

TEST REPORT NO.:VNSL1611017245TX	Date: Nov 17, 2016	

Factory Name 5183

Factory Address

The following sample was collected by the SGS: Adam Lee

Sampling Date: Oct.10, 2016

Sample Receiving Date: Nov 08, 2016

Sample Received Quantity: Inlet 7L / Outlet 7L

Sample Description: (A) INLET, (B) EFFLUENT

Buyer Name: JW DETOX

Importer Name:
Country of Origin:

Country of Destination:

Factory Discharge Location: Effluent, Before treatment

Test Performing Period Nov 08, 2016 - Nov 17, 2016

## Remarks

- 1. This test document cannot be reproduced in any way, except in full content, without prior approval in writing by the laboratory.
- 2. The results shown in this test report refer only to the sampling and the sample(s) tested unless otherwise stated.

# Disclaimer:

The reporting limits will be subjected to adjustment if significant matrix interference is observed during the analytical process

Signed for and on hehalf of

SGS VIETNAM LTD

Thai Thuy Ngan

Softlines Customer Service Manager

1



Sample ID Inlet water Outlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Factory Address: Date Sampled 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting UNIT ITEMS CAS No. **METHODS** Inlet water Limit water (without ETP plant) Phthalates With reference to USEPA 8270D, ISO 18856, or Di(2-Ethyl Hexyl) Phthalate (DEHP) 117-81-7 10 ua/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Bis(2-methoxyethyl)phthalate (DMEP) 117-82-8 10 μg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Di-N-Octyl Phthalate (DNOP) 117-84-0 10 μg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or 26761-40-0. Di-Iso-Decyl Phthalate (DIDP) 10 µg/L n.d. n.d. 68515-49-1 Solvent extraction followed by GC/MS analysis 28553-12-0, With reference to USEPA 8270D, ISO 18856, or Di-Iso-Nonyl Phthalate (DINP) 10 μg/L n.d. n.d. 68515-48-0 Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Di-N-Hexyl Phthalate (DNHP) 84-75-3 10 µg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Dibutyl Phthalate (DBP) 84-74-2 10 μg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Benzyl Butyl Phthalate (BBP) 85-68-7 10 n.d. ua/L n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856. or Dinonyl phthalate (DNP) 84-76-4 10 μg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Diethyl Phthalate (DEP) n.d. 84-66-2 10 μg/L n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Di-N-Propyl Phthalate (DPRP) 131-16-8 10 µg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Di-Iso-Butyl Phthalate (DIBP) 84-69-5 10 μg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Dicyclohexyl Phthalate (DCHP) 84-61-7 10 µg/L n.d. n.d. Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856, or Di-Iso-Octyl Phthalate (DIOP) 27554-26-3 10 µg/L n.d. n.d. Solvent extraction followed by GC/MS analysis 1,2-Benzenedicaboxylic acid, Di-C7-11 With reference to USEPA 8270D, ISO 18856, or 68515-42-4 10 ua/L n.d. n.d. Branched and Linear Alkyl Esters (DHNUP) Solvent extraction followed by GC/MS analysis With reference to USEPA 8270D, ISO 18856. or 1,2-Benzenedicaboxylic acid, Di-C6-8 Branched 71888-89-6 10 μg/L n.d. Alkyl Esters, C7-rich (DIHP) Solvent extraction followed by GC/MS analysis Flame retardants With reference to USEPA 527, USEPA 8321B, Polybrominated biphenyls (PBBs) 59536-65-1 ISO 22032 or Solvent extraction followed by 5 μg/L n.d. n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, ISO 22032 or Solvent extraction followed by 5 Pentabromodiphenyl ethers (PentaBDE) 32534-81-9 μg/L n.d. n.d. GC/MS or LC/MS analysis



Sample ID

Outlet water

Inlet water

Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Date Sampled Factory Address: 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting UNIT ITEMS CAS No. **METHODS** Inlet water Limit water (without ETP plant) With reference to USEPA 527, USEPA 8321B, Octabromodiphenyl ethers (OctaBDE) 32536-52-0 ISO 22032 or Solvent extraction followed by 5 n d n.d. µq/L GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, Decabromodiphenyl ethers (DecaBDE) 1163-19-5 ISO 22032 or Solvent extraction followed by 5 µq/L n.d. n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B. Tris(2-chloroethyl) phosphate (TCEP) 115-96-8 ISO 22032 or Solvent extraction followed by 5 µg/L n.d. n.d. GC/MS or LC/MS analysis With reference to USEPA 527 USEPA 8321B 545-55-1 ISO 22032 or Solvent extraction followed by Tris(1-aziridinyl)phosphine oxide) (TEPA) 5 n.d. µg/L n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, Tetrabromobisphenol A (TBBPA) 79-94-7 ISO 22032 or Solvent extraction followed by n.d. 5 ua/L n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, 134237-50-6, 134237-51-7, Hexabromocyclododecane (HBCDD) ISO 22032 or Solvent extraction followed by μg/L n.d. n.d. 134237-52-8. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, Bis(2,3-dibromopropyl)phosphate (BIS) 5412-25-9 ISO 22032 or Solvent extraction followed by 5 µg/L n.d. n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, Tris(2,3-dibromopropyl) phosphate (TRIS) 126-72-7 ISO 22032 or Solvent extraction followed by 5 μg/L n.d. n.d. GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B, 2,2-Bis(bromomethyl)-1,3-propanediol (BBMP) 3296-90-0 ISO 22032 or Solvent extraction followed by 5 μg/L n d n d GC/MS or LC/MS analysis With reference to USEPA 527, USEPA 8321B. ISO 22032 or Solvent extraction followed by Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) 13674-87-8 5 µg/L n.d. n.d. GC/MS or LC/MS analysis Azo dyes With reference to EPA 8270D, EN 14362 or 92-67-1 4-Aminodiphenyl Solvent extraction with sodium dithonite reduction 0,1 µg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or Benzidine 92-87-5 Solvent extraction with sodium dithonite reduction n.d. 0,1 μg/L n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 4-Chloro-o-Toluidine 95-69-2 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2-Naphthylamine 91-59-8 Solvent extraction with sodium dithonite reduction 0.1 μg/L n d n d followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or Solvent extraction with sodium dithonite reduction o-Aminoazotoluene 97-56-3 0.1 μq/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D. EN 14362 or 2-Amino-4-Nitrotoluene 99-55-8 Solvent extraction with sodium dithonite reduction 0,1 µg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or p-Chloroaniline 106-47-8 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2.4-Diaminoanisole 615-05-4 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 4,4'-Diaminodiphenylmethane 101-77-9 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis.



Sample ID Outlet water Inlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Date Sampled Factory Address: 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting UNIT ITEMS CAS No. **METHODS** Inlet water Limit water (without ETP plant) With reference to EPA 8270D, EN 14362 or 3,3'-Dichlorobenzidine 91-94-1 Solvent extraction with sodium dithonite reduction 0.1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 3,3'-Dimethoxybenzidine 119-90-4 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 3,3'-Dimethylbenzidine 119-93-7 Solvent extraction with sodium dithonite reduction 0.1 µg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D EN 14362 or 838-88-0 Solvent extraction with sodium dithonite reduction 3,3'-Dimethyl-4,4'diaminodiphenylmethane 0,1 n.d. µg/L n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 120-71-8 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. p-Cresidine n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 4,4'-Methylene-Bis(2-Chloroaniline) 101-14-4 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 4,4'-Oxydianiline 101-80-4 Solvent extraction with sodium dithonite reduction μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 4.4'-Thiodianiline 139-65-1 Solvent extraction with sodium dithonite reduction 0.1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or o-Toluidine 95-53-4 Solvent extraction with sodium dithonite reduction 0.1 μg/L n d n d followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2,4-Toluylenediamine 95-80-7 Solvent extraction with sodium dithonite reduction 0,1 µg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2,4,5-Trimethylaniline 137-17-7 Solvent extraction with sodium dithonite reduction 0,1 µg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or o-Anisidine 90-04-0 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 60-09-3 Solvent extraction with sodium dithonite reduction p-Aminoazobenzene µg/L n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2,4-Xylidine 95-68-1 Solvent extraction with sodium dithonite reduction n.d. 0,1 μg/L n.d. followed by GC/MS and HPLC analysis. With reference to EPA 8270D, EN 14362 or 2,6-Xylidine 87-62-7 Solvent extraction with sodium dithonite reduction 0,1 μg/L n.d. n.d. followed by GC/MS and HPLC analysis. Carcinogenic dyes and Disperse dyes 3761-53-3 Acid Red 26 Solvent extraction followed by LC/MS analysis. 5000 µg/L n.d. n.d. Basic Blue 26 2580-56-5 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Basic Red 9 5000 569-61-9 Solvent extraction followed by LC/MS analysis. μg/L n.d. n.d. Basic Violet 14 632-99-5 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d.



Sample ID

Inlet water

Outlet water

Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Factory Address: Date Sampled 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting ITEMS METHODS UNIT CAS No. Inlet water Limit water (without ETP plant) Basic Green 4 (malachite green) 10309-95-2 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Basic Green 4 (malachite green chloride)^ 569-64-2 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Basic Green 4 (malachite green oxalate)^ 2437-29-8 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Direct Blue 6 2602-46-2 Solvent extraction followed by LC/MS analysis. 5000 n.d. µg/L n.d. Direct Black 38 1937-37-7 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Direct Red 28 573-58-0 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Brown 1 23355-64-8 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Blue 1 2475-45-8 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. 5000 Disperse Blue 3 2475-46-9 Solvent extraction followed by LC/MS analysis. μg/L n d n.d. Disperse Blue 7 3179-90-6 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. 3860-63-7 Disperse Blue 26 Solvent extraction followed by LC/MS analysis. 5000 µg/L n.d. n.d. 12222-75-2, Disperse Blue 35 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. 56524-77-7 Disperse Blue 102 12222-97-8 5000 n.d. Solvent extraction followed by LC/MS analysis. μg/L n.d. Disperse Blue 106 12223-01-7 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Blue 124 61951-51-7 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. 5000 Disperse Orange 1 2581-69-3 Solvent extraction followed by LC/MS analysis. μg/L n d n d Solvent extraction followed by LC/MS analysis. Disperse Orange 3 730-40-5 5000 μg/L n.d. n.d. 82-28-0 Disperse Orange 11 Solvent extraction followed by LC/MS analysis. 5000 µg/L n.d. n.d. Disperse Orange 37/59/76 13301-61-6 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Red 1 5000 2872-52-8 Solvent extraction followed by LC/MS analysis. μg/L n.d. n.d. Disperse Red 11 2872-48-2 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d.



Sample ID Inlet water Outlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Factory Address: Date Sampled 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting UNIT ITEMS CAS No. **METHODS** Inlet water Limit water (without ETP plant) Disperse Red 17 3179-89-3 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Yellow 1 119-15-3 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Yellow 3 2832-40-8 Solvent extraction followed by LC/MS analysis. 5000 µg/L n.d. n.d. Disperse Yellow 9 6373-73-5 Solvent extraction followed by LC/MS analysis. 5000 n.d. µg/L n.d. Disperse Yellow 39 12236-29-2 Solvent extraction followed by LC/MS analysis. 5000 μg/L n.d. n.d. Disperse Yellow 49 54824-37-2 Solvent extraction followed by LC/MS analysis. μg/L n.d. n.d. **Organotin Compounds** With reference to ISO17353 and derivatisation Mono-, di- and tri-methyltin derivatives Multiple with sodium diethyl dithiocarbamate followed by 0.01 μg/L n d n d GC/MS analysis. With reference to ISO17353 and derivatisation Monomethyltin (MMT) Multiple with sodium diethyl dithiocarbamate followed by 0.01 µg/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation Dimethyltin (DMT) Multiple with sodium diethyl dithiocarbamate followed by 0,01 µg/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation Trimethyltin (TMT) with sodium diethyl dithiocarbamate followed by 0,01 μg/L n.d. Multiple n.d. GC/MS analysis. With reference to ISO17353 and derivatisation 0,01 Mono-, di- and tri-butyltin derivatives Multiple with sodium diethyl dithiocarbamate followed by μg/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation 1118-46-3. Monobutyltin (MBT) with sodium diethyl dithiocarbamate followed by 0,01 0,03 n.d. μg/L 78763-54-9 GC/MS analysis With reference to ISO17353 and derivatisation DibutyItin (DBT) 1002-53-5 with sodium diethyl dithiocarbamate followed by 0,01 μg/L 0.15 n.d. GC/MS analysis. With reference to ISO17353 and derivatisation Tributyltin (TBT) 56573-85-4 with sodium diethyl dithiocarbamate followed by 0.01 μg/L n d n d GC/MS analysis. With reference to ISO17353 and derivatisation Mono-, di- and tri-octyltin derivatives Multiple with sodium diethyl dithiocarbamate followed by 0.01 μq/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation 15231-57-9 Monooctyltin (MOT) 0,01 with sodium diethyl dithiocarbamate followed by µg/L n.d. n.d. GC/MS analysis With reference to ISO17353 and derivatisation 94410-05-6. Dioctyltin (DOT) with sodium diethyl dithiocarbamate followed by 0,01 μg/L n.d. n.d. 12531-44-4 GC/MS analysis. With reference to ISO17353 and derivatisation Trioctyltin (TOT) 0,01 Multiple with sodium diethyl dithiocarbamate followed by μg/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation Mono-, di- and tri-phenyltin derivatives Multiple with sodium diethyl dithiocarbamate followed by 0,01 μg/L n.d. n.d. GC/MS analysis.



Sample ID Inlet water Outlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Date Sampled Factory Address: 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting **METHODS** UNIT **ITEMS** CAS No. Inlet water Limit water (without ETP plant) With reference to ISO17353 and derivatisation Monophenyltin (MPhT) Multiple with sodium diethyl dithiocarbamate followed by 0.01 μg/L n.d. n.d. GC/MS analysis. With reference to ISO17353 and derivatisation Diphenyltin (DPhT) Multiple with sodium diethyl dithiocarbamate followed by 0.01 μg/L n.d. n.d. GC/MS analysis With reference to ISO17353 and derivatisation 892-20-6, Triphenyltin (TPhT) with sodium diethyl dithiocarbamate followed by 0.01 µg/L n.d. n.d. 668-34-8 GC/MS analysis. Chlorobenzenes and Chlorotoluenes Dichlorobenzenes Multiple With reference to USEPA 8260B, USEPA 8270D 1,2-Dichlorobenzene 95-50-1 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 1.3-Dichlorobenzene 541-73-1 0.2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 1,4-Dichlorobenzene 106-46-7 0.2 μg/L n d n d or Solvent extraction followed by GC/MS analysis Trichlorobenzene Multiple With reference to USEPA 8260B, USEPA 8270D 87-61-6 1,2,3-Trichlorobenzene 0,2 µg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 1,2,4-Trichlorobenzene 120-82-1 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 108-70-3 1,3,5-Trichlorobenzene 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis Tetrachlorobenzene 12408-10-5 With reference to USEPA 8260B, USEPA 8270D 1,2,3,4-Tetrachlorobenzene 634-66-2 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 1,2,3,5-Tetrachlorobenzene 634-90-2 0.2 μg/L n d n d or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 1.2.4.5-Tetrachlorobenzene 95-94-3 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Pentachlorobenzene 608-93-5 0,2 µg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Hexachlorobenzene 118-74-1 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis Chlorotoluenes Multiple With reference to USEPA 8260B, USEPA 8270D 2-Chlorotoluene 95-49-8 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis



Sample ID Inlet water Outlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Factory Address: Date Sampled 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting UNIT **ITEMS** CAS No. **METHODS** Inlet water Limit water (without ETP plant) With reference to USEPA 8260B, USEPA 8270D 3-Chlorotoluene 108-41-8 0.2 μg/L n d n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 4-Chlorotoluene 106-43-4 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis Dichlorotoluenes Multiple With reference to USEPA 8260B, USEPA 8270D 32768-54-0 2,3-Dichlorotoluene 0,2 µg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 95-73-8 0,2 μg/L n.d. 2.4-Dichlorotoluene n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 19398-61-9 2,5-Dichlorotoluene 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 2,6-Dichlorotoluene 118-69-4 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 3.4-Dichlorotoluene 95-75-0 0.2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis Trichlorotoluenes Multiple With reference to USEPA 8260B, USEPA 8270D 2.3.6-Trichlorotoluene 2077-46-5 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 6639-30-1 2,4,5-Trichlorotoluene 0,2 µg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 94-99-5 0,2 μg/L n.d. Alpha.2.4-Trichlorotoluene n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D 2014-83-7 Alpha,2,6-Trichlorotoluene 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Alpha,3,4-Trichlorotoluene 102-47-6 0,2 n.d. μg/L n.d. or Solvent extraction followed by GC/MS analysis Tetrachlorotoluenes Multiple With reference to USEPA 8260B, USEPA 8270D Alpha,alpha,2,6-Tetrachlorotoluene 81-19-6 0.2 μg/L n d n d or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Alpha, alpha, alpha, 2-Tetrachlorotoluene 2136-89-2 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Alpha,alpha,alpha,4-Tetrachlorotoluene 5216-25-1 0,2 n.d. μq/L n.d. or Solvent extraction followed by GC/MS analysis With reference to USEPA 8260B, USEPA 8270D Pentachlorotoluene 877-11-2 0,2 μg/L n.d. n.d. or Solvent extraction followed by GC/MS analysis Halogenated solvents & Volatile organic compounds (VOCs)



OCI			Samp	ole ID	Inlet water	Outlet water
Report No.: VNSL1611017245TX			Sampling	Location	Inlet	Outlet
Factory Name: 5183			Samplii	ng Time	10:00~16:00	10:00~16:00
Factory Address:			Date S	ampled	10.10.2016	10.10.2016
			Date R	eceived	08.11.2016	08.11.2016
			Sample D	escription	Water	Water
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Inlet water	Raw water (with ETP plant) / Raw water (without ETP plant)
1,2-Dichloroethane	107-06-2	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Methylene chloride	75-09-2	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Trichloroethene	79-01-6	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Tetrachloroethene	127-18-4	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Benzene	71-43-2	With reference to ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Xylene	1330-20-7	With reference to ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
o-cresol	95-48-7	With reference to ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
p-cresol	106-44-5	With reference to ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
m-cresol	108-39-4	With reference to ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	μg/L	n.d.	n.d.
Chlorophenois						
Pentachlorophenols (PCP)	87-86-5	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
Tetrachlorophenols (TeCP)	25167-83-3		-	-	-	-
2,3,4,5-Tetrachlorophenol	4901-51-3	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,3,4,6-Tetrachlorophenol	58-90-2	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,3,5,6-tetrachlorophenol	935-95-5	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
Trichlorophenol (TriCP)	25167-82-2	-	-	-	-	-
2,3,4-trichlorophenol	15950-66-0	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,3,5-trichlorophenol	933-78-8	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,4,5-trichlorophenol	95-95-4	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.  With reference to USEPA 9270D or Solvent	0,5	μg/L	n.d.	n.d.
2,4,6-trichlorophenol	88-06-2	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.



	200					
			Samp	ole ID	Inlet water	Outlet water
Report No.: VNSL1611017245TX			Sampling	Location	Inlet	Outlet
Factory Name: 5183			Samplii	ng Time	10:00~16:00	10:00~16:00
Factory Address:			Date S	ampled	10.10.2016	10.10.2016
			Date R	eceived	08.11.2016	08.11.2016
			Sample D	escription	Water	Water
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Inlet water	Raw water (with ETP plant) / Raw water (without ETP plant)
3,4,5-trichlorophenol	609-19-8	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
Dichlorophenols (DiCP)	25167-81-1	-	-	-	-	-
2,3-dichlorophenol	576-24-9	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,4-dichlorophenol	120-83-2	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.  With reference to USEPA 8270D or Solvent	0,5	μg/L	n.d.	n.d.
2,5-dichlorophenol	583-78-8	extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
2,6-dichlorophenol	87-65-0	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
3,4-dichlorophenol	95-77-2	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.  With reference to USEPA 8270D or Solvent	0,5	μg/L	n.d.	n.d.
3,5-dichlorophenol	591-35-5	extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
Monochlorophenols (MonoCP)	Various	-	-	-	-	-
2-chlorophenol	95-57-8	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
3-chlorophenol	108-43-0	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
4-chlorophenol	106-48-9	With reference to USEPA 8270D or Solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0,5	μg/L	n.d.	n.d.
Short Chain Chlorinated Paraffins with C10 –C13 (SCCPs)						
Short Chain Chlorinated Paraffins (SCCP), $C_{10}$ - $C_{13}$	85535-84-8	With reference to ISO 22032, USEPA 527, USEPA 8321B or Solvent extraction followed by GC/ECD or GC/NCI analysis	5	µg/L	n.d.	n.d.
Heavy Metals						
Total Lead (Pb)	7439-92-1	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	100	μg/L	n.d.	n.d.
Total Cadmium (Cd)	7440-43-9	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	100	μg/L	n.d.	n.d.
Total Mercury (Hg)	7439-97-6	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, USEPA 7473, ISO 18412 or Acid Digestion followed by ICP or With reference to USEPA 200.7, USEPA 200.8	5	μg/L	n.d.	n.d.
Total Antimony (Sb)	7440-36-0	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	100	μg/L	n.d.	1840



			Samp	ole ID	Inlet water	Outlet water
Report No.: VNSL1611017245TX	1		Sampling	Location	Inlet	Outlet
Factory Name: 5183			Samplii	ng Time	10:00~16:00	10:00~16:00
Factory Address:			Date S	ampled	10.10.2016	10.10.2016
			Date R	eceived	08.11.2016	08.11.2016
			Sample D	escription	Water	Water
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Inlet water	Raw water (with ETP plant) / Raw water (without ETP plant)
Total Arsenic (As)	7440-38-2	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	20	μg/L	n.d.	n.d.
Total Chromium (Cr)	7440-47-3	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	200	μg/L	n.d.	226
Total Hexavalent Chromium (Cr-VI)	7440-47-3, 18540-29-9	With reference to USEPA 218.6, ISO 18412 or Solvent extraction and derivatisation followed by UV/Vis analysis	10	μg/L	n.d.	n.d.
Total Nickel (Ni)	7440-02-0	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	200	μg/L	n.d.	223
Total Copper (Cu)	7440-50-8	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	1000	μg/L	n.d.	n.d.
Total Zinc (Zn)	7440-66-6	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	500	μg/L	n.d.	n.d.
Total Cobalt (Co)	7440-48-4	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	50	μg/L	n.d.	n.d.
Total Silver (Ag)	7440-22-4	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885 or Acid Digestion followed by ICP or ICP/MS	100	μg/L	n.d.	n.d.
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)						
Nonylphenol	Multiple, including 25154-52-3, 104	With reference to DIN EN ISO 18857 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	μg/L	n.d.	n.d.
Octylphenol		With reference to DIN EN ISO 18857 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	μg/L	n.d.	n.d.
NPEO, n=1~18	Multiple, including 9016-45-9,	With reference to DIN EN ISO 18857 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	μg/L	n.d.	n.d.
OPEO, n=1~18	Multiple, including 9002-93-1, 9036	With reference to DIN EN ISO 18857 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	μg/L	n.d.	n.d.
Perfluorinated / Polyfluorinated Chemicals (PFCs)						
PFOS	1763-23-1	With reference to DIN38407-42 or CEN/TS 15968 and followed by LS/MS or LC/MS/MS analysis	0,01	μg/L	n.d.	n.d.
PFOA	335-67-1	With reference to DIN38407-42 or CEN/TS 15968 and followed by LS/MS or LC/MS/MS analysis	0,01	μg/L	n.d.	n.d.
PFBS	66-3, 29420-49-	With reference to DIN38407-42 or CEN/TS 15968 and followed by LS/MS or LC/MS/MS analysis	0,01	μg/L	n.d.	n.d.
PFHxA	307-24-4	With reference to DIN38407-42 or CEN/TS 15968 and followed by LS/MS or LC/MS/MS analysis	0,01	μg/L	n.d.	n.d.
6:2 FTOH	647-42-7	With reference to DIN38407-42 or CEN/TS 15968 and derivatisation with acetic anhydride followed by GC/MS analysis.	1	μg/L	n.d.	n.d.



Sample ID Inlet water Outlet water Report No.: VNSL1611017245TX Sampling Location Inlet Outlet Factory Name: 5183 Sampling Time 10:00~16:00 10:00~16:00 Factory Address: Date Sampled 10.10.2016 10.10.2016 Date Received 08.11.2016 08.11.2016 Sample Description Water Water Raw water (with ETP plant) / Raw Reporting **METHODS** UNIT **ITEMS** CAS No. Inlet water Limit water (without ETP plant) With reference to DIN38407-42 or CEN/TS 8:2 FTOH 678-39-7 15968 and derivatisation with acetic anhydride μg/L n d n.d. followed by GC/MS analysis. Polycyclic Aromatic Hydrocarbons (PAHs) With reference to DIN 38407-39 or Solvent 50-32-8 Bezno[a]pyrene 1 μq/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent 120-12-7 μg/L n.d. Anthracene 1 n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Pyrene 129-00-0 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Benzo[ghi]perylene 191-24-2 n.d. μg/L n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Benzo[e]pyrene 192-97-2 1 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Indeno[1,2,3-cd]pyrene 193-39-5 1 μg/L n d n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Benzo[j]fluoranthene 205-82-3 1 µg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Benzo[b]fluoranthene 205-99-2 1 µg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Fluoranthene 206-44-0 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent 207-08-9 Benzo[k]fluoranthene 1 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Acenaphthylene 208-96-8 n.d. μg/L n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Chrysene 218-01-9 1 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Dibenz[a,h]anthracene 53-70-3 1 μg/L n d n d extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Benzo[a]anthracene 56-55-3 1 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent 83-32-9 Acenaphthene 1 µg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Phenanthrene 85-01-8 μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent 86-73-7 Fluorene μg/L n.d. n.d. extraction followed by GC/MS analysis With reference to DIN 38407-39 or Solvent Naphthalene 91-20-3 μg/L n.d. n.d. extraction followed by GC/MS analysis



			Samp	ole ID	Inlet water	Outlet water
Report No.: VNSL1611017245TX		Sampling Location Sampling Time Date Sampled		Inlet	Outlet	
Factory Name: 5183 Factory Address:				10:00~16:00	10:00~16:00	
				10.10.2016	10.10.2016	
			Date R	eceived	08.11.2016	08.11.2016
			Sample Description Water			Water
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Inlet water	Raw water (with ETP plant) / Raw water (without ETP plant)
Glycols						
Bis(2-methoxyethyl)-ether	111-96-6	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
2-Ethoxyethanol	110-80-5	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
2-Ethoxyethyl acetate	111-15-9	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
Ethylene glycol dimethyl ether	110-71-4	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
2-Methoxyethanol	109-86-4	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
2-Methoxyethylacetate	110-49-6	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
2-Methoxypropylacetate	70657-70-4	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.
Triethylene glycol dimethyl ether	112-49-2	With reference to USEPA 8270D or Solvent extraction followed by GC/MS or LC/MS analysis	5000	μg/L	n.d.	n.d.

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Remarks:
n.d. = Not Detected
^The test result is based of the calculation of selected element(s) and to the worst-case scenario
\*Base on client requirement
Moisture content of sludge = XX.X%



### PHOTOGRAPHS

Inlet water



Raw water (with ETP plant) / Raw water (without ETP plant)



Sludge



\*\*\* End Of Report \*\*\*