



**BUREAU
VERITAS**

TEST REPORT

Technical Report: (6614)104-0787-R2

July 18, 2014

The report is amendment of and supersedes the previous report (6614)104-0787 dated April 29, 2014

Date Received: April 14, 2014

Page 1 of 17

/

JACK WOLFSKIN

Ausrüstung für Draussen GmbH & Co. KGaA

Jack Wolfskin Kreisel 1 · 65510 Idstein/Ts., Germany

Factory Company Name: 5176, 5179 and 5180
Factory Address: 5176, 5179 and 5180
Project No.: /
Client Reference No.: /
Sample Type: Grab Sample*
Sample Pick Up Date: April 11, 2014
Test Period: April 14, 2014 to April 29, 2014

Sample Description: Sample(s) received is/are stated to be:
I001) Clear transparent liquid (Incoming water)
I002) Dark grey muddy liquid (Wastewater before treatment)
I003) Light greyish purple liquid (Wastewater after treatment)
I004) Black mud (Sludge in clarifier)

REMARK

If there are questions or concerns on this report, please contact the following persons:

General enquiry and invoicing	Mr. Roland Xue (021) 24081906 Roland.Xue@cn.bureauveritas.com
Technical enquiry-Chemical	Mr. Christ Ye (021) 24081949 Christ.ye@cn.bureauveritas.com

This report shown the test result of the environment samples of above factory which collected on specific date and time. The results of this report shall not be used for any regulatory compliance purposes.

* The grab sampling is agreed with client.

**BUREAU VERITAS
CONSUMER PRODUCTS SERVICES DIVISION
(SHANGHAI)**

PREPARED BY: Roland



Matthias Chan
Director (North China Analytical Support)

Photo of the Sample/ Sampling Location

I001)



I003)



I002)



I004)





Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 3 of 17

Executive Summary

11 Priority Chemical Groups	I001	I002	I003	I004
Phthalates	●	●	●	●
Brominated and Chlorinated Flame Retardants	○	○	○	○
Azo Dyes	○	○	○	○
Organotin Compounds	○	○	○	○
Chlorobenzenes	○	●	●	●
Chlorinated Solvents	○	○	○	○
Chlorophenols	○	○	○	○
Short-Chained Chlorinated Paraffins	○	○	○	○
Heavy Metals	●	●	●	●
APs and APEOs	○	●	●	●
Perfluorinated Chemicals	○	●	●	●

Traditional Parameters	I003
Color	See result in page 7 - 8
pH Value	
Total Suspended Solids (TSS)	
Biochemical Oxygen Demand (BOD ₅)	
Chemical Oxygen Demand (COD)	

Note / Key :

- ● – Detected
- ○ – Not Detected



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 4 of 17

Objective

The environment samples were tested for below 11 Priority Chemical Groups according to the Joint Roadmap: Toward Zero Discharge of Hazardous Chemicals.

11 Priority Chemical Groups

- 1) Phthalates
- 2) Brominated and Chlorinated Flame Retardants
- 3) Azo Dyes
- 4) Organotin Compounds
- 5) Chlorobenzenes
- 6) Chlorinated Solvents
- 7) Chlorophenols
- 8) Short-Chained Chlorinated Paraffins
- 9) Heavy Metals
- 10) APs and APEOs
- 11) Perfluorinated Chemicals

Sampling Plan

Basically, four environment samples were sampled per factory, including 1) Incoming water; 2) Wastewater before treatment; 3) Wastewater after treatment; and 4) Sludge in clarifier. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is grab sampling (agreed with client.). Grab samples are discrete samples that are taken at a location to provide a 'snapshot' of the water quality characteristics at that time. For the purposes of quantifying water or wastewater constituents, grab samples will show the concentrations at that location and time of sampling. They will not provide any information about the concentrations outside that point in time.

Remark :

- Sampling procedure is with reference to below standards:
 - 1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
 - 2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
 - 3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
 - 4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix B.



Test Result

11 Priority Chemical Groups

Phthalates

Test results of Phthalates are as below.

Phthalates	I001	I002	I003	I004
BBP	ND	ND	ND	ND
DBP	ND	0.00456	0.00292	ND
DEHP	0.0136	0.0374	0.0222	39.7
DNOP	ND	ND	ND	ND
DINP	ND	ND	ND	ND
DIDP	ND	ND	ND	ND
DMP	ND	ND	ND	ND
DEP	ND	ND	ND	ND
DPRP	ND	ND	ND	ND
DIBP	ND	0.00504	0.00252	16.2
DCHP	ND	ND	ND	ND
DnHP	ND	ND	ND	ND
DNP	ND	ND	ND	ND
DIOP	ND	ND	ND	ND
DMEP	ND	ND	ND	ND

Chlorobenzenes

Test results of Chlorobenzenes are as below.

Chlorobenzenes	I001	I002	I003	I004
Chlorobenzene	ND	0.00029	0.00027	0.227
1,2-Dichlorobenzene	ND	ND	ND	ND
1,3-Dichlorobenzene, 1,4-Dichlorobenzene	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND
1,3,5-Trichlorobenzene	ND	ND	ND	ND
1,2,3,4-Tetrachlorobenzene	ND	ND	ND	ND
1,2,3,5-Tetrachlorobenzene, 1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND
Pentachlorobenzene	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND



Technical Report:

(6614)104-0787-R2

July 18, 2014

Page 6 of 17

Test Result

Heavy Metals

Test results of Heavy Metals are as below.

Heavy Metals	I001	I002	I003	I004
As	0.00247	0.00285	0.00188	1.35
Cd	ND	ND	ND	ND
Hg	ND	ND	ND	0.02
Pb	ND	0.00956	0.00109	4.74
Sb	0.0159	0.223	0.138	24.9
Co	ND	0.00501	0.00523	3.76
Ni	ND	0.00322	0.00183	5.17
Cu	0.00359	0.00813	ND	9.48
Zn	0.0670	0.0724	0.0312	89.0
Cr	ND	0.0154	0.0106	37.6
Mn	0.00142	0.0294	0.0123	10.8
Cr VI	ND	ND	ND	ND
CN	ND	ND	ND	ND

APs and APEOs

Test results of APs and APEOs are as below.

APs and APEOs	I001	I002	I003	I004
OP	ND	ND	ND	ND
NP	ND	0.00402	0.00146	334
OPEOs	ND	0.0202	ND	ND
NPEOs	ND	ND	ND	ND

Perfluorinated Chemicals

Test results of Perfluorinated Chemicals are as below.

Perfluorinated Chemicals	I001	I002	I003	I004
C8:				
PFOA	ND	0.00159	0.00004	0.991
PFOS	ND	ND	ND	ND
C6:				
PFHxA	ND	ND	ND	ND
PFHxS	ND	ND	ND	ND
C4:				
PFBA	ND	ND	ND	ND
PFBS	ND	ND	ND	ND



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 7 of 17

Test Result

Others Priority Chemical Groups

	I001	I002	I003	I004
Brominated and Chlorinated Flame Retardants	ND	ND	ND	ND
Azo Dyes	ND	ND	ND	ND
Organotin Compounds	ND	ND	ND	ND
Chlorinated Solvents	ND	ND	ND	ND
Chlorophenols	ND	ND	ND	ND
Short-Chain Chlorinated Paraffins	ND	ND	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- NA = Not applicable.
- All results are in ppm as unit.
- ppm = part(s) per million.

Traditional Parameters

Color

Test Method : Qualitative Observation by Visual

Tested Item(s)	Result	Unit	Conclusion
I003	Dark greyish purple	-	DATA

pH Value

Test Method : With reference to APHA 4500-H+ B:2012 & U. S. EPA 150.2

-	Unit	Result
Test Item(s)	-	I003
Parameter	-	-
Temp. of sample	deg. C	24.0
pH value of sample	-	7.7
Conclusion	-	DATA

Note:

Temp. = Temperature deg. C = degree Celsius (°C)
 APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater
 U. S. EPA = United States Environmental Protection Agency



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 8 of 17

Test Result

Total Suspended Solids (TSS)

Test Method : With reference to APHA 2540 D:2012

Tested Item(s)	Result	Unit	Conclusion
I003	20	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 5

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

Biochemical Oxygen Demand (BOD₅)

Test Method : With reference to APHA 5210 B:2012

Tested Item(s)	Result	Unit	Conclusion
I003	162	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 2

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

Chemical Oxygen Demand (COD)

Test Method : With reference to APHA 5220 B:2012 & U. S. EPA 410.3

Tested Item(s)	Result	Unit	Conclusion
I003	291	mg/L	DATA

Note:

mg/L = milligram per liter

Detection Limit (mg/L) : 2

APHA = American Public Health Association Standard Methods for the Examination of Water and Wastewater

U. S. EPA = United States Environmental Protection Agency

Discussion

According to the test results, the priority chemical groups are found. It is suggested that further factory audit is required to identify the source of pollutants in the inventory.

END



APPENDIX A

List of Phthalates :

No.	Test Method	Reporting Limit		Unit	
1	With reference to U. S. EPA 8270D. (For Wastewater)	Each: 0.001		ppm	
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C and with reference to U. S. EPA 8270D. (For Sludge)	Each: 0.3		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Butyl benzyl phthalate (BBP)	85-68-7	9	Di-n-propyl phthalate (DPRP)	131-16-8
2	Dibutyl phthalate (DBP)	84-74-2	10	Di-iso-butyl phthalate (DIBP)	84-69-5
3	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	11	Di-cyclohexyl phthalate (DCHP)	84-61-7
4	Di-n-octyl phthalate (DNOP)	117-84-0	12	Di-n-hexyl phthalate (DnHP)	84-75-3
5	Di-iso-nonyl phthalate (DINP)	28553-12-0 & 68515-48-0	13	Dinonyl phthalate (DNP)	84-76-4
6	Di-iso-decyl phthalate (DIDP)	26761-40-0 & 68515-49-1	14	Di-iso-octyl phthalate (DIOP)	27554-26-3
7	Dimethyl phthalate (DMP)	131-11-3	15	Dimethoxyethyl phthalate (DMEP)	117-82-8
8	Diethyl phthalate (DEP)	84-66-2	-	-	-

List of Brominated Flame Retardants :

No.	Test Method	Reporting Limit		Unit	
1	With reference to U. S. EPA 527 and with reference to U. S. EPA 8321B. (For Wastewater)	Each (PBBs & PBDEs): 0.00005; Each (TRIS, TBBPA & HBCCD): 0.0005; Each (Others): 0.025		ppm	
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C, with reference to U. S. EPA 527 and with reference to U. S. EPA 8321B. (For Sludge)	Each (PBBs & PBDEs): 0.3; Each (Others): 0.25		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Polybromobiphenyls (PBBs)	Various	5	Bis(2,3-dibromopropyl) phosphate	5412-25-9
2	Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	6	Hexabromocyclododecane (HBCDD)	3194-55-6
3	Polybromodiphenyl ethers (PBDEs)	Various	7	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0
4	Tetrabromobisphenol A (TBBPA)	79-94-7	-	-	-

List of Chlorinated Flame Retardants :

No.	Test Method	Reporting Limit		Unit	
1	With reference to U. S. EPA 527 and with reference to U. S. EPA 8321B. (For Wastewater)	TCEP: 0.00005; TDCP: 0.0005		ppm	
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C, with reference to U. S. EPA 527 and with reference to U. S. EPA 8321B. (For Sludge)	Each: 0.5		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	2	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8

List of Aromatic Amines in Azo Colorants :					
No.	Test Method			Reporting Limit	Unit
1	With reference to German Standard DIN 38407-16, with reference to European Standard EN 14362-1 incorporating Corrigendum and with reference to European Standard EN 14362-3. (For Wastewater)			Each: 0.0001	ppm
2	With reference to German Standard DIN 38407-16, with reference to European Standard EN 14362-1 incorporating Corrigendum and with reference to European Standard EN 14362-3. (For Sludge)			Each: 0.1	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	4-Aminodiphenyl (Biphenyl-4-ylamine or Xenylamine)	92-67-1	14	p-Cresidine (6-Methoxy-m-toluidine)	120-71-8
2	Benzidine	92-87-5	15	4,4'-Methylene-bis-(2-chloroaniline) (2,2'-Dichloro-4,4'-methylene-dianiline)	101-14-4
3	4-Chloro-o-toluidine	95-69-2	16	4,4'-Oxydianiline	101-80-4
4	2-Naphthylamine	91-59-8	17	4,4'-Thiodianiline	139-65-1
5	o-Aminoazotoluene (4-Amino-2',3'-dimethylazobenzene or 4-o-tolyazo-o-toluidine)	97-56-3	18	o-Toluidine (2-Aminotoluene)	95-53-4
6	5-nitro-o-toluidine (2-Amino-4-nitrotoluene)	99-55-8	19	4-Methyl-m-phenylenediamine (2,4-Toluenediamine)	95-80-7
7	4-Chloroaniline (p-Chloroaniline)	106-47-8	20	2,4,5-Trimethylaniline	137-17-7
8	4-Methoxy-m-phenylenediamine (2,4-Diaminoanisole)	615-05-4	21	o-Anisidine (2-Methoxyaniline)	90-04-0
9	4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline)	101-77-9	22	4-Aminoazobenzene (p-Aminoazobenzene)	60-09-3
10	3,3'-Dichlorobenzidine (3,3'-Dichlorobiphenyl-4,4'-ylenediamine)	91-94-1	23	2,4-Xylidine (2,4-dimethylaniline)	95-68-1
11	3,3'-Dimethoxybenzidine (o-Dianisidine)	119-90-4	24	2,6-Xylidine (2,6-dimethylaniline)	87-62-7
12	3,3'-Dimethylbenzidine (4,4'-Bi-o-toluidine)	119-93-7	25	Aniline	62-53-3
13	4,4'-Methylenedi-o-toluidine (3,3'-Dimethyl-4,4'-diaminodiphenylmethane)	838-88-0	-	-	-

List of Organotin Compounds :					
No.	Test Method			Reporting Limit	Unit
1	With reference to European Standard EN ISO 17353. (For Wastewater)			Each: 0.00001	ppm
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C and with reference to International Standard ISO 23161. (For Sludge)			Each: 0.01	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Monobutyltin (MBT)	Various	5	Triphenyltin (TPhT)	Various
2	Dibutyltin (DBT)		6	Tricyclohexyltin (TCyHT)	
3	Dioctyltin (DOT)		7	Trioctyltin (TOT)	
4	Tributyltin (TBT)		8	Tripropyltin (TPT)	



Technical Report:

(6614)104-0787-R2

July 18, 2014

Page 11 of 17

List of Chlorobenzenes :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8260B and with reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.00002	ppm
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C, with reference to U. S. EPA 8260B and with reference to U. S. EPA 8270D. (For Sludge)			Each: 0.1	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Chlorobenzene	108-90-7	6	1,3,5-Trichlorobenzene	108-70-3
2	1,2-Dichlorobenzene	95-50-1	7	1,2,3,4-Tetrachlorobenzene	634-66-2
3	1,3-Dichlorobenzene, 1,4-Dichlorobenzene	541-73-1, 106-46-7	8	1,2,3,5-Tetrachlorobenzene, 1,2,4,5-Tetrachlorobenzene	634-90-2, 95-94-3
4	1,2,3-Trichlorobenzene	87-61-6	9	Pentachlorobenzene	608-93-5
5	1,2,4-Trichlorobenzene	120-82-1	10	Hexachlorobenzene	118-74-1

List of Chlorinated Solvents :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8260B. (For Wastewater)			Each: 0.1	ppm
2	With reference to U. S. EPA 5021, with reference to U. S. EPA 8021B and with reference to U. S. EPA 8260B. (For Sludge)			Each: 0.3	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	1,2-Dichloroethane	107-06-2	7	1,1,1-Trichloroethane	71-55-6
2	1,1-Dichloroethylene	75-35-4	8	Carbon Tetrachloride	56-23-5
3	Methylene Chloride	75-09-2	9	Trichloroethylene	79-01-6
4	cis-1,2-Dichloroethylene	156-59-2	10	1,1,2-Trichloroethane	79-00-5
5	trans-1,2-Dichloroethylene	156-60-5	11	1,1,1,2-Tetrachloroethane	630-20-6
6	Chloroform	67-66-3	12	Tetrachloroethylene	127-18-4

List of Chlorophenols :					
No.	Test Method			Reporting Limit	Unit
1	With reference to U. S. EPA 8270D. (For Wastewater)			Each: 0.0005	ppm
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C and with reference to U. S. EPA 8270D. (For Sludge)			Each: 0.025	ppm
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Pentachlorophenol	87-86-5	8	3,4,5-Trichlorophenol, 2,3,4-Trichlorophenol	609-19-8, 15950-66-0
2	2,3,4,5-Tetrachlorophenol	4901-51-3	9	2,3-Dichlorophenol	576-24-9
3	2,3,4,6-Tetrachlorophenol	58-90-2	10	3,4-Dichlorophenol	95-77-2
4	2,3,5,6-Tetrachlorophenol	935-95-5	11	2,4-Dichlorophenol, 2,5-Dichlorophenol, 2,6-Dichlorophenol, 3,5-Dichlorophenol	120-83-2, 583-78-8, 87-65-0, 591-35-5
5	2,4,6-Trichlorophenol	88-06-2	12	2-Chlorophenol	95-57-8
6	2,3,5-Trichlorophenol	933-78-8	13	3-Chlorophenol	108-43-0
7	2,4,5-Trichlorophenol	95-95-4	14	4-Chlorophenol	106-48-9



List of Short Chain Chlorinated Paraffins :					
No.	Test Method	Reporting Limit		Unit	
1	With reference to International Standard ISO 12010. (For Wastewater)	0.0004		ppm	
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C and with reference to International Standard ISO 12010. (For Sludge)	0.03		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Short Chain Chlorinated Paraffins	85535-84-8	-	-	-

List of Heavy Metals :					
No.	Test Method	Reporting Limit		Unit	
1	With reference to U. S. EPA 3015A and with reference to U. S. EPA 6020A./ With reference to U. S. EPA 7196A./ With reference to APHA 4500 CN- C:2012 & APHA 4500 CN- E:2012 (For Wastewater)	Cd: 0.0001; Hg: 0.00005; CN ⁻ : 0.02 Each (Others): 0.001		ppm	
2	With reference to U. S. EPA 3051A and with reference to U. S. EPA 6020A./ With reference to U. S. EPA 3051A, with reference to U. S. EPA 6020A, with reference to U. S. EPA 3060A and with reference to U. S. EPA 7196A./ With reference to U. S. EPA 9010C, with reference to U. S. EPA 9013 and with reference to U. S. EPA 9014 (For Sludge)	Hg: 0.02; Zn: 4; Cr VI: 0.4; CN ⁻ : 0.5 Each (Others): 1		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Arsenic (As)	Various	8	Copper (Cu)	Various
2	Cadmium (Cd)		9	Zinc (Zn)	
3	Mercury (Hg)		10	Chromium (Cr)	
4	Lead (Pb)		11	Manganese (Mn)	
5	Antimony (Sb)		12	Chromium VI (Cr VI)	
6	Cobalt (Co)		13	Cyanide (CN ⁻)	
7	Nickel (Ni)		-	-	

List of Alkylphenols & Alkylphenol Ethoxylates :					
No.	Test Method	Reporting Limit		Unit	
1	With reference to ASTM International Standard ASTM D7065. (For Wastewater)	Each (OP & NP): 0.001; Each (OPEOs & NPEOs): 0.005		ppm	
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C and with reference to ASTM International Standard ASTM D7065. (For Sludge)	Each: 0.2		ppm	
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenol (OP)	Various	3	Nonylphenol (NP)	Various
2	Octylphenoethoxylates (OPEOs)		4	Nonylphenoethoxylates (NPEOs)	



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 13 of 17

List of Perfluorinated Chemicals :

No.	Test Method	Reporting Limit	Unit		
1	In house method and analysis by Liquid Chromatograph Mass Spectrometer (LC-MS). (For Wastewater)	Each: 0.00001	ppm		
2	With reference to ASTM International Standard D5369, with reference to U. S. EPA 3540C, in house method and analysis by Liquid Chromatograph Mass Spectrometer (LC-MS). (For Sludge)	Each: 0.001	ppm		
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Perfluorooctanoic acid (PFOA)	335-67-1	4	Perfluorohexane sulphonates (PFHxS)	3871-99-6
2	Perfluorooctane sulphonates (PFOS)	2795-39-3	5	Perfluorobutanoic acid (PFBA)	375-22-4
3	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	6	Perfluorobutane sulphonates (PFBS)	29420-49-3

Note / Key :

ppm = part(s) per million

U. S. EPA = United States Environmental Protection Agency

APHA = American Public Health Association



Technical Report:

(6614)104-0787-R2

July 18, 2014

Page 14 of 17

APPENDIX B

General Data				
Laboratory Sample Number	6614-104-0787			
Client Name	Jack Wolfskin			
Field Contact Person	/			Phone No: /
Project (Facility Name and Address)	5176, 5179 and 5180			
	5176, 5179 and 5180			
Sampling Location / Description	Pipe/Clear transparent liquid			
Sample Identification	Incoming water			
Sample Type	Grab sample			
Name of Sampler	Shen Yiyi			
Date and time collected	2014.04.11		13:45	
Field Data				
Field Parameters	pH : 7.0		Temp : 16.0°C	Color : clear transparent
Control No. of field equipment	/		CA-014A	/
Analysis Required and Preservation Method				
Sampler container number	I001-1,I001-2,I001-3			
Volume collected	10L			
Tests	Test required	Sample size	Type of container	Preservation method
1. Phthalate	Y	500 mL	Amber Glass, pre-add 6.5mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C
2. Brominated and chlorinated Flame retardant	Y	500 mL		
3. Banned Azodyes	Y	500 mL		
4. Organotin Compounds	Y	500 mL		
5. Chlorobenzenes	Y	500 mL		
6. Chlorophenols	Y	500 mL		
7. SCCPs	Y	500 mL		
8. APEOs/APs	Y	500 mL		
9. Heavy Metals except CrVI	Y	500 mL	Amber Glass, pre-add 6.5mL of 2M HNO ₃	Acidify to pH 2 with HNO ₃ and store at 4°C
10. CrVI	Y	500 mL	Amber Glass, wash with pesticide grade acetone	Fill to full bottle and store at 4°C
11. Chlorinated Solvents	Y	500 mL		
12. PFCs	Y	500 mL	PE, pre-add 3.4mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C



General Data				
Laboratory Sample Number	6614-104-0787			
Client Name	Jack Wolfskin			
Field Contact Person	/			Phone No: /
Project (Facility Name and Address)	5176, 5179 and 5180			
	5176, 5179 and 5180			
Sampling Location / Description	Gutter/Dark grey muddy liquid			
Sample Identification	Water before treatment			
Sample Type	Grab sample			
Name of Sampler	Shen Yiyi			
Date and time collected	2014.04.11		13:15	
Field Data				
Field Parameters	pH : 8.0		Temp : 40.0°C	Color :Dark grey muddy
Control No. of field equipment	/		CA-014A	/
Analysis Required and Preservation Method				
Sampler container number	I002-1,I002-2,I002-3			
Volume collected	10L			
Tests	Test required	Sample size	Type of container	Preservation method
1. Phthalate	Y	500 mL	Amber Glass, pre-add 6.5mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C
2. Brominated and chlorinated Flame retardant	Y	500 mL		
3. Banned Azodyes	Y	500 mL		
4. Organotin Compounds	Y	500 mL		
5. Chlorobenzenes	Y	500 mL		
6. Chlorophenols	Y	500 mL		
7. SCCPs	Y	500 mL		
8. APEOs/APs	Y	500 mL		
9. Heavy Metals except CrVI	Y	500 mL	Amber Glass, pre-add 6.5mL of 2M HNO ₃	Acidify to pH 2 with HNO ₃ and store at 4°C
10. CrVI	Y	500 mL	Amber Glass, wash with pesticide grade acetone	Fill to full bottle and store at 4°C
11. Chlorinated Solvents	Y	500 mL		
12. PFCs	Y	500 mL	PE, pre-add 3.4mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 16 of 17

General Data				
Laboratory Sample Number	6614-104-0787			
Client Name	Jack Wolfskin			
Field Contact Person	/			Phone No: /
Project (Facility Name and Address)	5176, 5179 and 5180			
	5176, 5179 and 5180			
Sampling Location / Description	Gutter/Light greyish purple liquid			
Sample Identification	Water after treatment			
Sample Type	Grab sample			
Name of Sampler	Shen Yiyi			
Date and time collected	2014.04.11		13:30	
Field Data				
Field Parameters	pH : 7.0		Temp : 38.0°C	Color : Light greyish purple
Control No. of field equipment	/		CA-014A	/
Analysis Required and Preservation Method				
Sampler container number	I003-1,I003-2,I003-3			
Volume collected	10L			
Tests	Test required	Sample size	Type of container	Preservation method
1. Phthalate	Y	500 mL	Amber Glass, pre-add 6.5mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C
2. Brominated and chlorinated Flame retardant	Y	500 mL		
3. Banned Azodyes	Y	500 mL		
4. Organotin Compounds	Y	500 mL		
5. Chlorobenzenes	Y	500 mL		
6. Chlorophenols	Y	500 mL		
7. SCCPs	Y	500 mL		
8. APEOs/APs	Y	500 mL		
9. Heavy Metals except CrVI	Y	500 mL	Amber Glass, pre-add 6.5mL of 2M HNO ₃	Acidify to pH 2 with HNO ₃ and store at 4°C
10. CrVI	Y	500 mL	Amber Glass, wash with pesticide grade acetone	Fill to full bottle and store at 4°C
11. Chlorinated Solvents	Y	500 mL		
12. PFCs	Y	500 mL	PE, pre-add 3.4mL of 1M H ₂ SO ₄	Acidify to pH 2 with H ₂ SO ₄ and store at 4°C



Technical Report: **(6614)104-0787-R2**

July 18, 2014

Page 17 of 17

General Data				
Laboratory Sample Number	6614-104-0787			
Client Name	Jack Wolfskin			
Field Contact Person	/			Phone No: /
Project (Facility Name and Address)	5176, 5179 and 5180			
	5176, 5179 and 5180			
Sampling Location / Description	Sludge Tank/Black mud			
Sample Identification	Sludge			
Sample Type	Grab sample			
Name of Sampler	Shen Yiyi			
Date and time collected	2014.04.11		13:40	
Field Data				
Field Parameters	pH : /		Temp : / °C	Color : Black
Control No. of field equipment	/		/	/
Analysis Required and Preservation Method				
Sampler container number	I004-1,I004-2			
Volume collected	500g			
Tests	Test required	Sample size	Type of container	Preservation method
1. Phthalate	Y	10 g	Amber Glass, wash with nitric acid	Store at 4°C
2. Brominated and chlorinated Flame retardant	Y	10 g		
3. Banned Azodyes	Y	10 g		
4. Organotin Compounds	Y	10 g		
5. Chlorobenzenes	Y	10 g		
6. Chlorophenols	Y	10 g		
7. SCCPs	Y	10 g		
8. APEOs/APs	Y	10 g		
9. Heavy Metals except CrVI	Y	10 g		
10. CrVI	Y	10 g	Amber Glass, wash with pesticide grade acetone	Fill to full bottle and store at 4°C
11. Chlorinated Solvents	Y	10 g		
12. PFCs	Y	10 g	PE, wash with pesticide garde acetone	Store at 4°C