

## 10. Enclosures

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Table 1. Measured values of various parameters in the influent and effluent for monitoring the progress of nitrification (1/3)

Date	Days					Influent			Effluent				
		Q	T	DO	pH	COD Total	COD Soluble	TAN	COD Total	COD Soluble	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-NO <sub>2</sub> <sup>-</sup>
		(mL/day)	° C	mg/L		mg/L			mg/L				
25/04/2017	1	240	23	2.5	6.1	22505	7898	6798	6736	44610	24.7	5171	6.9
28/04/2017	3	240	23	7.1	5.8	16820	10690	4792	3432	4491	15.7	4690	10.1
03/05/2017	8	240	24	2.2	6.0	20090	12640	4877	6574	4044	14.6	5189	9.5
08/05/2017	13	240	24	0.5	6.0	22580	30770	5218	11996	3838	24.7	4754	16.5
12/05/2017	17	240	24	2.5	5.9	24640	12775	4668	6008	4133	22.9	4692	37.8
15/05/2017	20	0	24	2.4	6.6	19100	14310	4223	13136	389	74.4	5461	168.2
22/05/2017	27	0	24	6.3	6.6	10010	6354	4495	5809	2852	10.8	5266	6.2
29/05/2017	34	0			5.6	10010	6354	3639	5809	2852	7.4	2982	0.9
01/06/2017	37	240	26	0.9	7.7	19130	10110	4570	3724	2313	8.6	4440	3.6
05/06/2017	41	240	24	4.5	5.9	5960	4840	6380	2152	1662	10.4	5396	1.1
09/06/2017	45	240	24		5.7	15900	9830	5175	4484	2138	10.3	4039	0.9
15/06/2017	51	0	26	6.5	6.1	25190	11108	5363	3130	1975	11.3	5089	2.2
16/06/2017	52	216	26	6.5	6.0	8065	4288	4195	5486	1053	12.9	4628	0.8
21/06/2017	57	216	28	1.5	6.7	27937	8906	4067	2861	1785	15.5	3769	1.0
23/06/2017	59	240	26	5.1	5.4	11735	7190	3420	3666	2127	14.0	4191	2.3
27/06/2017	63	216	26	6.2	6.0	15960	8984	3885	4668	2639	75.0	5097	104.5

Table 17. Measured values of various parameters in the influent and effluent for monitoring the progress of the nitrification (2/3)

Date	Days					Influent			Effluent				
		Q	T	DO	pH	COD Total	COD Soluble	TAN	COD Total	COD Soluble	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-NO <sub>2</sub> <sup>-</sup>
		(mL/day)	° C	mg/L		mg/L			mg/L				
29/06/2017	65	216	27	7.7	6.1	12757	8488	6200	5320	2866	39.2	4885	287.8
03/07/2017	69	0	24	4.7	6.0	9910	6342	4620	4976	2813	9.8	4179	27.0
07/07/2017	73	0	27	4.7	5.9	6575	4916	3299	2964	2088	6.9	3845	1.2
10/07/2017	76	216	26	5.5	6.1	17110	10776	5713	4506	2434	6.7	4800	1.0
14/07/2017	80	216	23	5.7	6.1	17495	10338	4122	3888	2248	8.7	4977	1.1
17/07/2017	83	216	25	5.1	6.1	16625	12554	4251	4128	2141	5.4	6094	0.7
20/07/2017	86	0	27	5.5	6.1	16370	10596	3931	3002	2313	8.8	5338	2.6
25/07/2017	91	212	24	5.3	6.0	15065	10968	4430	3628	2465	177.0	5900	39.0
27/07/2017	93	216	25	5.3	5.9	15470	9084	4584	3500	2428	51.1	5434	28.3
01/08/2017	98	252	25	4.6	5.9	18395	11908	3846	3210	2270	32.5	5236	2.7
03/08/2017	100	240	27	5.2	6.1	18030	11982	3601	3720	2357	11.1	5601	3.9
07/08/2017	104	252	24	5.2	6.1	13385	9604	4244	4970	2309	10.9	5590	2.7
10/08/2017	107	252	28	5.0	5.9	16190	11116	4009	3698	2458	9.3	5518	2.9
14/08/2017	111	222	25	6.0	6.0	12160	7934	3835	4188	2295	6.3	6215	0.8
18/08/2017	115	228	27	5.2	5.9	15215	11172	3720	4022	2417	6.9	5557	3.4
24/08/2017	121	228	24	5.4	6.0	15015	8580	4235	6940	3267	12.7	5366	0.6

Table 17. Measured values of various parameters in the influent and effluent for monitoring the progress of the nitrification (3/3)

Date	Days					Influent			Effluent				
		Q	T	DO	pH	COD Total	COD Soluble	TAN	COD Total	COD Soluble	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-NO <sub>2</sub> <sup>-</sup>
		(mL/day)	° C	mg/L		mg/L			mg/L				
28/08/2017	125	226	24	4.9	6.0	17640	11662	3898	6872	3173	8.9	5146	0.9
31/08/2017	128	228	25	5.0	6.1	16345	9202	3352	5894	3618	6.5	5619	2.4
04/09/2017	132	233	25	2.5	5.9	20115	12728	5648	9002	3663	14.7	5054	19.3
07/09/2017	135	228	24	5.9	4.8	20375	11666	4057	7570	3657	11.2	5114	7.7
15/09/2017	143	228	24	5.9	6.0	20375	11666	4057	7068	3802	13.3	5487	0.3
18/09/2017	146	209	23	4.4	5.9	20335	10006	3975	6570	3753	16.2	5098	1.7
21/09/2017	149	228	24	5.9	6.0	28250	10176	4714	6826	3962	14.6	5342	0.3
25/09/2017	153	212	24	5.0	5.4	17515	8538	3573	6088	3593	14.6	5059	4.9
29/09/2017	157	216	24	5.4	6.2	19780	11436	4806	6648	3732	17.8	5379	5.1
02/10/2017	160	199	25	6.0	5.3	17570	9674	4842	7750	3583	14.7	4644	5.1
05/10/2017	163	204	25	5.3	5.3	15870	9216	3796	7516	3696	13.8	4612	4.3
11/10/2017	169	216	26	3.7	5.7	18020	10444	3702	7180	3727	19.3	5272	4.9
16/10/2017	174	204	23	4.4	5.5	20265	8172	3623	7266	4129	15.4	4460	0.7
19/10/2017	177	204	26	3.6	5.6	15955	8118	3676	7216	4095	11.1	5074	1.8
23/10/2017	181	210	24	6.4	5.5	26070	8600	3893	8804	3902	12.3	4850	5.1
26/10/2017	184	216	24	6.4	5.4	22955	8388	3691	7584	4277	12.3	5024	13.9

Table 2. Measured values of various parameters for monitoring the progress of denitrification during lab-scale storage (D1)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	TAN	N-NO <sub>2</sub> <sup>-</sup>	N-NO <sub>3</sub> <sup>-</sup>
			°C						
21/06/17	1	6.9			7844	3632	26.2	2.9	5074
28/06/17	7	7.4	26	0.3	5180	3684	47.9	2.0	5041
04/07/17	13	7.7	27	0.2	4100	3349	37.5	2.2	4624
12/07/17	21	7.9	28	0.1	4992	3467	36.7	2.1	4590
17/07/17	26	8.0	26	0.2	5014	3626	33.9	2.3	4915
24/07/17	33	8.0	28	0.1	4686	3589	36.4	2.3	5007
01/08/17	41	8.1	27	0.1	4808	3402	25.9	4.3	5175
08/08/17	48	8.0	28	0.2	5246	3527	28.5	6.9	5126
16/08/17	56	8.0	26	0.2	5184	3537	19.9	8.8	5146
22/08/17	62	8.0	25	0.1	6120	4005	19.8	9.6	5165
31/08/17	71	7.9	27	0.1	5954	3911	13.0	11.8	4857
05/09/17	76	7.9	27	0.1	7168	4047	10.3	12.7	4750
11/09/17	82	7.8	25	0.1	6212	3853	9.9	12.0	4781
26/09/17	97	7.8	26	0.1	6162	3860	1.9	4.9	4812
10/10/17	111	8.2	25	0.1	5904	3838	1.9	2.9	4780
24/10/17	125	8.1	23	1.5	7810	3814	1.0	1.8	4714
06/11/17	138	8.1	19	1.6	7190	2977	1.3	1.9	4656
21/11/17	153	8.1	26	1.7	4494	2900	11.4	2.2	4687
05/12/17	167	8.3	27	1.4	4644	3061	4.5	2.0	4837
22/12/17	184	8.2	27	0.8	6820	2912	4.9	2.2	5256
02/01/18	195	8.2	24	1.1	6930	3367	6.9	1.9	4795
12/02/18	236	8.2	25	1.7	7660	3366	1.5	1.5	4842

Table 3. Measured values of various parameters for monitoring the progress of denitrification during lab-scale storage (D2)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	TAN	N-NO <sub>2</sub> <sup>-</sup>	N-NO <sub>3</sub> <sup>-</sup>
			°C						
21/06/17	1	6.9			7844	3632	26.2	2.9	5074
28/06/17	7	7.0	30	0.2	6212	3599	32.4	9.0	5474
04/07/17	13	6.7	32	1.9	6590	3368	2.2	0.6	4861
12/07/17	21	6.7	29	0.1	5402	3431	13.0	1.2	5168
17/07/17	26	6.8	27	5.9	7450	3547	7.3	0.5	5003
24/07/17	33	6.6	29	5.2	6902	3413	2.2	0.4	4838
01/08/17	41	6.5	28	5.3	6556	3483	5.5	0.4	5149
08/08/17	48	6.5	29	6.5	6128	3496	8.6	0.4	5180
16/08/17	56	6.4	27	4.7	5184	3537	2.3	0.6	4849
22/08/17	62	6.5	26	4.8	7806	3423	2.0	0.6	4745
31/08/17	71	6.5	27	4.8	7870	3549	2.5	0.4	5268
05/09/17	76	6.4	26	5.2	7608	3508	1.9	0.3	4748
11/09/17	82	6.3	25	6.7	7550	3500	2.0	0.4	5018
26/09/17	97	6.1	27	6.3	7504	3577	2.1	0.4	4732
10/10/17	111	6.1	26	6.4	7506	3463	2.0	0.3	4755
24/10/17	125	5.9	23	6.8	8394	3390	2.0	0.3	4728
06/11/17	138	5.9	20	9.0	5544	2461	3.0	0.3	4662
21/11/17	153	5.8	26	8.0	5854	2528	3.4	0.3	4740
05/12/17	167	5.8	27	8.5	6160	2927	6.3	0.4	4688
22/12/17	184	5.9	28	6.9	5192	3214	6.6	0.5	5113
02/01/18	195	5.8	24	8.2	5336	2503	6.4	0.5	4858
12/02/18	236	5.6	25	5.0	5358	2001	9.6	0.6	5186

Table 4. Measured values of various parameters for monitoring the progress of denitrification during lab-scale storage (D3)

Date	Days	pH	Temperature	DO	COD Soluble	TAN	N-NO <sub>2</sub> <sup>-</sup>	N-NO <sub>3</sub> <sup>-</sup>
			°C					
21/06/17	0	6.9	10		3632	26.2	2.9	5074
05/07/17	14	7.2	10	1.5	3545	29.7	1.3	5953
12/07/17	21	7.4	10	0.1	3495	23.8	1.3	5979
18/07/17	27	7.5	10	0.1	3569	23.5	1.3	5955
01/08/17	41	7.5	10	0.5	3497	23.3	2.1	5912
17/08/17	57	7.4	10	0.1	3225	19.7	4.2	4950
25/08/17	65	7.3	11	0.8	4355	14.4	4.8	5437
12/09/17	83	7.2	10	0.9	4177	12.3	4.3	6010

Table 5. Measured values of various parameters for monitoring the progress of denitrification during lab-scale storage (D4)

Date	Days	pH	Temperature	DO	COD Soluble	TAN	N-NO <sub>2</sub> <sup>-</sup>	N-NO <sub>3</sub> <sup>-</sup>
			°C					
21/06/17	0	6.9			3632	26.2	2.9	5074
05/07/17	14	6.4	14	5.9	3614	45.9	0.5	4859
12/07/17	21	6.4	13	6.3	3606	1.8	0.6	5749
18/07/17	27	6.4	14	5.9	3478	1.8	0.4	5397
01/08/17	41	6.4	12	6.7	3323	1.2	0.3	5532
17/08/17	57	6.4	10	6.9	2983	2.7	0.4	5526
25/08/17	65	6.3	13	7.3	4185	2.1	0.4	5330
12/09/17	83	6.2	12	8.1	4204	4.5	0.5	5132



Table 6. Measured values of various parameters for monitoring the progress of volatilisation during lab-scale storage (V1)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	N-NO <sub>2</sub> <sup>-</sup>	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-losses
			°C							
16/11/17	1	8.3		0.1	16375	7538	1.1	5236	0	0%
23/11/17	7	8.2	19	0.1	14120	6661	1.1	4978	0	4.9%
30/11/17	14	8.6	27	0.1	11915	6728	0.9	4088	0	21.9%
07/12/17	21	8.8	20	0.1	13960	7418	1.0	3792	0	27.6%
14/12/17	28	8.9	28	0.1	16675	8202	1.5	2650	0	49.4%
22/12/17	36	9.1	28	0.1	14270	5804	0.9	2690	0	48.6%
03/01/18	48	9.2	25	0.1	14255	5444	0.9	2353	0	55.1%
18/01/18	63	9.3	26	0.1	21035	6186	0.8	2017	0	61.5%
01/02/18	77	9.2	22	0.1	16555	7246	1.1	1525	0	70.9%
15/02/18	91	9.1	27	0.1	16295	5682	0.9	1065	0	79.7%
28/02/18	104	8.9	26	0.1	10770	6505	0.6	690	0	86.8%

Table 7. Measured values of various parameters for monitoring the progress of volatilisation during lab-scale storage (V2)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	N-NO <sub>2</sub> <sup>-</sup>	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-losses
			°C							
16/11/17	1	8.3		0.1	16375	7538	1.1	5236	0	0%
23/11/17	7	9.1	20	0.1	18565	6802	0.9	4122	0	21.3%
30/11/17	14	9.2	28	0.1	19575	6492	0.8	3236	0	38.2%
07/12/17	21	9.3	21	0.1	19650	6598	0.8	2734	0	47.8%
14/12/17	28	9.3	29	0.1	17560	6554	0.7	2798	0	46.6%
22/12/17	36	9.4	29	0.1	17110	5186	0.8	2110	0	59.7%
03/01/18	48	9.3	26	0.1	16030	4918	0.7	2059	0	60.7%
18/01/18	63	9.3	27	0.1	15170	5630	0.8	1297	0	75.2%
01/02/18	77	9.3	27	0.5	13310	5640	0.8	1012	0	80.7%
15/02/18	91	9.0	28	0.6	13440	4914	0.7	581	0	88.9%
28/02/18	104	8.7	28	2.5	13880	5536	0.7	465	0	91.1%

Table 8. Measured values of various parameters for monitoring the progress of volatilisation during lab-scale storage (V3)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	N-NO <sub>2</sub> <sup>-</sup>	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-losses
			°C							
21/11/17	1	8.3		0.1	16375	7538	1.1	5236	0	0%
23/11/17	2	8.0	11	0.1	14965	7296	1.1	4002	0	23.6%
30/11/17	9	8.4	11	0.1	15820	7768	0.9	3642	0	30.4%
07/12/17	16	8.7	11	0.1	16150	7362	1.0	3024	0	42.2%
14/12/17	23	8.8	12	0.1	17230	7630	0.9	2823	0	46.1%
22/12/17	31	8.8	11	0.1	16055	6512	1.1	2642	0	49.5%
03/01/18	43	8.9	11	0.1	16280	6436	0.9	2518	0	51.9%
18/01/18	58	9.0	12	0.1	15170	6510	0.9	2012	0	61.6%
01/02/18	72	9.0	12	0.1	17640	6473	1.3	1354	0	74.1%
15/02/18	86	8.9	10	0.1	17330	7634	1.1	940	0	82.0%
28/02/18	99	8.7	14	0.1	18785	7054	1.1	661	0	87.4%

Table 9. Measured values of various parameters for monitoring the progress of volatilisation during lab-scale storage (V4)

Date	Days	pH	Temperature	DO	COD Total	COD Soluble	N-NO <sub>2</sub> <sup>-</sup>	TAN	N-NO <sub>3</sub> <sup>-</sup>	N-losses
			°C							
21/11/17	1	8.3		0.1	16375	7538	1.1	5236	0	0%
23/11/17	2	8.8	10	0.1	14775	7308	1.0	4812	0	8.1%
30/11/17	9	9.1	11	2.3	15165	6878	0.9	3504	0	33.1%
07/12/17	16	9.3	10	2.3	15805	6988	1.0	3394	0	35.2%
14/12/17	23	9.3	11	4.8	15570	6662	0.9	3030	0	42.1%
22/12/17	31	9.2	11	3.8	15630	6342	1.1	1594	0	69.6%
03/01/18	43	9.2	11	5.6	15090	5763	0.9	1257	0	76.0%
18/01/18	58	9.1	11	5.9	14140	6480	0.9	876	0	83.3%
01/02/18	72	9.0	10	8.0	14185	6424	1.3	796	0	84.8%
15/02/18	86	8.9	10	7.9	15285	6430	1.0	609	0	88.4%
28/02/18	99	8.7	11	9.5	15760	5670	0.9	199	0	96.5%

Table 10. Concentration changes of total NO<sub>3</sub><sup>-</sup> per week and the average rate of N loss from the nitrified LPD during storage.

Days	D1			D2			D3			D4		
	mg/L	%Losses	%Losses per week	mg/L	%Losses	%Losses per week	m/L	%Losses	%Losses per week	mg/L	% Losses	% Losses per week
0	4941	0%	0%	5035	0%	0%	5634	0%	0%	5265	0%	0%
7	4937	0.1%	0.1%	5028	0.1%	0.1%	5638	-0.1%	-0.1%	5276	-0.2%	-0.2%
14	4933	0.2%	0.1%	5021	0.3%	0.1%	5643	-0.2%	-0.1%	5287	-0.4%	-0.2%
21	4930	0.2%	0.1%	5014	0.4%	0.1%	5647	-0.2%	-0.1%	5298	-0.6%	-0.2%
28	4926	0.3%	0.1%	5007	0.6%	0.1%	5652	-0.3%	-0.1%	5309	-0.8%	-0.2%
35	4922	0.4%	0.1%	5000	0.7%	0.1%	5656	-0.4%	-0.1%	5319	-1.0%	-0.2%
42	4918	0.5%	0.1%	4993	0.8%	0.1%	5661	-0.5%	-0.1%	5330	-1.2%	-0.2%
49	4914	0.5%	0.1%	4986	1.0%	0.1%	5665	-0.6%	-0.1%	5341	-1.4%	-0.2%
56	4910	0.6%	0.1%	4979	1.1%	0.1%	5670	-0.6%	-0.1%	5352	-1.7%	-0.2%
63	4906	0.7%	0.1%	4972	1.2%	0.1%	5675	-0.7%	-0.1%	5363	-1.9%	-0.2%
70	4902	0.8%	0.1%	4965	1.4%	0.1%	5679	-0.8%	-0.1%	5374	-2.1%	-0.2%
77	4899	0.9%	0.1%	4958	1.5%	0.1%	5684	-0.9%	-0.1%	5385	-2.3%	-0.2%
83	4895	0.9%	0.1%	4952	1.6%	0.1%	5687	-1.0%	-0.1%	5394	-2.5%	-0.2%
90	4891	1.0%	0.1%	4945	1.8%	0.1%						
97	4887	1.1%	0.1%	4938	1.9%	0.1%						
104	4884	1.2%	0.1%	4931	2.1%	0.1%						
111	4880	1.2%	0.1%	4924	2.2%	0.1%						
118	4876	1.3%	0.1%	4918	2.3%	0.1%						
125	4872	1.4%	0.1%	4911	2.5%	0.1%						
132	4868	1.5%	0.1%	4904	2.6%	0.1%						
139	4864	1.6%	0.1%	4897	2.8%	0.1%						
146	4860	1.6%	0.1%	4890	2.9%	0.1%						
153	4856	1.7%	0.1%	4883	3.0%	0.1%						
160	4853	1.8%	0.1%	4876	3.2%	0.1%						
167	4849	1.9%	0.1%	4869	3.3%	0.1%						
174	4845	2.0%	0.1%	4862	3.4%	0.1%						
181	4841	2.0%	0.1%	4855	3.6%	0.1%						
188	4837	2.1%	0.1%	4848	3.7%	0.1%						
195	4833	2.2%	0.1%	4841	3.9%	0.1%						
202	4829	2.3%	0.1%	4834	4.0%	0.1%						
209	4825	2.3%	0.1%	4827	4.1%	0.1%						
216	4821	2.4%	0.1%	4820	4.3%	0.1%						
223	4818	2.5%	0.1%	4813	4.4%	0.1%						
230	4814	2.6%	0.1%	4806	4.6%	0.1%						
236	4810	2.6%	0.1%	4800	4.7%	0.1%						
<b>MEAN (83 days)</b>			<b>0.08%</b>				<b>0.1%</b>				<b>-0.08%</b>	<b>-0.2%</b>
<b>MEAN (236 days)</b>			<b>0.08%</b>				<b>0.1%</b>					

Table 11. Concentration changes of total N<sub>inorg</sub> per week and the average rate of N loss from the nitrified LPD during storage.

Days	D1			D2			D3			D4		
	mg/L	%Losses	%Losses per week	mg/L	%Losses	%Losses per week	mg/L	%Losses	%Losses per week	mg/L	%Losses	%Losses per week
0	4980	0%	0%	5267	0%	0%	5664	0%	0%	5290	0%	0%
7	4975	0.1%	0.1%	5249	0.3%	0.3%	5668	-0.1%	-0.1%	5299	-0.2%	-0.2%
14	4970	0.2%	0.1%	5232	0.7%	0.3%	5671	-0.1%	-0.1%	5307	-0.3%	-0.2%
21	4964	0.3%	0.1%	5215	1.0%	0.3%	5674	-0.2%	-0.1%	5315	-0.5%	-0.2%
28	4959	0.4%	0.1%	5198	1.3%	0.3%	5678	-0.2%	-0.1%	5324	-0.6%	-0.2%
35	4954	0.5%	0.1%	5180	1.6%	0.3%	5681	-0.3%	-0.1%	5332	-0.8%	-0.2%
42	4949	0.6%	0.1%	5163	2.0%	0.3%	5685	-0.4%	-0.1%	5341	-1.0%	-0.2%
49	4944	0.7%	0.1%	5146	2.3%	0.3%	5688	-0.4%	-0.1%	5349	-1.1%	-0.2%
56	4938	0.8%	0.1%	5129	2.6%	0.3%	5692	-0.5%	-0.1%	5357	-1.3%	-0.2%
63	4933	0.9%	0.1%	5111	2.9%	0.3%	5695	-0.5%	-0.1%	5366	-1.4%	-0.2%
70	4928	1.0%	0.1%	5094	3.3%	0.3%	5699	-0.6%	-0.1%	5374	-1.6%	-0.2%
77	4923	1.2%	0.1%	5077	3.6%	0.3%	5702	-0.7%	-0.1%	5383	-1.7%	-0.2%
83	4917	1.3%	0.1%	5060	3.9%	0.3%	5705	-0.7%	-0.1%	5391	-1.9%	-0.2%
90	4912	1.4%	0.1%	5042	4.3%	0.3%						
97	4907	1.5%	0.1%	5025	4.6%	0.3%						
104	4902	1.6%	0.1%	5008	4.9%	0.3%						
111	4896	1.7%	0.1%	4991	5.2%	0.3%						
118	4891	1.8%	0.1%	4974	5.6%	0.3%						
125	4886	1.9%	0.1%	4956	5.9%	0.3%						
132	4881	2.0%	0.1%	4939	6.2%	0.3%						
139	4876	2.1%	0.1%	4922	6.5%	0.3%						
146	4870	2.2%	0.1%	4905	6.9%	0.3%						
153	4865	2.3%	0.1%	4887	7.2%	0.3%						
160	4860	2.4%	0.1%	4870	7.5%	0.3%						
167	4855	2.5%	0.1%	4853	7.9%	0.3%						
174	4849	2.6%	0.1%	4836	8.2%	0.3%						
181	4844	2.7%	0.1%	4818	8.5%	0.3%						
188	4839	2.8%	0.1%	4801	8.8%	0.3%						
195	4834	2.9%	0.1%	4784	9.2%	0.3%						
202	4829	3.0%	0.1%	4767	9.5%	0.3%						
209	4823	3.1%	0.1%	4749	9.8%	0.3%						
216	4818	3.3%	0.1%	4732	10.1%	0.3%						
223	4813	3.4%	0.1%	4715	10.5%	0.3%						
230	4808	3.5%	0.1%	4698	10.8%	0.3%						
236	4802	3.6%	0.1%	4680	11.1%	0.3%						
<b>MEAN (83 days)</b>			<b>0.1%</b>							<b>-0.06%</b>		
<b>MEAN (236 days)</b>			<b>0.1%</b>							<b>-0.2%</b>		

Table 12. Concentration changes of TAN per week and the average rate of N loss from the untreated LPD during storage

Days	V1		V2		V3		V4	
	mg/L	%Change	mg/L	%Change	mg/L	%Change	mg/L	%Change
0	4676	0%	4116	0%	4121	0%	4182	0%
7	4384	6.2%	3835	6.8%	3858	6.4%	3852	7.9%
14	4093	6.2%	3554	6.8%	3595	6.4%	3522	7.9%
21	3802	6.2%	3273	6.8%	3333	6.4%	3192	7.9%
28	3511	6.2%	2992	6.8%	3070	6.4%	2862	7.9%
36	3178	7.1%	2671	7.8%	2770	7.3%	2485	9.0%
43	2886	6.2%	2390	6.8%	2507	6.4%	2155	7.9%
50	2595	6.2%	2109	6.8%	2244	6.4%	1825	7.9%
57	2304	6.2%	1828	6.8%	1982	6.4%	1495	7.9%
64	2012	6.2%	1547	6.8%	1719	6.4%	1165	7.9%
71	1721	6.2%	1267	6.8%	1456	6.4%	835	7.9%
78	1430	6.2%	986	6.8%	1194	6.4%	505	7.9%
85	1139	6.2%	705	6.8%	931	6.4%	175	7.9%
92	847	6.2%	424	6.8%	668	6.4%	-155	7.9%
99	556	6.2%	143	6.8%	405	6.4%	-485	7.9%
104	265	6.2%	-138	6.8%				
<b>Mean</b>		<b>5.9%</b>		<b>6.5%</b>		<b>6.0%</b>		<b>7.4%</b>
<b>SD</b>		<b>0.02</b>		<b>0.02</b>		<b>0.02</b>		<b>0.02</b>





Table 29. Measured concentrations before and after the vacuum evaporation and mass balance calculations of different parameters (2/3)

Variable	Date	Sample	pH	EC	COD Total	COD Soluble	N-NO <sub>3</sub> <sup>-</sup>	N-NO <sub>2</sub> <sup>-</sup>	TAN	COD Total	COD Soluble	N-NO <sub>3</sub> <sup>-</sup>	N-NO <sub>2</sub> <sup>-</sup>	TAN	
				mS/cm	mg/L					mg					
<b>Nitrified LPD</b>	31/07/17	3	6.1	49.8	3833	2417	5654	0.338	5.88	766.6	483.4	1130.8	0.068	1.2	
<b>Thickened LPD</b>	31/07/17	3	5.7	99.1	21010	11744	14300	1.13	12.45	1680.8	939.5	1144	0.0904	0.996	
<b>Distillate</b>	31/07/17	3	7.2	0.02	111.6	111.6	1.433	0.0561	2.43	13.28	13.28	0.17	0.007	0.289	
										<b>% Thickened LPD</b>	219%	194%	101%	134%	84.7%
										<b>%Distillate</b>	1.7%	2.7%	0.015%	9.8%	24.6%
										<b>% Total</b>	220%	197%	101%	144%	10.39%
										<b>% Losses or % Increases</b>	<b>-120%</b>	<b>-97%</b>	<b>-1%</b>	<b>-44%</b>	<b>-9.3%</b>
<b>Nitrified LPD</b>	29/08/17	<b>4</b>	6.848	55.0	4928	3531	5604	0.81	11.17	985.6	706.2	1120.8	0.162	2.2	
<b>Thickened LPD</b>	29/08/17	<b>4</b>	6.390	95.4	26990	12366	12582	2.00	23.12	2699	1236.6	1258.2	0.20	2.3	
<b>Distillate</b>	29/08/17	<b>4</b>	8.312	0.03	180.2	180.2	1.316	0.0314	2.578	18.02	18.02	0.132	0.003	0.26	
										<b>% Thickened LPD</b>	274%	175%	112%	123.5%	103%
										<b>%Distillate</b>	1.8%	2.6%	0.01%	1.94%	12%
										<b>% Total</b>	276%	178%	112%	125%	115%
										<b>% LOSSES OR % INCREASES</b>	<b>-176%</b>	<b>-78%</b>	<b>-12%</b>	<b>-25%</b>	<b>-15%</b>

