		7	16	1.2	3.4	0.4	1.46	5.3	7.1	17	46	300		*1600*
12/13/2004	Monthly											37			22000
1/17/2005	Monthly											35			7000
3/7/2005	Quarterly		22	15	4	4	0.4	4	8	7	13.9	31	272		90000
4/25/2005	Monthly											24			*1600*
5/23/2005	Quarterly		*40*	11	17	6.8	3	3.4	10	6.7	21.2	23	317		*2E+05*
7/11/2005	Quarterly		**33**	7	3.4	6.1	3.4	4.1	10	6.6	25.1	26	332		*2E+05*
8/15/2005	Monthly											30			*2E+05*
9/12/2005	Monthly											25			*2E+05*
10/3/2005	Quarterly		31	18	11	5.4	2.4	3.3	8.7	6.7	22.3	20	316		*2E+05*
11/7/2005	Monthly											25			*2E+05*
12/12/2005	Monthly											30			*16000*
1/30/2006	Monthly											254			*2E+05*
2/23/2006	Quarterly		52	21	47	18	9.2	9.5	27	6.6	15	27	260		*2E+05*
3/19/2006	Monthly											23			*2E+05*
3/30/2006	Quarterly		88	25	51	24	12.8	11.27	35	6.8	16.7	21	328		*2E+05*
AVE:			**39**	**16**	**19**	**10**	**5**	**5**	**15**		**19**	**41**	**304**		***36886***

Sample Date	AdvanTex Effluent cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
9/20/2004										32			*1600*
10/11/2004										29			*1600*
11/8/2004	3	2	0.7	1.6	0.1	5.8	7.5	7.7	16.6	34	284		*1600*
12/13/2004										36			35
1/17/2005										34			2200
3/7/2005	2	2	1.7	1.8	0.1	5.6	5.7	7.2	13.4	31	264		1100
4/25/2005										27			11100
5/23/2005	6	4	2.9	3.1	1	1	4.1	6.8	20.2	26	285		2300
7/11/2005	2	3	1	2.4	1	0.3	2.7	6.7	24.1	32	296		50
8/15/2005										30			*1600*
9/12/2005										28			160000
10/3/2005	4	1	0.9	1.1	0.2	4.8	5.9	6.8	22.1	21	300		2300
11/7/2005										28			8
12/12/2005										27			17000
1/30/2006										33			14000
2/23/2006	49	22	50	11	2.6	2	13	6.4	13.7	28	272		160000
3/19/2006										26			*2E+05*
3/30/2006	58	62	40	7.2	2.2	6.9	14	6.6	17.2	27	292		160000
AVE:	**18**	**14**	**14**	**4**	**1**	**4**	**8**		**18**	**29**	**285**		***3289***

Sample Date	Lysimeter #1 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #2 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #3 (Background) TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)
9/20/2004					Dry	Dry					Dry	Dry					Dry	Dry
10/11/2004					Dry	Dry					2	2					Dry	Dry
11/8/2004					Dry	Dry					2	1					Dry	Dry
12/13/2004					1	2					Dry	Dry					Dry	Dry
1/17/2005					1	2					Dry	Dry					Dry	Dry
3/7/2005					Dry	Dry					Dry	Dry					Dry	Dry
4/25/2005					1	2					Dry	Dry					Dry	Dry
5/23/2005					Dry	Dry					Dry	Dry					Dry	Dry
7/11/2005					Dry	Dry					Dry	Dry					Dry	Dry
8/15/2005					Dry	Dry					Dry	Dry					Dry	Dry
9/12/2005					Dry	Dry					Dry	Dry					Dry	Dry
10/3/2005					Dry	Dry					Dry	Dry					Dry	Dry
11/7/2005					Dry	Dry					Dry	Dry					Dry	Dry
12/12/2005					1	2					Dry	Dry					Dry	Dry
1/30/2006					Dry	Dry					Dry	Dry					Dry	Dry
2/23/2006					Dry	2					Dry	Dry					Dry	Dry
3/19/2006					Dry	Dry					Dry	Dry					Dry	Dry
3/30/2006					Dry	2					Dry	Dry					Broken	
AVE:					**1**	**2**					**2**	**2**						

Virginia Innovative Approval Sampling Results

707 Point Drive, Bumpass, VA 23024 Michael Carioscia Class IV Soils

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.

In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm

Occupants: 4
Start-up: July 21, 2003
Location: Louisa County
Designer / Engineer: TCS Engineering
Contractor / Installer: Martins Septic
Regulating Authority: Louisa County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b
Processing tank: 1500 gallon 2 compartment
Discharge Tank: 1500 gallon 2 compartment
Disposal Treatment System: Drip, 2898 ft2

Notes: Class IV soils
Discharge Pump rate = Qave = 82 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = 57 min

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

			Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
Sample Date	Test Type	GPD																																												
2/24/2004	Quarterly		45	83	12	52	39	4.3	56				302			12	21	4.2	10	5.1	42	52				76.5																				
2/24/2004	Monthly									8.3	10.7	126			77000								7.9	10.6	119			*24192*					Dry	1					95	1					38	1
3/18/2004	Monthly									8.5	13.6	168			*241920*								8.3	14.3	100			*24192*					27	1					83	1					25	1
4/27/2004	Monthly									7.7	17.8	88			*241917*								7.8	17.5	84			*24192*					22	1					65	1					18	1
5/26/2004	Monthly									6.7	24.2	125			*241920*								6.5	25.7	75			*24192*					Dry	1					69	1					Dry	Dry
5/27/2004	Quarterly		48	27	48	46	29	1	47				348			17	23	5.3	12	6.9	21	33				141																				
6/23/2004	Monthly									6.7	22.3	78			240000								6.7	22.5	66			*24192*					40	1					66	1					Dry	Dry
7/27/2004	Monthly									6.6	25.5	48			9600								6.6	26	52			3000					41	1					42	1					Dry	Dry
8/27/2004	Quarterly		62	66	29	27	18	3	30				265			22	18	9.4	9.5	6.3	3.8	13				172																				
8/27/2004	Monthly									6.6	26.5	58			*241960*								6.7	27.3	54			24196					44	1					42	1					Dry	Dry
9/14/2004	Monthly									6.9	24.5	54			*241960*								7	25.2	53			*24196*					35	1					42	1					Dry	Dry
10/7/2004	Monthly									7.1	23	49			110000								7	23	47			*24196*					32	1					37	1					Dry	Dry
11/24/2004	Quarterly		22	28	7	19	11	5.5	*25*				214			2	11	1	3.9	4.8	4.8	8.7				126																				
11/24/2004	Monthly									7	16.1	91			120000								7.1	16.6	91			770					Dry	1					37	1					Dry	Dry
12/28/2004	Monthly									7.3	10.1	144			2800								7.3	10.2	145			640					36	1					64	1					Dry	Dry
1/27/2005	Monthly									7.3	9.4	195			120000								7.1	9.3	150			*24196*					27	1					66	1					Dry	Dry
2/24/2005	Quarterly		23	20	3.5	20	14	8.7	29				261			8	5	1.4	8.4	4.3	7	15				180																				
2/24/2005	Monthly									7.5	8.9	135			100000								7.4	8.5	142			20000																	Dry	Dry
3/31/2005	Monthly									7	14.7	162			24000								7.1	14.9	166			8200					Dry	1					81	1					Dry	Dry
4/28/2005	Monthly									6.7	25	135			*241960*								6.5	25	136			130					115	1					29	1					Dry	Dry
5/27/2005	Quarterly		13	23	7	14	8.3	1.4	15				200			12	17	4.7	10	5.8	0.8	11				175																				
5/27/2005	Monthly									6.8	20.7	144			28000								6.7	22.4	146			17000					33	1					90	1					Dry	Dry
7/27/2005	Monthly									6.8	27.6	145			1200								7	27.8	144			250					Dry	Dry					99	1					Dry	Dry
AVE:		82	**36**	**41**	**18**	**30**	**20**	**4**	**34**		**19**	**114**	**265**		***67560***	**12**	**16**	**4**	**9**	**6**	**13**	**22**		**19**	**104**	**145**		***7206***					**41**	**1**					**63**	**1**					**27**	**1**

Virginia Innovative Approval Sampling Results

1822 Angus Road, Gloucester Point, VA 23062 Larry Cardwell Class II Soils

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3bdrm home

Occupants: 3 or 4
Start-up: November 22, 2003
Location: Glouchester
Designer / Engineer: William Meager
Contractor / Installer: Farmer Septic
Regulating Authority: Glouchester County
Design Flows: 600 gpd
System Configuration: AX20 Mode 3b
Septic tank: 1000 gallon
Processig Tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: 800 ft2 Pad

Notes: Class II Soils
vericomm, RTU# 101497, 9.5 min off, 30 sec on
Pod #201337
Watersoftener removed 3/30/05

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = ######

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
10/21/2003	Quarterly			43	4.6		41.3		70				240		
10/21/2003	Monthly									7.4	21	1280			410
10/22/2003	Monthly														
11/25/2003	Monthly									7.1	16.9	1920			120000
12/24/2003	Monthly									7.3	17.4	1850			37000
1/27/2004	Quarterly		16	14	1.8	6.9	2.1	0.8	7.7				123		
1/27/2004	Monthly									7.5	9.9	1900			170000
2/19/2004	Monthly									7.5	11.4	2300			20000
3/23/2004	Monthly									7.3	13.5	2200			*24192*
4/20/2004	Quarterly		13	23	2.3	22	12	7.6	29				198		
4/20/2004	Monthly									7.6	20	2030			240000
5/25/2004	Monthly									6.8	27	1880			240000
6/17/2004	Monthly									7.2	28.1	1250			1800
7/20/2004	Quarterly		2	27	5.6	4.1	1.6	2.8	6.9				224		
7/20/2004	Monthly									7.2	29	233			20000
8/12/2004	Monthly									7.1	28.4	86			18000
9/8/2004	Monthly									6.8	27.5	1550			6600
10/5/2004	Quarterly		14	8	3.1	3.1	1.5	0.5	3.6				140		
10/5/2004	Monthly									7.2	24.4	1700			24000
11/9/2004	Monthly									7.2	23.3	1650			41000
12/14/2004	Monthly									7.1	14.2	441			950
1/25/2005	Monthly									7.5	10.4	1300			1500
1/25/2005	Quarterly		28	7	3.4	3.8	0.7	12.7	16				150		
2/15/2005	Monthly									7	12.2	1480			1300
3/24/2005	Monthly									6.9	12.7	2370			100
AVE:			**15**	**20**	**3**	**8**	**10**	**5**	**22**		**19**	**1523**	**179**		***11117***

Sample Date	AdvanTex Effluent cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)	Lysimeter #1 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #2 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #3 (Background) TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)
10/21/2003		43	5.1								120																				
10/21/2003								7.4	22.1	1520			30																		
10/22/2003																		4.2	1					Dry	Dry					6.3	1
11/25/2003								6.9	17.7	2520			*24192*					24	1					36	1					20	1
12/24/2003								7.2	17.8	1950			*24192*					10	1					80	1					20	1
1/27/2004	6	11	0.7	4.9	1.5	4.4	9.3				113																				
1/27/2004								7.5	9.4	1800			*24192*					45	1					38	1					22	1
2/19/2004								7.4	12.4	2550			200					22	1					Dry	Dry					18	1
3/23/2004								7.1	14.2	2150			1600					15	1					110	1					7	1
4/20/2004	11	22	2	19	12	7.3	27				199																				
4/20/2004								7.6	20.8	1910			10000					7	1					Dry	Dry					11	1
5/25/2004								6.6	28	1930			*24192*					25	1					408	1					4	1
6/17/2004								7.4	29.4	1100			400					17	1					650	1					6	1
7/20/2004	3	10	0.9	2.2	1.1	2.3	4.5				211																				
7/20/2004								7.3	30.7	252			2900					11	1					3	1					4	1
8/12/2004								7.1	29.4	99			410					6	1					5	1					Dry	Dry
9/8/2004								6.9	27.6	1220			2700					2	1					1	1					7	1
10/5/2004	2	4	1.1	2.8	2.1	2.4	5.2				146																				
10/5/2004								7.5	25.5	1800			2600					400	1					450	1					200	1
11/9/2004								7.3	23.4	1670			3700					2	1					2	1					3	1
12/14/2004								7.3	13.1	451			85					5	1					8	1					7	1
1/25/2005								7.6	11.1	1350			250					5	1					16	1					5	1
1/25/2005	4	2	1.3	1.5	0.2	15	17				142																				
2/15/2005								7.1	12.4	1480			260					5	1					Dry	Dry					9	1
3/24/2005								7	13.3	2400			10					1	1					1	1					5	1
AVE:	**5**	**15**	**2**	**6**	**3**	**6**	**13**		**20**	**1564**	**155**		***1189***					**34**	**1**					**129**	**1**					**21**	**1**

Virginia Innovative Approval Sampling Results

2280 Genito W Court, Moseley, VA 23120 Steven Knudson Class II

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 4 bdrm Single Family Residence

Occupants: 4
Start-up: Feb. 26, 2002
Location: Chesterfield County
Designer / Engineer: Matthews Soil Consultants
Contractor / Installer: Glen Allen Mechanical
Regulating Authority: Powhatan County Health Department
Design Flows: 600 gpd
System Configuration: AX20 Mode 3b-MVP
Processing Tank: 1500 gallon 2 compartment
Discharge Tank: 1250 gallon
Disposal Treatment System: Reduced Footprint

Notes: Class II Soi Water softener removed 4/29/05
Lot 12

Qave = 128 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
########	Quarterly		2	9	5.8	0.2				7.5		775			
1/21/2003	Monthly											4200			*1600*
1/21/2003	Quarterly		14	6	1.8	4.48	0.2	0.3	0.2	7.3	19.9		218		
1/22/2003	Monthly														
2/3/2003	Monthly									7.1	14.3	4500			*1600*
2/4/2003	Monthly														
3/3/2003	Monthly									7.8	13.5	####			*2419.2*
3/4/2003	Monthly														
4/3/2003	Monthly											1730			*2419.2*
4/3/2003	Quarterly		14	20	0.1	5.88	5	14	20	7.8	23.6		171		
4/4/2003	Monthly														
5/503	Monthly									7.1	18	1710			240000
5/6/2003	Monthly														
6/3/2003	Monthly									7.4	16.3	1280			92000
7/1/2003	Quarterly		12	7	0.2	6.02	0.2	3.8	9.8	7.2	15.5	1090	209		92000
7/2/2003	Monthly														
8/4/2003	Monthly											1820			*24192*
8/5/2003	Monthly														
9/2/2003	Quarterly									6.7	27.2	1710			*241920*
9/2/2003	Monthly														
10/2/2003	Quarterly		34	17	1.8								240		
10/2/2003	Monthly									6.7	22.7	1550			*241920*
10/2/2003	Monthly														
11/4/2003	Monthly									7.1	23.4	1790			140000
12/2/2003	Monthly									7.1	15.3	1440			200000
1/6/2004	Quarterly		37	10	14	2.8	2.8	0.4	3.2				224		
1/6/2004	Monthly	81								7.9	15.1	1570			*241920*
2/3/2004	Monthly	136								7.8	11.1	2500			*241920*
3/2/2004	Monthly	137								7.6	12.4	1560			*55000*
4/2/2004	Quarterly		28	17	14	7.8	7.9	5.5	16				201		
4/2/2004	Monthly	114								7.4	14.4	1440			*241920*
5/4/2004	Monthly	174								7.7	20.3	1430			*241920*
6/2/2004	Quarterly			10	17	35	27	11	46				377		
6/2/2004	Monthly									6.4	24.1	1590			*241920*
6/24/2005	Quarterly		41	102	59	51	44	0.1	51				326		
6/24/2005	Monthly									6.6	22.3	214			200000
AVE:		**128**	**23**	**22**	**13**	**14**	**5**	**5**	**21**		**18**	**2240**	**246**		***61894***

Sample Date	AdvanTex Effluent cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
########	2	4	3.5	0.2				7.5		675			
1/21/2003										3600			*1600*
1/21/2003	2	6	0.2	1.5	0.2	2.3	0.2	7.4	21.2		187		
1/22/2003													
2/3/2003								7.1	14.4	4400			*1600*
2/4/2003													
3/3/2003								7.8	12.9	3350			1000
3/4/2003													
4/3/2003										1730			*2419.2*
4/3/2003	6	5	0.1	5.7	0.3	14	20	7.7	24.7		148		
4/4/2003													
5/503								7	18.3	2130			9800
5/6/2003													
6/3/2003								7.2	16.6	1180			1500
7/1/2003	4	8	0.1	1.3	0.4	6.7	8	7.4	15.5	750	182		5500
7/2/2003													
8/4/2003										3750			86
8/5/2003													
9/2/2003								6.8	27	1710			*24192*
9/2/2003													
10/2/2003		17				45					255		
10/2/2003								7.1	22.7	1550			*24192*
10/2/2003													
11/4/2003								7.2	23.7	1710			24192
12/2/2003								7.2	15.3	1360			*24192*
1/6/2004	24	11	4.9	10	6.8	1.7	12				206		
1/6/2004								8	14.7	1640			*24192*
2/3/2004								7.9	11.1	2250			*24192*
3/2/2004								7.4	12.3	1530			*10000*
4/2/2004	11	16	1.3	3.9	2.2	6.4	10				178		
4/2/2004								7.5	14.8	1540			*24192*
5/4/2004								8.2	20.1	1730			*24192*
6/2/2004		14	9.2	34	26	6.3	40				381		
6/2/2004								6.6	23.7	1820			*24192*
6/24/2005	14	8	4.4	38	36	1.3	39				288		
6/24/2005								6.5	29.9	1780			*24196*
AVE:	**9**	**10**	**3**	**12**	**10**	**6**	**22**		**19**	**2009**	**228**		***7360***

Sample Date	Lysimeter #1 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #2 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #3 (Background) TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml
########						2												
1/21/2003																		
1/21/2003																		
1/22/2003					360	1												1
2/3/2003																		
2/4/2003					###	1					1100	1					1	
3/3/2003												1						
3/4/2003					415	1					2500	1					50	Dry
4/3/2003																		
4/3/2003																		
4/4/2003					336	1					2940	1						1
5/503																		
5/6/2003					363	1					Dry	Dry					19	1
6/3/2003					Dry	1					1340	1					29	1
7/1/2003																		
7/2/2003					Dry	Dry					1100	2					Dry	2
8/4/2003																		
8/5/2003					265	1					1750	1					58	1
9/2/2003																		
9/2/2003					Dry	Dry					918	5.2					Dry	Dry
10/2/2003																		
10/2/2003																		
10/2/2003					Dry	Dry					1170	1					Dry	1
11/4/2003					Dry	Dry					757	1					Dry	1
12/2/2003					80	1					1050	1					Dry	Dry
1/6/2004																		
1/6/2004					73	1					1100	1					40	1
2/3/2004					Dry	Dry					1450	1					Dry	1
3/2/2004					48	1					940	1					30	1
4/2/2004																		
4/2/2004					30	1					1020	1					Dry	Dry
5/4/2004					196	1					1390	1					238	1
6/2/2004																		
6/2/2004					Dry	Dry					1790	1					Dry	Dry
6/24/2005																		
6/24/2005					Dry	Dry					Dry	Dry					Dry	Dry
AVE:					**461**	**1**					**1395**	**1**					**58**	**1**

Virginia Innovative Approval Sampling Results

2284 Genito W Court, Moseley, VA 23120 Marguerita Atkins Class II

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: Single Family Residence, 3bdrm
Occupants: 5
Start-up: May 21, 2002
Location: Chesterfield
Designer / Engineer: Matthews Soil Consultants
Contractor / Installer: Glen Allen Mechanical
Regulating Authority: Powhatan County Health Department
Design Flows: 450gpd
System Configuration: AX20 Mode 3b
Processing Tank: 1250 gallong 2 compartment
Discharge Tank: 1250 gallon
Disposal Treatment System: Gravity Discharge 800 ft2 Reduced Footprint

Notes: Lysimeter #1) 2nd/3rd sample bright purple, then indigo, then ice tea color. Now normal.
Class II Soils
Water softener removed 4/29/05
Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
########	Quarterly		10	46	12	6				6.9		390			*1600*	2	2	2.4	0.2				7.3		375			*1600*					250	8					350	1						
1/21/2003	Monthly											515			*1600*										1000			*1600*																		
1/21/2003	Quarterly		15	9	1.3	8.5	0.2	44.7	53.3	7.3	20.2		163			4	4	0.1	3.2	0.2	34	37	7.3	21.3		124																					
1/22/2003	Monthly																																99	1					65	1						
2/3/2003	Monthly									7	12	1050			*1600*								7.1	12.4	1000			1600																		
2/4/2003	Monthly																																1100	1					75	1				3000	1
3/3/2003	Monthly									8.1	9.7	800			*2419.2*								8	10.3	400			1400																		
3/4/2003	Monthly																																750	1					45	1				130	1
4/3/2003	Monthly											218			1700										194			370																		
4/3/2003	Quarterly		15	24	0.5	7.7	5	21	29	7.8	20.1		158			6	16	0.1	3.4	0.6	20	23	7.5	19.7		136																					
4/4/2003	Monthly																																994	1					52.5	1				3.7	1
5/5/2003	Monthly									7.6	16.5	135			5000								7.4	17.4	162			400																		
5/6/2003	Monthly																																534	1					16.6	1				0	1
6/3/2003	Monthly									7.3	16.1	128			630								7.3	16.6	131			280																		
6/4/2003	Monthly																																534	1					26.2	1				0	1
7/1/2003	Quarterly		28	5	0.1	6.2	0	9.4	15.5	7.4	14.5	522	210		100	0	3	0	2.8	0	11	13	7.2	14.5	380	187		31																		
7/2/2003	Monthly																																Dry	Dry					Dry	Dry				Dry	Dry
8/4/2003	Monthly											475			9800										550			74																		
8/5/2003	Monthly																																45	1					875	1				Dry	1
9/2/2003	Monthly																																47.2	1					Dry	Dry				Dry	Dry
9/2/2003	Monthly									6.8	28.2	304			700								6.9	28.9	414			1																		
10/2/2003	Quarterly		22	22	1.4		5		8.59				280			4	3	0		0		6.8				206																					
10/2/2003	Monthly									7.2	22.9	462			2000								7.3	23.3	375			230					200	1					675	1				Dry	Dry
11/4/2003	Monthly									7.3	21.9	440			1600								7.4	22.7	900			470					115	1					Dry	1				Dry	Dry
12/2/2003	Monthly									7.2	14.3	302			6800								7.2	13.4	287			1100					76	1					400	1				5	1
1/6/2004	Quarterly		26	6	4.9	7.3	5	8.2	15				178			7	1	1.1	14	0.7	8.6	23				146																					
1/6/2004	Monthly									7.8	12.8	100			232								7.9	12.5	200			31					104	1					430	1				4	1
2/3/2004	Monthly									7.8	9.2	150			*100*								7.9	9.1	275			180											250	1				425	1
3/2/2004	Monthly									7.9	10.8	130			100								7.7	10.4	155			110					152	1					332	1				Dry	1
4/2/2004	Quarterly		16	9	8.7	6.9	5.2	8.1	15				230			*2*	5	1.7	3.6	0.7	7.1	11				228																					
4/2/2004	Monthly									7.3	13.8	380			850								7.4	13.9	310			30					180	1					250	1				Dry	Dry
5/4/2004	Monthly									7.5	21.4	252			*100*								7.6	21.7	299			370					282	1					193	1				Dry	Dry
6/2/2004	Quarterly		19	11	7.4	10	4.9	5.2	15				333			3	2	0.8	7.1	2.4	4	11				280																					
6/2/2004	Monthly									6.7	26.6	381			4600								6.8	27.9	340			140					386	1					340	1				Dry	Dry
6/24/2005	Quarterly		26	32	25	11	6.8	0.2	12				283			4	5	2.1	4.2	3.4	1.3	5.5				248																					
6/24/2005	Monthly									7	23.9	221			5700								6.9	25.1	218			1200					261	1					Dry	Dry				Dry	Dry
AVE:			**19.7**	**18.2**	**6.8**	**8.0**	**4.0**	**13.8**	**20.4**		**17.5**	**368**	**229**		***1073.0***	**3.6**	**4.6**	**0.9**	**4.8**	**1.0**	**12.3**	**16.4**		**17.8**	**398**	**194**		***220.6***					**339**	**1.1**					**273**	**1.0**				**446**	**1.0**

Virginia Innovative Approval Sampling Results

2675 Lam-Conley Lane, Elkton, VA 22827 Daniel Cook Class IV

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm

Occupants: 3
Start-up: 9/8/2003
Location: Rockingham County
Designer / Engineer: Valley Engineering and Planning
Contractor / Installer: Soil Services Inc.
Regulating Authority: Rockingham County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b
Processing tank: 1500 gallon 2 compartment
Dosing Tank: 1000 gallon
Disposal Treatment System: 3078 ft2 drip

Notes: Class IV soils
Pod #201720
MVP
Drip returns to the primary side of processing tank

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #DIV/0!

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
10/21/2003	Quarterly		17.8	15	10	4.9	0.66	6.1	11			53	164		*2419*	2	1.4	0.9	2.3	0.2	6.5	8.8			63.5	162		1046																		
1/16/2004	Quarterly		15.2	26.1	6.5	4.1	0.45	12.5	17	7.6	8.5	65	147		*200*	3.6	1.7	1.5	2.2	*0.2*	15	17.43	8	8	72	135		38																		
2/17/2004	Monthly											76.5			866										81.5			361																		1
3/17/2004	Monthly											71.5			687										65			132																		
6/10/2004	Quarterly		6.7	5.5	3.4	3.4	0.36	8.2	11.8	7.1	14.7	62	171		*2419*	4.9	11	3	3.4	0.2	12	14.98	7.1	14.7	86.5	160		*2419*																		
6/10/2004	Monthly											72			*2419*										84.5			*2419*					Dry	Dry					Dry	Dry					Dry	Dry
7/27/2004	Monthly											74			*2419.2*										72.5			81.6					Dry	Dry					Dry	Dry					Dry	Dry
7/28/2004	Quarterly									7.1	25.5	101	332		*2419*	3	11		3.6	0.7	1	4.64	7.1	26.5	79.5	201		*2419*																		
8/16/2004	Quarterly		10	9	1.8	4.8	1.2	2.1	7.2	6.9	26	34	176		*1600*	3	2	0.4	1.3	1.3	5.1	6.4	7.1	24.8	32	163		*350*					Dry	Dry					Dry	Dry					Dry	Dry
9/13/2004	Monthly											36			*1600*										36			140					Dry	Dry					Dry	Dry					Dry	Dry
10/4/2004	Monthly											28			*1600*										28			1600					Dry	Dry					Dry	Dry					Dry	Dry
11/1/2004	Quarterly		16	8	2.7	17	1.4	3	21	6.8	18	30	152		*1600*	4	2	0.4	9	0.1	5.1	14.1	6.7	18	27	116		2					Dry	Dry					Dry	2					Dry	Dry
12//06/04	Monthly											23			3000										28			2					Dry	Dry					Dry	Dry					Dry	Dry
1/10/2005	Monthly											22			8000										25			59					Dry	Dry					Dry	Dry					Dry	Dry
2/7/2005	Monthly		5	9	4.9	1.6	0.8	7.2	8.8	6.8	11.3	22	120		*1600*	2	2	0.5	0.3	0.2	9.2	9.5	7.1	9.1	22	116		1600					Dry	Dry					Dry	Dry					9	2
3/14/2005	Monthly											19			70										21			500					Dry	Dry					Dry	2					Dry	Dry
5/2/2005	Quarterly		14	7	8.2	2.9	2.3	1.5		6.7	16.8	32	156		6700	2	4	1.6	0.8	0.4	4.6		6.8	15	32	140		400					Dry	Dry					2	2					Dry	Dry
6/3/2005	Monthly											11			*9000*										10			800					Dry	Dry					Dry	Dry					Dry	Dry
AVE:			**12**	**11**	**5**	**5**	**1**	**6**	**13**		**17**	**46**	**177**		***1672***	**3**	**4**	**1**	**3**	**0**	**7**	**11**		**17**	**48**	**149**		***245***					**Dry**						**Dry**	**2**					**Dry**	**1**

Virginia Innovative Approval Sampling Results

3815 Summit Crossing Road, Fredricksburg, VA 22408 Homeowner: Jerod Fo Class: IV

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.

In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 4 bdrm
Occupants: 5
Start-up:
Location: Spotsylvania County
Designer / Engineer:
Contractor / Installer:
Regulating Authority: Spotsylvania County Health Department
Design Flows: 600 gpd
System Configuration: **AX20 Mode 3**
Processing tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: 2000 ft2, reduced footprint

Notes: Water Softener
Appearance of pod is poor. It has a gelatinous, yellow film growing on it.
Sheets are bridged with the gelatinous material.
Discharge pump rate = 54.9 gpm

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E.Coli (mpn/100ml)
2/24/2005	Quarterly		154	70	21	56	46	11	67				347		
2/24/2005	Monthly									6.9	10.1	182			9600
4/1/2005	Quarterly		76	64	54	66	45	1	67				334		
4/1/2005	Monthly											67			1210
4/26/2005	Monthly									7.2	16.6	64			1970
5/25/2005	Quarterly		74		26	60	56	0.3	60				336		
5/25/2005	Monthly									6.8	14.8	83			1900
6/28/2005	Monthly														
7/26/2005	Monthly														
8/19/2005	Quarterly		24	29	15	16	6.1	5	20				260		
8/19/2005	Monthly									7	24.2	55			920
9/29/2005	Monthly									6.7	22.5	72			510
10/24/2005	Monthly									6.7	21	47			200000
11/28/2005	Quarterly		71	38	8	14.3	7.9	2.6	17				363		
11/28/2005	Monthly									6.8	17.9	72			10000
12/23/2005	Monthly									6.6	14.8	51			2840
1/27/2006	Monthly									7.1	14	54			14000
2/24/2006	Quarterly		24	27	16	9	2.7	0.2	9				198		
2/24/2006	Monthly									6.7	13.4	52			2100
3/24/2006	Monthly									6.6	15.2	59			86640
4/28/2006	Monthly									6.4	19.6	45			4600
5/25/2006	Quarterly		30	38	24	19	3.2	0.6	20	6.7	20.1	44	45		100
6/30/2006	Monthly									6.4	26.3	40			1710
6/30/2006	Quarterly														
7/28/2006	Monthly									6.3	27.5	53			2750
8/30/2006	Quarterly		19	62	19	7.8	3.7	0.5	8.3				161		
8/30/2006	Monthly									6.6	26.9	44			241960
AVE:			**59**	**47**	**23**	**31**	**21**	**3**	**34**		**19**	**64**	**256**		**4552**

Sample Date	AdvanTex Effluent cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
2/24/2005		33	12	49	44	9.7	59				328		
2/24/2005								6.8	9.2	203			9800
4/1/2005	45	46	27	58	42	2.3	60				298		
4/1/2005										443			63
4/26/2005								7.1	16.4	60			5475
5/25/2005	40	60	16	58	52	1.9	59				328		
5/25/2005								6.7	16.1	81			830
6/28/2005													
7/26/2005													
8/19/2005	3	5	2.6	6.2	1.2	5.6	12				222		
8/19/2005								7.3	24.6	50			10
9/29/2005								6.6	22.8	81			10
10/24/2005								6.7	21	47			*24196*
11/28/2005	5	4	1.5	4.2	2.1	3.2	7.4				180		
11/28/2005								6.8	17.5	68			840
12/23/2005								6.7	14.4	49			354
1/27/2006								7.9	12.7	63			2000
2/24/2006	5	9	3	7	0.9	3.8	11				174		
2/24/2006								6.6	13.3	50			220
3/24/2006								6.7	15.3	59			17329
4/28/2006								6.3	20.1	46			1223
5/25/2006													
6/30/2006								6.6	26	40			169
6/30/2006	2	3	1.7	5	0.8	5.3	5				106		
7/28/2006								6.1	27.7	54			368
8/30/2006	2	4	2.2	2.5	0.3	4.3	6.8				128		
8/30/2006								6.5	27.3	45			9208
AVE:	**15**	**21**	**8**	**24**	**18**	**5**	**28**		**19**	**90**	**220**		**753**

Sample Date	Lysimeter #1 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #2 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #3 (Background) TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)
2/24/2005																		
2/24/2005					Buried under snow						Dry	Dry					Dry	Dry
4/1/2005																		
4/1/2005					Dry	Dry					192	1					Dry	Dry
4/26/2005					Dry	1					108	1					Dry	Dry
5/25/2005																		
5/25/2005					285	1					99	1					3	1
6/28/2005					294	1					72	1					Dry	Dty
7/26/2005					107	1					64	1					Dry	Dry
8/19/2005																		
8/19/2005					128	22					62	1					Dry	Dry
9/29/2005					85	1					55	1					Dry	Dry
10/24/2005					67	1					32	1					Dry	Dry
11/28/2005																		
11/28/2005					67	1					28	1					Dry	Dry
12/23/2005					58	1					39	1					Dry	Dry
1/27/2006					54	1					18	1					Dry	Dry
2/24/2006																		
2/24/2006					58	1					33	1					Dry	Dry
3/24/2006					58	1												
4/28/2006					Dry	Dry					33	1						
5/25/2006					27	Dry					63	1						
6/30/2006					Dry	1					22	1					Dry	Dry
6/30/2006																		
7/28/2006					53	1					25	1					Dry	Dry
8/30/2006																		
8/30/2006					58	1					Dry	Dry					Dry	Dry
AVE:					**100**	**1**					**59**	**1**					**3**	**1**

Virginia Innovative Approval Sampling Results

4581 Waterside Drive, Lanexa, VA 23089 Richard Calvert Class II

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: Single Family Residence

Occupants: 4
Start-up: 8/05/2002 Moved in Sept/Oct
Location: New Kent County
Designer / Engineer: Coastal Plains Environmental Group
Contractor / Installer: Parsley Septic Tanks, Inc.
Regulating Authority: New Kent County
Design Flows: 450 gpd
System Configuration: AX20 Mode 3-MVP
Processing tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: 800 ft2, reduced footprint, 2 pads

Notes: Class II Soils
Pod # 200294
9.5 min off, 30 sec on. Qave = 52 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = 91 min

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

			Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
Sample Date	Test Type	GPD																																												
1/6/2003	Quarterly		2	18	0.6	4.3	0.38	9.2	14			51	135		*6000*	2	2	0.1	2.5	0.2	10	13			50	127		1000					9	1											15	1
1/7/2003	Quarterly														*1600*														1600																		
1/8/2003	Monthly																																	1												1
2/10/2003	Monthly									7.1	14.3	30			*2419.2*								7.2	14.2	38			650																		
2/11/2003	Monthly																																11	1					30	1					10	1
3/10/2003	Monthly											65			75								8.2	10.9	78			63																		
3/11/2003	Monthly																						7.9	11.4									Dry	Dry					20	1					13	1
4/7/2003	Monthly											65			2900										67			*2419.2*																		
4/7/2003	Quarterly		13	16	0.1	6.7	5	33	40	7.9	15.6		106			2	4	0.1	2.2	0.2	23	25	7.8	15.9		82.5																				
4/8/2003	Monthly																																7	1					13	1					8	1
5/8/2003	Monthly									7.1	19.5	53			100								6.7	20.8	49			20																		
5/9/2003	Monthly																																Dry	1					20	1					2.1	1
6/9/2003	Monthly									7.2	17.6	53			2900								7.1	17.3	39			710																		
6/10/2003	Monthly																																Dry						32	1					4.2	1
7/8/2003	Quarterly		14	13	0.9	3.2	0.2	1.5	0.2	8.1	15.8	61	158			2	6	0.2	2.1	0.2	14	17	8.2	15.9		148																				
7/9/2003	Monthly											76			*241920*										69			2800					Dry	Dry					69	1					21	1
8/11/2003	Monthly									6.7	26.7	71			2800								6.6	27.4	69			73																		
8/12/2003	Monthly																																Dry	1					150	1					30	1
9/11/2003	Monthly									7.3	24.6	75			2200								7.6	27.8	100			140																		
9/12/2003	Monthly																																35						Dry	Dry					12	
9/26/2003	Monthly																																	1												1
10/6/2003	Quarterly		2	17	0.7		19		23.9				235			3	5	0.1								190																				
10/6/2003	Monthly											60			3400										67			330					19	1					Dry	Dry					11	1
11/12/2003	Monthly									7.5	20.7	83.1			1300								7.5	20.3	78.4			180					Dry	Dry					Dry	Dry					33	1
12/9/2003	Monthly									8.1	15.7	57.9			2200								8.2	15.7	77.4			74					Dry	1					Dry	Dry					2.3	Dry
1/13/2004	Quarterly			5	1.4	5.3	5.1	4.8	10				156			2	1	0.5	4.9	3.7	5.4	10				145																				
1/13/2004	Monthly	56								9.1	13.2	47.5			410								9.2	13.2	62.5			160					Dry	Dry					Dry	Dry					8	1
2/10/2004	Monthly	42								8.1	11.6	67.5			16000								8.2	11.1	85.0			12000					15	1					16	1					8	1
3/9/2004	Monthly	50								8	14.4	64.0			1300								8	14.7	62.0			110					15	1					Dry	Dry					11	1
4/6/2004	Quarterly		8	7	0.6	5.2	2	12.7	18				86			2	1	0.1	2.8	0.3	12	15				91																				
4/6/2004	Monthly	41								8	16.6	38.0			2900								8	15.2	64.9			110					5	1					Dry	Dry					9	1
5/11/2004	Monthly	69								7	22.4	48.0			7500								7.1	23.7	76.0			590					13	1					Dry	Dry					6	1
6/8/2004	Quarterly		2	11	1.1	4.6	1.2	7.5	12				176			2	8	0.8	2.7	0.3	6.2	8.9				147																				
6/8/2004	Monthly									6.8	24.4	261			*241920*								6.8	25.8	63.0			*24192*					39	1					Dry	Dry					Dry	Dry
AVE:		**52**	**7**	**12**	**1**	**5**	**5**	**11**	**17**		**18**	**70**	**150**		***2969***	**2**	**4**	**0.24**	**3**	**0.82**	**12**	**15**		**18**	**66**	**133**		***427***					**17**	**1**					**44**	**1**					**12**	**1**

Virginia Innovative Approval Sampling Results

5716 Buck Hunt Lane, New Kent, Va 23124 R. Major Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: Single Family Residence 4 bdrm
Occupants: 3
Start-up: Dec. 06, 2002
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Dowdy's Well & Septic, Inc.
Regulating Authority: New Kent County Health Department
Design Flows: 600 gpd
System Configuration: AX20 Mode 3b-MVP
Processing Tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: Reduced Footprint

Notes: Class III Soils

Qave = 140 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
1/8/2003	Monthly											51			*1600*
1/8/2003	Quarterly		24	19	1.3	82	64.4	0.2	82	7.2	15.2		466		
1/9/2003	Monthly														
1/10/2003	Monthly														
1/10/2003	Quarterly														
2/12/2003	Monthly									7.7	11	54			*2419.2*
2/13/2003	Monthly														
3/12/2003	Monthly									8	14.5	48			*2419.2*
3/13/2003	Monthly														
4/9/2003	Monthly											43			*2419.2*
4/9/2003	Quarterly		22	21	2	11	5	5.3	16	7.9	18.5		193		
4/10/2003	Monthly														
5/14/2003	Monthly									7.1	18.3	47			*2419.2*
5/15/2003	Monthly														
6/11/2003	Monthly									7.8	15.9	46			*2419.2*
6/12/2003	Monthly														
7/10/2003	Monthly											50			*241920*
7/11/2003	Monthly														
7/10/2003	Quarterly		16	21	1.5	8.5	0.2	0.1	8.62	7.9	15.2		246		
8/13/2003	Monthly									6.5	26.2	145			*133056*
8/14/2003	Monthly														
9/14/2003	Monthly									6.7	24.7	44			200000
10/8/2003	Quarterly		22	20	0.5		5.6		9.75				190		
10/8/2003	Monthly									7.3	22.6	86			*241920*
10/15/2003	Monthly														
11/13/2003	Monthly									7.4	17.7	73			*241920*
12/11/2003	Monthly									7.6	16.5	49			*241920*
1/15/2004	Quarterly		14	20	26	10	2.7	2.7	11				198		
1/16/2004	Monthly									8.2	11.1	80			120000
2/12/2004	Monthly	140								7.9	11.6	63			130000
3/11/2004	Monthly	148								7.8	16.7	68			120000
4/16/2004	Quarterly		11	11	1.9	11	8.2	22	33				199		
4/16/2004	Monthly	159								8.1	16.9	41			*241920*
5/13/2004	Monthly	111								6.6	22.5	46			200000
6/10/2004	Quarterly		43	48	14	11	3	16	27				254		
6/10/2004	Monthly									6.5	26	###			*241920*
AVE:		**140**	**22**	**23**	**7**	**22**	**13**	**8**	**27**		**18**	**115**	**249**		***43113***

Sample Date	AdvanTex Effluent cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
1/8/2003													
1/8/2003								7.1	15.2				
1/9/2003													
1/10/2003													*1600*
1/10/2003		10	3.3								486		
2/12/2003								7.3	12.5	57			*2419.2*
2/13/2003													
3/12/2003								8.2	14.2	45			*2419.2*
3/13/2003													
4/9/2003										38			*2419.2*
4/9/2003	14	11	1.9	6.3	0.3	10	17	7.8	18.6		166		
4/10/2003													
5/14/2003								7	18.6	44.9			2419.2
5/15/2003													
6/11/2003								7.6	15.8	78.7			*2419.2*
6/12/2003													
7/10/2003										52.3			*24192*
7/11/2003													
7/10/2003	4	7	0.1	3.8	0.4	14	18	7.8	15.2		228		
8/13/2003								6.3	27.8	125			*16934*
8/14/2003													
9/14/2003								6.7	25	####			8300
10/8/2003	2	2	0.1		0.2		8.8				140		
10/8/2003								7.4	23.1	79.8			10000
10/15/2003													
11/13/2003								7.5	18.1	75			24000
12/11/2003								7.7	16.7	51.3			*24192*
1/15/2004	7	5	1.1	1.8	0.3	10	12				180		
1/16/2004								8.2	11.2	60			4900
2/12/2004								8	11.3	67.5			17000
3/11/2004								8	17.1	64.6			6700
4/16/2004	2	14	0.6	14	13	29	43				173		
4/16/2004								8.4	17.2	42.8			2500
5/13/2004								6.6	23.5	47.5			17000
6/10/2004	3	2	0.7	2.5	0.2	7.7	10				214		
6/10/2004								6.4	27.6	46			8600
AVE:	**5**	**7**	**1**	**6**	**2**	**14**	**18**		**18**	**60**	**227**		***6580***

Sample Date	Lysimeter #1 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #2 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #3 (Background) TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml
1/8/2003																		
1/8/2003																		
1/9/2003						1												
1/10/2003																	12	1
1/10/2003																		
2/12/2003																		
2/13/2003					Dry	Dry					Dry	Dry					Dry	Dry
3/12/2003																		
3/13/2003					Dry	Dry					8.5	1					Dry	Dry
4/9/2003																		
4/9/2003																		
4/10/2003					Dry	1					Dry	Dry					Dry	1
5/14/2003																		
5/15/2003					Dry	Dry					7.5	36					Dry	130
6/11/2003																		
6/12/2003					Dry	Dry					Dry	Dry					Dry	Dry
7/10/2003																		
7/11/2003					Dry	Dry					13	1					Dry	Dry
7/10/2003																		
8/13/2003																		
8/14/2003					Dry	Dry					Dry	14					Dry	130
9/14/2003					5	Dry					10	1					####	140
10/8/2003																		
10/8/2003					34						Dry	Dry					Dry	
10/15/2003						1						Dry						3
11/13/2003					43	1					Dry	Dry					Dry	1
12/11/2003				Not holding vacuum							8.6	1					3.8	1
1/15/2004																		
1/16/2004					30	1					Dry	Dry					Dry	1
2/12/2004					24	1					Dry	1					8	1
3/11/2004					Dry	Dry					25	1					Dry	1
4/16/2004																		
4/16/2004					30	1					Dry	Dry					Dry	1
5/13/2004					Dry	Dry					34	1					Dry	1
6/10/2004																		
6/10/2004					Dry	Dry					Dry	Dry					Dry	2
AVE:						**1**					**15**	**2**					**10**	**3**

Virginia Innovative Approval Sampling Results

5739 Buck Hunt Lane, New Kent, VA 23124 Richard Honeycutt Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 4 bdrm Single Family Residence

Occupants: 5
Start-up: July 02, 2002
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Dowdy's Well & Septic, Inc
Regulating Authority: New Kent County Health Department
Design Flows: 600 gpd
System Configuration: AX20 Mode 3a-MVP
Processing tank: 1500 gallon 2 compartment
Dosing Tank: 1000 gallon
Disposal Treatment System: Reduced Footprint

Notes: Heavy usage. They're only getting samples out of Lysimeter 2.
Class III Soils
Pod# 200010
Drip returns to primary chamber of processing tank

Qave = 247 T "ON" = ####
Rb:R = 3.5 T "OFF" = ####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (npn/100m	AdvanTex Effluent cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (npn/100m	Lysimeter #1 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (npn/100m	Lysimeter #2 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (npn/100m	Lysimeter #3 (Background) TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (npn/100m
1/9/2003	Monthly											35			*1600*										31			540					4.5	1												
1/9/2003	Quarterly		9	6	0.1		*5*		7.3	7	15		176			2	3	0.1		0.2		0.2	7.2	16		174																				
2/12/2003	Monthly									8	12	30			*2419*								7.5	15	31			44																			
2/13/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
3/12/2003	Monthly									8	15	28			*2419*								7.8	15	36			4.1																			
3/13/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
4/9/2003	Monthly											28			5800										31			490																			
4/9/2003	Quarterly		15	19	0.5		5		22	8	19		170			3	3	0.1		0.2		15	7.7	19		154																				
4/10/2003	Monthly																																10	1					8.5	1					8	1
5/14/2003	Monthly									7	18	39			65000								7.2	17	36			2200																			
5/15/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
6/11/2003	Monthly									8	16	38			1400								7.2	16	38			580																			
6/12/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
7/10/2003	Monthly									7	15	20											7.6	15	19																						
7/10/2001	Quarterly		*15*	6	0.1	5.7	0.2	0.1	5.8				196		4900	2	3	0.1		0.3		16				270		450																			
7/11/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
8/13/2003	Monthly									7	29	105			25000								6.7	27	90			700																			
8/14/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
9/14/2003	Monthly									7	24	###			1E+05								7.1	26	###			810					Dry	Dry					7.5	1					Dry	Dry
10/8/2003	Quarterly		2	12	0.5		0.2		12.3				155			4	5	0.1		0.2		7.5				140																				
10/8/2003	Monthly									7	23	###			27000								7.6	23	###			6200					Dry	Dry					Dry	Dry					Dry	Dry
########	Monthly									8	18	###			3700								7.5	18	###			530					Dry	Dry					Dry	Dry					Dry	Dry
########	Monthly									8	16	###			270								7.8	15	###			1400					Dry	Dry					Dry	1					Dry	Dry
1/16/2004	Quarterly		10	23	3.6	5.2	0.6	5.1	10				174			8	13	2.5	3.9	0.2	6.6	10				168																				
1/16/2004	Monthly									8	14	###			2800								8.1	13	###			590					Dry	Dry					Dry	Dry					Dry	Dry
2/12/2004	Monthly	162								8	9.6	###			22000								8	9.6	###			16934					Dry	Dry					Dry	Dry					Dry	Dry
3/11/2004	Monthly	250								8	15	###			6800								8.5	15	###			600					Dry	Dry					Dry	Dry						
4/7/2004	Quarterly		20	45	0.1	5.7	3	13	19				180			4	18	0.1	2.9	0.9	15	18				159																				
4/8/2004	Monthly	250								9	16	###			45000								9.1	16	###			5700					Dry	Dry					Dry	Dry					Dry	Dry
5/13/2004	Monthly	324								7	23	###			61000								7	23	###			720					Dry	Dry					Dry	Dry					Dry	Dry
6/10/2004	Quarterly		32	160	26	10	..8	17	27				202			5	5	1	2.5	0.2	9.6	12				174																				
6/10/2004	Monthly									7	25	152			7800								6.8	25	48			440					Dry	Dry					Dry	Dry					Dry	Dry
AVE:		**247**	**15**	**39**	**4**	**7**	**5**	**9**	**15**		**18**	**52**	**179**		***7909***	**4**	**7**	**1**	**3**	**0**	**10**	**11**		**18**	**43**	**177**		***672***					**7**	**1**					**8**	**1**					**8**	**1**

Virginia Innovative Approval Sampling Results

5812 Buck Hunt Lane, New Kent, VA 23124 James Powell Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm Single Family Residence

Occupants: 4
Start-up: Aug 26, 2002
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Stamie Lyttle Company
Regulating Authority: New Kent County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b-MVP
Processing tank: 1500 gallon
Dosing Tank: 1000 gallon
Disposal Treatment System: 600 ft2 2 pad lpd

Notes: Class III Soils

Qave = 331 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = 14 min

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

			Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
Sample Date	Test Type	GPD																																												
1/8/2003	Monthly											49			*1600*										51			1600																		
1/8/2003	Quarterly		11	20	0.4	7.84	0.2	11	18.8	7.5	15.4		171			9	15	0.09	4.5	0.2	19	24	7.3	15.4		150																					
2/12/2003	Monthly									7.2	13.8	48			*2419*								7.3	13.3	37			1100																		
2/13/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
3/12/2003	Monthly									8	15.4	37			*2419*								8	16.4	40			*2419.2*																		
3/13/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
4/9/2003	Monthly											37.5			12000										34			*2419.2*																		
4/9/2003	Quarterly				1.8	14.4	6.72	0.6	15	7.4	19.6		238					0.67	14	5	3.7	18	7.2	19.2		209																					
4/10/2003	Monthly																																Dry	1					3	1					Dry	Dry
5/14/2003	Monthly									7.2	18.6	37.4			9900								7.1	18.2	31.2			5200																		
5/15/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
6/11/2003	Monthly									7.4	15.6	39.9			170000								7.2	15.8	35.7			7700																		
6/12/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
7/10/2003	Monthly									7.6	15.4	30.9			39000								7.3	15.6	35.6			3900					Dry	Dry					Dry	Dry					Dry	Dry
7/10/2003	Quarterly		17	24	2	7	0.2	0.1	7.07				213			4	11	7	7	0.2	14	21				200																					
8/13/2003	Monthly									6.7	28	100			*24501*								6.6	29.1	115			4100																		
8/14/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
9/14/2003	Monthly									7	26.4	####			130000								7.1	26.9	####			3800					Dry	Dry					Dry	Dry					Dry	Dry
10/8/2003	Quarterly		13	4	0.1		0.2		8.03				160			2	2	0.05		0.2		10				100																					
10/8/2003	Monthly									7.5	24.2	####			58000								7.7	24.5	####			5100					Dry	Dry					Dry	Dry					Dry	Dry
11/13/2003	Monthly									7.3	19.3	####			5700								7.3	19.4	####			220					Dry	Dry					Dry	Dry					Dry	Dry
12/11/2003	Monthly									7.7	16.9	####			140000								7.8	17	####			36000					Dry	Dry					Dry	Dry					Dry	Dry
1/15/2004	Quarterly		21	11	3.5	6.2	2.4	114	120				171			5	3	0.98	2.7	0.9	13	16				146																					
1/15/2004	Monthly									8.4	12.7	####			23000								8.4	12.7	####			1900					Dry	1					Dry	Dry					Dry	Dry
2/12/2004	Monthly	352								8.6	12.1	####			13000								8.9	12.3	####			930					7	3					Dry	1					Dry	Dry
3/11/2004	Monthly	360								7.8	17.2	####			16000								7.7	17.6	####			240					1	Dry					Dry	Dry					Dry	Dry
4/8/2004	Quarterly		11	6	0.3	5.7	3.8	20	26				197			6	14	0.09	39	1.8	23	27				175																					
4/8/2004	Monthly	264								8.2	18	####			14000								8.2	18.6	####			4700					Dry	Dry					Dry	Dry					Dry	Dry
5/13/2004	Monthly	348								6.6	25.2	####			61000								6.6	25.8	####			2500					Dry	Dry					Dry	Dry					Dry	Dry
6/10/2004	Quarterly		37		18	11	1.7	15	26				230			2	4	1.09	1.5	0.2	6	7.5				199																					
6/10/2004	Monthly									6.6	25.9	####			19000								6.6	27.7	####			930					Dry	Dry					Dry	Dry					Dry	Dry
AVE:		**331**	**18**	**13**	**4**	**9**	**2**	**27**	**32**		**19**	**51**	**197**		***18780***	**5**	**8**	**1**	**11**	**1**	**13**	**18**		**19**	**49**	**168**		***2348***						**1**					**3**	**1**						

Virginia Innovative Approval Sampling Results

5833 Buck Hunt Lane, New Kent, VA 23124 Phillip Christian Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm Single Family Residence

Occupants: 3
Start-up: Sept. 23, 2002
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Stamie Lyttle Company
Regulating Authority: New Kent County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b-MVP
Processing tank: 2-comp 1500gal
Dosing Tank: 1000 gal
Disposal Treatment System: 600 ft2 2 pad lpd

Notes: Tnaks have overflowed not related to hurricane. Above normal usage.
Class III Soils
Pod# 200299

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml	AdvanTex Effluent cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml	Lysimeter #1 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #2 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #3 (Background) TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml
3/12/2003	Monthly											43			*2419.2*										47			2400																		
3/12/2003	Quarterly																																													
3/14/2003	Monthly																												Dry	Dry			35	1												
4/14/2003	Monthly									8	18.5	43			310								8.1	18.5	44			30																		
4/15/2003	Monthly																												15	1			Dry	1							11	1				
5/19/2003	Monthly									7	15.7												7.2	15.3					Dry	Dry			Dry	Dry							3.9	1				
5/20/2003	Monthly											59			6600										54			190																		
6/16/2003	Monthly											45													51																					
6/16/2003	Quarterly				0.3		10.25		17	8	15.4							0.2		7.1		15	7.8	15.2																						
6/24/2003	Monthly																												Dry	1			Dry	Dry							13	Dry				
7/15/2003	Monthly											59			1										67			22																		
7/16/2003	Monthly																												Dry	Dry			Dry	Dry							Dry	1				
7/24/2003	Monthly														41000													2300																		
8/18/2003	Monthly									7	27.9	59			4500								6.6	28	124			880																		
8/19/2003	Monthly																												Dry	Dry			Dry	Dry							Dry	Dry				
9/24/2003	Monthly																												Dry	Dry			Dry	Dry							Dry	Dry				
9/26/2003	Quarterly		28	22	1.2		17.0						288			15	5	0.6								282																				
9/26/2003	Monthly									7	21.2	68			*24192*								7.1	21.3	58			*24192*																		
9/30/2003	Monthly				0.3													0.1																												
10/15/2003	Monthly									8	22.1				4300								7.9	21.1	64			67					Dry	Dry							Dry	Dry				
11/17/2003	Monthly									8	20.1	42			17000								7.7	19.5	48			2200					44	1							2	1				
12/17/2003	Quarterly		15	9	19	5.46	2.60	22	28				115			2	3	1.5	1.82	0.6	21	22.8				92																				
12/17/2003	Monthly									7	19.2	38			450								7.4	19.4	34			15					Dry	Dry							NR	1				
1/20/2004	Monthly											58			1400										53			86					43	1							10	1				
2/17/2004	Monthly									9	10	43			230								8.7	10.1	50			10					48	1							Dry	Dry				
3/16/2004	Monthly									9	12.5	78			4300								8.8	12.9	40			610					41	1							Dry	Dry				
3/16/2004	Quarterly		15	9	1.1	8	1.90	25	33				125			3	5	1.4	14	5.9	24	37.0				98																				
4/13/2004	Monthly									8	13..2	35			530								8	15.4	50			42					Dry	Dry							Dry	Dry				
5/18/2004	Monthly									7	25	31			590								7	25.3	54			29					37	1							Dry	Dry				
6/15/2004	Quarterly		12	22	2.1	6.4	1.80	12	18				190			2	2	0.5	2	0.5	2.3	4.4				162																				
6/15/2004	Monthly									7	26.3	78			23000								6.9	26.6	54			610					Dry	Dry							Dry	Dry				
7/15/2004	Monthly									7	26	55			5000								6.8	28	60			660					Dry	Dry							Dry	Dry				
8/10/2004	Quarterly		2	5	0.7	5.9	2.70	5.4	11				146			2	1	0.3	1.7	0.5	4	5.7				124																				
8/10/2004	Monthly									7	26.8	45			150								6.7	26.9	49			12					Dry	Dry							1	1				
AVE:			**14**	**13**	**4**	**6**	**6**	**16**	**21**		**20**	**52**	**173**		***1612***	**5**	**3**	**1**	**5**	**3**	**13**	**17**		**20**	**56**	**152**		***190***					**38**	**1**							**7**	**1**				

Virginia Innovative Approval Sampling Results

6209 Lakeside Drive, New Kent, VA

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bedroom Single Family Residence

Occupants: 2
Start-up: July 16, 2002
Location: New Kent County
Designer / Engineer: Coastal Plains Environmental Group
Contractor / Installer: Churchview Septic System
Regulating Authority: New Kent County
Design Flows: 450gpd
System Configuration: AX20 Mode 3b-MVP
Processing tank: 1500 gallon 2 compartment
Dosing Tank: 1000 gallon
Disposal Treatment System: 630 sq ft. 3) 7x30' rf pads
Discharge Flow Rate: 32.8 gpm
Notes: Class II Soils
Pod# 200158
9.5 min on, 45 seconds on
Qave = 134 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boxes indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml	AdvanTex Effluent cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
1/6/2003	Quarterly		2	1	0.1		1.46		15.2			23	116		230	2	2	0.1		0.62		11			23	102		8
1/7/2003	Monthly														110													22
1/8/2003	Monthly																											
2/10/2003	Monthly									7.1	13.8	33			280								7.1	13.8	35			11
2/11/2003	Monthly																											
3/10/2003	Monthly									7.8	10.9	48			870								7.9	11.5	55			44
3/11/2003	Monthly																											
4/7/2003	Monthly											30			220										30			60
4/7/2003	Quarterly		*13*	20	0.1		*5*		25.5	7.9	15.6		100			3	5	0.1		*5*		22	7.8	15.7		94		
4/8/2003	Monthly																											
5/8/2003	Monthly									7	19.6	31			100								6.6	19.7	34			*10*
5/9/2003	Monthly																											
6/9/2003	Monthly									7	15.7	23			310								7	15.6	18			3100
6/10/2003	Monthly																											
7/8/2003	Quarterly		14	150	1.3		*0.2*		*0.2*				158			*2*	3	0.3		0.2		0.2				146		
7/9/2003	Monthly									7.4	15.6	36			58000								7.6	15.8	35			3100
8/11/2003	Monthly									6.7	26	38			29000													
8/12/2003	Monthly																											
9/11/2003	Monthly									7.3	24.6	65.0			120													
9/12/2003	Monthly																											
9/26/2003	Monthly																											
10/6/2003	Quarterly		2	47	0.4		0.2		9.43				115															
10/6/2003	Monthly											37.0			4400													
11/13/2003	Monthly									7.4	19.7	64.1			1100													
12/9/2003	Monthly									7.7	14.6	35.6			200													
1/13/2004	Quarterly		12	4	1.1	2.9	2.8	11	14				128			2	1	0.6	3.2	2.7	9.2	12				108		
1/13/2004	Monthly	166								8.7	13.4	37.5			100								8.6	13.4	23			3
2/10/2004	Monthly	118								8.1	11.2	42.5			*100*								8.4	11.4	50			31
3/9/2004	Monthly	71								8.2	12.4	52.0			100								8.3	12.8	46			10
4/6/2004	Quarterly		8	172	1.8	5.2	0.5	7.4	13				88															
4/6/2004	Monthly	116								8.4	14.8	31.7			100													
4/28/2004	Quarterly															4	6	6.5	4.6	*0.2*	3	7.6				81		
4/28/2004	Monthly																						8.1	18.7	26			790
5/11/2004	Monthly	197								6.6	22.6	24.0			7700								6.5	22.8	44			2900
6/8/2004	Quarterly		2	10	4	4.3	0.6	4.2	8.6				151			4	7	2.3	2.9	0.2	3.7	6.7				148		
6/8/2004	Monthly									6.6	24.6	71.0			11000								6.7	25.2	32			3100
AVE:		**134**	**8**	**58**	**1**	**4**	**2**	**7**	**12**		**17**	**40**	**122**		***604***	**3**	**4**	**2**	**4**	**1**		**10**		**16**	**35**	**113**		***92***

Sample Date	Lysimeter #1 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #2 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #3 (Background) TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	FC mpn/100ml
1/6/2003																		
1/7/2003																		
1/8/2003					19	1						1					18	1
2/10/2003																		
2/11/2003					21	1					Dry	Dry					Dry	1
3/10/2003																		
3/11/2003					28	1					Dry	1					Dry	1
4/7/2003																		
4/7/2003																		
4/8/2003					19	1					Dry	1					14	1
5/8/2003																		
5/9/2003					10	1					Dry	Dry					Dry	Dry
6/9/2003																		
6/10/2003					17	2					Dry	1					11	1
7/8/2003																		
7/9/2003					40	1					Dry	Dry					Dry	Dry
8/11/2003																		
8/12/2003					80	1					85	1					40	1
9/11/2003																		
9/12/2003					26					Lysimeters gone						Lysimeters gone		
9/26/2003						1												
10/6/2003																		
10/6/2003					35	1					31	1					Dry	Dry
11/13/2003					40	1					43	1					Dry	Dry
12/9/2003					22	1					4.5	1					Dry	1
1/13/2004																		
1/13/2004					23	1					23	1					Dry	1
2/10/2004					22	1					21	1					54	1
3/9/2004					30	1					27	1					Dry	Dry
4/6/2004																		
4/6/2004					21	1					22	1					Dry	Dry
4/28/2004																		
4/28/2004																		
5/11/2004					24	1					25	1					Dry	Dry
6/8/2004																		
6/8/2004					25	2					26	1					Dry	Dry
AVE:					**28**	**1**						**1**					**27**	**1**

Virginia Innovative Approval Sampling Results

9008 Cuba Lane, Gloucester Point, VA 23062 Robin Stamaway Class II

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3bdrm Single Family Residence

Occupants: 3
Start-up: May 20, 2003
Location: Gloucester County
Designer / Engineer: William J. Meager
Contractor / Installer: Farmer Septic Service
Regulating Authority: Gloucester County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 1
Septic tank: 1000 gallon
Processing Tank: 1500 gallon 2 compartment
Dosing Tank: 1000 gallon
Disposal Treatment System: 900 ft2 pad

Notes:
Class II Soils
Next door to 1822 Angus Road
Vericomm
Watersoftener removed 3/30/05

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
7/17/2003	Monthly									9.6	27.9	###			630
7/17/2003	Quarterly														
8/25/2003	Monthly									7	29	###			8400
8/26/2003	Monthly														
9/25/2003	Monthly									7.3	27.1	680			*241920*
10/21/2003	Quarterly		27	77	2.4		6.6		57				67		
10/21/2003	Monthly									7.7	23.3	965			*241920*
10/22/2003	Monthly														
11/25/2003	Monthly									6.2	15.7	###			100
12/24/2003	Monthly									7.2	16.3	320			34000
1/27/2004	Quarterly		25	10	1.4	16	15	1.1	17				51		
1/27/2004	Monthly									7.6	7.8	90			*241920*
2/19/2004	Monthly									7.4	10.1	84			73000
3/23/2004	Monthly									7.3	13.4	80			850
4/20/2004	Quarterly		16	12	1.8	15	10	4.8	20				91		
4/20/2004	Monthly									8	17.7	412			3400
5/25/2004	Monthly									6.8	26.8	###			8800
6/17/2004	Monthly									6.7	28.5	600			6100
7/20/2004	Quarterly		2	20	4.1	5.2	4	4.5	9.7				150		
7/20/2004	Monthly									7.1	27.4	860			1100
8/12/2004	Monthly									6.9	27.8	632			44000
9/8/2004	Monthly									7	26.1	470			*241960*
10/5/2004	Quarterly		102	41	29	63	59	1.5	65				284		
10/5/2004	Monthly									6.9	21.6	310			*241960*
11/9/2004	Monthly	No Sample taken in Recirc or AX													
12/14/2004	Monthly									6.5	11.6	399			17000
AVE:			**34**	**32**	**8**	**25**	**19**	**3**	**34**		**21**	**774**	**128**		***15307***

Sample Date	AdvanTex Effluent cBOD5 (mg/L)	TSS (mg/L)	TURB (NTU)	TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	pH	Temp (celcius)	Cl (mg/L)	Alk (mg/L)	TP (mg/L)	E. Coli (mpn/100ml)
7/17/2003								9	29	1850			220
7/17/2003													
8/25/2003								7	29.9	410			2600
8/26/2003													
9/25/2003								7	28.2	940			*24192*
10/21/2003	6	11	0.2		*5*		51				73		
10/21/2003								8	22.9	4250			*24192*
10/22/2003													
11/25/2003								6	15.8	1150			63
12/24/2003								7	16.5	330			5300
1/27/2004	5	7	0.9	11	11	9.1	20				12		
1/27/2004								8	8.2	110			*24192*
2/19/2004								7	10.3	77.5			6500
3/23/2004								7	13.2	105			210
4/20/2004	8	19	1.1	11	6.8	*3.9*	15				57		
4/20/2004								8	19.6	432			1800
5/25/2004								7	27.4	1430			2600
6/17/2004								7	28.9	675			1700
7/20/2004	2	10	2.8	5	1.7	2.8	7.9				138		
7/20/2004								7	27.8	884			1100
8/12/2004								6	28.2	736			*24196*
9/8/2004								7	26.2	105			*24196*
10/5/2004	49	14	11	36	35	19.7	56				180		
10/5/2004								7	22.4	332			*24196*
11/9/2004													
12/14/2004								7	11.4	414			13000
AVE:	**14**	**12**	**3**	**16**	**12**	**9**	**30**		**22**	**837**	**92**		***3758***

Sample Date	Lysimeter #1 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #2 TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)	Lysimeter #3 (Background) TKN (mg/L)	NH3 (mg/L)	NO3 (mg/L)	TN (mg/L)	Cl (mg/L)	E. Coli (mpn/100ml)
7/17/2003																		
7/17/2003																		
8/25/2003																		
8/26/2003					Dry	Dry					80	1					Damaged	
9/25/2003					2.5	Dry					28	1					Lysimeter gone	
10/21/2003																		
10/21/2003																		
10/22/2003					25	1					###	1					6.3	1
11/25/2003					76	1					360	1					20	1
12/24/2003					Dry	1					280	1					20	1
1/27/2004																		
1/27/2004					Dry	Dry					97	1					22	1
2/19/2004					28	1					50	1					18	1
3/23/2004					10	1					38	1					7	1
4/20/2004																		
4/20/2004					Dry	Dry					Dry	Dry					11	1
5/25/2004					34	1					431	1					4	1
6/17/2004					575	1					Dry	Dry					6	1
7/20/2004																		
7/20/2004					Dry	1					257	1					4	1
8/12/2004					Dry	Dry					90	1					Dry	Dry
9/8/2004					Dry	Dry					53	1					7	1
10/5/2004																		
10/5/2004					Dry	Dry					Dry	Dry					200	1
11/9/2004					Dry	Dry					Dry	Dry					3	1
12/14/2004					Dry	Dry					Dry	Dry					7	1
AVE:					**107**	**1**					**239**	**1**					**24**	**1**

Virginia Innovative Approval Sampling Results

9451 Deer Lake Drive, Quinton, VA 23141 Edward Goodman Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: Single Family Residence 4 bdrm
Occupants: 4
Start-up: Nov. 18, 2002
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Dowdy's Well & Septic, Inc.
Regulating Authority: New Kent County Health Department
Design Flows: 600 gpd
System Configuration: AX20 Mode 3b-MVP
Processing Tank: 1500 gallon 2 compartment
Discharge Tank: 1000 gallon
Disposal Treatment System: Drip reduced footprint

Notes: Class III Soils
Qave = 308 T "ON" = ####
Rb:R = 3.5 T "OFF" = ####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

			Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
Sample Date	Test Type	GPD																																												
1/7/2003	Quarterly																																													
1/9/2003	Monthly																																													1
2/10/2003	Monthly									7	14	39			*2419*								7	14	45			*2419*																		
2/11/2003	Monthly																																Dry	Dry					Dry	1					Dry	Dry
3/10/2003	Monthly									8	15	52			*2419*								8	15	54			350																		
3/11/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
4/7/2003	Monthly											34			2500										35			490																		
4/7/2003	Quarterly		30	27	1.7	19	6.86	14	33	8	16		210			2	8	0.1	2.7		17	20	8	16		151																				
4/8/2003	Monthly																																Dry	Dry					4.3	1					2	Dry
5/8/2003	Monthly									7	20	53			77000								7	20	56			11000																		
5/9/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
6/9/2003	Monthly									7	17	35			740								7	17	39			*24192*																		
6/10/2003	Monthly																																Dry	Dry					Dry	Dry					0	1
7/7/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
7/8/2003	Monthly											49			*2E+05*										67			20000																		
7/8/2003	Quarterly		6	9	1.9	12	7.31	4.7	17	7	16		227			5	8	0.9	6.6	0.2	2.4	8.9	7	17		186																				
8/11/2003	Monthly											56			29000								6	27	83			97																		
8/12/2003	Monthly																																Dry	Dry					Dry	Dry					Dry	Dry
9/11/2003	Monthly									7	25	67			2200								7	26	###			400																		
9/12/2003	Monthly																																Dry	Dry					Dry	Dry				Lysimeter broke		
10/6/2003	Quarterly		37	20	1.5		7.84		###				172			2	6	0.1		0.2		###				155																				
10/6/2003	Monthly											48			*2E+05*										52			3700					Dry	Dry					Dry	Dry					Dry	Dry
11/12/2003	Monthly									8	19	78			2E+05								8	19	90			1600					Lysimeter Broke						Dry	Dry					Dry	Dry
12/9/2003	Monthly									8	14	36			2E+05								8	13	36			5200					Lysimeter Broke						Dry	Dry					Dry	Dry
1/13/2004	Quarterly		32	22	9.9	13	10	0.4	14				195			6	11	1.5	5.3	4.8	8.6	14				158																				
1/13/2004	Monthly	##								9	13	63			*24192*								9	13	50			630					15	1					Dry	Dry					10	8.6
2/10/2004	Monthly	##								8	11	53			44000								8	11	58			2200					Dry	1					Dry	Dry					Dry	Dry
3/9/2004	Monthly	##								8	14	37			46000								8	14	58			2500					Dry	Dry					Dry	Dry					Dry	Dry
4/6/2004	Quarterly		19	9	1.1	11	6.6	7.3	18				188			4	11	0.1	5.5	3.5	6.8	12				166																				
4/6/2004	Monthly	##								9	14	40			34000								9	15	43			680					Dry	Dry					Dry	Dry					Dry	Dry
5/11/2004	Monthly	##								7	21	31			2500								7	21	60			63					Dry	Dry					Dry	Dry					Dry	Dry
6/8/2004	Quarterly		37	15	29	15	3.6	11	26				223			6	15	1.1	4.2	1.3	4	8.2				191																				
6/8/2004	Monthly									7	25	110			14000								7	25	51			1900					43	1					Dry	Dry					Dry	Dry
AVE:		##	**27**	**17**	**7**	**14**	**7**	**7**	**20**		**17**	**52**	**203**		***18883***	**4**	**10**	**1**	**5**	**2**	**8**	**13**		**18**	**56**	**168**		***1475***					**29**	**1**					**4**	**1**					**4**	**2**

Virginia Innovative Approval Sampling Results

9592 Big Buck Court, New Kent, VA 23124 Phyllis Smith Class III

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: Single Family Residence 3 bdrm
Occupants: 1
Start-up: Jan 22, 2003
Location: New Kent County
Designer / Engineer: Engineering Design Associates
Contractor / Installer: Stamie Lyttle Company
Regulating Authority: New Kent County Health Department
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b-MVP
Septic tank: 1500 gallon 2 compartment
Processing Tank: 1500 gallon 2 compartment
Dosing Tank: 1000 gallon
Disposal Treatment System: 600 ft2 Reduced Footprint

Notes: Class III Soils
Qave = 90 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #####

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

Sample Date	Test Type	GPD	Recirculation Tank cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
3/18/2003	Monthly											17			35
3/18/2003	Quarterly		2	7	0.5		10.14		17	10	11.9		141		
3/19/2003	Monthly														
4/14/2003	Monthly									8	17.1	13			1
4/15/2003	Monthly														
5/19/2003	Monthly									7	15.9	18			410
5/20/2003	Monthly														
6/16/2003	Monthly														
6/16/2003	Quarterly			1	0.1	3.92	0.64	20	24	8	15.4				
6/24/2003	Monthly														
7/15/2003	Monthly											26			1
7/16/2003	Monthly														
7/24/2003	Monthly														13000
8/18/2003	Monthly									7	27	24			20
8/19/2003	Monthly														
9/26/2003	Quarterly		18	21	2		8.55		15.0				198		
9/26/2003	Monthly									7	22.8	50			30
9/30/2003	Monthly				0.1										
10/15/2003	Monthly									8	23.6	40			370
11/17/2003	Monthly											40			130
12/17/2003	Quarterly		15	4	2.5	2.94	0.9	20	23				90		
12/17/2003	Monthly									7	18.1	18			55
1/20/2004	Monthly	65										43			*100*
2/17/2004	Monthly									8	6.4	48			77000
3/16/2004	Quarterly		*11*	8	1.1								68		
3/16/2004	Monthly									8	10.3	37			41000
4/13/2004	Monthly	108								8	13.2	26			6700
5/18/2004	Monthly	98								7	25.7	30			1
6/15/2004	Quarterly		12	11	1.6	2.5	0.6	12	14				87		
6/15/2004	Monthly									7	27.4	49			1
7/15/2004	Monthly									7	27.1	28			10
8/10/2004	Quarterly		2	5	0.9	1.5	0.2	7.1	8.6				78		
8/10/2004	Monthly									7	26.1	18			10
AVE:		**90**	**10**	**8**	**1**	**3**	**4**	**15**	**17**		**19**	**31**	**110**		***86***

Sample Date	AdvanTex Effluent cBOD5 mg/L	TSS mg/L	TURB NTU	TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	pH	Temp celcius	Cl mg/L	Alk mg/L	TP mg/L	E. Coli mpn/100ml
3/18/2003										18			29
3/18/2003	6	7	0.6		9.8		16	10	12.5		146		
3/19/2003													
4/14/2003								8.4	19.8	13			10
4/15/2003													
5/19/2003								7.2	15.8	18			20
5/20/2003													
6/16/2003										21			28.33
6/16/2003		6	0.1	3.9	0.3	29	33	8.1	15.6				
6/24/2003													
7/15/2003										52			2
7/16/2003													
7/24/2003													210
8/18/2003								7.1	27.5	31			30
8/19/2003													
9/26/2003	17		1.9		8.1		16.0				194		
9/26/2003								7	22.4	45			41
9/30/2003			0.1										
10/15/2003								8.1	22.9	48			53
11/17/2003								7.5	18.7	38			10
12/17/2003	2	3	1.4	2.4	0.4	24	27				81		
12/17/2003								7.1	18.2	22			10
1/20/2004										44			20
2/17/2004								8.5	6	110			3200
3/16/2004	5	46	1								47		
3/16/2004								8.2	10	50			8700
4/13/2004								8.4	15.1	33			1400
5/18/2004								6.9	24.5	35			1
6/15/2004	2	17	4.5	2.2	0.2	3.1	5.4				86		
6/15/2004								6.9	25.9	39			7
7/15/2004								7.2	29.1	34			4
8/10/2004	2	13	2.8	2.4	0.5	4.6	7				82		
8/10/2004								7.4	26.3	20			4
AVE:	**6**	**15**	**2**	**3**	**3**	**15**	**17**		**19**	**37**	**106**		***32***

Sample Date	Lysimeter #1 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #2 TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml	Lysimeter #3 (Background) TKN mg/L	NH3 mg/L	NO3 mg/L	TN mg/L	Cl mg/L	E. Coli mpn/100ml
3/18/2003																		
3/18/2003																		
3/19/2003					6.5	1					22	1					Dry	Dry
4/14/2003																		
4/15/2003					4	1					7.5	1					Dry	Dry
5/19/2003																		
5/20/2003					4.2	1					6.1	1					Dry	Dry
6/16/2003																		
6/16/2003																		
6/24/2003					11	1					11	1					Dry	Dry
7/15/2003																		
7/16/2003					40	1					35	1					Dry	Dry
7/24/2003																		
8/18/2003																		
8/19/2003					40	1					45	1					Dry	Dry
9/26/2003																		
9/26/2003																		
9/30/2003																		
10/15/2003					44	1					37	1					Dry	Dry
11/17/2003					16	1					24	1					Dry	Dry
12/17/2003																		
12/17/2003					6	1					12	1					Dry	Dry
1/20/2004					25	1					30	1					Dry	Dry
2/17/2004					20	1					32	1					Dry	Dry
3/16/2004																		
3/16/2004					15	1					21	1					Dry	Dry
4/13/2004					8	1					17	1					Dry	Dry
5/18/2004					18	1					Dry	1					Dry	1
6/15/2004																		
6/15/2004					25	1					Dry	1					Dry	Dry
7/15/2004					16	1					20	1					Dry	Dry
8/10/2004																		
8/10/2004					10	1					11	1					Dru	Dry
AVE:					**18**	**1**					**22**	**1**						**1**

Virginia Innovative Approval Sampling Results

11520 McFaden Drive, Spotsylvania, VA 22553 Stephen Jones (540)972-7571 Class IV

This System Performance Sheet records test results from effluent samples taken at key points throughout the wastewater treatment system.
In addition, here are some quick system facts and a legend for the wastewater characteristics. See the flow configuration below.

Quick Facts

Building / Facilities: 3 bdrm

Occupants: 3
Start-up: July 22, 2003
Location: Spotsylvania County
Designer / Engineer: CMW LLC
Contractor / Installer: White Oak Excavating, Inc.
Regulating Authority: Spotsylvania County
Design Flows: 450 gpd
System Configuration: AX20 Mode 3b
Processing Tank: 1500 gallon 2 compartment
Discharge Tank: 1500 gallon 2 compartment
Disposal Treatment System: 2380 ft2
Discharge Pump Rate: 2.65 gpm
Notes: Class IV soils

Qave = 0 T "ON" = 30 sec
Rb:R = 3.5 T "OFF" = #DIV/0!

Legend

BOD5: Biochemical Oxygen Demand (*5 day, uninhibited*)
cBOD5: Carbonaceous Biochemical Oxygen Demand (*5 day, inhibited*)
TSS: Total Suspended Solids
TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
NH3-n: Ammonia-Nitrogen
NO2-n: Nitrite-Nitrogen
NO3-n: Nitrate-Nitrogen
TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
DO: Dissolved Oxygen
pH: Measure of accidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
Alk: Alkalinity
TP: Total Phosphorus
G&O: Grease and Oil
FC: Fecal Coliform
Baseline Data: *When available, represents the level of performance of the Primary Septic Tank w/o recirc-filter operation.*

> *Numbers shown in italics were actually reported as greater than*
Numbers shaded were actually reported as less than
Shaded boses indicate outliers that were removed. See notes for #.

			Recirculation Tank													AdvanTex Effluent													Lysimeter #1						Lysimeter #2						Lysimeter #3 (Background)					
			cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	cBOD5	TSS	TURB	TKN	NH3	NO3	TN	pH	Temp	Cl	Alk	TP	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli	TKN	NH3	NO3	TN	Cl	E. Coli
			mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L		celcius	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml	mg/L	mg/L	mg/L	mg/L	mg/L	mpn/100ml
Sample Date	Test Type	GPD																																												
1/28/2004	Quarterly		52	17	3.4	11	6.3	2.5	14				240			10	13	1.1	4.6	2.2	3.7	4.6				197																				
1/28/2004	Monthly									7.7	10.5	64			36000								7.8	10.3	66			7700																		
2/24/2004	Monthly									8.1	10.3	76			22000								8.3	11	80.8			840					Dry	1					71	1					Dry	Dry
3/18/2004	Monthly									8.3	13.7	46.6			240000								8.5	14.5	75			24000					68	1					43	1					8	1
4/27/2004	Quarterly		44	14	4.1	24	8.7	7.3	31				206			25		2.9	18	14	6.7	25				165																				
4/27/2004	Monthly									7.8	18.8	32			160000								8.1	19.4	40			*24192*					38	1					23	1					Dry	Dry
5/25/2004	Quarterly															12	12	11																												
5/26/2004	Monthly									6.7	24.3	47			36000								6.5	24.6	47			12000					250	1					125	1					Dry	Dry
6/23/2004	Monthly									7	22.9	46			61000								6.9	23.2	59			930					46	1					34	1					Dry	Dry
7/27/2004	Quarterly		2	17	2.6	5.3	2.5	4	9.3				196			2	3	0.7	2.1	0.7	3.6	5.7				167																				
7/27/2004	Monthly									6.8	21.8	41			14000								6.9	21.6	48			750					50	1					33	1					Dry	Dry
8/27/2004	Monthly									6.8	25.9	39			14000								6.7	26.6	46			1900					45	1					33	1					Dry	Dry
9/14/2004	Monthly									7.2	25	48			33000								7.3	25.4	47			3400					47	1					40	1					Dry	Dry
10/7/2004	Quarterly		13	21	6.3	7.1	3.7	5.2	12				258			2	3	0.9	2.4	0.9	4.2	6.6				236																				
10/7/2004	Monthly									7.2	23.8	42			5400								7.2	24.3	54			340					42	1					31	1					Dry	Dry
11/24/2004	Monthly									6.6	17.7	38			87000								6.5	17.9	39			8200					Dry	1					28	1					Dry	Dry
12/28/2004	Monthly									6.8	10.9	53			82000								6.8	10.7	53			10000					Dry	1					26	1					8	5
1/27/2005	Quarterly		17	30	12	9.7	3.8	5.6	15				286			4	2	1.7	3.4	0.7	11	15				252																				
1/27/2005	Monthly									7.1	8.8	35			*6600*								7	8.5	65			380					Dry	Dry					Dry	Dry					Dry	Dry
2/18/2005	Monthly									7.3	10	62			1200								7.3	10.4	52			130					Dry	Dry					28	1					Dry	Dry
3/29/2005	Monthly									7.1	15.1	41			6100								7	15.6	54			710					Dry	1					23	1					Dry	Dry
4/26/2005	Quarterly		32	22	10	12	3.7	5.5	17				312			2	2	1.1	4.1	0.2	7	11				269																				
4/26/2005	Monthly									7.1	17	44			48000								7	16.9	44			1500					47	1					40	1					Dry	Dry
5/25/2005	Monthly									6.8	15.7	46			170000								6.7	16.9	46			24000					Dry	1					23	1					Dty	Dry
6/28/2005	Monthly									6.9	26.2	34			46000								6.7	27.2	37			17000					Dry	1					26	1					Dry	Dry
7/26/2005	Quarterly		14	25	10	8.5	1.3	1.2	9.7				398			2	4	2.2	2.4	0.3	1.5	3.9				342																				
7/26/2005	Monthly									7.4	25.8	34			12000								7.1	28	38			7300					34	1					29	1					Dry	Dry
AVE:			**25**	**21**	**7**	**11**	**4**	**4**	**15**		**18**	**46**	**271**		***28214***	**7**	**6**	**3**	**5**	**3**	**5**	**10**		**19**	**52**	**233**		***2958***					**67**	**1**					**39**	**1**					**8**	**2**