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RESEARCH ARTICLE

LAS pollution of the Sea of Marmara, Golden Horn and Istanbul Strait (Bosphorus) during 2004-2007

Kasım Cemal Güven*[1], Burak Coban[2]

[1]Turkish Marine Research Foundation (TUDAV), 34820, Beykoz, Istanbul, TURKEY

[2]Department of Chemistry, Faculty of Science and Letters, Bulent Ecevit University, 67100, Zonguldak, TURKEY

***Corresponding author:** kcguven@yahoo.com.tr

Abstract
In this study, LAS pollution of Sea of Marmara, Golden Horn and Istanbul Strait (Bosphorus) was reported for different depths including the surface and the deep during 2004-2007. Highest LAS pollution for the years were: 243.99 in January 2004 in the Sea of Marmara, 204.86 in Golden Horn in February 2005, 271.40 in January 2006 and 164.64 in February 2007 (μg/l). As a result of this study, it is shown that, waste water discharged into the deep water of Sea of Marmara (Mediterranean Sea water) cannot totally reach to the Black Sea. This problem must be solved. In our opinion the wastewater of Istanbul City should be collected to one station and discharged directly into the deep waters of the Black Sea.

Keywords: LAS, Istanbul Strait, Golden Horn, Sea of Marmara.

Introduction

Detergents were used as cleaning agent. The formulation of powder detergents is composed of 17 and 22% alkylbenzenesulfonate (LAS) in European countries and Turkey, respectively. The other components of detergent are 15-30 (25-30) % phosphates, 5-12 (5-10) % sodium silicates, 0-15 (0-10) % sodium carbonate, 0-25 (0-15) % sodium perborate, 0.1-0.7 (0.1-0.5) % optical brightener (numbers out of parenthesis for European countries, in parenthesis for Turkey). LAS is the main compound in detergents. The most important properties of desired anionic surfactant are biodegradability; low toxicity for health sanity even though may cause hemolysis, skin and eye irritation, enzyme inhibition. LCA (limit concentration available) 0.5 mg/l.

LAS is prepared from LAB (linear alkyl benzene), by sulfonation technique. LAB was not uniform product.

The rations of alkyl chain of LAB components are (%): C_{11}, 25-25; C_{12}, 12-35; C_{13}, 15-30; C_{14}, 0-15. Phenyl ring attached to carbon numbers of LAB are (%): 5-phenyl, C_{10}, 0.4; Phenyl $C_{10,}$ 8.9; Phenyl $C_{11,}$ 33.7; Phenyl C_{12}, 31; Phenyl $C_{13,}$24; Phenyl $C_{14,}$2. After sulfonation of LAB 8-15 homologue and C_2-C_n-LAS 26 isomers occur.

LAS is degraded in the environment. The speed of degradation of LAS is strongly influenced by the alkyl chain length and the point of phenyl attachment (Swisher 1963). The major components of C_{12} and C_{13}-LAS are decreased earlier than C_{10} and C_{11}-LAS. More than 97% of LAS is often degraded in 3-4 days (Hon-Nami and Hanya 1980). After 22 days, the degradation was 86% of the C_{12} and C_{13}.LAS. The factors of degradation of LAS in the environment are: temperature, oxygen content, light, pH, bacteria, salinity, and distance from discharge point to determined point. It rapidly diminutes with depth (Gonzale-Mazo and Gomez-Parra 1996, Qin *et al.* 1991). The degradation of LAS for tap and distilled waters was investigated by HPLC analysis and found that the rank of degradation as follows: Sea water > tap water > distilled water. In sea water it degraded 83.07% in 14 days (Koç *et al.* 2002). The degradation in sea water during the transport and storage was (%): in Golden Horn 53,9-54.98, in 22 days, in Sea of Marmara 83.07-93.02, in 14 days, in the Black Sea cities 30.07-89.93 in 15 days (Koç *et al.* 2002; Güven *et al.* 2008).

Various methods were proposed for determination of anionic detergents in water. The methods used are: potentiometric (He *et al.* 1993), spectrophotometric as methylene blue active substance (MBAS) (Standard Methods, 1995), metachromatic (Güven *et al.* 1994; Akıncı and Guven 1997, Bektaş and Güven 2004, Çetintürk and Güven 2009), IR (Helmann 1978), AAS (Crips *et al.* 1976), GC/MS (Hon. Nami *et al.* 1978, 1980; Eganhouse *et al.* 1983; Raymundo and Preston 1992), HPLC (Marcomini abd Giger 1987, Terzic and Ahel 1993, Koç *et al.* 2002). C_{12}-LAS was determined by API-MS and HPLC-FLD (Ceglarek *et al.* 1999). AB/MDS Eİ-MS (Moldovan *et al.* 2011), liquid chromatography-UV and liquid chromatography mass spectrometry (Wangkarn *et al.* 2005). The most widely used method is methylene blue active substances (MBAS). This method is relatively simple but some substances interfere (Çetintürk and Güven 2009, Güven and Cumali 2007). The methods other then MBAS need expensive apparatus and application is time consuming.

In this work, a detailed LAS pollution in the Sea of Marmara, Golden Horn and Istanbul Strait (Bosphorus) during 2004-2007 for 26 stations and various depths was reported.

Materials and Methods

The sampling stations of the Sea of Marmara, Golden Horn and Istanbul Strait are shown in Figure 1: in the Black Sea near the entrance of the Istanbul Strait (aprox. 15 km) K1, K2, K3; Istanbul Strait: (Entrance of Istanbul Strait) K0, K0(A), K0(B), (Beykoz) B13, (Balta Limanı) BL, (Bebek) B7, (Üsküdar) B2, (Kız Kulesi) KK, KKK, KKO; Golden Horn: (between the Islands) ADA, (Eyüp-Sütlüce) ES, (Valide Sultan Bridge) VS, (Haliç Bridge) HK, (Unkapanı Bridge) UK, (Galata Bridge) GK; the Sea of Marmara: MBC, MKC, M14, M23, M8, MK, M11, MY1, MY2, M20.

For the determination of LAS: the Standard Methods (1995) was used.

Results and Discussion

As can be seen in Tables 1-8, LAS concentrations were not uniform in the studied area and show wide variation in all depths including discharge points. The highest LAS pollution found in the stations during the years were: Istanbul Strait at station K0: 107.37 in Jan 2004; BL: 133.49 in Feb 2005; BL: 231.44 in Jun 2006; BL: 128.50 in Mar 2007; Golden Horn at station VS: 164.50 in Nov 2004; ES: 204.86 in Feb 2005; ADA: 271.40 in Jan 2006; GK: 164.64 in Feb 2007; Sea of Marmara MK: 243.99 in Jan 2004; MK: 143.29 in Feb 2005; MBC: 198.19 in Sep 2006; MBC: 113.38 in Dec 2007.

As a comparison of the Sea of Marmara, Istanbul Strait and Golden Horn, the highest LAS pollution was found in Golden Horn in every year except in 2004 in the Sea of Marmara at MK station.

The waste water of Istanbul City is discharged into the deep water of the Sea of Marmara because the pollution was directed towards the Black Sea. The studies in this area showed that this opinion is not correct, because all the pollutants especially LAS raise to the surface. To prevent this waste water of Istanbul city must be collected in a station and directly discharged into deep waters of Black Sea. This is vital for the regeneration of the marine organisms in Sea of Marmara. In conclusion, this problem must be solved urgently.

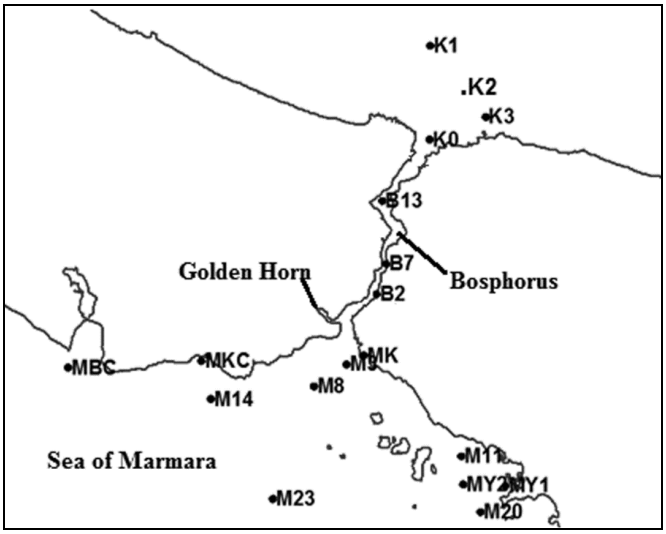

Figure 1. Sampling stations in the Bosphorus and the Sea of Marmara

İstanbul Boğazı, Haliç ve Marmara Denizi'nde LAS Kirliliği

Özet

Bu çalışmada, İstanbul Boğazı, Haliç ve Marmara Denizi'nde 26 istasyonda deterjan (LAS) kirliliği ölçümlerinin sonuçları yüzeyden dipe kadar değişik derinliklerde tayinleri bildirilmiştir. İstasyonlarda yıllara gore görülen en yüksek LAS miktarları aşağıda sıralanmıştır. İstanbul Boğazı: K0: 107.37 Ocak 2004, BL: 133.49 Şubat 2005, BL: 231.44 Haziran 2006, BL: 128.50 Mart 2007. Haliç: VS: 164.50 Kasım 2004, ES: 204.86 Şubat 2005, ADA: 271.40 Ocak 2006, GK: 164.64 Şubat 2007. Marmara Denizi: MK: 43.99 Ocak 2004, MK: 143.29 Şubat 2005, MBC: 198.19 Eylül 2006, MBC: 113.38 Aralık 2007. Bu çalışma göstermiştir ki, LAS miktarları verilen istasyonlarda dipten yüzeye kadar homojen bir dağılım göstermemiştir. Bu sonuçlara gore İstanbul şehrinden dip (Akdeniz suyu) suyuna verilen atık sular Karadeniz'e ulaşmadan yüzeye istasyonlara göre değişik oranlarda çıkmaktadır. Bu sebepten Marmara Denizi'ni atık suya bağlı kirlilikten korumak için bir çözüm bulunması gereklidir. Bize gore en uygun yol Marmara'ya verilen atık suların değişik istasyonlardan değil, bir istasyonda birleştirilerek Karadeniz'in derin suyuna verilmesi gereklidir.

Acknowledgement

The authors thank to Prof. Dr. E. Doğan for kind help.

Table 1. 2004 LAS Analysis Results (Jan-Jun)
Abbreviations: Stat: station; DE: depth (m); S: surface; T: thermocline; D: deep.

2004 LAS Analysis Results (Jan-Jun)																	
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	22.87	K3	S	15.0	K2	S	9.02	K2	S	56.67	K1	S	29.93	K2	S	15.76
K2	10	22.68	K3	10	9.94	K2	10	17.5	K2	10	52.34	K1	10	41.40	K2	10	13.50
K2	T	34.73	K3	D	15.18	K2	T	-	K2	T	59.78	K1	D	32.62	K2	T	17.46
K2	D	42.41	K1	S	31.8	K2	D	11.42	K2	D	64.23	K2	S	100.1	K2	D	34.32
K0	S	39.45	K1	10	39.76	K0	S	13.23	K0	S	22.35	K2	10	12.56	K0	S	16.64
K0	10	78.56	K1	T	46.02	K0	10	15.32	K0	10	38.26	K2	D	11.09	K0	10	18.50
K0	T	96.4	K1	D	34.18	K0	T	16.22	K0	T	58.87	K3	S	4.23	K0	T	28.23
K0	D	107.37	K2	S	17.44	K0	D	17.88	K0	D	41.22	K3	10	9.54	K0	D	19.72
K0A	S	22.53	K2	10	18.35	K0	S	4.05	K0	S	34.09	K3	D	18.32	K0	S	17.65
K0A	10	65.95	K2	T	21.68	K0	10	3.14	K0	10	42.41	K0	S	38.04	K0	10	17.01
K0B	S	52.35	K2	D	28.84	K0	S	4.7	K0	S	28.66	K0	10	40.03	K0	S	16.82
K0B	10	40.12	K0	S	22.96	K0	10	4.48	K0	10	25.55	K0	T	32.56	K0	10	25.73
BL	S	-	K0	10	26.25	BL	S	33.79	B2	S	15.43	K0	D	63.96	B2	S	20.54
BL	10	-	K0	T	33.54	BL	10	14.01	B2	10	18.51	K0	S	11.03	B2	10	20.48
BL	20	-	K0	D	31.07	BL	20	27.03	B2	T	31.34	K0	10	15.45	B2	T	17.71
BL	30	-	K0A	S	28.48	BL	30	22.03	B2	D	60.00	K0	S	27.80	B2	D	47.80
BL	T	-	K0A	10	14.42	BL	T	39.38	B7	S	26.62	K0	10	25.09	B7	S	15.64
BL	D	-	K0B	S	18.54	BL	50	24.56	B7	10	41.37	B2	S	20.09	B7	10	16.18
B13	S	13.66	K0B	10	16.77	BL	D	50.85	B7	T	28.35	B2	10	14.66	B7	T	23.62
B13	10	22.89	BL	S	19.18	B13	S	28.41	B7	D	34.51	B2	T	20.88	B7	D	39.48
B13	T	36.55	BL	10	23.78	B13	10	27.93	B13	S	31.95	B2	D	17.22	B13	S	44.87
B13	D	32.89	BL	20	21.79	B13	T	-	B13	10	29.33	B7	S	25.09	B13	10	27.40
B7	S	29.09	BL	30	27.77	B13	D	24.76	B13	T	48.17	B7	10	23.56	B13	T	34.75
B7	10	29.33	BL	T	25.18	B7	S	27.16	B13	D	52.93	B7	T	50.42	B13	D	45.82
B7	T	35.91	BL	50	45.82	B7	10	39.18	BL	S	32.38	B7	D	39.81	BL	S	24.45
B7	D	27.32	BL	D	27.62	B7	T	40.88	BL	10	39.02	B13	S	11.70	BL	10	25.60
B2	S	37.56	B13	S	13.66	B7	D	44.66	BL	20	33.17	B13	10	6.76	BL	20	19.39
B2	10	24.02	B13	10	18.35	B2	S	31.31	BL	30	27.26	B13	T	13.07	BL	30	18.53
B2	T	38.78	B13	T	51.22	B2	10	38.21	BL	50	53.08	B13	D	26.28	BL	50	45.64
B2	D	27.07	B13	D	44.17	B2	T	4.65	BL	T	52.16	BL	S	28.26	BL	T	43.10
KK	S	-	B7	S	16.52	B2	D	-	BL	D	54.39	BL	10	27.25	BL	D	38.50
KK	10	-	B7	10	18.81	KK	S	12.73	KK	S	16.80	BL	20	30.33	KK	S	21.03
KK	D	-	B7	T	28.35	KK	10	19.04	KK	10	22.68	BL	30	29.57	KK	10	20.48
KKK	S	-	B7	D	24.24	KK	D	12.09	KK	D	22.96	BL	40	35.64	KK	D	18.68
KKK	10	-	B2	S	25.88	KKK	S	-	ADA	S	72.31	BL	50	39.90	ADA	S	18.96
KKO	S	-	B2	10	12.9	KKK	10	-	ADA	D	28.50	BL	D	48.04	ADA	D	22.43
KKO	10	-	B2	T	34.42	KKO	S	-	ES	S	20.97	KK	S	27.13	ES	S	27.56
ADA	S	-	B2	D	31.65	KKO	10	-	ES	D	14.90	KK	10	36.49	ES	D	91.70
ADA	D	-	KK	S	20.55	ADA	S	68.35	VK	S	21.34	KK	D	21.37	VK	S	18.68
ES	S	-	KK	10	16.31	ADA	D	15.95	VK.	D	27.62	ADA	S	31.18	VK	D	24.69
ES	D	-	KK	D	24.88	ES	S	31.95	HK	S	33.75	ADA	D	22.53	HK	S	17.37
VS	S	-	ADA	S	147.36	ES	D	31.89	HK	D	33.44	ES	S	24.29	HK	D	28.68
VS	D	-	ADA	D	47.81	VS	S	32.84	UK	S	35.21	ES	D	20.42	UK	S	23.23
HK	S	-	ES	S	115.95	VS	D	16.59	UK	10	23.07	VS	S	25.06	UK	10	14.14
HK	D	-	ES	D	29.51	HK	S	22.35	UK	20	30.67	VS	D	22.77	UK	20	25.97
UK	S	-	VK	S	68.54	HK	D	26.1	UK	D	43.75	HK	S	19.63	UK	D	26.82
UK	10	-	VK	D	32.53	UK	S	29.36	GK	S	31.79	HK	D	20.06	GK	S	13.44
UK	20	-	HK	S	22.56	UK	10	18.9	GK	10	26.28	UK	S	24.45	GK	10	16.34
UK	D	-	HK	D	35.4	UK	20	19.7	GK	20	25.36	UK	10	28.14	GK	20	15.30
GK	S	-	UK	S	42.41	UK	D	36.77	GK	D	43.56	UK	20	30.15	GK	D	29.51
GK	10	-	UK	10	13.26	GK	S	5.67	MY1	S	28.17	UK	D	38.23	MY1	S	31.85
GK	20	-	UK	20	25.88	GK	10	8.93	MY1	10	26.25	GK	S	24.90	MY1	10	24.75
GK	D	-	UK	D	24.85	GK	20	10.82	MY1	T	33.29	GK	10	23.56	MY1	T	21.67

Table 1. Continued

2004 LAS Analysis Results (Jan-Jun)																	
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
MY1	S	16.31	**GK**	S	41.59	**GK**	D	19.63	**MY1**	D	37.38	**GK**	20	31.98	**MY1**	D	33.62
MY1	1	27.5	**GK**	10	34.54	**MY1**	S		**MY2**	S	34.96	**GK**	D	42.43	**MY2**	S	19.23
MY1	T	19.97	**GK**	20	27.29	**MY1**	10	23.43	**MY2**	10.	41.83	**M3**	S	11.98	**MY2**	10	14.81
MY1	D	26.4	**GK**	D	29.97	**MY1**	T	27.82	**MY2**	T	51.19	**M3**	10	21.92	**MY2**	T	22.89
MY2	S	24.27	**M3**	S	30.03	**MY1**	D	40.53	**MY2**	D	51.92	**M3**	T	18.50	**MY2**	D	38.26
MY2	1	27.13	**M3**	10	35.49	**MY2**	S	24.7	**MBC**	S	26.31	**M3**	D	8.44	**MBC**	S	26.21
MY2	T	31.68	**M3**	D	30.82	**MY2**	10	19.66	**MBC**	10	28.14	**M8**	S	36.58	**MBC**	10	14.45
MY2	D	26.07	**MK**	S	38.9	**MY2**	T	10.06	**MBC**	T	31.95	**M8**	10	31.49	**MBC**	T	22.56
MBC	S	16.98	**MK**	D	28.24	**MY2**	D	9.94	**MBC**	D	30.88	**M8**	T	40.27	**MBC**	D	38.96
MBC	1	16.28	**M11**	S	19.66	**MBC**	S	34.82	**MKC**	S	28.51	**M8**	D	50.33	**MKC**	S	49.20
MBC	T	24.42	**M11**	10	26.28	**MBC**	10	92.74	**MKC**	10	37.23	**M11**	S	31.00	**MKC**	10	23.56
MBC	D	18.9	**M11**	T	26.7	**MBC**	T	47.68	**MKC**	D	29.08	**M11**	10	31.49	**MKC**	D	21.09
MKC	S	38.57	**M11**	D	29.91	**MBC**	D	33.41	**MK**	S	26.49	**M11**	T	28.93	**MK**	S	22.50
MKC	1	62.07	**MY2**	S	43.57	**MKC**	S	45.56	**MK**	D	42.90	**M11**	D	28.44	**MK**	D	15.82
MKC	T	53.29	**MY2**	10	28.23	**MKC**	10	21.97				**M14**	S	23.78			
MKC	D	45.12	**MY2**	T	40.49	**MKC**	D	22.26				**M14**	10	27.13			
MK	S	243.9	**MY2**	D	60.76	**MK**	S	30.61				**M14**	T	24.96			
MK	D	27.84	**MY1**	S	53.6	**MK**	D	32.44				**M14**	D	24.45			
			MY1	10	36.71							**M20**	S	28.41			
			MY1	T	53.3							**M20**	10	19.69			
			MY1	D	47.3							**M20**	T	29.26			
			M20	S	33.69							**M20**	D	32.89			
			M20	10	34.15							**M23**	S	16.03			
			M20	T	39.57							**M23**	10	15.18			
			M20	D	36.38							**M23**	T	33.53			
			M23	S	41.9							**M23**	D	52.22			
			M23	10	34.15							**MY1**	S	26.64			
			M23	T	46.8							**MY1**	10	22.04			
			M23	D	43.57							**MY1**	T	33.90			
			M8	S	34.73							**MY1**	D	38.71			
			M8	10	22.71							**MY2**	S	12.59			
			M8	T	32.87							**MY2**	10	14.96			
			M8	D	38.45							**MY2**	T	12.43			
			M14	S	29.36							**MY2**	D	12.62			
			M14	10	27.99							**MBC**	S	21.02			
			M14	T	28.35							**MBC**	10	36.82			
			M14	D	32.16							**MBC**	T	32.77			
			MKC	S	40.76							**MBC**	D	30.33			
			MKC	10	31.52							**MKC**	S	16.03			
			MKC	D	32.87							**MKC**	10	24.72			
			MBC	S	17.32							**MKC**	D	29.23			
			MBC	10	29.08							**MK**	S	154.0			
			MBC	T	27.04							**MK**	D	47.62			
			MBC	D	24.05												

Table 2. 2004 LAS Analysis Results (Jul-Dec)

2004 LAS Analysis Results (Jul-Dec)																	
July			August			September			October			November			December		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	17.83	K1	S	14.66	K2	S	6.25	K2	S	15.48	K1	S	19.9	K2	S	30.48
K2	10	21.49	K1	1	15.57	K2	10	11.40	K2	10	19.84	K1	10	18.1	K2	10	30.18
K2	T	28.47	K1	T	13.04	K2	T	16.31	K2	T	26.03	K1	T	27.77	K2	T	36.09
K0	D	27.56	K1	D	16.28	K2	D	14.11	K2	D	28.04	K1	D	36.28	K2	D	59.6
K0	S	16.52	K2	S	14.42	K0	S	4.14	K0	S	12.71	K2	S	9.93	K0	S	12.89
K0	10	18.01	K2	1	16.64	K0	10	6.31	K0	10	14.72	K2	10	19.87	K0	10	18.99
K0	T	27.25	K2	T	23.01	K0	T	22.04	K0	T	22.04	K2	T	36.06	K0	T	43.99
K0	D	31.09	K2	D	27.40	K0	D	17.37	K0	D	18.17	K2	D	33.9	K0	D	44.63
K0A	S	10.73	K3	S	13.62	K0A	S	11.40	K0A	S	13.65	K3	S	21.82	K0A	S	19.45
K0B	10	18.81	K3	1	14.84	K0A	10	14.08	K0A	10	14.42	K3	10	14.23	K0A	10	17.68
K0B	S	18.17	K3	D	20.36	K0B	S	13.96	K0B	S	11.76	K3	D	22.95	K0B	S	25.82
K0B	10	17.89	K0	S	15.51	K0B	10	9.84	K0B	10	14.42	K0	S	17.62	K0B	10	22.92
B2	S	21.67	K0	1	15.76	B2	S	7.77	B2	S	16.09	K0	10	18.56	B2	S	21.58
B2	10	23.84	K0	T	30.57	B2	10	11.64	B2	10	15.67	K0	T	45.82	B2	10	19.9
B2	T	42.22	K0	D	31.09	B2	T	11.46	B2	T	23.87	K0	D	46.18	B2	T	34.08
B7	D	39.96	K0A	S	14.11	B2	D	19.48	B2	D	28.44	K0A	S	25.79	B2	D	31.21
B7	S	14.14	K0A	1	19.29	B7	S	15.82	B7	S	7.25	K0A	10	18.04	B7	S	22.16
B7	10	13.96	K0B	S	15.82	B7	10	9.08	B7	10	10.7	K0B	S	34.08	B7	10	32.86
B7	T	20.03	K0B	1	13.14	B7	T	10.27	B7	T	15.0	K0B	10	18.38	B7	T	31.31
B13	D	39.05	B2	S	16.28	B7	D	18.50	B7	D	15.24	B2	S	14.45	B7	D	47.62
B13	S	24.69	B2	1	15.97	B13	S	4.78	B13	S	13.04	B2	10	13.99	B13	S	53.07
B13	10	10.42	B2	T	39.90	B13	10	6.92	B13	10	21.09	B2	T	28.35	B13	10	30.18
B13	T	22.71	B2	D	37.56	B13	T	11.70	B13	T	22.5	B2	D	23.01	B13	T	31.28
BL	D	26.28	B7	S	7.74	B13	D	19.57	B13	D	29.6	B7	S	10.12	B13	D	33.75
BL	S	10.79	B7	1	14.11	BL	S	9.90	BL	S	5.54	B7	10	8.68	BL	S	26.82
BL	10	11.70	B7	T	17.71	BL	10	3.01	BL	10	5.18	B7	T	10.64	BL	10	36.28
BL	20	12.10	B7	D	27.40	BL	20	3.87	BL	20	11.76	B7	D	15.7	BL	20	31.64
BL	30	16.31	B13	S	17.50	BL	40	26.70	BL	30	14.32	B13	S	3.32	BL	30	14.6
BL	50	42.40	B13	1	16.85	BL	T	15.27	BL	50	14.66	B13	10	8.5	BL	50	26.61
BL	T	38.35	B13	T	23.41	BL	D	14.14	BL	T	15.27	B13	T	8.32	BL	T	28.23
KK	D	21.15	B13	D	30.48	KK	S	12.22	BL	D	13.29	B13	D	18.35	BL	D	25.73
KK	S	14.11	BL	S	15.91	KK	10	7.83	KK	S	14.96	BL	S	27.77	KK	S	30.57
KK	10	9.26	BL	1	16.18	KK	D	4.05	KK	10	18.68	BL	10	14.84	KK	10	27.37
ADA	D	16.43	BL	2	13.65	ADA	S	17.53	KK	D	24.05	BL	20	21.7	KK	D	29.93
ADA	S	30.85	BL	3	18.47	ADA	D	14.66	ADA	S	42.25	BL	30	19.05	ADA	S	116.6
ES	D	76.00	BL	5	26.15	ES	S	18.14	ADA	D	29.32	BL	50	30.97	ADA	D	82.22
ES	S	25.21	BL	T	25.30	ES	D	10.06	ES	S	26.64	BL	T	37.92	VS	S	22.53
VS	D	11.98	BL	D	24.51	VS	S	12.40	ES	D	14.63	BL	D	30.0	VS	D	23.29
VS	S	19.90	KK	S	20.24	VS	D	10.64	VS	S	22.22	KK	S	11.18	ES	S	23.56
HK	D	12.04	KK	1	15.57	HK	S	10.85	VS	D	20.21	KK	10	12.83	ES	D	26.55
HK	S	25.12	KK	D	23.43	HK	D	13.96	HK	S	16.95	KK	D	12.16	HK	S	21.76
UK	D	16.43	ADA	S	38.44	UK	S	20.09	HK	D	22.25	ADA	S	164.5	HK	D	22.25
UK	S	21.58	ADA	D	27.56	UK	10	10.18	UK	S	22.22	ADA	D	137.9	UK	S	18.5
UK	10	19.69	ES	S	42.22	UK	20	14.63	UK	10	12.62	ES	S	85.42	UK	10	14.75
UK	20	18.84	ES	D	28.75	UK	D	13.99	UK	20	14.23	ES	D	14.66	UK	20	22.8
GK	D	20.30	VS	S	46.28	GK	S	3.44	UK	D	18.47	VS	S	21.82	UK	D	27.92
GK	S	12.43	VS	D	21.49	GK	10	8.23	GK	S	14.42	VS	D	19.14	GK	S	21.37
GK	10	17.28	HK	S	19.63	GK	20	7.56	GK	10	15.76	HK	S	37.37	GK	10	14.69
GK	20	13.04	HK	D	27.59	GK	D	15.70	GK	20	19.2	HK	D	12.43	GK	20	11.58

Table 2. Continued

2004 LAS Analysis Results (Jul-Dec)																		
July			August			September			October			November			December			
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	
MY1	D	32.31	UK	S	27.71	MY	S	19.84	GK	D	18.14	UK	S	21.34	GK	D	17.28	
MY1	S	17.01	UK	1	19.02	MY	10	19.96	MY1	S	13.47	UK	10	11.7	MY	S	15.09	
MY1	10	18.17	UK	2	15.85	MY	T	20.91	MY1	10	12.59	UK	20	14.78	MY	1	28.29	
MY1	T	26.25	UK	D	24.23	MY	D	16.03	MY1	T	13.71	UK	D	28.07	MY	T	37.86	
MY2	D	28.04	GK	S	16.28	MY	S	12.10	MY1	D	13.99	GK	S	9.6	MY	D	38.96	
MY2	S	18.38	GK	1	13.38	MY	10	12.25	MY2	S	23.23	GK	10	15.57	MY	S	22.92	
MY2	10	21.64	GK	2	14.60	MY	T	20.73	MY2	10	44.17	GK	20	17.62	MY	1	14.81	
MY2	T	12.25	GK	D	18.90	MY	D	27.04	MY2	T	17.43	GK	D	21.34	MY	T	21.89	
MBC	D	35.03	M3	S	14.96	MB	S	19.05	MY2	D	8.59	M3	S	8.07	MY	D	20.91	
MBC	S	15.18	M3	1	18.90	MB	10	13.32	MBC	S	16.76	M3	10	10.85	MB	S	16.98	
MBC	10	14.39	M3	T	21.89	MB	T	15.12	MBC	10	15.97	M3	T	5.57	MB	1	15.18	
MBC	T	18.62	M3	D	22.40	MB	D	11.28	MBC	T	16.52	M3	D	11.18	MB	T	20.88	
MKC	D	32.19	M8	S	31.00	MK	S	162.9	MBC	D	25.18	M8	S	9.39	MB	D	16.95	
MKC	S	18.47	M8	1	27.62	MK	10	17.16	MKC	S	19.45	M8	10	11.31	MK	S	25.3	
MKC	10	13.44	M8	T	36.03	MK	D	14.60	MKC	10	15.7	M8	T	9.69	MK	1	21.34	
MKC	D	18.47	M8	D	33.04	MK	S	12.40	MKC	D	18.68	M8	D	13.65	MK	D	29.29	
MK	S	16.70	M11	S	24.54	MK	D	8.75	MK	S	13.38	M1	S	30	MK	S	47.8	
MK	D	21.15	M11	1	26.89				MK	D	17.68	M1	10	27.92	MK	D	26.31	
			M11	T	22.56							M1	T	26.03				
			M11	D	24.23							M1	D	39.05				
			M14	S	14.96							M1	S	8.93				
			M14	1	21.18							M1	10	12.37				
			M14	T	27.13							M1	T	8.75				
			M14	D	32.65							M1	D	8.41				
			M20	S	18.01							M2	S	11.06				
			M20	1	23.53							M2	10	16.95				
			M20	T	19.17							M2	T	9.51				
			M20	D	19.96							M2	D	13.78				
			M23	S	29.11							M2	S	9.69				
			M23	1	28.90							M2	10	15.57				
			M23	T	49.69							M2	T	13.09				
			M23	D	52.33							M2	D	20.73				
			MY1	S	8.84							MY	S	30.24				
			MY1	1	17.77							MY	10	30.18				
			MY1	T	27.37							MY	T	31.67				
			MY1	D	35.97							MY	D	35.18				
			MY2	S	24.29							MY	S	18.62				
			MY2	1	23.10							MY	10	24.54				
			MY2	T	27.56							MY	T	32.43				
			MY2	D	29.14							MY	D	30.85				
			MBC	S	27.07							MB	S	9.72				
			MBC	1	20.36							MB	10	8.75				
			MBC	T	22.71							MB	T	10.51				
			MBC	D	23.23							MB	D	16.34				
			MKC	S	59.96							MK	S	18.14				
			MKC	1	21.55							MK	10	9.78				
			MKC	D	22.86							MK	D	10.64				
			MK	S	13.84							MK	S	7.71				
			MK	D	23.10							MK	D	12.65				

Table 3. 2005 LAS Analysis Results (Jan-Jun)

2005 LAS Analysis Results (Jan-Jun)																		
January			February			March			April			May			June			
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	
K2	S	14.58	K1	S	30.9	K2	S	23.58	K2	S	14.90	-	-	-	K2	S	14.73	
K2	10	21.22	K1	10	24.54	K2	10	20.49	K2	10	14.75	K1	S	11.49	K2	10	13.79	
K2	T	28.7	K1	D	43.18	K2	T	49.00	K2	T	23.68	K1	10	10.04	K2	T	23.68	
K2	D	31.23	K2	S	25.89	K2	D	35.18	K2	D	21.80	K1	D	9.66	K2	D	24.09	
K0	S	31.72	K2	10	28.91	K0	S	16.59	K0	S	13.79	K2	S	12.96	K0	S	16.31	
K0	10	29.81	K2	T	39.44	K0	10	13.35	K0	10	21.91	K2	10	34.59	K0	10	10.14	
K0	T	37.58	K2	D	26.45	K0	T	20.74	K0	T	28.39	K2	T	25.41	K0	T	14.28	
K0	D	36.57	K3	S	32.74	K0	D	23.89	K0	D	35.08	K2	D	22.56	K0	D	19.04	
K0A	S	15.08	K3	10	20.84	K0A	S	22.88	K0A	S	17.21	K3	S	15.83	K0A	S	21.01	
K0A	10	22.58	K3	D	21.63	K0A	10	20.00	K0A	10	20.39	K3	10	10.14	K0A	10	20.18	
K0B	S	25.83	K0	S	14.63	K0B	S	16.76	K0B	S	14.69	K3	D	13.65	K0B	S	15.76	
K0B	10	46.33	K0	10	16.04	K0B	10	22.23	K0B	10	16.00	K0	S	14.69	K0B	10	17.35	
B13	S	31.61	K0	T	31.73	B13	S	11.73	B13	S	20.18	K0	10	17.94	B13	S	34.55	
B13	10	28.22	K0	D	30.86	B13	10	16.73	B13	10	29.19	K0	T	31.45	B13	10	12.45	
B13	T	48.19	K0A	S	18.49	B13	T	31.66	B13	T	54.63	K0	D	36.09	B13	T	23.30	
B13	D	32.72	K0A	10	23.71	B13	D	31.73	B13	D	49.49	K0A	S	11.49	B13	D	22.09	
B7	S	21.78	K0B	S	22.25	B7	S	17.45	B7	S	20.90	K0A	10	20.18	B7	S	21.70	
B7	10	23.50	K0B	10	24.40	B7	10	23.74	B7	10	28.23	K0B	S	13.31	B7	10	16.76	
B7	T	58.64	B2	S	18.86	B7	T	45.31	B7	T	43.68	K0B	10	11.41	B7	T	24.26	
B7	D	34.53	B2	10	18.00	B7	D	46.93	B7	D	57.91	B2	S	15.28	B7	D	16.10	
B2	S	29.58	B2	T	35.25	B2	S	19.45	B2	S	26.86	B2	10	16.94	B2	S	23.58	
B2	10	28.22	B2	D	24.09	B2	10	23.95	B2	10	24.79	B2	T	31.24	B2	10	20.88	
B2	T	30.19	B7	S	28.50	B2	T	25.75	B2	T	42.65	B2	D	27.31	B2	T	35.00	
B2	D	47.11	B7	10	28.56	B2	D	41.60	B2	D	43.78	B7	S	12.55	B2	D	35.25	
BL	S	30.22	B7	T	39.34	BL	S	11.90	BL	S	14.90	B7	10	16.04	BL	S	30.20	
BL	10	38.03	B7	D	54.60	BL	10	12.55	BL	10	16.18	B7	T	27.08	BL	10	31.98	
BL	20	25.64	B13	S	23.33	BL	20	13.08	BL	20	14.96	B7	D	29.44	BL	20	23.36	
BL	30	41.75	B13	10	24.71	BL	30	19.59	BL	30	18.21	B13	S	13.14	BL	30	20.70	
BL	50	47.33	B13	T	32.08	BL	50	54.88	BL	50	32.33	B13	10	12.86	BL	50	27.59	
BL	T	39.03	B13	D	58.65	BL	T	52.10	BL	T	37.90	B13	T	32.35	BL	T	30.41	
BL	D	42.17	KK	S	31.06	BL	D	51.85	BL	D	33.48	B13	D	29.19	BL	D	25.69	
KK	S	26.11	KK	10	26.63	KK	S	27.63	KK	S	15.10	KK	S	22.95	KK	S	16.24	
KK	10	32.75	KK	D	34.94	KK	10	20.59	KK	10	22.05	KK	10	21.88	KK	10	20.08	
KK	D	46.19	ADA	S	104.3	KK	D	28.46	KK	D	22.36	KK	D	27.80	KK	D	16.21	
ADA	S	79.58	ADA	D	74.55	ADA	S	66.65	ADA	S	38.15	ADA	S	33.19	ADA	S	171.1	
ADA	D	41.54	ES	S	204.8	ADA	D	34.38	ADA	D	40.94	ADA	D	20.63	ADA	D	87.13	
ES	S	29.44	ES	D	49.99	ES	S	50.05	ES	S	31.06	ES	S	16.83	ES	S	27.84	
ES	D	28.01	VS	S	31.73	ES	D	26.51	ES	D	29.96	ES	D	17.83	ES	D	18.21	
VS	S	43.11	VS	D	149.6	VS	S	40.73	VS	S	37.28	VS	S	33.83	VS	S	17.18	
VS	D	33.71	HK	S	193.8	VS	D	30.06	VS	D	32.78	VS	D	30.13	VS	D	12.10	
HK	S	46.09	HK	D	42.38	HK	S	40.90	HK	S	29.09	HK	S	31.41	HK	S	20.25	
HK	D	22.23	UK	S	127.6	HK	D	36.93	HK	D	27.43	HK	D	20.49	HK	D	14.55	
UK	S	24.30	UK	10	29.40	UK	S	38.78	UK	S	20.49	UK	S	27.04	UK	S	47.81	
UK	10	15.73	UK	20	43.50	UK	10	28.88	UK	10	33.93	UK	10	30.51	UK	10	21.70	
UK	20	23.71	UK	D	59.39	UK	20	27.25	UK	20	25.20	UK	20	23.99	UK	20	13.00	
UK	D	29.30	GK	S	27.63	UK	D	33.36	UK	D	47.81	UK	D	44.13	UK	D	22.56	
GK	S	19.56	GK	10	35.95	GK	S	22.84	GK	S	26.76	GK	S	16.31	GK	S	18.16	
GK	10	24.05	GK	20	23.46	GK	10	21.91	GK	10	25.71	GK	10	14.20	GK	10	18.18	
GK	20	14.63	GK	D	23.36	GK	20	24.54	GK	20	21.25	GK	20	25.34	GK	20	23.09	
GK	D	43.00	BL	S	30.73	GK	D	36.89	GK	D	40.06	GK	D	29.99	GK	D	45.29	

Table 3. Continued

2005 LAS Analysis Results (Jan-Jun)																	
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat.	DE	µg/L	Stat	DE	µg/L
MY1	S	36.33	**BL**	1	33.68	**MY1**	S	47.10	**MY1**	S	22.64	**BL**	S	15.90	**MY1**	S	24.75
MY1	10	41.33	**BL**	2	28.43	**MY1**	1	57.74	**MY1**	1	21.49	**BL**	10	19.25	**MY1**	1	28.15
MY1	T	42.53	**BL**	3	27.63	**MY1**	T	55.83	**MY1**	T	24.58	**BL**	20	22.66	**MY1**	T	23.50
MY1	D	67.31	**BL**	5	133.4	**MY1**	D	39.65	**MY1**	D	31.73	**BL**	30	21.60	**MY1**	D	30.44
MY2	S	36.22	**BL**	T	62.69	**MY2**	S	36.23	**MY2**	S	8.84	**BL**	50	85.95	**MY2**	S	18.90
MY2	10	45.11	**BL**	D	36.40	**MY2**	1	33.19	**MY2**	1	7.09	**BL**	T	39.89	**MY2**	1	21.11
MY2	T	44.83	**M3**	S	21.43	**MY2**	T	30.24	**MY2**	T	16.04	**BL**	D	26.24	**MY2**	T	24.19
MY2	D	64.22	**M3**	1	17.41	**MY2**	D	50.55	**MY2**	D	32.33	**M3**	S	18.69	**MY2**	D	25.69
MBC	S	45.64	**M3**	D	24.09	**MBC**	S	38.04	**MBC**	S	17.94	**M3**	10	30.73	**MBC**	S	21.70
MBC	10	53.83	**M8**	S	21.21	**MBC**	1	30.55	**MBC**	1	16.96	**M3**	D	31.04	**MBC**	1	22.36
MBC	T	38.64	**M8**	1	23.95	**MBC**	T	32.25	**MBC**	T	23.23	**M8**	S	16.76	**MBC**	T	19.00
MBC	D	56.06	**M8**	T	33.75	**MBC**	D	52.13	**MBC**	D	35.84	**M8**	10	20.63	**MBC**	D	21.94
MKC	S	75.72	**M8**	D	67.44	**MKC**	S	36.61	**MKC**	S	22.15	**M8**	T	19.98	**MKC**	S	77.23
MKC	10	43.92	**M11**	S	31.31	**MKC**	1	18.21	**MKC**	1	23.30	**M8**	D	19.28	**MKC**	1	18.35
MKC	D	68.53	**M11**	1	24.40	**MKC**	D	25.48	**MKC**	D	16.94	**M11**	S	13.65	**MKC**	D	14.35
MK	S	38.06	**M11**	T	27.18	**MK**	S	37.51	**MK**	S	19.39	**M11**	10	14.18	**MK**	S	22.74
MK	D	50.39	**M11**	D	22.43	**MK**	D	39.93	**MK**	D	23.05	**M11**	T	19.56	**MK**	D	17.59
			M14	S	33.01							**M11**	D	17.55	**KK**	S	22.74
			M14	1	27.21							**M14**	S	19.80	**KK**	1	22.84
			M14	T	24.19							**M14**	10	15.38	**KK**	S	21.21
			M14	D	38.43							**M14**	T	18.41	**KK**	1	18.04
			M20	S	38.35							**M14**	D	17.96			
			M20	1	27.08							**M20**	S	15.79			
			M20	T	37.28							**M20**	10	12.38			
			M20	D	39.44							**M20**	T	17.55			
			M23	S	33.13							**M20**	D	17.59			
			M23	1	34.10							**M23**	S	21.91			
			M23	T	85.09							**M23**	10	17.73			
			M23	D	58.65							**M23**	T	20.29			
			MY1	S	28.85							**M23**	D	29.09			
			MY1	1	32.46							**MY1**	S	19.41			
			MY1	T	50.34							**MY1**	10	23.46			
			MY1	D	40.76							**MY1**	T	21.39			
			MY2	S	24.93							**MY1**	D	25.51			
			MY2	1	29.89							**MY2**	S	19.98			
			MY2	T	27.00							**MY2**	10	18.90			
			MY2	D	35.98							**MY2**	T	19.86			
			MBC	S	30.69							**MY2**	D	20.25			
			MBC	1	28.60							**MBC**	S	17.35			
			MBC	T	36.44							**MBC**	10	17.24			
			MBC	D	20.70							**MBC**	T	17.79			
			MKC	S	45.70							**MBC**	D	22.29			
			MKC	1	28.68							**MKC**	S	68.25			
			MKC	D	31.35							**MKC**	10	25.20			
			MK	S	143.2							**MKC**	D	26.00			
			MK	D	18.66							**MK**	S	19.25			
												MK	D	17.94			
												KK	S	17.86			
												KK	10	20.29			
												KK	S	20.45			
												KK	10	22.88			

Table 4. 2005 LAS Analysis Results (Jul-Dec)

2005 LAS Analysis Results (Jul-Dec)																		
July			August			September			October			November			December			
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	
K2	S	19.7	K3	S	10.8	K2	S	12.7	K2	S	18.70	K3	S	28.01	K2	S	-	
K2	10	16.7	K3	10	13.4	K2	10	10.4	K2	10	22.11	K3	10	32.15	K2	10	-	
K2	T	21.0	K3	D	14.9	K2	T	22.0	K2	T	36.58	K3	D	25.89	K2	T	-	
K2	D	29.1	K1	S	13.2	K2	D	24.5	K2	D	56.46	K1	S	21.88	K2	D	-	
K0	S	18.8	K1	10	17.7	K0	S	9.86	K0	S	25.20	K1	10	26.03	K0	S	32.9	
K0	10	11.4	K1	T	17.1	K0	10	13.0	K0	10	21.70	K1	D	46.16	K0	10	17.5	
K0	T	20.8	K1	D	28.4	K0	T	21.3	K0	T	43.50	K2	S	24.61	K0	T	20.3	
K0	D	25.5	K2	S	15.1	K0	D	28.8	K0	D	70.41	K2	10	21.74	K0	D	19.5	
K0A	S	11.9	K2	10	22.8	K0A	S	13.8	K0A	S	38.46	K2	T	31.94	K0A	S	16.8	
K0A	10	13.5	K2	T	26.2	K0A	10	17.6	K0A	10	42.59	K2	D	20.63	K0A	10	25.3	
K0B	S	12.0	K2	D	31.2	K0B	S	19.5	K0B	S	44.05	K0	S	21.80	K0B	S	20.6	
K0B	10	11.3	K0	S	16.8	K0B	10	32.1	K0B	10	48.23	K0	10	24.36	K0B	10	34.9	
BL	S	14.5	K0	10	16.1	BL	S	18.8	BL	S	24.13	K0	T	38.46	BL	S	20.1	
BL	10	12.3	K0	T	24.1	BL	10	15.9	BL	10	32.19	K0	D	37.86	BL	10	17.8	
BL	20	16.0	K0	D	31.3	BL	20	13.2	BL	20	29.68	K0A	S	29.93	BL	20	20.2	
BL	30	19.5	K0A	S	26.1	BL	30	12.7	BL	30	44.55	K0A	10	16.73	BL	30	15.5	
BL	T	27.4	K0A	10	22.1	BL	T	17.7	BL	T	48.79	K0B	S	10.45	BL	T	28.1	
BL	50	21.2	K0B	S	20.7	BL	50	22.1	BL	50	53.96	K0B	10	10.04	BL	40	25.3	
BL	D	32.7	K0B	10	21.7	BL	D	30.3	BL	D	76.36	BL	S	26.41	BL	D	36.5	
B13	S	17.3	BL	S	15.9	B13	S	12.0	B13	S	29.40	BL	10	21.04	B13	S	16.7	
B13	10	9.39	BL	10	17.5	B13	10	15.5	B13	10	31.14	BL	20	23.85	B13	10	27.3	
B13	T	10.0	BL	20	16.5	B13	T	28.1	B13	T	48.65	BL	30	18.63	B13	T	31.2	
B13	D	25.8	BL	30	16.5	B13	D	28.9	B13	D	69.49	BL	T	14.41	B13	D	48.1	
B7	S	10.8	BL	T	36.4	B7	S	27.1	B7	S	36.01	BL	50	28.15	B7	S	26.6	
B7	10	11.0	BL	50	32.9	B7	10	27.9	B7	10	22.50	BL	D	45.56	B7	10	24.7	
B7	T	16.6	BL	D	36.9	B7	T	38.2	B7	T	53.23	B13	S	19.49	B7	T	32.9	
B7	D	19.3	B13	S	15.1	B7	D	27.1	B7	D	70.03	B13	10	24.40	B7	D	33.3	
B2	S	14.2	B13	10	18.7	B2	S	10.2	B2	S	25.71	B13	T	33.99	B2	S	28.8	
B2	10	15.0	B13	T	28.9	B2	10	20.7	B2	10	23.85	B13	D	37.61	B2	10	21.0	
B2	T	24.7	B13	D	38.0	B2	T	29.2	B2	T	50.44	B7	S	11.49	B2	T	22.8	
B2	D	34.6	B7	S	16.0	B2	D	39.4	B2	D	48.69	B7	10	13.18	B2	D	38.9	
KK	S	18.1	B7	10	16.7	KK	S	23.3	KK	S	35.35	B7	T	36.79	KK	S	35.3	
KK	10	16.1	B7	T	31.3	KK	10	19.8	KK	10	44.34	B7	D	28.15	KK	10	21.9	
KK	D	19.0	B7	D	32.1	KK	D	30.5	KK	D	48.86	B2	S	15.76	KK	D	27.2	
KK	S	13.9	B2	S	22.9	KKK	S	20.3	KKK	S	38.88	B2	10	15.51	KK	S	36.6	
KK	10	10.9	B2	10	22.9	KKK	10	15.7	KKK	10	49.60	B2	T	38.11	KK	10	27.2	
KK	S	13.3	B2	T	38.4	KKO	S	26.8	KKO	S	42.41	B2	D	31.63	KK	S	35.4	
KK	10	16.3	B2	D	44.8	KKO	10	18.6	KKO	10	35.39	KK	S	21.11	KK	10	33.9	
ADA	S	26.9	KK	S	13.1	ADA	S	48.8	ADA	S	34.51	KK	10	20.74	ADA	S	26.8	
ADA	D	16.3	KK	10	18.1	ADA	D	27.6	ADA	D	11.83	KK	D	21.53	ADA	D	51.5	
ES	S	22.6	KK	D	16.5	ES	S	24.0	ES	S	42.03	KKK	S	25.79	ES	S	78.0	
ES	D	9.90	KKK	S	22.5	ES	D	18.3	ES	D	22.43	KKK	10	24.50	ES	D	29.2	
VS	S	17.6	KKK	10	16.5	VS	S	21.0	VS	S	23.23	KKO	S	24.58	VS	S	55.0	
VS	D	20.0	KKO	S	21.8	VS	D	15.5	VS	D	14.79	KKO	10	17.59	VS	D	30.5	
HK	S	25.1	KKO	10	28.6	HK	S	27.0	HK	S	33.13	ADA	S	114.5	HK	S	47.1	
HK	D	16.8	ADA	S	18.7	HK	D	19.2	HK	D	27.76	ADA	D	104.6	HK	D	26.3	
UK	S	15.3	ADA	D	22.0	UK	S	24.9	UK	S	21.43	ES	S	108.1	UK	S	17.9	
UK	10	9.70	ES	S	18.3	UK	10	16.9	UK	10	20.25	ES	D	22.78	UK	10	19.5	
UK	20	18.2	ES	D	16.6	UK	20	25.2	UK	20	16.86	VS	S	141.5	UK	20	25.5	
UK	D	25.1	VS	S	19.0	UK	D	38.9	UK	D	38.78	VS	D	21.49	UK	D	43.6	
GK	S	13.7	VS	D	18.2	GK	S	23.4	GK	S	28.50	HK	S	115.0	GK	S	22.5	
GK	10	13.9	HK	S	19.8	GK	10	18.7	GK	10	25.83	HK	D	26.14	GK	10	21.0	
GK	20	13.6	HK	D	16.3	GK	20	27.7	GK	20	30.41	UK	S	39.44	GK	20	31.8	
GK	D	17.2	UK	S	18.4	GK	D	30.1	GK	D	24.16	UK	10	37.83	GK	D	51.9	

Table 4. Continued

2005 LAS Analysis Results (Jul-Dec)																		
July			August			September			October			November			December			
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat.	DE	µg/L	Stat	DE	µg/L	
MY1	S	30.0	UK	10	19.2	MY1	S	22.9	MY1	S	30.7	UK	20	37.3	MY1	S	26.6	
MY1	10	21.3	UK	20	20.6	MY1	10	30.7	MY1	10	35.1	UK	D	45.8	MY1	10	27.5	
MY1	T	23.9	UK	D	22.1	MY1	T	46.7	MY1	T	42.7	GK	S	37.1	MY1	T	25.5	
MY1	D	27.6	GK	S	14.9	MY1	D	43.5	MY1	D	69.8	GK	10	31.1	MY1	D	21.0	
MY2	S	11.0	GK	10	6.30	MY2	S	24.3	MY2	S	30.1	GK	20	40.6	MY2	S	21.9	
MY2	10	22.0	GK	20	9.39	MY2	10	25.3	MY2	10	40.5	GK	D	49.6	MY2	10	30.7	
MY2	T	28.1	GK	D	14.9	MY2	T	30.0	MY2	T	27.2	M3	S	34.9	MY2	T	20.4	
MY2	D	19.2	M3	S	23.4	MY2	D	41.6	MY2	D	58.1	M3	10	36.0	MY2	D	31.7	
MB	S	16.6	M3	10	32.1	MBC	S	23.7	MBC	S	35.8	M3	T	41.1	MBC	S	38.2	
MB	10	14.4	M3	T	29.9	MBC	10	32.8	MBC	10	29.8	M3	D	35.5	MBC	10	31.4	
MB	T	11.9	M3	D	32.1	MBC	T	25.4	MBC	T	41.9	MK	S	44.6	MBC	T	36.5	
MB	D	18.5	MK	S	27.0	MBC	D	30.4	MBC	D	43.8	MK	D	39.3	MBC	D	35.5	
MK	S	14.7	MK	D	19.3	MKC	S	20.4	MKC	S	26.7	M11	S	27.2	MKC	S	24.8	
MK	10	24.4	M11	S	24.1	MKC	10	21.3	MKC	10	34.7	M11	10	33.0	MKC	10	27.5	
MK	D	18.0	M11	10	24.3	MKC	D	23.0	MKC	D	34.4	M11	T	41.4	MKC	D	30.0	
MK	S	23.7	M11	T	31.6	MK	S	25.9	MK	S	29.8	M11	D	38.1	MK	S	22.6	
MK	D	13.9	M11	D	24.7	MK	D	21.7	MK	D	42.5	MY2	S	24.5	MK	D	31.7	
			MY2	S	20.9							MY2	10	26.1				
			MY2	10	21.6							MY2	T	22.3				
			MY2	T	31.4							MY2	D	18.8				
			MY2	D	29.6							MY1	S	32.0				
			MY1	S	23.5							MY1	10	31.9				
			MY1	10	21.5							MY1	T	39.5				
			MY1	T	25.8							MY1	D	47.7				
			MY1	D	31.1							M20	S	18.2				
			M20	S	15.9							M20	10	24.7				
			M20	10	27.5							M20	T	38.4				
			M20	T	16.6							M20	D	42.6				
			M20	D	29.3							M23	S	21.8				
			M23	S	19.3							M23	10	25.8				
			M23	10	22.2							M23	T	26.8				
			M23	T	25.5							M23	D	31.7				
			M23	D	51.3							M8	S	23.8				
			M8	S	14.1							M8	10	19.1				
			M8	10	18.9							M8	T	22.6				
			M8	T	25.6							M8	D	25.7				
			M8	D	21.1							M14	S	21.0				
			M14	S	24.2							M14	10	28.8				
			M14	10	20.8							M14	T	41.8				
			M14	T	21.9							M14	D	39.1				
			M14	D	33.6							MK	S	38.6				
			MKC	S	24.7							MK	10	31.1				
			MKC	10	18.6							MK	D	35.5				
			MKC	D	42.4							MB	S	32.9				
			MBC	S	19.8							MB	10	26.9				
			MBC	10	30.6							MB	T	54.1				
			MBC	T	31.7							MB	D	47.5				
			MBC	D	46.7													

Table 5. 2006 LAS Analysis Results (Jan-Jun)

2006 LAS Analysis Results (Jan-Jun)																		
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	42.34	K3	S	28.60	K2	S	15.18	K2	S	10.45	K3	S	30.55	K2	S	59.50
K2	10	29.36	K3	10	8.80	K2	10	18.39	K2	10	13.59	K3	10	24.75	K2	10	62.33
K2	T	26.31	K3	D	31.63	K2	T	19.63	K2	D	12.38	K3	D	23.78	K2	T	38.00
K2	D	71.05	K1	S	11.76	K2	D	23.85	K0	S	16.00	K1	S	55.34	K2	D	62.29
K0	S	27.31	K1	10	12.69	K0	S	15.18	K0	10	17.14	K1	10	93.14	K0	S	122.69
K0	10	17.76	K1	D	7.78	K0	10	20.25	K0	T	31.31	K1	D	60.74	K0	10	68.64
K0	T	26.14	K2	S	12.49	K0	T	29.61	K0	D	24.61	K2	S	46.26	K0	T	133.64
K0	D	51.99	K2	10	15.63	K0	D	18.80	K0A	S	21.84	K2	10	38.64	K0	D	98.21
K0A	S	26.35	K2	T	20.31	K0A	S	7.46	K0A	10	87.81	K2	T	40.55	K0A	S	82.90
K0A	10	24.09	K2	D	23.33	K0A	10	20.31	K0B	S	10.63	K2	D	86.66	K0A	10	97.06
K0B	S	22.11	K0	S	7.29	K0B	S	18.70	K0B	10	14.48	K0	S	42.41	K0B	S	119.40
K0B	10	17.38	K0	10	22.91	K0B	10	17.55	BL	S	15.20	K0	10	12.10	K0B	10	81.58
BL	S	20.08	K0	T	6.26	BL	S	17.59	BL	10	9.21	K0	T	31.14	BL	S	98.44
BL	10	11.90	K0	D	23.91	BL	10	17.31	BL	20	11.41	K0	D	71.59	BL	10	67.79
BL	20	16.63	K0A	S	6.81	BL	20	10.69	BL	30	22.74	K0A	S	56.75	BL	20	86.85
BL	30	14.75	K0A	10	14.28	BL	30	16.14	BL	40	8.11	K0A	10	54.49	BL	30	93.56
BL	T	30.65	K0B	S	14.63	BL	T	34.45	BL	50	19.35	K0B	S	24.30	BL	T	227.61
BL	D	18.90	K0B	10	17.38	BL	50	28.39	BL	T	14.73	K0B	10	15.96	BL	50	231.44
B13	S	23.26	BL	S	25.61	BL	D	31.70	BL	D	4.04	BL	S	25.03	BL	D	188.30
B13	10	22.68	BL	10	21.04	B13	S	15.51	B13	S	15.00	BL	10	29.26	B13	S	214.79
B13	T	17.83	BL	20	23.13	B13	10	16.76	B13	10	18.96	BL	20	15.51	B13	10	57.20
B13	D	33.83	BL	40	52.90	B13	T	21.63	B13	D	11.24	BL	30	19.25	B13	T	94.33
B7	S	16.51	BL	T	40.10	B13	D	18.21	B7	S	12.08	BL	T	51.68	B13	D	64.81
B7	10	13.96	BL	50	33.01	B7	S	15.00	B7	10	11.08	BL	50	62.54	B7	S	58.98
B7	T	25.79	BL	D	28.60	B7	10	16.80	B7	T	16.55	BL	D	77.50	B7	10	28.36
B7	D	29.50	B13	S	14.90	B7	T	15.38	B7	D	25.79	B13	S	20.43	B7	T	112.03
B2	S	22.95	B13	10	11.28	B7	D	27.04	B2	S	16.04	B13	10	23.89	B7	D	57.20
B2	10	32.81	B13	T	23.05	B2	S	17.76	B2	10	8.63	B13	T	26.86	B2	S	35.06
B2	T	64.06	B13	D	15.06	B2	10	16.00	B2	D	18.24	B13	D	20.74	B2	10	56.64
B2	D	67.15	B7	S	29.13	B2	T	21.60	KK	S	9.80	B7	S	11.83	B2	T	64.36
KK	S	33.83	B7	10	36.46	B2	D	31.21	KK	10	6.88	B7	10	18.46	B2	D	56.64
KK	10	50.36	B7	T	30.83	KK	S	15.31	KK	D	16.38	B7	T	17.35	KK	S	89.04
KK	D	103.2	B7	D	30.06	KK	10	13.31	KK K	S	9.01	B7	D	23.15	KK	10	66.13
KKK	S	59.39	B2	S	38.84	KK	D	15.96	KK K	10	11.31	B2	S	20.70	KK	D	101.76
KKK	10	28.73	B2	10	21.70	KKK	S	38.56	KKO	S	9.53	B2	10	25.41	KKK	S	70.43
KKO	S	38.19	B2	T	31.56	KKK	10	40.00	KKO	10	11.49	B2	T	26.00	KKK	10	75.33
KKO	10	28.76	B2	D	15.76	KKO	S	23.46	ADA	S	31.06	B2	D	24.09	KKO	S	73.30
ADA	S	271.4	KK	S	32.25	KKO	10	23.30	ADA	D	32.78	KK	S	28.56	KKO	10	45.14
ADA	D	45.88	KK	10	39.79	ADA	S	59.21	ES	S	26.98	KK	10	18.83	ADA	S	76.13
ES	S	95.80	KK	D	32.91	ADA	D	121.08	ES	D	26.80	KK	D	22.68	ADA	D	-
ES	D	35.43	KKK	S	21.66	ES	S	144.33	VS	S	30.26	KKK	S	19.25	ES	S	38.46
VS	S	215.5	KKK	10	12.55	ES	D	29.58	VS	D	35.78	KKK	10	11.08	ES	D	73.40
VS	D	28.56	KKO	S	32.70	VS	S	125.95	HK	S	27.80	KKO	S	15.13	VS	S	40.13
HK	S	216.5	KKO	10	11.65	VS	D	26.35	HK	D	20.31	KKO	10	8.25	VS	D	84.76
HK	D	37.46	ADA	S	184.46	HK	S	157.54	UK	S	21.84	ADA	S	4.20	HK	S	46.15
UK	S	249.5	ADA	D	76.79	HK	D	24.93	UK	10	14.14	ADA	D	-	HK	D	58.80
UK	10	54.49	ES	S	199.10	UK	S	23.13	UK	20	9.24	ES	S	20.49	UK	S	76.96
UK	20	52.06	ES	D	29.44	UK	10	75.94	UK	D	7.84	ES	D	11.04	UK	10	68.35
UK	D	53.44	VS	S	42.13	UK	20	46.51	GK	S	21.08	VS	S	21.88	UK	20	81.29
GK	S	64.33	VS	D	20.18	UK	D	50.44	GK	10	22.05	VS	D	7.66	UK	D	99.63
GK	10	38.20	HK	S	68.64	GK	S	33.75	GK	20	13.79	HK	S	16.45	GK	S	106.86
GK	20	115.11	HK	D	19.49	GK	10	31.10	GK	D	15.63	HK	D	7.50	GK	10	107.81
GK	D	47.54	UK	S	12.55	GK	20	45.95	MY1	S	10.86	UK	S	15.93	GK	20	125.85

Table 5. Continued

2006 LAS Analysis Results (Jan-Jun)																		
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
MY	S	59.95	**UK**	10	19.1	**GK**	D	78.9	**MY1**	1	15.34	**UK**	10	10.76	**GK**	D	124.3
MY	1	33.30	**UK**	20	7.36	**MY1**	S	22.8	**MY1**	T	15.18	**UK**	20	42.45	**MY1**	S	105.4
MY	T	41.78	**UK**	D	13.9	**MY1**	10	10.8	**MY1**	D	13.79	**UK**	D	50.20	**MY1**	10	103.0
MY	D	33.68	**GK**	S	21.0	**MY1**	T	17.5	**MY2**	S	9.59	**GK**	S	9.04	**MY1**	T	147.8
MY	S	60.10	**GK**	10	22.5	**MY1**	D	21.6	**MY2**	1	13.93	**GK**	10	10.66	**MY1**	D	76.75
MY	1	47.21	**GK**	20	19.0	**MY2**	S	29.0	**MY2**	T	16.73	**GK**	20	10.11	**MY2**	S	90.53
MY	T	50.94	**GK**	D	19.5	**MY2**	10	21.3	**MY2**	D	14.41	**GK**	D	14.83	**MY2**	10	88.46
MY	D	36.89	**M3**	S	17.3	**MY2**	T	18.8	**MBC**	S	14.75	**M3**	S	20.90	**MY2**	T	95.84
MB	S	52.84	**M3**	10	29.7	**MY2**	D	26.0	**MBC**	1	16.59	**M3**	10	33.93	**MY2**	D	118.5
MB	1	41.54	**M3**	D	20.1	**MBC**	S	29.0	**MBC**	T	18.83	**M3**	D	25.14	**MBC**	S	83.55
MB	T	33.75	**MK**	S	37.3	**MBC**	10	36.0	**MBC**	D	27.08	**MK**	S	17.79	**MBC**	10	82.36
MB	D	29.23	**MK**	D	15.4	**MBC**	T	15.5	**MKC**	S	13.08	**MK**	D	16.00	**MBC**	T	85.84
MK	S	26.51	**M1**	S	19.5	**MBC**	D	17.2	**MKC**	1	10.69	**M11**	S	10.73	**MBC**	D	78.50
MK	1	31.31	**M1**	10	28.3	**MKC**	S	21.2	**MKC**	D	31.04	**M11**	10	9.29	**MKC**	S	60.31
MK	D	27.43	**M1**	T	12.0	**MKC**	10	19.6	**MK**	S	13.51	**M11**	T	46.19	**MKC**	10	38.84
MK	S	128.6	**M1**	D	61.9	**MKC**	D	24.6	**MK**	D	17.04	**M11**	D	17.79	**MKC**	D	91.63
MK	D	38.64	**MY**	S	22.2	**MK**	S	65.4				**MY2**	S	13.00	**MK**	S	119.4
			MY	10	27.8	**MK**	D	17.5				**MY2**	10	13.31	**MK**	D	94.50
			MY	T	27.8							**MY2**	T	30.65	**MKC**	S	90.69
			MY	D	22.0							**MY2**	D	15.83	**MKC**	10	98.33
			MY	S	44.4							**MY1**	S	25.83	**MKC**	T	104.1
			MY	10	30.1							**MY1**	10	22.09	**MKC**	D	167.8
			MY	T	14.7							**MY1**	T	19.69			
			MY	D	34.3							**MY1**	D	28.91			
			M2	S	32.8							**M20**	S	12.45			
			M2	10	29.1							**M20**	10	26.41			
			M2	T	15.0							**M20**	T	44.61			
			M2	D	20.4							**M20**	D	18.28			
			M2	S	22.2							**M23**	S	82.48			
			M2	10	14.6							**M23**	10	15.18			
			M2	T	10.2							**M23**	T	40.76			
			M2	D	7.60							**M23**	D	99.26			
			M8	S	19.1							**M8**	S	26.66			
			M8	10	21.7							**M8**	10	17.38			
			M8	T	22.3							**M8**	T	19.25			
			M8	D	14.9							**M8**	D	16.86			
			M1	S	26.5							**M14**	S	35.04			
			M1	10	28.2							**M14**	10	48.90			
			M1	T	30.9							**M14**	T	106.3			
			M1	D	25.4							**M14**	D	10.96			
			MK	S	26.3							**MKC**	S	33.40			
			MK	10	10.0							**MKC**	10	63.43			
			MK	D	19.2							**MKC**	D	15.96			
			MB	S	23.1							**MBC**	S	28.19			
			MB	10	20.4							**MBC**	10	32.19			
			MB	T	19.6							**MBC**	T	33.15			
			MB	D	37.0							**MBC**	D	82.33			

Table 6. 2006 LAS Analysis Results (Jul-Dec)

2006 LAS Analysis Results (Jul-Dec)																	
July			August			September			October			November			December		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	65.63	K3	S	44.04	K2	S	37.03	K2	S	33.68	K3	S	62.16	K2	S	67.51
K2	10	53.23	K3	10	56.68	K2	10	85.88	K2	10	60.46	K3	10	34.35	K2	10	41.40
K2	T	50.13	K3	D	66.98	K2	T	22.43	K2	T	93.93	K3	D	54.57	K2	T	35.36
K2	D	23.64	K1	S	34.00	K2	D	147.5	K2	D	116.7	K1	S	119.9	K2	D	43.50
K0	S	23.09	K1	10	112.2	K0	S	63.86	K0	S	114.9	K1	10	124.6	K0	S	32.75
K0	10	38.25	K1	T	77.26	K0	10	69.58	K0	10	138.5	K1	D	115.3	K0	10	44.13
K0	T	63.18	K1	D	48.66	K0	T	86.67	K0	T	115.7	K2	S	105.5	K0	T	37.90
K0	D	18.14	K2	S	49.46	K0	D	110.8	K0	D	118.2	K2	10	57.49	K0	D	53.26
K0A	S	59.81	K2	10	46.06	K0A	S	70.42	K0A	S	57.64	K2	T	153.7	K0A	S	44.31
K0A	10	82.48	K2	T	91.77	K0A	10	112.7	K0A	10	64.88	K2	D	45.36	K0A	10	44.90
K0B	S	105.6	K2	D	119.7	K0B	S	137.8	K0B	S	81.83	K0	S	57.72	K0B	S	23.78
K0B	10	136.0	K0	S	40.18	K0B	10	62.62	K0B	10	60.59	K0	10	47.22	K0B	10	54.36
BL	S	80.40	K0	10	32.07	BL	S	91.88	BL	S	113.8	K0	T	41.82	BL	S	196.5
BL	10	69.10	K0	T	29.72	BL	10	151.8	BL	10	126.6	K0	D	54.67	BL	10	95.09
BL	20	66.51	K0	D	37.27	BL	20	123.2	BL	20	121.3	K0A	S	126.6	BL	20	59.47
BL	30	106.7	K0A	S	45.99	BL	30	181.0	BL	30	102.5	K0A	10	90.48	BL	30	60.39
BL	50	117.0	K0A	10	37.42	BL	T	176.7	BL	50	134.6	K0B	S	38.01	BL	T	64.85
BL	T	52.76	K0B	S	33.49	BL	50	165.7	BL	T	141.4	K0B	10	47.95	BL	50	73.62
BL	D	25.51	K0B	10	62.16	BL	D	111.0	BL	D	147.8	BL	S	38.11	BL	D	88.46
B13	S	56.00	BL	S	39.48	B13	S	132.3	B13	S	24.26	BL	10	37.10	B13	S	30.87
B13	10	72.16	BL	10	58.98	B13	10	126.7	B13	10	20.88	BL	20	35.05	B13	10	25.03
B14	T	117.7	BL	20	59.40	B13	T	91.56	B13	T	34.73	BL	30	25.90	B13	T	116.3
B13	D	35.60	BL	30	48.79	B13	D	215.3	B13	D	57.39	BL	T	28.92	B13	D	97.75
B7	S	90.54	BL	T	148.0	B7	S	229.88	B7	S	126.8	BL	50	37.94	B7	S	100.6
B7	10	103.7	BL	50	44.29	B7	10	91.30	B7	10	85.49	BL	D	27.95	B7	10	66.52
B7	T	154.9	BL	D	43.26	B7	T	224.81	B7	T	90.40	B13	S	128.4	B7	T	114.0
B7	D	61.69	B13	S	42.84	B7	D	174.55	B7	D	159.9	B13	10	129.5	B7	D	169.4
B2	S	167.0	B13	10	38.91	B2	S	105.6	B2	S	136.1	B13	T	74.34	B2	S	114.8
B2	10	55.79	B13	T	52.14	B2	10	60.04	B2	10	94.65	B13	D	124.9	B2	10	71.31
B3	T	124.7	B13	D	39.79	B2	T	231.24	B2	T	124.2	B7	S	20.60	B2	T	90.94
B2	D	165.9	B7	S	34.42	B2	D	122.4	B2	D	187.5	B7	10	27.32	B2	D	78.65
KK	S	150.0	B7	10	49.08	KK	S	99.85	KK	S	25.34	B7	T	42.13	KK	S	85.16
KK	10	159.1	B7	T	63.61	KK	10	56.65	KK	10	28.61	B7	D	42.66	KK	10	54.43
KK	D	210.1	B7	D	51.78	KK	D	95.05	KK	D	28.43	B2	S	130.6	KK	D	72.34
KKK	S	96.08	B2	S	40.25	KKK	S	111.67	KKK	S	122.4	B2	10	146.4	KKK	S	39.65
KKK	10	-	B2	10	47.25	KKK	10	131.46	KKK	10	32.75	B2	T	58.41	KKK	10	45.11
KKO	S	79.25	B2	T	38.50	KKO	S	-	KKO	S	-	B2	D	159.8	KKO	S	55.87
KKO	10	88.89	B2	D	55.55	KKO	10	-	KKO	10	-	KK	S	66.43	KKO	10	58.80
ADA	S	75.40	KK	S	74.73	ADA	S	107.56	ADA	S	186.2	KK	10	97.28	ADA	S	103.2
ADA	D	150.3	KK	10	61.24	ADA	D	-	ADA	D	-	KK	D	79.69	ADA	D	-
ES	S	148.2	KK	D	44.24	ES	S	75.76	ES	S	96.71	KKK	S	56.58	ES	S	83.62
ES	D	172.9	KKK	S	92.93	ES	D	71.99	ES	D	0.00	KKK	10	119.5	ES	D	89.65
VS	S	100.6	KKK	10	72.64	VS	S	180.7	VS	S	78.37	KKO	S	128.5	VS	S	98.26
VS	D	116.1	KKO	S	70.31	VS	D	131.9	VS	D	9.94	KKO	10	116.8	VS	D	89.72
HK	S	146.4	KKO	10	57.42	HK	S	181.7	HK	S	71.63	ADA	S	0.00	HK	S	61.56
HK	D	145.8	ADA	S	74.04	HK	D	153.9	HK	D	50.55	ADA	D	107.4	HK	D	69.82
UK	S	183.9	ADA	D	145.5	UK	S	53.72	UK	S	24.41	ES	S	111.5	UK	S	51.47
UK	10	170.8	ES	S	120.0	UK	10	141.5	UK	10	21.81	ES	D	51.26	UK	10	33.27
UK	20	202.7	ES	D	156.4	UK	20	101.6	UK	20	26.45	VS	S	144.8	UK	20	29.68
UK	D	232.3	VS	S	102.9	UK	D	249.8	UK	D	45.25	VS	D	137.7	UK	D	104.5
GK	S	149.7	VS	D	128.9	GK	S	66.73	GK	S	23.54	HK	S	127.9	GK	S	75.80
GK	10	155.7	HK	S	149.3	GK	10	93.14	GK	10	30.76	HK	D	79.62	GK	10	149.0
GK	20	212.6	HK	D	147.7	GK	20	110.9	GK	20	50.62	UK	S	52.42	GK	20	123.1
GK	D	144.4	UK	S	67.79	GK	D	164.6	GK	D	33.34	UK	10	60.89	GK	D	121.4

Table 6. Continued

2006 LAS Analysis Results (Jul-Dec)																	
July			August			September			October			November			December		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
MY1	S	41.95	UK	10	94.36	MY1	S	113.9	MY	S	38.78	UK	20	122.0	MY	S	75.19
MY1	10	42.16	UK	20	77.67	MY1	10	187.8	MY	10	68.61	UK	D	204.6	MY	10	74.34
MY1	T	38.84	UK	D	87.86	MY1	T	26.98	MY	T	45.85	GK	S	102.9	MY	T	63.61
MY1	D	62.50	GK	S	89.19	MY1	D	154.6	MY	D	53.02	GK	10	42.53	MY	D	110.6
MY2	S	65.76	GK	10	69.92	MY2	S	117.4	MY	S	38.36	GK	20	55.61	MY	S	54.43
MY2	10	82.15	GK	20	81.41	MY2	10	52.73	MY	10	-	GK	D	71.69	MY	10	67.86
MY2	T	96.78	GK	D	107.9	MY2	T	57.10	MY	T	49.60	M3	S	128.2	MY	T	81.94
MY2	D	117.6	M3	S	85.27	MY2	D	166.3	MY	D	67.30	M3	10	127.9	MY	D	104.1
MBC	S	192.9	M3	10	82.30	MBC	S	72.02	MB	S	141.9	M3	T	118.4	MB	S	60.25
MBC	10	155.1	M3	T	40.42	MBC	10	87.60	MB	10	-	M3	D	87.08	MB	10	41.65
MBC	T	111.5	M3	D	51.96	MBC	T	198.1	MB	T	35.36	MK	S	112.9	MB	T	84.07
MBC	D	46.16	MK	S	15.96	MBC	D	151.3	MB	D	60.21	MK	D	119.1	MB	D	122.8
MKC	S	130.1	MK	D	47.95	MK	S	114.9	MK	S	49.01	M1	S	59.01	MK	S	93.36
MKC	10	145.7	M11	S	49.94	MK	D	103.1	MK	10	28.05	M1	10	77.65	MK	D	90.59
MKC	T	90.29	M11	10	40.56	MKC	S	79.94	MK	T	33.27	M1	T	48.62	MK	S	60.25
MKC	D	187.6	M11	T	52.17	MKC	10	30.34	MK	D	28.68	M1	D	83.16	MK	10	41.65
MK	S	83.48	M11	D	34.56	MKC	T	137.8	MK	S	119.0	MY	S	152.7	MK	T	49.89
MK	D	137.9	MY2	S	40.14	MKC	D	177.1	MK	D	93.79	MY	10	146.6	MK	D	80.40
			MY2	10	46.37							MY	T	63.43			
			MY2	T	37.26							MY	D	103.7			
			MY2	D	63.33							MY	S	54.18			
			MY1	S	27.94							MY	10	69.82			
			MY1	10	45.57							MY	T	42.03			
			MY1	T	59.15							MY	D	31.98			
			MY1	D	31.94							M2	S	151.7			
			M20	S	30.76							M2	10	143.6			
			M20	10	77.65							M2	T	60.07			
			M20	T	35.43							M2	D	148.8			
			M20	D	33.34							M2	S	88.90			
			M23	S	30.83							M2	10	82.23			
			M23	10	51.15							M2	T	78.30			
			M23	T	37.14							M2	D	122.8			
			M23	D	58.16							M8	S	171.4			
			M8	S	34.99							M8	10	161.2			
			M8	10	30.24							M8	T	145.7			
			M8	T	30.77							M8	D	147.7			
			M8	D	35.64							M1	S	41.05			
			M14	S	37.80							M1	10	28.64			
			M14	10	45.97							M1	T	36.05			
			M14	T	48.83							M1	D	34.59			
			M14	D	35.88							MK	S	59.65			
			MKC	S	37.46							MK	10	84.66			
			MKC	10	33.09							MK	T	61.46			
			MKC	T	39.55							MK	D	61.17			
			MKC	D	37.38							MB	S	30.55			
			MBC	S	21.50							MB	10	55.20			
			MBC	10	23.26							MB	T	79.58			
			MBC	T	24.31							MB	D	126.8			
			MBC	D	35.32												

Table 7. 2007 LAS Analysis Results (Jan-Jun)

2007 LAS Analysis Results (Jan-Jun)																	
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	18.59	K3	S	32.05	K2	S	46.44	K2	S	27.15	K3	S	24.96	K2	S	25.43
K2	1	17.73	K3	10	38.92	K2	10	51.92	K2	10	25.76	K3	10	30.36	K2	10	24.72
K2	T	45.39	K3	D	42.20	K2	T	52.27	K2	T	32.71	K3	D	32.67	K2	T	24.28
K2	D	56.12	K1	S	71.63	K2	D	67.06	K3	D	56.96	K1	S	27.34	K2	D	32.11
K0	S	31.49	K1	10	68.01	K0	S	37.28	K0	S	31.15	K1	10	24.29	K0	S	25.39
K0	1	41.96	K1	T	74.62	K0	10	44.68	K0	10	33.13	K1	T	36.38	K0	10	33.72
K0	T	57.56	K1	D	65.20	K0	T	60.84	K0	T	50.62	K2	D	35.01	K0	T	26.16
K0	D	59.15	K2	S	44.97	K0	D	76.17	K0	D	54.81	K2	S	28.52	K0	D	39.94
K0A	S	37.42	K2	10	69.43	K0A	S	44.76	K0A	S	31.32	K2	10	25.70	K0A	S	22.61
K0A	1	19.91	K2	T	80.58	K0A	10	48.39	K0A	10	29.30	K2	T	32.08	K0A	10	22.73
K0B	S	15.52	K2	D	120.7	K0B	S	48.82	K0B	S	22.61	K2	D	40.73	K0B	S	22.26
K0B	1	22.75	K0	S	29.48	K0B	10	41.16	K0B	10	28.44	K0	S	23.98	K0B	10	29.54
BL	S	52.73	K0	10	43.99	BL	S	25.94	BL	S	33.33	K0	10	24.49	BL	S	20.33
BL	1	49.25	K0	T	86.85	BL	10	28.05	BL	10	35.13	K0	T	37.20	BL	10	30.24
BL	2	47.46	K0	D	91.45	BL	20	32.08	BL	20	28.71	K0	D	44.60	BL	20	30.98
BL	3	67.58	K0A	S	36.58	BL	30	26.33	BL	30	27.74	K0A	S	36.81	BL	30	27.15
BL	T	69.00	K0A	10	40.07	BL	50	128.5	BL	40	-	K0A	10	30.51	BL	T	35.29
BL	5	84.12	K0B	S	43.29	BL	T	113.5	BL	50	58.18	K0B	S	30.00	BL	50	59.54
BL	D	70.85	K0B	10	44.24	BL	D	74.76	BL	T	69.40	K0B	10	33.13	BL	D	40.84
B13	S	37.38	BL	S	37.87	B13	S	29.61	BL	D	82.24	BL	S	41.43	B13	S	20.89
B13	1	36.40	BL	10	37.14	B13	10	37.75	B13	S	39.83	BL	10	33.10	B13	10	24.49
B13	T	66.05	BL	20	55.69	B13	T	70.23	B13	10	36.23	BL	20	40.61	B13	T	31.30
B13	D	45.46	BL	30	51.29	B13	D	65.57	B13	T	47.10	BL	30	28.52	B13	D	40.18
B7	S	65.24	BL	T	58.16	B7	S	32.59	B13	D	62.48	BL	T	26.44	B7	S	24.37
B7	1	73.62	BL	50	61.87	B7	10	47.57	B7	S	28.95	BL	50	71.56	B7	10	23.16
B7	T	92.31	BL	D	77.05	B7	T	53.25	B7	10	34.07	BL	D	23.08	B7	T	32.47
B7	D	111.9	B13	S	53.40	B7	D	51.95	B7	T	51.56	B13	S	37.48	B7	D	42.72
B2	S	38.26	B13	10	40.35	B2	S	38.53	B7	D	55.28	B13	10	34.70	B2	S	22.61
B2	1	51.15	B13	T.	61.70	B2	10	26.09	B2	S	29.46	B13	T	53.25	B2	10	22.18
B2	T	68.15	B13	D	64.21	B2	T	33.92	B2	10	32.47	B13	D	40.65	B2	T	43.89
B2	D	52.73	B7	S	41.37	B2	D	36.62	B2	T	52.66	B7	S	34.00	B2	D	40.14
KK	S	44.76	B7	10	38.50	KK	S	29.57	B2	D	56.18	B7	10	40.29	KK	S	21.71
KK	1	65.77	B7	T	72.52	KK	10	41.47	KK	S	-	B7	T	44.79	KK	10	30.32
KK	D	34.42	B7	D	57.00	KK	D	37.87	KK	10	-	B7	D	55.51	KK	D	38.06
KKK	S	36.47	B2	S	40.91	KKK	S	35.29	KK	D	-	B2	S	37.52	KKK	S	30.24
KKK	1	53.15	B2	10	54.04	KKK	10	38.06	KKK	S	36.26	B2	10	33.25	KKK	10	29.10
KKO	S	42.17	B2	T	66.23	KKO	S	34.59	KKK	10	27.81	B2	T	70.07	KKO	S	22.84
KKO	1	40.77	B2	D	77.80	KKO	10	31.84	KKO	S	26.32	B2	D	61.89	KKO	10	15.57
ADA	S	150.6	KK	S	65.31	ADA	S	66.45	KKO	10	22.92	KK	S	19.36	ADA	S	25.00
ADA	D	-	KK	10	56.75	ADA	D	-	ADA	S	45.30	KK	10	31.53	ADA	D	-
ES	S	32.47	KK	D	65.06	ES	S	21.46	ADA	D	-	KK	D	37.48	ES	S	20.65
ES	D	28.82	KKK	S	60.50	ES	D	39.59	ES	S	32.12	KKK	S	21.40	ES	D	16.94
VS	S	50.03	KKK	10	45.18	VS	S	26.11	ES	D	26.13	KKK	10	22.61	VS	S	20.30
VS	D	51.89	KKO	S	45.39	VS	D	36.54	VS	S	24.45	KKO	S	18.81	VS	D	22.61
HK	S	51.54	KKO	10	32.26	HK	S	24.13	VS	D	27.34	KKO	10	20.46	HK	S	23.35
HK	D	46.90	ADA	S	131.9	HK	D	39.75	HK	S	34.00	ADA	S	52.85	HK	D	20.58
UK	S	30.87	ADA	D	-	UK	S	28.91	HK	D	30.24	ADA	D	-	UK	S	21.51
UK	1	32.19	ES	S	56.68	UK	10	28.26	UK	S	35.40	ES	S	17.64	UK	10	22.14
UK	2	37.28	ES	D	93.07	UK	20	47.30	UK	10	26.29	ES	D	17.60	UK	20	24.57
UK	D	51.29	VS	S	28.26	UK	D	38.22	UK	20	22.65	VS	S	26.91	UK	D	36.54
GK	S	24.34	VS	D	61.24	GK	S	43.43	UK	D	35.87	VS	D	20.30	GK	S	19.64
GK	1	27.36	HK	S	32.57	GK	10	33.93	GK	S	26.60	HK	S	18.81	GK	10	22.85
GK	2	38.85	HK	D	51.05	GK	20	41.78	GK	10	61.85	HK	D	35.13	GK	20	20.38
GK	D	55.94	UK	S	64.64	GK	D	68.65	GK	20	38.30	UK	S	117.8	GK	D	29.54

Table 7. Continued

2007 LAS Analysis Results (Jan-Jun)																	
January			February			March			April			May			June		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
MY1	S	54.43	**UK**	10	47.60	**MY1**	S	56.22	**GK**	D	27.60	**UK**	10	29.57	**MY1**	S	19.64
MY1	10	55.94	**UK**	20	76.58	**MY1**	10	61.93	**MY1**	S	36.58	**UK**	20	33.06	**MY1**	10	27.70
MY1	T	47.11	**UK**	D	80.15	**MY1**	T	64.47	**MY1**	10	46.16	**UK**	D	41.16	**MY1**	T	29.85
MY1	D	72.80	**GK**	S	42.45	**MY1**	D	89.01	**MY1**	T	38.89	**GK**	S	25.74	**MY1**	D	24.10
MY2	S	72.52	**GK**	10	52.56	**MY2**	S	72.77	**MY1**	D	55.16	**GK**	10	38.34	**MY2**	S	43.70
MY2	10	87.85	**GK**	20	29.44	**MY2**	10	70.30	**MY2**	S	30.90	**GK**	20	32.20	**MY2**	10	20.93
MY2	T	132.98	**GK**	D	51.12	**MY2**	T	82.08	**MY2**	10	52.31	**GK**	D	33.10	**MY2**	T	38.30
MY2	D	143.88	**M3**	S	49.39	**MY2**	D	72.53	**MY2**	T	38.69	**M3**	S	37.05	**MY2**	D	28.40
MBC	S	57.32	**M3**	10	49.27	**MBC**	S	54.34	**MY2**	D	55.87	**M3**	10	31.73	**MBC**	S	30.59
MBC	10	66.94	**M3**	T	51.78	**MBC**	10	58.49	**MBC**	S	28.83	**M3**	T	48.24	**MBC**	10	39.63
MBC	T	86.35	**M3**	D	70.78	**MBC**	T	64.47	**MBC**	10	28.24	**M3**	D	43.23	**MBC**	T	43.07
MBC	D	119.22	**MK**	S	34.52	**MBC**	D	65.53	**MBC**	T	32.59	**MK**	S	45.73	**MBC**	D	43.50
MKCD	S	55.55	**MK**	D	33.37	**MKC**	S	35.13	**MBC**	D	42.21	**MK**	D	42.96	**MK**	S	25.78
MKCD	10	38.64	**M11**	S	30.76	**MKC**	10	32.59	**MKC**	S	32.90	**M11**	S	37.01	**MK**	D	27.27
MKCD	T	47.85	**M11**	10	38.67	**MKC**	T	34.47	**MKC**	10	33.45	**M11**	10	48.55	**MKC**	S	30.16
MKCD	D	52.42	**M11**	T	38.95	**MKC**	D	26.41	**MKC**	T	55.08	**M11**	T	45.30	**MKC**	10	24.49
MK	S	41.02	**M11**	D	42.84	**MK**	S	37.24	**MKC**	D	51.445	**M11**	D	75.23	**MKC**	T	34.00
MK	D	37.62	**MY2**	S	50.62	**MK**	D	36.58	**MK**	S	42.80	**MY2**	S	56.81	**MKC**	D	37.71
			MY2	10	39.55				**MK**	D	43.42	**MY2**	10	38.06			
			MY2	T	38.50							**MY2**	T	37.99			
			MY2	D	71.77							**MY2**	D	28.44			
			MY1	S	56.43							**MY1**	S	32.12			
			MY1	10	49.04							**MY1**	10	28.75			
			MY1	T	31.84							**MY1**	T	49.45			
			MY1	D	27.84							**MY1**	D	39.55			
			M20	S	47.11							**M20**	S	30.94			
			M20	10	39.09							**M20**	10	34.74			
			M20	T	40.77							**M20**	T	32.59			
			M20	D	66.27							**M20**	D	51.05			
			M23	S	47.60							**M23**	S	34.90			
			M23	10	42.04							**M23**	10	38.77			
			M23	T	29.30							**M23**	T	37.95			
			M23	D	39.06							**M23**	D	54.03			
			M8	S	48.23							**M8**	S	43.70			
			M8	10	25.72							**M8**	10	38.57			
			M8	T	33.97							**M8**	T	38.06			
			M8	D	36.37							**M8**	D	54.26			
			M14	S	48.83							**M14**	S	33.84			
			M14	10	51.85							**M14**	10	40.41			
			M14	T	50.13							**M14**	T	31.92			
			M14	D	74.51							**M14**	D	60.17			
			MKC	S	40.77							**MKC**	S	-			
			MKC	10	47.32							**MKC**	10	-			
			MKC	T	39.90							**MKC**	T	-			
			MKC	D	83.95							**MKC**	D	-			
			MBC	S	42.84							**MBC**	S	-			
			MBC	10	54.78							**MBC**	10	-			
			MBC	T	50.20							**MBC**	T	-			
			MBC	D	79.72							**MBC**	D	-			

Table 8. 2007 LAS Analysis Results (Jul-Dec)

2007 LAS Analysis Results (Jul-Dec)																	
July			August			September			October			November			December		
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L
K2	S	-	K3	S	-	K2	S	39.52	K2	S	41.34	K3	S	44.52	K2	S	-
K2	10	-	K3	10	-	K2	10	37.28	K2	10	42.13	K3	10	28.40	K2	10	-
K2	T	-	K3	D	-	K2	T	36.96	K2	T	52.38	K3	D	26.99	K2	T	-
K2	D	-	K1	S	-	K2	D	55.87	K2	D	63.54	K1	S	51.02	K2	D	-
K0	S	-	K1	10	-	K0	S	39.20	K0	S	106.7	K1	10	52.97	K0	S	55.20
K0	10	-	K1	T	-	K0	10	38.88	K0	10	36.73	K1	T	63.50	K0	10	51.92
K0	T	-	K1	D	-	K0	T	49.78	K0	T	63.61	K1	D	72.81	K0	T	55.08
K0	D	-	K2	S	-	K0	D	41.44	K0	D	64.55	K2	S	47.65	K0	D	84.59
K0A	S	-	K2	10	-	K0A	S	36.31	K0A	S	38.29	K2	10	53.17	K0A	S	26.52
K0A	10	-	K2	T	-	K0A	10	36.96	K0A	10	30.31	K2	T	65.45	K0A	10	28.64
K0B	S	-	K2	D	-	K0B	S	35.35	K0B	S	34.80	K2	D	86.70	K0B	S	70.85
K0B	10	-	K0	S	13.61	K0B	10	36.96	K0B	10	36.26	K0	S	48.55	K0B	10	63.34
BL	S	-	K0	10	18.61	BL	S	37.92	BL	S	39.16	K0	10	42.56	BL	S	45.77
BL	10	-	K0	T	19.48	BL	10	33.43	BL	10	37.40	K0	T	63.50	BL	10	40.14
BL	20	-	K0	D	30.71	BL	20	31.51	BL	20	45.93	K0	D	82.04	BL	20	43.93
BL	30	-	K0A	S	24.33	BL	30	57.79	BL	40	67.10	K0A	S	42.80	BL	30	43.23
BL	50	-	K0A	10	27.38	BL	T	28.30	BL	50	76.53	K0A	10	36.26	BL	50	86.54
BL	T	-	K0B	S	23.43	BL	50	65.48	BL	T	53.99	K0B	S	44.60	BL	T	69.56
BL	D	-	K0B	10	26.13	BL	D	70.93	BL	D	73.20	K0B	10	41.29	BL	D	93.08
B13	S	-	BL	S	-	B13	S	33.11	B13	S	27.34	BL	S	56.53	B13	S	36.03
B13	10	-	BL	10	-	B13	10	37.92	B13	10	27.11	BL	10	49.96	B13	10	30.36
B14	T	-	BL	20	-	B13	T	39.20	B13	T	44.40	BL	20	56.34	B13	T	60.84
B13	D	-	BL	30	-	B13	D	49.13	B13	D	56.57	BL	30	51.37	B13	D	42.25
B7	S	-	BL	T	-	B7	S	31.83	B7	S	33.92	BL	50	73.24	B7	S	48.04
B7	10	-	BL	50	-	B7	10	33.11	B7	10	36.97	BL	T	50.62	B7	10	49.02
B7	T	-	BL	D	-	B7	T	31.19	B7	T	50.70	BL	D	88.38	B7	T	71.57
B7	D	-	B13	S	11.18	B7	D	50.74	B7	D	73.32	B13	S	35.44	B7	D	121.6
B2	S	-	B13	10	17.52	B2	S	28.94	B2	S	28.91	B13	10	29.42	B2	S	29.10
B2	10	-	B13	T	27.27	B2	10	28.30	B2	10	35.40	B13	T	53.48	B2	10	61.74
B3	T	-	B13	D	33.33	B2	T	60.99	B2	T	37.28	B13	D	46.01	B2	T	81.49
B2	D	-	B7	S	19.05	B2	D	71.57	B2	D	41.35	B7	S	27.70	B2	D	-
KK	S	-	B7	10	16.00	KK	S	37.60	KK	S	41.39	B7	10	28.28	KK	S	66.35
KK	10	-	B7	T	30.71	KK	10	35.35	KK	10	33.26	B7	T	42.21	KK	10	71.91
KK	D	-	B7	D	27.70	KK	D	72.21	KK	D	30.83	B7	D	55.91	KK	D	81.85
KKK	S	-	B2	S	-	KKK	S	35.99	KKK	S	40.53	B2	S	45.77	KKK	S	63.77
KKK	10	-	B2	10	-	KKK	10	33.75	KKK	10	46.63	B2	10	47.30	KKK	10	64.44
KKO	S	-	B2	T	-	KKO	S	28.30	KKO	S	37.05	B2	T	69.91	KKO	S	58.64
KKO	10	-	B2	D	-	KKO	10	31.83	KKO	10	31.65	B2	D	79.03	KKO	10	55.91
ADA	S	-	KK	S	19.83	ADA	S	40.16	ADA	S	153.8	KK	S	40.53	ADA	S	134.9
ADA	D	-	KK	10	24.57	ADA	D	-	ADA	D	-	KK	10	65.37	ADA	D	-
ES	S	-	KK	D	25.70	ES	S	30.87	ES	S	82.67	KK	D	54.73	ES	S	86.35
ES	D	-	KKK	S	14.91	ES	D	25.42	ES	D	55.63	KKK	S	51.80	ES	D	55.51
VS	S	-	KKK	10	13.18	VS	S	25.42	VS	S	39.63	KKK	10	59.43	VS	S	69.48
VS	D	-	KKO	S	17.09	VS	D	26.06	VS	D	36.26	KKO	S	53.36	VS	D	61.70
HK	S	-	KKO	10	26.09	HK	S	25.74	HK	S	49.69	KKO	10	44.76	HK	S	98.71
HK	D	-	ADA	S	21.36	HK	D	31.19	HK	D	39.00	ADA	S	314.8	HK	D	79.89
UK	S	-	ADA	D	-	UK	S	33.43	UK	S	26.99	ADA	D	-	UK	S	61.62
UK	10	-	ES	S	24.45	UK	10	40.48	UK	10	47.10	ES	S	195.6	UK	10	71.36
UK	20	-	ES	D	25.70	UK	20	57.15	UK	20	58.64	ES	D	54.30	UK	20	66.51
UK	D	-	VS	S	18.74	UK	D	59.07	UK	D	63.26	VS	S	43.74	UK	D	78.36
GK	S	-	VS	D	19.48	GK	S	34.39	GK	S	38.53	VS	D	40.65	GK	S	52.17
GK	10	-	HK	S	19.28	GK	10	28.30	GK	10	49.69	HK	S	130.0	GK	10	59.15
GK	20	-	HK	D	12.65	GK	20	70.61	GK	20	65.30	HK	D	52.31	GK	20	59.90
GK	D	-	UK	S	21.98	GK	D	64.84	GK	D	64.67	UK	S	52.50	GK	D	70.03

Table 8. Continued

2007 LAS Analysis Results (Jul-Dec)																		
July			August			September			October			November			December			
Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	Stat	DE	µg/L	
MY1	S	-	UK	10	13.53	MY1	S	47.53	MY1	S	42.21	UK	10	61.2	MY1	S	84.27	
MY1	10	-	UK	20	14.32	MY1	10	T. Denk	MY1	10	34.62	UK	20	68.3	MY1	10	T. Denk	
MY1	T	-	UK	D	30.16	MY1	T	25.10	MY1	T	57.55	UK	D	77.3	MY1	T	85.84	
MY1	D	-	GK	S	22.18	MY1	D	70.29	MY1	D	72.77	GK	S	50.1	MY1	D	95.31	
MY2	S	-	GK	10	16.55	MY2	S	43.69	MY2	S	48.97	GK	10	66.8	MY2	S	85.17	
MY2	10	-	GK	20	27.81	MY2	10	T. Denk	MY2	10	45.08	GK	20	65.6	MY2	10	T. Denk	
MY2	T	-	GK	D	24.21	MY2	T	24.78	MY2	T	56.68	GK	D	78.5	MY2	T	100.0	
MY2	D	-	M3	S	18.93	MY2	D	27.02	MY2	D	72.20	M3	S	55.6	MY2	D	110.8	
MBC	S	-	M3	10	24.49	MBC	S	45.29	MBC	S	41.47	M3	10	63.5	MBC	S	77.54	
MBC	10	-	M3	T	29.38	MBC	10	39.84	MBC	10	46.05	M3	T	67.2	MBC	10	T. Denk	
MBC	T	-	M3	D	26.41	MBC	T	42.40	MBC	T	59.80	M3	D	80.9	MBC	T	105.0	
MBC	D	-	MK	S	30.28	MBC	D	45.61	MBC	D	83.33	MK	S	49.6	MBC	D	113.3	
MKC	S	-	MK	D	33.92	MK	S	36.31	MKC	S	46.55	MK	D	57.5	MK	S	96.99	
MKC	10	-	M11	S	-	MK	D	29.26	MKC	10	44.87	M11	S	40.8	MK	D	74.84	
MKC	T	-	M11	10	-	MKC	S	43.69	MKC	T	61.11	M11	10	69.3	MKC	S	71.59	
MKC	D	-	M11	T	-	MKC	10	42.08	MKC	D	71.13	M11	T	57.0	MKC	10	73.32	
MK	S	-	M11	D	-	MKC	T	48.49	MK	S	39.71	M11	D	77.3	MKC	T	92.80	
MK	D	-	MY	S	36.23	MKC	D	76.38	MK	D	46.52	MY2	S	62.9	MKC	D	99.02	
			MY	10	25.39							MY2	10	55.4				
			MY	T	26.80							MY2	T	73.9				
			MY	D	50.47							MY2	D	115.				
			MY	S	34.47							MY1	S	57.2				
			MY	10	28.48							MY1	10	59.3				
			MY	T	33.33							MY1	T	70.3				
			MY	D	33.84							MY1	D	88.5				
			M20	S	-							M20	S	-				
			M20	10	-							M20	10	-				
			M20	T	-							M20	T	-				
			M20	D	-							M20	D	-				
			M23	S	33.25							M23	S	51.2				
			M23	10	38.34							M23	10	54.1				
			M23	T	31.22							M23	T	44.7				
			M23	D	33.68							M23	D	70.9				
			M8	S	27.15							M8	S	53.7				
			M8	10	24.96							M8	10	46.8				
			M8	T	24.57							M8	T	69.0				
			M8	D	29.85							M8	D	76.2				
			M14	S	-							M14	S	53.3				
			M14	10	-							M14	10	59.9				
			M14	T	-							M14	T	82.9				
			M14	D	-							M14	D	96.0				
			MK	S	40.92							MKC	S	50.1				
			MK	10	20.07							MKC	10	30.2				
			MK	T	29.38							MKC	T	29.0				
			MK	D	42.49							MKC	D	97.5				
			MB	S	28.24							MBC	S	46.1				
			MB	10	25.39							MBC	10	45.7				
			MB	T	30.12							MBC	T	62.4				
			MB	D	38.04							MBC	D	87.7				

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