APPENDIX E. OTHER INVESTIGATIONS—BOEING

E1. Landau. 2016. Annual performance evaluation report, long-term stormwater treatment - 2014-2015, North Boeing Field, Seattle, Washington. Landau Associates, Edmonds, WA.

E2. Bach CM. 2016. Personal communication (email from C. Bach, Boeing, to T. Do, Windward, regarding the Year 4 Performance Evaluation Report for North Boeing Field). The Boeing Company, Seattle, WA. September 6, 2016.

E1. Landau 2016

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	TW50A/TW50F/TW54A	TX90A/TX90D/TX91A	TY96A/TY96D/TY98A	UA56A/UA56D/UA57A	UC78A/UC78D/UC80A	UE10A/UE10D/UE11A	UE68A/UE68D/UE73A	UH75A/UH75F/UH76A	UL49A/UL49D/UL50A	UM18A/UM18C/UM19A
Sample Start Date	11/8/2011	11/16/2011	11/22/2011	12/5/2011	12/27/2011	1/9/2012	1/20/2012	2/6/2012	3/5/2012	3/12/2012
Sample End Date	11/11/2011	11/17/2011	11/23/2011	12/8/2011	12/28/2011	1/12/2012	1/21/2012	2/8/2012	3/8/2012	3/13/2012
Event Type	Monthly	Storm	Storm	Monthly	Storm	Monthly	Storm	Monthly	Monthly	Storm
Sample Type					Flow-weighted composite					
PCBs (µg/L) (a)										
Method SW8082A										
Aroclor 1016	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1242	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1248	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1254	0.010 U	0.010 U	**0.025**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1260	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1221	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1232	0.010 U	0.010 U	0.010 U	0.030 U	0.010 U	0.012 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1262	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total PCBs (b)	ND	ND	**0.025**	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILES (µg/L)										
Method SW8270D										
Phenol	**1.8**	**1.5**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
4-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Hexachloroethane	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U
Nitrobenzene	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2,4-Dimethylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzoic Acid	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Hexachlorobutadiene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2-Methylnaphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Dimethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Acenaphthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 2
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LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	TW50A/TW50F/TW54A	TX90A/TX90D/TX91A	TY96A/TY96D/TY98A	UA56A/UA56D/UA57A	UC78A/UC78D/UC80A	UE10A/UE10D/UE11A	UE68A/UE68D/UE73A	UH75A/UH75F/UH76A	UL49A/UL49D/UL50A	UM18A/UM18C/UM19A
Sample Start Date	11/8/2011	11/16/2011	11/22/2011	12/5/2011	12/27/2011	1/9/2012	1/20/2012	2/6/2012	3/5/2012	3/12/2012
Sample End Date	11/11/2011	11/17/2011	11/23/2011	12/8/2011	12/28/2011	1/12/2012	1/21/2012	2/8/2012	3/8/2012	3/13/2012
Event Type	Monthly	Storm	Storm	Monthly	Storm	Monthly	Storm	Monthly	Monthly	Storm
Sample Type					Flow-weighted composite					
2,4-Dinitrophenol	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Dibenzofuran	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Diethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Fluorene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroaniline	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA
N-Nitrosodiphenylamine	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Hexachlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenanthrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Benzo(a)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl)phthalate	1.0 U	1.0 U	**1.0**	1.0 U	**2.3**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chrysene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1-Methylnaphthalene	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U
Total Benzofluoranthenes	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
PAHs (µg/L)										
Method SW8270D-SIM										
Naphthalene	**0.022**	**0.032**	**0.044**	**0.018** U	**0.021**	**0.012**	**0.080**	0.021 U	**0.012**	**0.014**
2-Methylnaphthalene	**0.011**	**0.038**	**0.025**	0.010 U	**0.013**	**0.0099** J	**0.10**	**0.014**	0.010 U	**0.014**
1-Methylnaphthalene	0.010 U	**0.028**	**0.016**	0.010 U	**0.0091** J	**0.0070** J	**0.075**	**0.011**	0.010 U	**0.012**
Acenaphthylene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.010**	0.010 U	0.010 U	0.010 U
Acenaphthene	**0.087**	**0.030**	**0.0088** J	**0.092**	**0.015**	**0.041**	**0.013**	**0.088**	**0.045**	**0.011**
Fluorene	0.010 U	**0.010**	**0.0093** J	0.010 U	**0.0068** J	0.010 U	**0.019**	0.010 U	0.010 U	0.010 U
Phenanthrene	0.010 U	**0.032**	**0.094**	**0.010**	**0.081**	**0.014** J	**0.078**	**0.022**	**0.018**	**0.031**
Anthracene	0.010 U	0.010 U	**0.013**	0.010 U	**0.0096** J	0.010 U	**0.0070** J	0.010 U	0.010 U	0.010 U
Fluoranthene	0.012 U	**0.056** B	**0.28** B	0.010 U	**0.24**	**0.032**	**0.17**	**0.041**	**0.041**	**0.078**
Pyrene	0.010 U	**0.029**	**0.19**	0.010 U	**0.18**	**0.019**	**0.12**	**0.038** J	**0.024**	**0.048**
Benzo(a)anthracene	0.010 U	0.010 U	**0.057**	0.010 U	**0.043**	0.010 U	**0.026**	0.010 U	0.010 U	**0.0093** J
Chrysene	0.010 U	**0.020**	**0.17** B	0.010 U	**0.14**	**0.011**	**0.11**	**0.019**	**0.017**	**0.043**
Benzo(a)pyrene	0.010 U	0.010 U	**0.10**	0.010 U	**0.072**	0.010 U	**0.048**	0.010 U	0.010 U	**0.015**
Indeno(1,2,3-cd)pyrene	0.010 U	0.010 U	**0.10**	0.010 U	**0.070**	0.010 U	**0.048**	0.010 U	0.010 U	**0.012**
Dibenz(a,h)anthracene	0.010 U	0.010 U	**0.035**	0.010 U	**0.020**	0.010 U	**0.014**	0.010 U	0.010 U	0.010 U
Benzo(g,h,i)perylene	0.010 U	0.010 U	**0.12**	0.010 U	**0.086**	0.010 U	**0.068**	**0.010**	0.010 U	**0.013**
Dibenzofuran	0.010 U	0.010 U	**0.0067** J	0.010 U	**0.0063** J	0.010 U	**0.010**	0.010 U	0.010 U	0.010 U
Total Benzofluoranthenes	0.020 U	**0.029**	**0.30**	0.020 U	**0.23**	**0.011** J	**0.17**	**0.028**	**0.022**	**0.062**
CPAH TEQ	ND	**0.0031**	**0.151**	ND	**0.110**	**0.001**	**0.075**	**0.003**	**0.002**	**0.0238**

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Sample Start Date	11/8/2011	11/16/2011	11/22/2011	12/5/2011	12/27/2011	1/9/2012	1/20/2012	2/6/2012	3/5/2012	3/12/2012
Sample End Date	11/11/2011	11/17/2011	11/23/2011	12/8/2011	12/28/2011	1/12/2012	1/21/2012	2/8/2012	3/8/2012	3/13/2012
Event Type	Monthly	Storm	Storm	Monthly	Storm	Monthly	Storm	Monthly	Monthly	Storm
Sample Type					Flow-weighted composite					
TOTAL METALS (µg/L)										
Method EPA200.8/6010B,C/7470A										
Arsenic	**0.6**	**0.5**	**0.7**	**0.8**	**0.7**	**0.7**	**0.5**	**0.8**	**0.7**	**0.4**
Cadmium	0.1 U	0.1 U	**0.6**	0.1 U	**0.2**	0.1 U	**0.3**	0.1 U	0.1 U	0.1 U
Chromium	0.5 U	0.5 U	**1.7**	0.5 U	**1.2**	1 U	**1.1**	1 U	1 U	0.5 U
Copper	0.5 U	**1.8**	**5.1**	**0.6**	**4.3**	**1.2**	**4.0**	**0.8**	**1.1**	**1.9**
Iron	NA	NA	NA	**760**	**3890**	**2480**	**1970**	**2110**	**2230**	**860**
Lead	0.1 U	**0.5**	**4.9**	**0.3**	**2.5**	**0.2**	**1.9**	**0.4**	**0.2**	**0.6**
Manganese	NA	NA	NA	**833**	**132**	**593**	**84**	**639**	**540**	**69**
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	**0.5**	**0.6**	**1.2**	**1.3**	**1.1**	**1.4**	**2.4**	**1.4**	**1.8**	**0.8**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**7**	**20**	**48**	**8**	**38**	**16**	**50**	**7**	**9**	**24**
DISSOLVED METALS (µg/L)										
Method EPA200.8/6010C										
Arsenic	**0.6**	**0.4**	**0.3**	**0.8**	**0.3**	**0.5**	**0.2**	**0.6**	**0.4**	**0.3**
Cadmium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2**	0.1 U	0.1 U	**0.1**
Chromium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U
Copper	0.5 U	**1.3**	**1.4**	**0.8**	**1.3**	**0.9**	**1.3**	**1.0**	**0.7**	**1.1**
Iron	NA	NA	NA	NA	**150**	**170**	**220**	50 U	**360**	**230**
Lead	0.1 U	0.1 U	**0.2**	0.1 U	**0.2**	0.1 U	**0.2**	0.1 U	0.1 U	0.1 U
Manganese	NA	NA	NA	NA	**90**	**552**	**76**	**621**	**509**	**65**
Nickel	**0.6**	**0.6**	**0.5**	**1.2**	**0.7**	**1.3**	**1.8**	**1.3**	**1.8**	**0.9**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**7**	**16**	**21**	**6**	**17**	**13**	**37**	**8**	4 U	**17**
DISSOLVED METALS (ng/L)										
Method SW7470A										
Mercury	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
CONVENTIONALS										
pH (SU; EPA 150.1; SM 4500H)	NA	NA	NA	**7.05**	**6.40**	**7.06**	**6.78**	**7.17**	**7.35**	**6.41**
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	1.0 U	**3.4**	**110**	**1.4**	**16.6**	**6.2**	**6.1**	**5.8**	**6.4**	**4.4**
Turbidity (NTU; EPA 180.1)	**1.33** J	**4.30**	**6.60**	**2.00**	**29.0**	**14.6**	**14.4**	**7.80**	**8.00**	**4.20**
PARTICLE/GRAIN SIZE (mg/L)										
Method ASTM-D3977C										
Sediment Conc. > 500 µm	0.01 U	**0.1**	**62.1**	0.01 U	**1.3**	**1.8**	**0.4**	**5.1**	**0.9**	**0.5**
Sediment Conc. 500 to 250 µm	**0.4**	**1.1**	**33.9**	0.01 U	**2.3**	**1.5**	**0.4**	**0.7**	**0.4**	**1.4**
Sediment Conc. 250 to 125 µm	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 125 to 62.5 µm	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 62.5 to 3.9 µm	0.01 U	0.01 U	**16.0**	0.01 U	**11.8**	0.01 U	**7.1**	0.01 U	0.01 U	0.01 U
Sediment Conc. 3.9 to 1 µm	**0.3**	**2.0**	**4.0**	**0.9**	**2.4**	**4.9**	**1.4**	**3.3**	**0.3**	**1.2**
Sediment Conc. < 1 µm	**0.3**	**2.3**	**2.2**	**1.9**	**1.0**	**13.4**	**1.2**	**2.4**	**0.4**	**2.7**
PRECIPITATION (c)										
Amount During Test (inches)	0.0	0.38	1.99	0.0	0.86	0.23	0.85	0.10	0.06	0.76

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	UO82A/UO82D/UO83A	UP29A/UP29E/UP30A	UU03A/UU03F/UU04A	UX69A/UX69C/UX70A	VB89A/VB89D/VB90A	VF37A/VF37D/VF38A	VJ50A/VJ50G/VJ52A	VL90A/VL90D/VL91A	VN17A/VN17B/VN18A	VR68A/VR68D/VR69A
Sample Start Date	3/31/2012	4/2/2012	5/7/2012	6/4/2012	7/9/2012	8/6/2012	9/10/2012	10/1/2012	10/12/2012	11/5/2012
Sample End Date	4/1/2012	4/5/2012	5/10/2012	6/7/2012	7/11/2012	8/9/2012	9/13/2012	10/4/2012	10/13/2012	11/8/2012
Event Type	Storm	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Storm	Monthly
Sample Type	Flow-weighted composite									
PCBs (µg/L) (a)										
Method SW8082A										
Aroclor 1016	0.010 U	0.010 U	0.010 U	0.010 U	0.012 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1242	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1248	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1254	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1260	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1221	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Aroclor 1232	0.015 U	0.010 U	0.018 U	0.015 U	0.010 U	0.020 U	0.010 U	0.010 U	0.015 U	0.010 U
Aroclor 1262	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total PCBs (b)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILES (µg/L)										
Method SW8270D										
Phenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	10 U	10 U	10 U	10 U	10 U	10 U	20 U	20 U	20 U	20 U
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	3.0 U	3.0 U
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	UO82A/UO82D/UO83A	UP29A/UP29E/UP30A	UU03A/UU03F/UU04A	UX69A/UX69C/UX70A	VB89A/VB89D/VB90A	VF37A/VF37D/VF38A	VJ50A/VJ50G/VJ52A	VL90A/VL90D/VL91A	VN17A/VN17B/VN18A	VR68A/VR68D/VR69A
Sample Start Date	3/31/2012	4/2/2012	5/7/2012	6/4/2012	7/9/2012	8/6/2012	9/10/2012	10/1/2012	10/12/2012	11/5/2012
Sample End Date	4/1/2012	4/5/2012	5/10/2012	6/7/2012	7/11/2012	8/9/2012	9/13/2012	10/4/2012	10/13/2012	11/8/2012
Event Type	Storm	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Storm	Monthly
Sample Type	Flow-weighted composite									
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	10 U
Phenanthrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl)phthalate	1.0 U	1.0 U	**2.5**	1.0 U	1.0 U	1.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Chrysene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
1-Methylnaphthalene	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Benzofluoranthenes	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U
PAHs (µg/L)										
Method SW8270D-SIM										
Naphthalene	**0.010**	**0.012**	**0.035**	**0.011**	0.011 U	**0.010**	0.010 U	0.010 U	0.010 U	0.010 U
2-Methylnaphthalene	**0.010**	**0.010**	**0.0080** J	**0.011**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
1-Methylnaphthalene	**0.012**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acenaphthylene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acenaphthene	**0.016**	**0.043**	**0.054**	**0.035**	**0.066**	**0.090**	**0.080**	**0.10**	**0.081**	**0.046**
Fluorene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Phenanthrene	**0.026**	**0.011**	**0.0088** J	**0.040**	0.010 U	**0.010**	0.010 U	0.010 U	**0.014**	0.010 U
Anthracene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Fluoranthene	**0.073**	**0.014**	**0.020**	**0.093**	**0.013**	**0.012**	0.010 U	0.010 U	**0.010**	**0.013**
Pyrene	**0.046**	0.010 U	**0.016**	**0.044**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.012**
Benzo(a)anthracene	**0.016**	0.010 U	0.010 U	**0.012**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Chrysene	**0.036**	0.010 U	**0.0089** J	**0.049**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(a)pyrene	**0.020**	0.010 U	0.010 U	**0.018**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	**0.021**	0.010 U	0.010 U	**0.022** J	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dibenz(a,h)anthracene	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(g,h,i)perylene	**0.025**	0.010 U	0.010 U	**0.025**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzofuran	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total Benzofluoranthenes	**0.056**	0.020 U	0.020 U	**0.069**	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
CPAH TEQ	**0.030**	ND	**0.0001**	**0.029**	ND	ND	ND	ND	ND	ND

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	UO82A/UO82D/UO83A	UP29A/UP29E/UP30A	UU03A/UU03F/UU04A	UX69A/UX69C/UX70A	VB89A/VB89D/VB90A	VF37A/VF37D/VF38A	VJ50A/VJ50G/VJ52A	VL90A/VL90D/VL91A	VN17A/VN17B/VN18A	VR68A/VR68D/VR69A
Sample Start Date	3/31/2012	4/2/2012	5/7/2012	6/4/2012	7/9/2012	8/6/2012	9/10/2012	10/1/2012	10/12/2012	11/5/2012
Sample End Date	4/1/2012	4/5/2012	5/10/2012	6/7/2012	7/11/2012	8/9/2012	9/13/2012	10/4/2012	10/13/2012	11/8/2012
Event Type	Storm	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Storm	Monthly
Sample Type	Flow-weighted composite									
TOTAL METALS (µg/L)										
Method EPA200.8/6010B,C/7470A										
Arsenic	**0.4**	**0.5**	**0.8**	**0.7**	**0.7**	**0.7**	**0.9**	**0.6**	**1.0**	**0.7**
Cadmium	0.1 U	0.1 U	0.1 U	**0.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chromium	0.5 U	0.5 U	0.5 U	**0.6**	1 U	0.5 U	1 U	0.5 U	**0.6**	**0.5**
Copper	**1.7**	**1.1**	**0.6**	**2.7**	0.5 U	0.5 U	**1.0**	0.5 U	**4.2**	**0.9** J
Iron	**1090**	**890**	**1890**	**2690**	**1320**	**1850**	**2490**	**1260**	**2180**	**1720**
Lead	**0.5**	0.1 U	0.1 U	**0.7**	0.1 U	0.1 U	0.1 U	**0.1**	**0.5**	**0.2**
Manganese	**178**	**482**	**752**	**344**	**660**	**779**	**960**	**872**	**606**	**728**
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	**1.2**	**1.9** J	**2.1**	**1.2**	**0.7**	**1.2**	**1.1**	**0.8**	**1.6**	**1.0**
Silver	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**24**	**11**	**8**	**19**	**6**	**4**	**4**	4 U	**9**	**13**
DISSOLVED METALS (µg/L)										
Method EPA200.8/6010C										
Arsenic	**0.3**	**0.4**	**0.6**	**0.5**	**0.5**	**0.5**	**0.6**	**0.5**	**0.9**	**0.6**
Cadmium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chromium	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Copper	**1.1**	**0.9**	0.5 U	**2.0**	0.5 U	0.5 U	**0.8**	0.5 U	**3.6**	1.4 U
Iron	**190**	50 U	**100**	**230**	**120**	**60**	**60**	**190**	**690**	50 U
Lead	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3**	0.1 U
Manganese	**163**	**472**	**703**	**295**	**622**	**749**	**870**	**855**	**568**	**679**
Nickel	**1.2**	**1.7**	**2.0**	**1.1**	**0.7**	**0.6**	**1.0**	**0.8**	**1.5**	**1.0**
Silver	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**19**	**9**	**5**	**14**	4 U	**4**	4 U	4 U	**6**	**6**
DISSOLVED METALS (ng/L)										
Method SW7470A										
Mercury	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
CONVENTIONALS										
pH (SU; EPA 150.1; SM 4500H)	**6.94**	**7.03**	**7.20**	**7.33**	**7.14**	**7.21**	**7.31**	**7.59**	**7.06**	**7.07**
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	**6.8**	**1.9**	**8.4**	**15.9**	**3.2**	**6.0**	**7.0**	**5.8**	**4.7**	**6.9**
Turbidity (NTU; EPA 180.1)	**3.60**	**5.00**	**7.30**	**14.1**	**8.50**	**8.20**	**15.0**	**6.20**	**8.40**	**9.30**
PARTICLE/GRAIN SIZE (mg/L)										
Method ASTM-D3977C										
Sediment Conc. > 500 µm	**3.5**	**7.6**	**0.9**	**0.59**	**3.14**	**0.42**	**4.77**	**3.99**	**0.60**	**0.21**
Sediment Conc. 500 to 250 µm	**1.3**	**8.9**	**1.5**	**2.85**	**3.66**	**0.53**	**0.20**	**0.53**	**0.60**	**0.75**
Sediment Conc. 250 to 125 µm	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 125 to 62.5 µm	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 62.5 to 3.9 µm	**4.7**	**1.7**	0.01 U	**9.95**	0.01 U	**5.27**	0.01 U	**2.74**	0.01 U	0.01 U
Sediment Conc. 3.9 to 1 µm	**0.4**	**0.5**	**4.2**	**1.42**	**0.70**	**1.32**	**2.61**	**0.80**	**2.19**	**0.15**
Sediment Conc. < 1 µm	0.01 U	**0.3**	**4.8**	**0.33**	**2.70**	**0.93**	**12.12**	**0.39**	**5.10**	**7.01**
PRECIPITATION (c)										
Amount During Test (inches)	0.50	0.29	0.01	0.87	0.00	0.00	0.01	0.00	0.08	0.01

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	VS17A/VS17E/VS30A	VV27A/VV27E/VV28A	VW75C/VW75G/VW76C	VZ15A/VZ15C/VZ16A	WC96A/WC96E/WC97A	WG51A/WG51E/WG56A	WI40C/WI40G/WI41C	WK37A/WK37E/WK38A	WK74A/WK74E/WK81A	WP40A/WP40E/WP39A	WS97A/WS97B/WS98A
Sample Start Date	11/11/2012	12/3/2012	12/16/2012	1/7/2013	2/4/2013	3/4/2013	3/19/2013	4/1/2013	4/5/2013	5/6/2013	6/3/2013
Sample End Date	11/12/2012	12/6/2012	12/17/2012	1/10/2013	2/7/2013	3/7/2013	3/20/2013	4/4/2013	4/6/2013	5/8/2013	6/6/2013
Event Type	Storm	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Storm	Monthly	Monthly
Sample Type		Flow-weighted composite									
PCBs (µg/L) (a)											
Method SW8082A											
Aroclor 1016	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1242	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1248	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1254	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1260	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1221	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1232	0.015 U	0.010 U	0.005 U	0.006 U	0.008 U	0.008 U	0.008 U	0.008 U	0.005 U	0.008 U	0.010 U
Aroclor 1262	0.010 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Total PCBs (b)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILES (µg/L)											
Method SW8270D											
Phenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	VS17A/VS17E/VS30A	VV27A/VV27E/VV28A	VW75C/VW75G/VW76C	VZ15A/VZ15C/VZ16A	WC96A/WC96E/WC97A	WG51A/WG51E/WG56A	WI40C/WI40G/WI41C	WK37A/WK37E/WK38A	WK74A/WK74E/WK81A	WP40A/WP40E/WP39A	WS97A/WS97B/WS98A
Sample Start Date	11/11/2012	12/3/2012	12/16/2012	1/7/2013	2/4/2013	3/4/2013	3/19/2013	4/1/2013	4/5/2013	5/6/2013	6/3/2013
Sample End Date	11/12/2012	12/6/2012	12/17/2012	1/10/2013	2/7/2013	3/7/2013	3/20/2013	4/4/2013	4/6/2013	5/8/2013	6/6/2013
Event Type	Storm	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Storm	Monthly	Monthly
Sample Type		Flow-weighted composite									
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl)phthalate	3.0 U	3.0 U	3.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.2**	3.0 U	3.0 U
Chrysene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1-Methylnaphthalene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Benzofluoranthenes	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
PAHs (µg/L)											
Method SW8270D-SIM											
Naphthalene	0.018 U	0.010 U	**0.022**	0.010 U	**0.012**	**0.012**	**0.041**	0.010 U	**0.021**	0.015 U	0.010 U
2-Methylnaphthalene	**0.013**	0.010 U	**0.035**	0.010 U	**0.019**	**0.016**	**0.055**	0.010 U	**0.026**	0.010 U	0.010 U
1-Methylnaphthalene	**0.011**	0.010 U	**0.030**	0.010 U	**0.017**	**0.011**	**0.041**	0.010 U	**0.022**	0.010 U	0.010 U
Acenaphthylene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acenaphthene	**0.018**	0.010 U	0.010 U	0.010 U	**0.029**	**0.016**	0.010 U	**0.033**	**0.012**	**0.044**	**0.055**
Fluorene	0.0063 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Phenanthrene	**0.032**	**0.014**	**0.040**	**0.013**	0.010 U	**0.014**	**0.027**	0.010 U	**0.018**	0.010 U	0.010 U
Anthracene	0.010 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Fluoranthene	**0.060**	**0.049**	**0.13**	**0.050**	**0.014**	**0.022**	**0.058**	0.010 U	**0.042**	0.010 U	0.010 U
Pyrene	**0.033**	**0.043**	**0.095**	**0.040**	**0.012**	**0.014**	**0.038**	0.010 U	**0.024**	0.010 U	0.010 U
Benzo(a)anthracene	0.0059 U	**0.013**	**0.028**	**0.011**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Chrysene	**0.026**	**0.027**	**0.077**	**0.034**	0.010 U	**0.010**	**0.035**	0.010 U	**0.019**	0.010 U	0.010 U
Benzo(a)pyrene	0.0080 U	**0.016**	**0.042**	**0.017**	0.010 U	0.010 U	**0.017**	0.010 U	0.010 U	0.010 U	0.010 U
Indeno(1,2,3-cd)pyrene	0.0085 U	**0.010**	**0.038**	**0.014**	0.010 U	0.010 U	**0.018**	0.010 U	0.010 U	0.010 U	0.010 U
Dibenz(a,h)anthracene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Benzo(g,h,i)perylene	**0.011**	**0.013**	**0.044**	**0.017**	0.010 U	0.010 U	**0.022**	0.010 U	0.010 U	0.010 U	0.010 U
Dibenzofuran	0.010 U	0.010 U	**0.011**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Total Benzofluoranthenes	**0.032**	**0.046**	**0.14**	**0.064**	0.020 U	0.020 UJ	**0.060**	0.020 U	0.020 U	0.020 U	0.020 U
CPAH TEQ	**0.003**	**0.023**	**0.063**	**0.026**	ND	**0.0001**	**0.025**	ND	**0.0002**	ND	ND

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	VS17A/VS17E/VS30A	VV27A/VV27E/VV28A	VW75C/VW75G/VW76C	VZ15A/VZ15C/VZ16A	WC96A/WC96E/WC97A	WG51A/WG51E/WG56A	WI40C/WI40G/WI41C	WK37A/WK37E/WK38A	WK74A/WK74E/WK81A	WP40A/WP40E/WP39A	WS97A/WS97B/WS98A
Sample Start Date	11/11/2012	12/3/2012	12/16/2012	1/7/2013	2/4/2013	3/4/2013	3/19/2013	4/1/2013	4/5/2013	5/6/2013	6/3/2013
Sample End Date	11/12/2012	12/6/2012	12/17/2012	1/10/2013	2/7/2013	3/7/2013	3/20/2013	4/4/2013	4/6/2013	5/8/2013	6/6/2013
Event Type	Storm	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Storm	Monthly	Monthly
Sample Type		Flow-weighted composite									
TOTAL METALS (µg/L)											
Method EPA200.8/6010B,C/7470A											
Arsenic	**0.6**	**0.6**	**0.4**	**0.6**	**0.6**	**0.5**	**0.5**	**0.6**	**0.4**	**0.6**	**0.6**
Cadmium	**0.1**	**0.1**	**0.1**	**0.1**	0.1 U	0.1 U	**0.1**	0.1 U	0.1 U	0.1 U	0.1 U
Chromium	**0.5**	**0.5**	0.5 U	0.5 U	1 U	0.5 U	**0.6**	0.5 U	**0.6**	1 U	0.5 U
Copper	**3.6** J	**4.6**	**2.1**	**2.3**	**1.4**	**1.6**	**2.5**	0.5 U	**2.6**	0.5 U	**0.6**
Iron	**2660**	**1610**	**1540**	**1320**	**1070**	**1220**	**2230**	**410**	**870**	**1060**	**600**
Lead	**0.5**	**0.7**	**1.0**	**0.8**	0.1 U	**0.3**	**0.8**	0.1 U	**0.4**	0.1 U	0.1 U
Manganese	**143**	**268**	**77**	**129**	**673**	**247**	**115**	**756**	**121**	**848**	**781**
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	**1.3**	**1.2**	**1.0**	**0.7**	**1.7**	**1.7**	**0.8**	**1.0**	0.5 U	**1.0**	**1.0**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**26**	**23**	**29**	**26**	**14**	**14**	**20**	**6**	**20**	**8**	**6**
DISSOLVED METALS (µg/L)											
Method EPA200.8/6010C											
Arsenic	**0.3**	**0.4**	**0.2**	**0.4**	**0.5**	**0.9**	**0.3**	**0.5**	**0.3**	**0.6**	**0.5**
Cadmium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chromium	0.5 U	0.5 U	0.5 U	0.5 U	1 U	**0.6**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Copper	**2.4** J	**2.8** J	**1.0**	**1.1**	**1.1**	**1.1**	**1.2**	0.5 U	**2.0**	0.5 U	0.5 U
Iron	**70**	**480**	**200**	**120**	50 U	**100**	**200**	50 U	**290**	**170**	**120**
Lead	0.1 U	**0.1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.1**	0.1 U	0.1 U
Manganese	**137**	**239**	**67**	**113**	**445**	**233**	**89**	**742**	**117**	**842**	**736**
Nickel	**1.2**	**1.1**	**0.8**	**0.6**	**1.6**	**1.6**	**0.6**	**1.2**	0.5 U	**1.0**	**0.8**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**15**	**15**	**21**	**18**	**9**	**8**	**10**	4 U	**16**	**4**	**4**
DISSOLVED METALS (ng/L)											
Method SW7470A											
Mercury	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
CONVENTIONALS											
pH (SU; EPA 150.1; SM 4500H)	**6.72**	**6.60**	**6.56**	**6.88**	**7.10**	**6.97**	**6.81**	**7.35**	**6.70**	**7.58**	**7.64**
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	**10.0**	**13.1**	**9.0**	**8.4**	**4.1**	**9.3**	**13.4**	**1.0**	**5.0**	**3.1**	**3.9**
Turbidity (NTU; EPA 180.1)	**20.0**	**6.70**	**8.60**	**6.50**	**2.20**	**7.80**	**13.7**	**1.66**	**4.10**	**2.80**	**2.5**
PARTICLE/GRAIN SIZE (mg/L)											
Method ASTM-D3977C											
Sediment Conc. > 500 µm	**64.08**	**0.21**	**0.54**	**0.94**	**0.43**	**0.85**	**4.59**	**5.62**	**7.85**	**4.52**	**17.25**
Sediment Conc. 500 to 250 µm	**0.79**	**1.69**	**1.29**	**0.31**	**0.85**	**2.01**	**3.34**	**5.81**	0.01 U	**6.53**	**8.68**
Sediment Conc. 250 to 125 µm	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 125 to 62.5 µm	**8.02**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 62.5 to 3.9 µm	**11.91**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sediment Conc. 3.9 to 1 µm	**0.79**	**1.40**	**3.50**	**1.98**	**4.15**	**3.68**	**4.77**	**4.59**	**2.67**	**2.07**	**1.27**
Sediment Conc. < 1 µm	**2.28**	**3.70**	**5.52**	**3.90**	**3.12**	**3.20**	**8.23**	**3.84**	**6.07**	**5.52**	**2.41**
PRECIPITATION (c)											
Amount During Test (inches)	0.63	0.68	0.94	1.68	0.35	0.87	0.92	0.00	0.64	0.00	0.00

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	WX01A/WX01E/WX02A	XA11A/XA11E/XA14A	XE07A/XE07E/XE22A	XE91A/XE91E/XE92A	XJ12A/XJ12E/XJ36A	XN18A/XN18E/XN19A	XO76A/XO76C/XO77A	XQ44A/XQ44E/XQ45A	XT98A/XT98E/XT99A	XU48A/XU48C/XU49A	XZ68A/XZ68E/XZ69A
Sample Start Date	7/8/2013	8/5/2013	9/5/2013	9/9/2013	10/7/2013	11/4/2013	11/18/2013	12/2/2013	1/6/2014	1/10/2014	2/16/2014
Sample End Date	7/9/2013	8/8/2013	9/6/2013	9/12/2013	10/9/2013	11/7/2013	11/19/2013	12/5/2013	1/9/2014	1/11/2014	2/17/2014
Event Type	Monthly	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Quarterly	Storm	Storm
Sample Type	Flow-weighted composite										
PCBs (µg/L) (a)											
Method SW8082A											
Aroclor 1016	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1242	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1248	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1254	0.005 U	0.005 U	**0.015**	0.005 U	**0.015**	**0.013**	0.005 U	0.005 U	0.005 U	**0.012**	**0.010**
Aroclor 1260	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1221	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Aroclor 1232	0.015 U	0.008 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.015 U	0.005 U	0.005 U
Aroclor 1262	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Total PCBs (b)	ND	ND	**0.015**	ND	**0.015**	**0.013**	ND	ND	ND	**0.012**	**0.010**
SEMIVOLATILES (µg/L)											
Method SW8270D											
Phenol	1.0 U	1.0 U	**1.0**	**1.7**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl Alcohol	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Benzoic Acid	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 UJ	20 UJ	20 UJ	20 U
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	1.0 U	1.0 U	**4.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	1.0 U	1.0 U	**7.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acenaphthylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	WX01A/WX01E/WX02A	XA11A/XA11E/XA14A	XE07A/XE07E/XE22A	XE91A/XE91E/XE92A	XJ12A/XJ12E/XJ36A	XN18A/XN18E/XN19A	XO76A/XO76C/XO77A	XQ44A/XQ44E/XQ45A	XT98A/XT98E/XT99A	XU48A/XU48C/XU49A	XZ68A/XZ68E/XZ69A
Sample Start Date	7/8/2013	8/5/2013	9/5/2013	9/9/2013	10/7/2013	11/4/2013	11/18/2013	12/2/2013	1/6/2014	1/10/2014	2/16/2014
Sample End Date	7/9/2013	8/8/2013	9/6/2013	9/12/2013	10/9/2013	11/7/2013	11/19/2013	12/5/2013	1/9/2014	1/11/2014	2/17/2014
Event Type	Monthly	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Quarterly	Storm	Storm
Sample Type	Flow-weighted composite										
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U
Phenanthrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Fluoranthene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.5**
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl)phthalate	**8.1**	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	**6.1**	3.0 U	3.0 U	3.0 U
Chrysene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
1-Methylnaphthalene	1.0 U	1.0 U	**5.9**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Benzofluoranthenes	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
PAHs (µg/L)											
Method SW8270D-SIM											
Naphthalene	**0.014**	**0.015**	**4.2**	**0.098**	**0.010**	**0.017**	0.010 U	**0.010**	**0.018**	**0.046**	**0.043**
2-Methylnaphthalene	0.010 U	0.010 U	**6.0**	**0.11**	0.010 U	**0.016**	0.010 U	0.010 U	**0.026**	**0.021**	**0.047**
1-Methylnaphthalene	0.010 U	0.010 U	**4.8**	**0.11**	0.010 U	**0.022**	**0.012**	**0.011**	**0.030**	**0.030**	**0.039**
Acenaphthylene	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acenaphthene	**0.060**	**0.073**	**0.049**	**0.071**	**0.017**	0.010 U	0.010 U	**0.022**	**0.013**	**0.011**	**0.057**
Fluorene	0.010 U	0.010 U	**0.14**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.058**
Phenanthrene	0.010 U	0.010 U	**0.12**	0.010 U	**0.15**	**0.046**	**0.013**	0.010 U	**0.025**	**0.067**	**0.49**
Anthracene	0.010 U	0.010 U	**0.013**	0.010 U	**0.032**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.062**
Fluoranthene	0.010 U	0.010 U	**0.26**	**0.012**	**0.38**	**0.11**	**0.042**	**0.010**	**0.050**	**0.19**	**0.83**
Pyrene	0.010 U	0.010 U	**0.18**	0.010 U	**0.48**	**0.14**	**0.045**	0.010 U	**0.038** J	**0.17**	**0.67**
Benzo(a)anthracene	0.010 U	0.010 U	**0.067**	0.010 U	**0.26**	**0.041**	0.010 U	0.010 U	0.010 U	**0.054**	**0.20**
Chrysene	0.010 U	0.010 U	**0.17**	0.010 U	**0.41**	**0.12**	**0.041**	0.010 U	**0.030**	**0.14**	**0.38**
Benzo(a)pyrene	0.010 U	0.010 U	**0.096**	0.010 U	**0.28**	**0.065**	**0.015**	0.010 U	**0.013**	**0.088**	**0.23**
Indeno(1,2,3-cd)pyrene	0.010 U	0.010 U	**0.11**	0.010 U	**0.20**	**0.080**	**0.022**	0.010 U	**0.017**	**0.12**	**0.20**
Dibenz(a,h)anthracene	0.010 U	0.010 U	**0.021**	0.010 U	**0.039**	**0.016**	0.010 U	0.010 U	0.010 U	**0.026**	**0.045** J
Benzo(g,h,i)perylene	0.010 U	0.010 U	**0.14**	0.010 U	**0.25**	**0.11**	**0.031**	0.010 U	**0.022**	**0.14** J	**0.20**
Dibenzofuran	0.010 U	0.010 U	**0.16**	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.038**
Total Benzofluoranthenes	0.020 U	0.020 U	**0.29**	0.020 U	**0.61**	**0.18**	**0.051**	0.020 U	**0.044** J	**0.24**	**0.57**
CPAH TEQ	ND	ND	**0.147**	ND	**0.395**	**0.098**	**0.023**	ND	**0.019**	**0.133**	**0.335**

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	WX01A/WX01E/WX02A	XA11A/XA11E/XA14A	XE07A/XE07E/XE22A	XE91A/XE91E/XE92A	XJ12A/XJ12E/XJ36A	XN18A/XN18E/XN19A	XO76A/XO76C/XO77A	XQ44A/XQ44E/XQ45A	XT98A/XT98E/XT99A	XU48A/XU48C/XU49A	XZ68A/XZ68E/XZ69A
Sample Start Date	7/8/2013	8/5/2013	9/5/2013	9/9/2013	10/7/2013	11/4/2013	11/18/2013	12/2/2013	1/6/2014	1/10/2014	2/16/2014
Sample End Date	7/9/2013	8/8/2013	9/6/2013	9/12/2013	10/9/2013	11/7/2013	11/19/2013	12/5/2013	1/9/2014	1/11/2014	2/17/2014
Event Type	Monthly	Monthly	Storm	Monthly	Monthly	Monthly	Storm	Monthly	Quarterly	Storm	Storm
Sample Type	Flow-weighted composite										
TOTAL METALS (µg/L)											
Method EPA200.8/6010B,C/7470A											
Arsenic	**0.6**	**0.6**	**0.7**	**0.5**	**0.7**	**0.5**	**0.4**	**0.9**	**0.4**	**0.4**	**0.5**
Cadmium	0.1 U	0.1 U	**0.3**	0.1 U	**0.4**	**0.2**	**0.1**	**0.3**	0.1 U	**0.2**	**0.2**
Chromium	0.5 U	1 U	**1.7**	0.5 U	**2.0**	1 U	**0.7**	**0.7**	**0.6**	**0.8**	**1.8** J
Copper	**0.5**	**1.2**	**6.5**	0.5 U	**7.2**	**3.6**	**2.5**	**2.8**	**2.4**	**4.4**	**4.8**
Iron	**750**	**930**	**2400**	**600**	**2880**	**2060**	**2510**	**5130**	**790**	**1350**	**1210**
Lead	0.1 U	0.1 U	**6.1**	0.1 U	**6.0**	**2.0**	**1.0**	**1.0**	**0.6**	**2.1**	**2.4**
Manganese	**829**	**849**	**127**	**885**	**344**	**276**	**68**	**2120**	**242**	**101**	**44**
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	**0.7**	**1.0**	**2.0** J	**0.9**	**1.4**	**0.9**	**0.7**	**2.3**	**1.0**	**0.5**	**3.3**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**5**	**4**	**42**	**9**	**42**	**27**	**22**	**59**	**21**	**34**	**33**
DISSOLVED METALS (µg/L)											
Method EPA200.8/6010C											
Arsenic	**0.5**	**0.5**	**0.3**	**0.5**	**0.3**	**0.3**	**0.2**	**0.5**	**0.2**	**0.2**	**0.2**
Cadmium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chromium	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**1.1** J
Copper	**0.7**	**0.6**	**2.0**	**0.5**	**1.7**	**1.6**	**1.3**	**0.8**	**1.3**	**1.4**	**1.6** J
Iron	**80**	**140**	**80**	50 U	**160**	**110**	**180**	50 U	50 U	**190**	**130**
Lead	0.1 U	0.1 U	0.1 U	0.1 U	**0.1**	**0.3**	**0.1**	0.1 U	0.1 U	**0.1**	0.1 U
Manganese	**796**	**817**	**25**	**860**	**298**	**245**	**55**	**674**	**219**	**79**	**22**
Nickel	**0.7**	**1.0**	0.5 U	**1.0**	**0.6**	**0.7**	0.5 U	**1.2**	**0.9**	0.5 U	**2.4**
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	4 U	4 U	**13**	**8**	**12**	**11**	**11**	**8**	**13**	**19**	**16**
DISSOLVED METALS (ng/L)											
Method SW7470A											
Mercury	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
CONVENTIONALS											
pH (SU; EPA 150.1; SM 4500H)	**7.26**	**7.31**	**6.85**	**7.26**	**7.11**	**7.18**	**6.53**	**7.35**	**6.83**	NA	NA
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	**3.9**	**3.4**	**35.5**	**1.9**	**27.0**	**14.0**	**10.4**	**8.6**	**6.9**	**15.9**	**43.3**
Turbidity (NTU; EPA 180.1)	**3.90**	**4.20**	**4.38**	**3.06**	**7.88**	**6.08**	**11.2**	**4.26**	**3.03**	**3.33**	**2.35**
PARTICLE/GRAIN SIZE (mg/L)											
Method ASTM-D3977C											
Sediment Conc. > 500 µm	**5.66**	**0.65**	**6.27**	**8.23**	**11.31**	**9.78**	0.01 U	**3.52**	**1.71**	**1.18**	NA
Sediment Conc. 500 to 250 µm	**5.13**	**0.43**	**4.89**	**10.58**	**8.22**	**11.17**	**1.52**	**3.09**	**3.21**	**1.94**	NA
Sediment Conc. 250 to 125 µm	0.01 U	**0.01**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**3.49**	0.01 U	0.01 U	NA
Sediment Conc. 125 to 62.5 µm	0.01 U	**0.98**	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**2.32**	0.01 U	0.01 U	NA
Sediment Conc. 62.5 to 3.9 µm	0.01 U	**0.36**	**22.21**	0.01 U	**13.85**	**15.31**	**7.47**	**0.75**	0.01 U	**8.35**	NA
Sediment Conc. 3.9 to 1 µm	**0.93**	**0.01**	**1.85**	**0.56**	**3.44**	**1.43**	**1.28**	**0.24**	**1.72**	**1.17**	NA
Sediment Conc. < 1 µm	**2.29**	0.01 U	**2.13**	**1.99**	**1.81**	**1.96**	**1.10**	0.01 U	**11.20**	**1.59**	NA
PRECIPITATION (c)											
Amount During Test (inches)	0.00	0.00	1.36	0.00	0.40	0.78	0.71	0.12	0.78	1.06	1.61

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	YB86A/YB86C/YB88A	YG17A/YG17C/YG18A	YR11A/YR11E/YR12A	ZE23A/ZE23E/ZE24A	ZF08A/ZF08E/ZF09A	ZO34A/ZO34E/ZO35A	ZQ78A/ZQ78E/ZQ79A	ZS95A/ZS95E/ZS96A	ZU80A	ZV55A	AEB1A
Sample Start Date	3/5/2014	4/7/2014	7/7/2014	10/6/2014	10/13/2014	12/9/2014	12/23/2014	1/12/2015	--	2/5/2015	4/7/2015
Sample End Date	3/6/2014	4/10/2014	7/10/2014	10/9/2014	10/14/2014	12/10/2014	12/24/2014	1/15/2015	2/2/2015	2/6/2015	4/10/2015
Event Type	Storm	Quarterly	Quarterly	Quarterly	Storm	Storm	Storm	Quarterly	Quarterly	Storm	Quarterly
Sample Type	Flow-weighted composite								Grab	Flow-weighted composite	Flow-weighted composite
PCBs (µg/L) (a)											
Method SW8082A											
Aroclor 1016	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1242	0.005 U	0.005 U	0.005 U	0.008 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1248	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1254	0.005 U	0.005 U	0.005 U	0.005 U	**0.011**	0.005 U	**0.0080** J	0.005 U	NA	0.005 U	0.005 U
Aroclor 1260	0.005 U	0.005 U	0.005 U	0.005 U	**0.011**	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1221	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1232	0.005 U	0.005 U	0.010 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Aroclor 1262	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U
Total PCBs (b)	ND	ND	ND	ND	**0.022**	ND	**0.008** J	ND	NA	ND	ND
SEMIVOLATILES (µg/L)											
Method SW8270D											
Phenol	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
1,4-Dichlorobenzene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Benzyl Alcohol	2.0 U	NA	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	NA	NA	NA
1,2-Dichlorobenzene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
2-Methylphenol	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	2.0 U	NA	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	NA	NA
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	2.0 U	NA	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	3.0 U	NA	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	NA	NA	NA
Benzoic Acid	20 U	NA	20 UJ	20 UJ	20 U	20 U	20 U	20 U	NA	NA	NA
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Naphthalene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	3.0 U	NA	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Acenaphthylene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	YB86A/YB86C/YB88A	YG17A/YG17C/YG18A	YR11A/YR11E/YR12A	ZE23A/ZE23E/ZE24A	ZF08A/ZF08E/ZF09A	ZO34A/ZO34E/ZO35A	ZQ78A/ZQ78E/ZQ79A	ZS95A/ZS95E/ZS96A	ZU80A	ZV55A	AEB1A
Sample Start Date	3/5/2014	4/7/2014	7/7/2014	10/6/2014	10/13/2014	12/9/2014	12/23/2014	1/12/2015	--	2/5/2015	4/7/2015
Sample End Date	3/6/2014	4/10/2014	7/10/2014	10/9/2014	10/14/2014	12/10/2014	12/24/2014	1/15/2015	2/2/2015	2/6/2015	4/10/2015
Event Type	Storm	Quarterly	Quarterly	Quarterly	Storm	Storm	Storm	Quarterly	Quarterly	Storm	Quarterly
Sample Type	Flow-weighted composite								Grab	Flow-weighted composite	Flow-weighted composite
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Pentachlorophenol	10 U	NA	10 U	10 UJ	10 UJ	10 U	10 UJ	10 UJ	NA	NA	NA
Phenanthrene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Di-n-Butylphthalate	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Fluoranthene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Pyrene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Butylbenzylphthalate	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
bis(2-Ethylhexyl)phthalate	3.0 U	NA	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	NA	NA	NA
Chrysene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Di-n-Octyl phthalate	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Benzo(a)pyrene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Dibenz(a,h)anthracene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Benzo(g,h,i)perylene	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
1-Methylnaphthalene	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Total Benzofluoranthenes	5.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	NA	NA
PAHs (µg/L)											
Method SW8270D-SIM											
Naphthalene	**0.012**	NA	0.010 U	**0.010**	**0.012**	**0.011**	0.060 UJ	0.010 U	NA	NA	NA
2-Methylnaphthalene	0.010 U	NA	0.010 U	0.010 U	**0.018**	**0.016**	**0.098** J	0.010 U	NA	NA	NA
1-Methylnaphthalene	0.010 U	NA	0.010 U	0.010 U	**0.021**	**0.019**	**0.083** J	0.010 U	NA	NA	NA
Acenaphthylene	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	NA	NA	NA
Acenaphthene	0.010 U	NA	0.010 U	**0.088**	**0.010**	**0.012**	0.010 UJ	**0.031**	NA	NA	NA
Fluorene	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	NA	NA	NA
Phenanthrene	0.013 U	NA	0.010 U	0.010 U	**0.048**	**0.16**	**0.028** J	0.010 U	NA	NA	NA
Anthracene	0.010 U	NA	0.010 U	0.010 U	0.010 U	**0.017**	0.010 UJ	0.010 U	NA	NA	NA
Fluoranthene	0.041 U	NA	0.010 U	0.010 U	**0.11**	**0.54**	**0.046** J	0.010 U	NA	NA	NA
Pyrene	**0.030**	NA	0.010 U	0.010 U	**0.083**	**0.66** J	**0.055** J	0.010 U	NA	NA	NA
Benzo(a)anthracene	0.010 U	NA	0.010 U	0.010 U	**0.018**	**0.30**	**0.013** J	0.010 U	NA	NA	NA
Chrysene	**0.026**	NA	0.010 U	0.010 U	**0.082**	**0.43**	**0.042** J	0.010 U	NA	NA	NA
Benzo(a)pyrene	**0.012**	NA	0.010 U	0.010 U	**0.033**	**0.35**	**0.018** J	0.010 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	**0.015**	NA	0.010 U	0.010 U	**0.050**	**0.29**	**0.027** J	0.010 U	NA	NA	NA
Dibenz(a,h)anthracene	0.010 U	NA	0.010 U	0.010 UJ	0.010 U	**0.066**	0.010 UJ	0.010 U	NA	NA	NA
Benzo(g,h,i)perylene	**0.016**	NA	0.010 U	0.010 U	**0.066**	**0.33**	**0.037** J	0.010 U	NA	NA	NA
Dibenzofuran	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 UJ	0.010 U	NA	NA	NA
Total Benzofluoranthenes	**0.043**	NA	0.020 U	0.020 U	**0.14**	**0.74**	**0.058** J	0.020 U	NA	NA	NA
CPAH TEQ	**0.018**	NA	ND	ND	**0.055**	**0.494**	**0.028** J	ND	NA	NA	NA

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	YB86A/YB86C/YB88A	YG17A/YG17C/YG18A	YR11A/YR11E/YR12A	ZE23A/ZE23E/ZE24A	ZF08A/ZF08E/ZF09A	ZO34A/ZO34E/ZO35A	ZQ78A/ZQ78E/ZQ79A	ZS95A/ZS95E/ZS96A	ZU80A	ZV55A	AEB1A
Sample Start Date	3/5/2014	4/7/2014	7/7/2014	10/6/2014	10/13/2014	12/9/2014	12/23/2014	1/12/2015	--	2/5/2015	4/7/2015
Sample End Date	3/6/2014	4/10/2014	7/10/2014	10/9/2014	10/14/2014	12/10/2014	12/24/2014	1/15/2015	2/2/2015	2/6/2015	4/10/2015
Event Type	Storm	Quarterly	Quarterly	Quarterly	Storm	Storm	Storm	Quarterly	Quarterly	Storm	Quarterly
Sample Type	Flow-weighted composite								Grab	Flow-weighted composite	Flow-weighted composite
TOTAL METALS (µg/L)											
Method EPA200.8/6010B,C/7470A											
Arsenic	**0.4**	**0.7**	**0.7**	**0.8**	**0.8**	**0.5**	**0.4**	**0.7**	NA	NA	NA
Cadmium	**0.1**	**0.1**	0.1 U	0.1 U	**0.2**	**0.1**	**0.1**	0.1 U	NA	NA	NA
Chromium	**0.8**	**0.6**	**2**	**0.6**	**1.3**	**0.5**	**0.6**	1 U	NA	NA	NA
Copper	**3.3**	**3.8**	**2.5**	0.5 U	**4.8**	**2.6**	**2.3**	**0.7**	NA	NA	NA
Iron	**1110**	**5870**	**5040**	**1570**	**3450**	**1520**	**1740**	**2220**	NA	NA	NA
Lead	**0.8**	**0.7**	**0.2**	0.1 U	**2.3**	**0.7**	**0.6**	0.1 U	NA	NA	NA
Manganese	**81**	**820**	**450**	**1010**	**63**	**164**	**115**	**1320**	NA	NA	NA
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NA	NA	NA
Nickel	**2.7**	**1.2**	**1.7**	**2.0**	**1.0**	**1.0**	**0.6**	**1.4**	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**24**	**19**	**4**	4 U	**33**	**24**	**19**	**7**	NA	NA	NA
DISSOLVED METALS (µg/L)											
Method EPA200.8/6010C											
Arsenic	**0.3**	**0.3**	**0.6**	**0.6**	**0.3**	**0.3**	**0.2**	**0.5**	NA	NA	NA
Cadmium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NA	NA	NA
Chromium	0.5 U	1 U	**2**	0.5 U	0.5 U	0.5 U	0.5 U	1 U	NA	NA	NA
Copper	**2.3**	**2.4**	**2.2**	0.5 U	**1.4**	**1.7**	**1.2**	**0.6**	NA	NA	NA
Iron	**430**	**230**	**3760**	**110**	**160**	**450**	**230**	**110**	NA	NA	NA
Lead	**0.2**	0.1 U	**0.1**	0.1 U	0.1 U	**0.1**	0.1 U	0.1 U	NA	NA	NA
Manganese	**62**	**322**	**398**	**862**	**35**	**72**	**44**	**991**	NA	NA	NA
Nickel	**2.4**	**0.8**	**1.2**	**1.7**	0.5 U	**0.8**	0.5 U	**1.2**	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	**19**	**8**	4 U	4 U	**9**	**17**	**12**	**4**	NA	NA	NA
DISSOLVED METALS (ng/L)											
Method SW7470A											
Mercury	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	NA	NA	NA
CONVENTIONALS											
pH (SU; EPA 150.1; SM 4500H)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	**9.0**	**13.2**	**2.1**	**12.6**	**20.4**	**8.9**	**7.1**	**9.1**	**8.4**	NA	NA
Turbidity (NTU; EPA 180.1)	**3.77**	**14.1**	**15.0**	**8.19**	**16.1**	**4.75**	**5.23**	**8.50**	NA	NA	NA
PARTICLE/GRAIN SIZE (mg/L)											
Method ASTM-D3977C											
Sediment Conc. > 500 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 500 to 250 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 250 to 125 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 125 to 62.5 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 62.5 to 3.9 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 3.9 to 1 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. < 1 µm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PRECIPITATION (c)											
Amount During Test (inches)	0.55	0.38	0.00	0.00	0.63	0.54	0.71	0.00	0.03	0.72	0.01

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	AIH9A	AIO4A	AIY6A	AKV0A	ALR5A	AOB4A	AOJ7A	APT0A
Sample Start Date	--	--	--	--	--	10/5/2015	10/10/2015	10/30/2015
Sample End Date	6/25/2015	6/30/2015	7/9/2015	8/14/15	9/1/2015	10/8/2015	10/11/2015	10/31/2015
Event Type	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Storm	Storm
Sample Type	Grab	Grab	Flow-weighted composite	Grab	Grab	Flow-weighted composite	Flow-weighted composite	Flow-weighted composite
PCBs (µg/L) (a)								
Method SW8082A								
Aroclor 1016	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1242	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1248	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1254	NA	NA	0.005 U	NA	NA	0.005 U	**0.0070** J	0.005 U
Aroclor 1260	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1221	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1232	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Aroclor 1262	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U	0.005 U
Total PCBs (b)	NA	NA	ND	NA	NA	ND	**0.0070** J	ND
SEMIVOLATILES (µg/L)								
Method SW8270D								
Phenol	NA	NA	NA	NA	NA	NA	NA	NA
Bis-(2-Chloroethyl) Ether	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl Alcohol	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-Oxybis(1-Chloropropane)	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-Di-N-Propylamine	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic Acid	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy) Methane	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	AIH9A	AIO4A	AIY6A	AKV0A	ALR5A	AOB4A	AOJ7A	APT0A
Sample Start Date	--	--	--	--	--	10/5/2015	10/10/2015	10/30/2015
Sample End Date	6/25/2015	6/30/2015	7/9/2015	8/14/15	9/1/2015	10/8/2015	10/11/2015	10/31/2015
Event Type	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Storm	Storm
Sample Type	Grab	Grab	Flow-weighted composite	Grab	Grab	Flow-weighted composite	Flow-weighted composite	Flow-weighted composite
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Butylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Octyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
Total Benzofluoranthenes	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)								
Method SW8270D-SIM								
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA
Total Benzofluoranthenes	NA	NA	NA	NA	NA	NA	NA	NA
CPAH TEQ	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

Sample Location ID	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W	LS431-W
Laboratory Data ID	AIH9A	AIO4A	AIY6A	AKV0A	ALR5A	AOB4A	AOJ7A	APT0A
Sample Start Date	--	--	--	--	--	10/5/2015	10/10/2015	10/30/2015
Sample End Date	6/25/2015	6/30/2015	7/9/2015	8/14/15	9/1/2015	10/8/2015	10/11/2015	10/31/2015
Event Type	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Storm	Storm
Sample Type	Grab	Grab	Flow-weighted composite	Grab	Grab	Flow-weighted composite	Flow-weighted composite	Flow-weighted composite
TOTAL METALS (µg/L)								
Method EPA200.8/6010B,C/7470A								
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED METALS (µg/L)								
Method EPA200.8/6010C								
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
DISSOLVED METALS (ng/L)								
Method SW7470A								
Mercury	NA	NA	NA	NA	NA	NA	NA	NA
CONVENTIONALS								
pH (SU; EPA 150.1; SM 4500H)	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids (mg/L; EPA 160.2; SM2540D)	**100**	**3.1**	NA	**107**	**9.4**	**5.3**	NA	NA
Turbidity (NTU; EPA 180.1)	NA	**8.88**	NA	NA	NA	NA	NA	NA
PARTICLE/GRAIN SIZE (mg/L)								
Method ASTM-D3977C								
Sediment Conc. > 500 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 500 to 250 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 250 to 125 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 125 to 62.5 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 62.5 to 3.9 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. 3.9 to 1 µm	NA	NA	NA	NA	NA	NA	NA	NA
Sediment Conc. < 1 µm	NA	NA	NA	NA	NA	NA	NA	NA
PRECIPITATION (c)								
Amount During Test (inches)	0.00	0.00	0.00	0.13	0.12	0.39	0.53	0.98

TABLE 2
LS431 WHOLE WATER SAMPLING ANALYTICAL RESULTS
LONG-TERM STORMWATER TREATMENT SYSTEM
NORTH BOEING FIELD - SEATTLE, WASHINGTON

TEQ = Total Equivalency Quotient
cPAH = Carcinogenic Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SIM = Select Ion Monitoring
-- = Not applicable (grab sample does not require start/end date).
NA = Not Analyzed.
ND = Not Detected.
Bold = Detected compound.

EPA = U.S. Environmental Protection Agency
ASTM = American Society for Testing and Materials
ARI = Analytical Resources Inc.
NOAA = National Oceanic and Atmospheric Administration
µg/L = micrograms per liter
mg/L = milligrams per liter
µm = micrometer
ng/L = nanograms per liter

SU = Standard Units
NTU = Nephelometric Turbidity Units

B = Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's limit of quantitation or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = Indicates the compound was not detected at the reported concentration.

(a) Starting in December 2012, ARI evaluated PCBs in whole water between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). For these non-detect results, the reported concentration shown is the LOD (1/2 the LOQ).
(b) Total PCBs is the sum of detected aroclors or, if no aroclors are detected, is reported as non-detect (ND).
(c) Precipitation data is from the NOAA Quality Controlled Local Climatological Data for Station 24234/BFI - SEATTLE: BOEING FIELD/KING COUNTY INTERNATIONAL AIRPORT.

E2. Bach 2016

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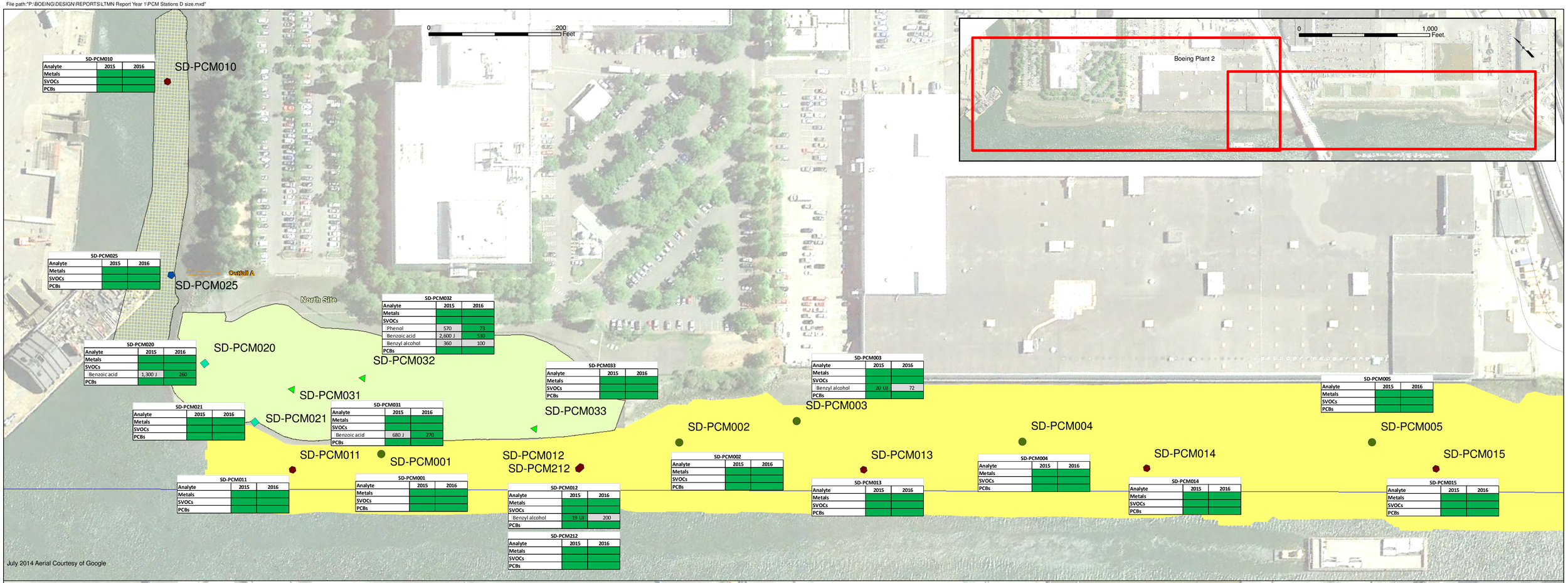


SD-PCM010	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM025	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM020	2015	2016
Analyte		
Metals		
SVOCs		
Benzoic acid	1,300 J	260
PCBs		

SD-PCM032	2015	2016
Analyte		
Metals		
SVOCs		
Phenol	570	73
Benzoic acid	2,600 J	530
Benzyl alcohol	360	100
PCBs		

SD-PCM021	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM031	2015	2016
Analyte		
Metals		
SVOCs		
Benzoic acid	680 J	270
PCBs		

SD-PCM033	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM003	2015	2016
Analyte		
Metals		
SVOCs		
Benzyl alcohol	20 UJ	72
PCBs		

SD-PCM005	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM011	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM001	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM012	2015	2016
Analyte		
Metals		
SVOCs		
Benzyl alcohol	19 UJ	200
PCBs		

SD-PCM212	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

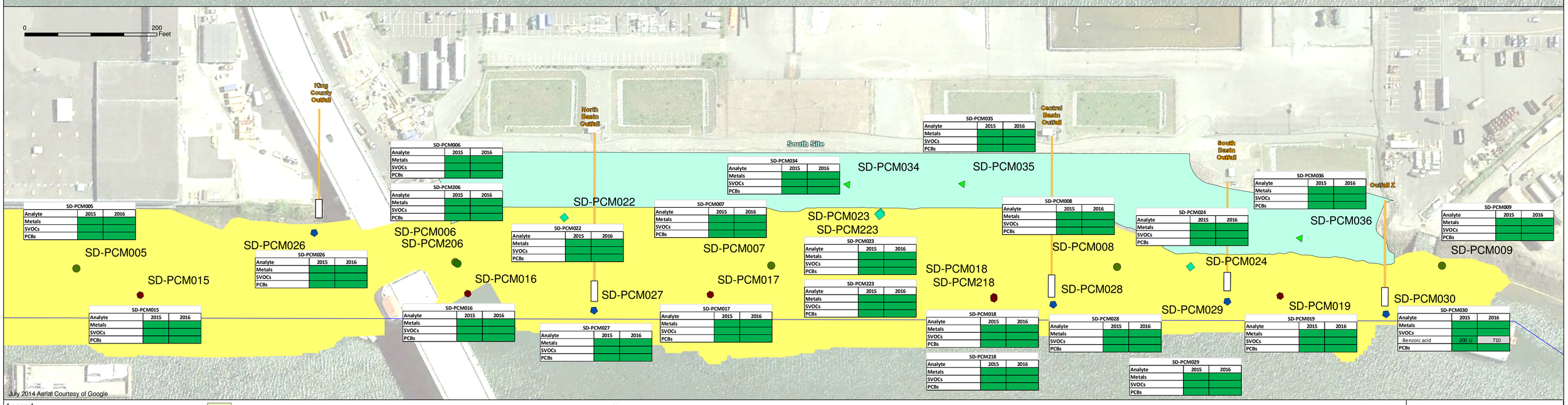
SD-PCM002	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM013	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM004	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM014	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM015	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		



SD-PCM006	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM206	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM005	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM026	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM022	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM034	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM035	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM007	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM023	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM223	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM008	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM024	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM036	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM009	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM015	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM016	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM027	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM017	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM018	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM218	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM028	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM029	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM019	2015	2016
Analyte		
Metals		
SVOCs		
PCBs		

SD-PCM030	2015	2016
Analyte		
Metals		
SVOCs		
Benzoic acid	200 U	710
PCBs		

Legend

- Shoreline Area Samples (at approximately +7 ft MLLW)
- Shoreline Area Samples (at approximately +4 ft MLLW)
- Sampling Locations (above -5 ft MLLW and below + 4 ft MLLW)
- Sampling Location (below -5 ft MLLW)
- Outfall Sample Locations
- North Site
- South Site
- Slip 4 Approximate Dredge Area
- DSOA Limits of Dredging

SMS COC Groups

SD-PCM030	2015	2016
Analyte		
Metals		
SVOCs		
Benzoic acid	200 U	710
PCBs		

Sampling Location

SMS Analyte That Exceeds SMS Criteria

Notes:
Sediment concentrations for Sediment Management Standards (SMS) chemicals of concern (COC) are compared to the SMS dry weight equivalent sediment criteria (Sediment Quality Standard [SQS] and Cleanup Screening Level [CSL] criteria). If all of the SMS COCs within a group are below the SQS then the cell is colored green. If one or more analytes exceed the SQS (or CSL) then the analyte is listed with the results from each year and the cells are color coded gray to indicate the value exceeds one or more of the SMS criterion.

POST-CONSTRUCTION SURFACE MONITORING
SAMPLING RESULTS 2015 AND 2016
Duwamish Sediment Other Area and Southwest
Bank Corrective Measure and Habitat Project,
Boeing Plant 2, Seattle/Tukwila, Washington

BOEING

By: RHG	Date: 6/1/2016	Project No. 0131320100
		Figure 1

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW																														
	Location	SD-PCM001						SD-PCM002						SD-PCM003						SD-PCM004						SD-PCM005					
	Monitoring Year	Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)		
	Collection Date	3/11/2015			3/9/2016			3/10/2015			3/9/2016			3/11/2015			3/9/2016			3/11/2015			3/9/2016			3/10/2015			3/10/2016		
	Sample Depth (ft)	0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33		
	Sample ID	SD-PCM00115			SD-PCM00116			SD-PCM00215			SD-PCM00216			SD-PCM00315			SD-PCM00316			SD-PCM00415			SD-PCM000416			SD-PCM00515			SD-PCM00516		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																
Total Organic Carbon (percent)	—	0.061			0.471		J	0.068			0.466		J	0.076			2.71		J	0.087			1.48		J	0.083			0.157		J
Metals (mg/kg)																																
Arsenic	57	2			3.9			2.3			2.8			2.2			8.9			2.4			6.2			2			2.7		
Cadmium	5.1	0.3			0.2	U		0.3			0.2	U		0.2			0.4	U		0.2			0.3	U		0.2			0.2	U	
Chromium	260	18.9			12.8			16.2			21.2			18.3			25.8			18.1			15.4			19.4			21.9		J
Copper	390	16.2			13.9			15.6			13.9			13.7			36.5			16			18.7			13.8			15.6		
Lead	450	2			3			2	U		3			2	U		11			2	U		5			2	U		2		
Mercury	0.41	0.02	U		0.03	U		0.02	U		0.03			0.02	U		0.08			0.03			0.04			0.02	U		0.02	U	
Silver	6.1	0.3	U		0.4	U		0.3	U		0.3	U		0.3	U		0.5	U		0.3	U		0.4	U		0.3	U		0.4	U	
Zinc	410	31			29			31			30			28			71			30			39			29			32		
Non-ionizable Organic Compounds																																
Aromatic Hydrocarbons (µg/kg)																																
Total LPAHs	5,200	20	U		20	U		20	U		19	U		20	U		44.7	J		20	U		24.8	J		19	U		19	U	
Naphthalene	2,100	20	U		20	U		20	U		19	U		20	U		6.9	J		20	U		5.8	J		19	U		19	U	
Acenaphthylene	1,300	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	
Acenaphthene	500	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	
Fluorene	540	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	
Phenanthrene	1,500	20	U		20	U		20	U		19	U		20	U		30			20	U		19			19	U		19	U	
Anthracene	960	20	U		20	U		20	U		19	U		20	U		7.8	J		20	U		19	U		19	U		19	U	
2-Methylnaphthalene	670	20	U		20	U		20	U		19	U		20	U		7.8	J		20	U		7.7	J		19	U		19	U	
Total HPAHs	12,000	40	U		40	U		40	U		51.5	J		40	U		336.1			40	U		200.7	J		60	J		12.3	J	
Fluoranthene	1,700	20	U		20	U		20	U		8.7	J		20	U		60			20	U		45			19	U		5.7	J	
Pyrene	2,600	20	U		20	U		20	U		11	J		20	U		57			20	U		34			19	U		6.6	J	
Benz[a]anthracene	1,300	20	U		20	U		20	U		19	U		20	U		24			20	U		19	U		19	U		19	U	
Chrysene	1,400	20	U		20	U		20	U		11	J		20	U		50			20	U		30			19	U		19	U	
Total benzofluoranthenes	3,200	40	U		40	U		40	U		14	J		40	U		69			40	U		44			10	J		38	U	
Benzo[a]pyrene	1,600	20	U		20	U		20	U		6.8	J		20	U		24			20	U		14	J		19	U		19	U	
Indeno[1,2,3-c,d]pyrene	600	20	U		20	U		20	U		19	U		20	U		20		J	20	U		12	J	J	6.5	J		19	U	
Dibenzo[a,h]anthracene	230	5	U		5	U		4.9	U		4.8	U		5	U		6.1		J	5	U		4.7	J	J	4.3	J		4.8	U	
Benzo[g,h,i]perylene	670	20	U		20	U		20	U		19	U		20	U		26		J	20	U		17	J	J	39			19	U	
Chlorinated Benzenes (µg/kg)																																
1,2-Dichlorobenzene	35	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		2.8	J		2.8	J	
1,4-Dichlorobenzene	110	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		2.5	J		4.8	U	
1,2,4-Trichlorobenzene	31	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		2.6	J		4.8	U	
Hexachlorobenzene	22	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		3.5	J		3.1	J	
Phthalate Esters (µg/kg)																																
Dimethyl phthalate	71	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		4.7	U		3	J	
Diethyl phthalate	200	20	U		20	U		20	U		19	U		20	U		20	U		23		J	24			19	U		19	U	
Di-n-butyl phthalate	1,400	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	
Butyl benzyl phthalate	63	5	U		5	U		4.9	U		4.8	U		5	U		8.6			5	U		4.2	J		2.9	J	J	5		
Bis[2-ethylhexyl] phthalate	1,300	50	U		50	U		49	U		48	U		50	U		120			50	U		75			47	U		48	U	
Di-n-octyl phthalate	6,200	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW**																														
	Location	**SD-PCM001**						**SD-PCM002**						**SD-PCM003**						**SD-PCM004**						**SD-PCM005**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM00115**			**SD-PCM00116**			**SD-PCM00215**			**SD-PCM00216**			**SD-PCM00315**			**SD-PCM00316**			**SD-PCM00415**			**SD-PCM000416**			**SD-PCM00515**			**SD-PCM00516**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																
Miscellaneous (µg/kg)																																
Dibenzofuran	540	20	U		20	U		20	U		19	U		20	U		20	U		20	U		19	U		19	U		19	U	
Hexachlorobutadiene	11	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		2.4	J		4.8	U	
N-nitrosodiphenylamine	28	5	U		5	U		4.9	U		4.8	U		5	U		4.9	U		5	U		4.8	U		4.7	U		4.8	U	
Ionizable Organic Compounds (µg/kg)																																
Phenol	420	20	U	UJ	20	U		20	U		19	U		20	U	UJ	16	J		20	U	UJ	19	U		10	J		19	U	
2-Methylphenol	63	5	U	UJ	5	U		4.9	U		4.8	U	UJ	5	U	UJ	2.6	J		5	U	UJ	4.8	U		4.7	U		4.8	U	
4-Methylphenol	670	20	U	UJ	20	U		20	U		19	U		20	U	UJ	24			20	U	UJ	19	U		19	U		19	U	
2,4-Dimethylphenol	29	25	U	UJ	25	U		25	U		24	U		25	U	UJ	24	U		25	U	UJ	24	U		23	U		24	U	
Pentachlorophenol	360	20	U	UJ	20	U		20	U		19	U	UJ	20	U	UJ	20	U		20	U	UJ	19	U		19	U	UJ	19	U	
Benzyl alcohol	57	20	U	UJ	20	U		20	U		19	U		20	U	UJ	72			20	U	UJ	46			19	U		19	U	
Benzoic acid	650	200	U	UJ	200	U		200	U		190	U		200	U	UJ	180	J		200	U	UJ	110	J		190	U		190	U	
PCBs (µg/kg)																																
Aroclor 1016	NE	3.9	U		3.7	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U	
Aroclor 1221	NE	3.9	U		3.7	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U	
Aroclor 1232	NE	3.9	U		3.7	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U	
Aroclor 1242	NE	3.9	U		3.7	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U	
Aroclor 1248	NE	3.9	U		3.7	U		3.9	U		3.9	U		3.9	U		11			3.9	U		7			3.8	U		3.8	U	
Aroclor 1254	NE	3.9	U		4.6			3.9	U		6.6	P	J	3.9	U		17			3.9	U		12			3.8	U		3.8	U	
Aroclor 1260	NE	3.9	U		2.2	J		3.9	U		2.3	J		3.9	U		16			3.9	U		7.9			3.8	U		3.8	U	
Total PCBs (µg/kg Dry-Weight)	130	3.9	U		6.8	J	J [5]	3.9	U		8.9	J	J [5]	3.9	U		44			3.9	U		26.9			3.8	U		3.8	U	
Total PCBs (mg/kg OC) [4]	12	—			—			—			—			—			1.6		J [6]	—			1.8		J [6]	—			—		

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW**																													
	Location	**SD-PCM006**						**SD-PCM206**						**SD-PCM007**						**SD-PCM008**						**SD-PCM009**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/10/2015**			**3/10/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/25/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM00615**			**SD-PCM00616**			**SD-PCM20615**			**SD-PCM20616**			**SD-PCM00715**			**SD-PCM00716**			**SD-PCM00815**			**SD-PCM00816**			**SP-PCM00915**			**SD-PCM00916**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																															
Total Organic Carbon(percent)	—	0.08			0.083		J	0.048			0.094		J	0.079			0.161		J	0.04			0.059		J	0.051			0.334		J
Metals (mg/kg)																															
Arsenic	57	2			2.7			1.9			3			1.8			2.4			1.2			2.6			1.6			2.9		
Cadmium	5.1	0.2			0.2	U		0.2	U		0.2	U		0.2			0.2	U		0.2	U		0.2	U		0.2	U		0.2	U	
Chromium	260	16.2		J	19.7		J	20.7			18.7		J	20.9			14.4		J	17.9			24.5		J	15.9			19.1		J
Copper	390	13.9			14.9			13			17.3			13.3			12.2			12.4			15.7			11.5			14.4		J
Lead	450	2	U		2			2	U		3			2	U		3			2	U		2			2	U		4		
Mercury	0.41	0.02	U		0.02	U		0.02	U		0.02	U		0.03	U		0.02	U		0.03	U		0.02	U		0.02	U		0.02	U	
Silver	6.1	0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.4	U	
Zinc	410	27			32			26			36			30			29			28			32			25			33		
Non-ionizable Organic Compounds																															
Aromatic Hydrocarbons (µg/kg)																															
Total LPAHs	5,200	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		5.7	J	
Naphthalene	2,100	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Acenaphthylene	1,300	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Acenaphthene	500	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Fluorene	540	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Phenanthrene	1,500	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		5.7	J	J
Anthracene	960	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
2-Methylnaphthalene	670	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Total HPAHs	12,000	38	U		39	U		39	U		39	U		2.5	J		22	J		39	U		38	U		37	U		107.6	J	
Fluoranthene	1,700	19	U		20	U		19	U		19	U		19	U		11	J		20	U		19	U		18	U		46		J
Pyrene	2,600	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		42		J
Benz[a]anthracene	1,300	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Chrysene	1,400	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		7.6	J	J
Total benzofluoranthenes	3,200	38	U		39	U		39	U		39	U		37	U		11	J		39	U		38	U		37	U		12	J	J
Benzo[a]pyrene	1,600	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Indeno[1,2,3-c,d]pyrene	600	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Dibenzo[a,h]anthracene	230	4.8	U		4.9	U		4.8	U		4.8	U		2.5	J		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Benzo[g,h,i]perylene	670	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Chlorinated Benzenes (µg/kg)																															
1,2-Dichlorobenzene	35	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
1,4-Dichlorobenzene	110	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
1,2,4-Trichlorobenzene	31	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Hexachlorobenzene	22	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Phthalate Esters (µg/kg)																															
Dimethyl phthalate	71	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Diethyl phthalate	200	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		20	B	U	19	U	UJ
Di-n-butyl phthalate	1,400	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Butyl benzyl phthalate	63	4.8	U		4.9	U		4.8	U		4.8	U		5.3	Q	J	4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Bis[2-ethylhexyl] phthalate	1,300	48	U		49	U		48	U		48	U		46	U		48	U		49	U		47	U		46	U		32	J	J
Di-n-octyl phthalate	6,200	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW**																														
	Location	**SD-PCM006**						**SD-PCM206**						**SD-PCM007**						**SD-PCM008**						**SD-PCM009**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/10/2015**			**3/10/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/25/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM00615**			**SD-PCM00616**			**SD-PCM20615**			**SD-PCM20616**			**SD-PCM00715**			**SD-PCM00716**			**SD-PCM00815**			**SD-PCM00816**			**SP-PCM00915**			**SD-PCM00916**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																
Miscellaneous (µg/kg)																																
Dibenzofuran	540	19	U		20	U		19	U		19	U		19	U		19	U		20	U		19	U		18	U		19	U	UJ
Hexachlorobutadiene	11	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
N-nitrosodiphenylamine	28	4.8	U		4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U		4.7	U		4.6	U		4.7	U	UJ
Ionizable Organic Compounds (µg/kg)																																
Phenol	420	19	U	UJ	20	U		19	U		19	U		19	U		19	U		20	U	UJ	19	U		18	U		19	U	J
2-Methylphenol	63	4.8	U	UJ	4.9	U		4.8	U		4.8	U		4.6	U		4.8	U		4.9	U	UJ	4.7	U		4.6	U		4.7	U	UJ
4-Methylphenol	670	19	U	UJ	20	U		19	U		19	U		19	U		19	U		20	U	UJ	19	U		18	U		19	U	UJ
2,4-Dimethylphenol	29	24	U		24	U		24	U		24	U		23	U		24	U		24	U	UJ	24	U		23	U		24	U	UJ
Pentachlorophenol	360	19	U	UJ	20	U		19	U		19	U		19	U		19	U		20	U	UJ	19	U		18	U		19	U	UJ
Benzyl alcohol	57	19	U	UJ	20	U		19	U		19	U		19	U		19	U	UJ	20	U	UJ	19	U		18	U		19	U	UJ
Benzoic acid	650	190	U	UJ	200	U		190	U		190	U		190	U		190	U		200	U	UJ	190	U		180	U		190	Q	J
PCBs (µg/kg)																																
Aroclor 1016	NE	3.8	U		3.9	U		3.8	U		3.9	U		4	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U	
Aroclor 1221	NE	3.8	U		3.9	U		3.8	U		3.9	U		4	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U	
Aroclor 1232	NE	3.8	U		3.9	U		3.8	U		3.9	U		4	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U	
Aroclor 1242	NE	3.8	U		3.9	U		3.8	U		3.9	U		4	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U	
Aroclor 1248	NE	3.8	U		3.9	U		3.8	U		3.9	U		4	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U	
Aroclor 1254	NE	3.8	U		3.9	J		3.8	U		3.9	U		4	U		4.5			3.9	U		3.8	U		3.9	U		4.6		
Aroclor 1260	NE	3.8	U		3.1	J		3.8	U		3.9	U		4	U		2.7	J		3.9	U		3.8	U		3.9	U		2.7	J	
Total PCBs (µg/kg Dry-Weight)	130	3.8	U		7	J	J [5]	3.8	U		3.9	U		4	U		7.2	J	J [5]	3.9	U		3.8	U		3.9	U		7.3	J	J [5]
Total PCBs (mg/kg OC) [4]	12	—			—			—			—			—			—			—			—			—			—		

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Dredging Area Samples Below -5 feet MLLW**																																	
	Location	**SD-PCM010**						**SD-PCM011**						**SD-PCM012**						**SD-PCM212**						**SD-PCM013**						**SD-PCM014**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM01015**			**SD-PCM01016**			**SD-PCM01115**			**SD-PCM01116**			**SD-PCM01215**			**SD-PCM01216**			**SD-PCM21215**			**SD-PCM21216**			**SD-PCM01315**			**SD-PCM01316**			**SD-PCM01415**			**SD-PCM01416**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																					
Total Organic Carbon(percent)	—	0.097			1.95		J	0.165			0.59		J	0.095			1.82		J	0.065			2.15		J	0.065			0.077		J	0.065			1.78		J
Metals (mg/kg)																																					
Arsenic	57	1.9			5.7			3			2.6			2.3		J	6.2		J	1.6			3.9		J	2.2			2.2			2.2			4.4		
Cadmium	5.1	0.2			0.3	U		0.2			0.2	U		0.2	U		0.3	U		0.2	U		0.2	U		0.2			0.2	U		0.2			0.3	U	
Chromium	260	16.6			23.2			17.2			15.7			14.2			20.7			16.2			18.9			28.2			19.6			18.8			17.7		
Copper	390	17.9			26.7			13.4			14			13.1			27.6		J	12.7			20.7		J	14.3			13.6			15.5			23.2		
Lead	450	2	U		7			2	U		3			2	U		10		J	2	U		6		J	2	U		2	U		2	U		7		
Mercury	0.41	0.02	U		0.08			0.02	U		0.02	U		0.02	U		0.07			0.02	U		0.04			0.02	U		0.02	U		0.05			0.05		
Silver	6.1	0.3	U		0.4	U		0.3	U		0.3	U		0.3	U		0.5	U		0.3	U		0.4	U		0.3	U		0.3	U		0.3	U		0.4	U	
Zinc	410	29			50			26			32			27			59		J	25			42		J	30			27			34			47		
Non-ionizable Organic Compounds																																					
Aromatic Hydrocarbons (µg/kg)																																					
Total LPAHs	5,200	19	U		42	J		19	U		19.4	J		19	U		62	J		20	U		33.8	J		19	U		20	U		19	U		25.9	J	
Naphthalene	2,100	19	U		20	U		19	U		18	U		19	U		18	J		20	U		20	U		19	U		20	U		19	U		20	U	
Acenaphthylene	1,300	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Acenaphthene	500	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Fluorene	540	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Phenanthrene	1,500	19	U		28			19	U		13	J		19	U		31			20	U		25			19	U		20	U		19	U		19	J	
Anthracene	960	19	U		14	J		19	U		6.4	J		19	U		13	J		20	U		8.8	J		19	U		20	U		19	U		6.9	J	
2-Methylnaphthalene	670	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Total HPAHs	12,000	38	U		345.6	J		38	U		77.1	J		38	U		386.4			40	U		295.7			38	U		40	U		37	U		256.6	J	
Fluoranthene	1,700	19	U		81			19	U		15	J		19	U		74			20	U		70			19	U		20	U		19	U		50		
Pyrene	2,600	19	U		69			19	U		14	J		19	U		64			20	U		65			19	U		20	U		19	U		41		
Benz[a]anthracene	1,300	19	U		26			19	U		5.5	J		19	U		30			20	U		20			19	U		20	U		19	U		22		
Chrysene	1,400	19	U		43			19	U		11	J		19	U		54			20	U		37			19	U		20	U		19	U		30		
Total benzofluoranthenes	3,200	38	U		62			38	U		16	J		38	U		75			40	U		53			38	U		40	U		37	U		51		
Benzo[a]pyrene	1,600	19	U		22			19	U		9.2	J		19	U		29			20	U		24			19	U		20	U		19	U		24		
Indeno[1,2,3-c,d]pyrene	600	19	U		16	J	J	19	U		6.4	J	J	19	U		22		J	20	U		20	U		19	U		20	U		19	U		13	J	J
Dibenzo[a,h]anthracene	230	4.8	U		4.6	J	J	4.8	U		4.6	U		4.8	U		9.4		J	5	U		6.7		J	4.8	U		5	U		4.7	U		4.6	J	J
Benzo[g,h,i]perylene	670	19	U		22		J	19	U		18	U		19	U		29		J	20	U		20		J	19	U		20	U		19	U		21		J
Chlorinated Benzenes (µg/kg)																																					
1,2-Dichlorobenzene	35	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
1,4-Dichlorobenzene	110	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
1,2,4-Trichlorobenzene	31	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
Hexachlorobenzene	22	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
Phthalate Esters (µg/kg)																																					
Dimethyl phthalate	71	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		2.4	J	
Diethyl phthalate	200	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		22		
Di-n-butyl phthalate	1,400	19	U		20	U		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Butyl benzyl phthalate	63	4.8	U		5.5			4.8	U		4.6	U		4.8	U		4.2	J		5	U		3.4	J		4.8	U		5	U		4.7	U		3.2	J	
Bis[2-ethylhexyl] phthalate	1,300	48	U		85			48	U		46	U		48	U		74			50	U		41	J		48	U		50	U		47	U		49		
Di-n-octyl phthalate	6,200	19	U		13	J		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Dredging Area Samples Below -5 feet MLLW**																																			
	Location	**SD-PCM010**						**SD-PCM011**						**SD-PCM012**						**SD-PCM212**						**SD-PCM013**						**SD-PCM014**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM01015**			**SD-PCM01016**			**SD-PCM01115**			**SD-PCM01116**			**SD-PCM01215**			**SD-PCM01216**			**SD-PCM21215**			**SD-PCM21216**			**SD-PCM01315**			**SD-PCM01316**			**SD-PCM01415**			**SD-PCM01416**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																					
Miscellaneous (µg/kg)																																					
Dibenzofuran	540	19	U		6	J		19	U		18	U		19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U	
Hexachlorobutadiene	11	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
N-nitrosodiphenylamine	28	4.8	U		5	U		4.8	U		4.6	U		4.8	U		4.7	U		5	U		4.9	U		4.8	U		5	U		4.7	U		4.9	U	
Ionizable Organic Compounds (µg/kg)																																					
Phenol	420	19	U	UJ	20	U		19	U	UJ	18	U		19	U	UJ	43			20	U	UJ	9.8	J		10	J		20	U		19	U		9.8	J	
2-Methylphenol	63	4.8	U	UJ	5	U	UJ	4.8	U	UJ	4.6	U	UJ	4.8	U	UJ	4.7	U	UJ	5	U	UJ	4.9	U	UJ	4.8	U		5	U		4.7	U		4.9	U	
4-Methylphenol	670	19	U	UJ	20	U		19	U	UJ	18	U		19	U	UJ	19	U		20	U	UJ	20	U		19	U		20	U		19	U		20	U	
2,4-Dimethylphenol	29	24	U	UJ	25	U		24	U	UJ	23	U		24	U	UJ	24	U		25	U	UJ	24	U		24	U		25	U		23	U		25	U	
Pentachlorophenol	360	19	U	UJ	20	U	UJ	19	U	UJ	18	U	UJ	19	U	UJ	19	U	UJ	20	U	UJ	20	U	UJ	19	U		20	U		19	U		20	U	
Benzyl alcohol	57	19	U	UJ	20	U		19	U	UJ	18	U		19	U	UJ	200		J	20	U	UJ	12	J	J	19	U		20	U		19	U		32		
Benzoic acid	650	190	U	UJ	85	J		190	U	UJ	180	U		190	U	UJ	390			200	U	UJ	200	U		190	U		200	U		190	U		72	J	
PCBs (µg/kg)																																					
Aroclor 1016	NE	3.8	U		3.9	U		3.8	U		3.8	U		3.8	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U		3.7	U		3.9	U	
Aroclor 1221	NE	3.8	U		3.9	U		3.8	U		3.8	U		3.8	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U		3.7	U		3.9	U	
Aroclor 1232	NE	3.8	U		3.9	U		3.8	U		3.8	U		3.8	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U		3.7	U		3.9	U	
Aroclor 1242	NE	3.8	U		3.9	U		3.8	U		3.8	U		3.8	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U		3.7	U		3.9	U	
Aroclor 1248	NE	3.8	U		14			3.8	U		4.7			3.8	U		20		J	3.9	U		11		J	3.8	U		3.9	U		3.7	U		12		
Aroclor 1254	NE	3.8	U		21			3.8	U		12			3.8	U		34		J	3.9	U		20		J	3.8	U		3.9	U		3.7	U		21		
Aroclor 1260	NE	3.8	U		11			3.8	U		4.8			3.8	U		18			3.9	U		10			3.8	U		3.9	U		3.7	U		17		
Total PCBs (µg/kg Dry-Weight)	130	3.8	U		46			3.8	U		21.5			3.8	U		72		J [5]	3.9	U		41		J [5]	3.8	U		3.9	U		3.7	U		50		
Total PCBs (mg/kg OC) [4]	12.0	—			2.4		J [6]	—			3.6		J [6]	—			4.0		J [6]	—			1.9		J [6]	—			—			—			2.8		J [6]

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Dredging Area Samples Below -5 feet MLLW**																																	
	Location	**SD-PCM015**						**SD-PCM016**						**SD-PCM017**						**SD-PCM018**						**SD-PCM218**						**SD-PCM019**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/10/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM01515**			**SD-PCM01516**			**SD-PCM01615**			**SD-PCM01616**			**SD-PCM01715**			**SD-PCM01716**			**SD-PCM01815**			**SD-PCM01816**			**SD-PCM21815**			**SD-PCM21816**			**SD-PCM01915**			**SD-PCM01916**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																					
Total Organic Carbon(percent)	—	0.071			0.047		J	0.076		J	0.193		J	0.079		J	0.046		J	0.059		J	0.038		J	0.187			0.068		J	0.034			0.054		J
Metals (mg/kg)																																					
Arsenic	57	1.9			2.6			2.1			3			2			2.2			5.7		J	2.7		J	3.1			1.8		J	1.5			2		
Cadmium	5.1	0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2	U	
Chromium	260	17		J	20.8		J	13.2		J	23.9		J	17.1		J	19.6		J	23.9		J	17.2		J	18.2			15.3		J	34.5			12.1		J
Copper	390	12.6			15.4			13.2			14.4			12.2			11.5		J	12.6			17		J	13.5			12.1		J	14			12.8		J
Lead	450	2	U		2	U		2	U		3			2	U		2	U		2	U		2			2			2	U		2	U		2	U	
Mercury	0.41	0.02	U		0.02	U		0.02	U		0.03			0.02	U		0.02	U		0.03	U		0.02	U		0.03	U		0.02	U		0.02	U		0.02	U	
Silver	6.1	0.3	U		0.3	U		0.3	U		0.4	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U	
Zinc	410	30			30			25			34			26		J	23			29			34			32			28			28			23		
Non-ionizable Organic Compounds																																					
Aromatic Hydrocarbons (µg/kg)																																					
Total LPAHs	5,200	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		11	J		20	U		20	U		20	U	
Naphthalene	2,100	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Acenaphthylene	1,300	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Acenaphthene	500	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Fluorene	540	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Phenanthrene	1,500	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		11	J		20	U		20	U		20	U	
Anthracene	960	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
2-Methylnaphthalene	670	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Total HPAHs	12,000	38	U		37	U		43	J		28.8	J		2.9	J		40	U		39	U		39	U		80	J		39	U		40	U		40	U	
Fluoranthene	1,700	19	U		19	U		4.8	J		7.4	J		19	U		20	U		20	U		20	U		17	J		20	U		20	U		20	U	
Pyrene	2,600	19	U		19	U		6.8	J		7.4	J		19	U		20	U		20	U		20	U		16	J		20	U		20	U		20	U	
Benz[a]anthracene	1,300	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		7.8	J		20	U		20	U		20	U	
Chrysene	1,400	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		12	J		20	U		20	U		20	U	
Total benzofluoranthenes	3,200	38	U		37	U		39	U		14	J		38	U		40	U		39	U		39	U	UJ	20	J		39	U		40	U		40	U	
Benzo[a]pyrene	1,600	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U	UJ	6.9	J		20	U		20	U		20	U	
Indeno[1,2,3-c,d]pyrene	600	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U	UJ	20	U		20	U		20	U		20	U	
Dibenzo[a,h]anthracene	230	4.8	U		4.6	U		4.6	J		4.6	U		2.9	J		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
Benzo[g,h,i]perylene	670	19	U		19	U		27			19	U		19	U		20	U		20	U		20	U	UJ	20	U		20	U		20	U		20	U	
Chlorinated Benzenes (µg/kg)																																					
1,2-Dichlorobenzene	35	4.8	U		4.6	U		2.8	J		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
1,4-Dichlorobenzene	110	4.8	U		4.6	U		2.8	J		4.6	U		4.8	U		4.9	U	UJ	4.9	U		4.9	U	UJ	4.9	U		4.9	U	UJ	5	U		4.9	U	UJ
1,2,4-Trichlorobenzene	31	4.8	U		4.6	U		2.7	J		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
Hexachlorobenzene	22	4.8	U		4.6	U		3.2	J		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
Phthalate Esters (µg/kg)																																					
Dimethyl phthalate	71	4.8	U		4.6	U		2.7	J		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
Diethyl phthalate	200	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Di-n-butyl phthalate	1,400	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Butyl benzyl phthalate	63	4.8	U		4.6	U		3.6	J	J	4.6	U		2.8	QJ	J	4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		3.8	QJ	J	4.9	U	
Bis[2-ethylhexyl] phthalate	1,300	48	U		46	U		48	U		46	U		48	U		49	U		49	U		49	U		33	J		49	U		50	U		49	U	
Di-n-octyl phthalate	6,200	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Dredging Area Samples Below -5 feet MLLW**																																				
	Location	**SD-PCM015**						**SD-PCM016**						**SD-PCM017**						**SD-PCM018**						**SD-PCM218**						**SD-PCM019**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/10/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM01515**			**SD-PCM01516**			**SD-PCM01615**			**SD-PCM01616**			**SD-PCM01715**			**SD-PCM01716**			**SD-PCM01815**			**SD-PCM01816**			**SD-PCM21815**			**SD-PCM21816**			**SD-PCM01915**			**SD-PCM01916**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																						
Miscellaneous (µg/kg)																																						
Dibenzofuran	540	19	U		19	U		19	U		19	U		19	U		20	U		20	U		20	U		20	U		20	U		20	U		20	U	
Hexachlorobutadiene	11	4.8	U		4.6	U		2.5	J		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
N-nitrosodiphenylamine	28	4.8	U		4.6	U		4.8	U		4.6	U		4.8	U		4.9	U		4.9	U		4.9	U		4.9	U		4.9	U		5	U		4.9	U	
Ionizable Organic Compounds (µg/kg)																																						
Phenol	420	10	J		19	U		9.7	J		19	U		19	U		20	U		20	U	UJ	20	U		20	U		11	J		20	U		20	U	
2-Methylphenol	63	4.8	U		4.6	U		4.8	U		4.6	U		4.8	U		4.9	U		4.9	U	UJ	4.9	U		4.9	U		4.9	U		5	U		4.9	U	
4-Methylphenol	670	19	U		19	U		19	U		19	U		19	U		20	U		20	U	UJ	20	U		20	U		20	U		20	U		20	U	
2,4-Dimethylphenol	29	24	U		23	U		24	U		23	U		24	U		25	U		25	U	UJ	25	U		24	U		25	U		25	U		25	U	UJ
Pentachlorophenol	360	19	U		19	U		19	U		19	U		19	U		20	U	UJ	20	U	UJ	20	U	UJ	20	U		20	U	UJ	20	U		20	U	UJ
Benzyl alcohol	57	19	U		19	U		19	U		19	U		19	U		20	U		20	U	UJ	20	U		20	U		20	U		20	U	UJ	12	J	
Benzoic acid	650	190	U		190	U		190	U		190	U		62	JQ	J	200	U		200	U	UJ	200	U		130	JQ	J	200	U		200	U		200	U	
PCBs (µg/kg)																																						
Aroclor 1016	NE	3.8	U		4	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U	
Aroclor 1221	NE	3.8	U		4	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U	
Aroclor 1232	NE	3.8	U		4	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U	
Aroclor 1242	NE	3.8	U		4	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U	
Aroclor 1248	NE	3.8	U		10	Y	UY	3.9	U		4.1			3.9	U		3.9	U		3.9	U		3.9	U		3.9	U		3.8	U		3.8	U		3.9	U	
Aroclor 1254	NE	3.8	U		4	U		3.9	U		6			3.9	U		3.9	U		3.9	U		3.9	U		5.2			3.8	U		3.8	U		3.9	U	
Aroclor 1260	NE	3.8	U		4	U		3.9	U		3.2	J		3.9	U		3.9	U		3.9	U		3.9	U		3.6	J		3.8	U		3.8	U		3.9	U	
Total PCBs (µg/kg Dry-Weight)	130	3.8	U		10	Y	UY	3.9	U		13.3	J	J [5]	3.9	U		3.9	U		3.9	U		3.9	U		8.8	J	J [5]	3.8	U		3.8	U		3.9	U	
Total PCBs (mg/kg OC) [4]	12.0	—			—			—			—			—			—			—			—			—			—			—			—		

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Shoreline Area Samples at Approximately +4 feet MLLW**																																	
	Location	**SD-PCM020**						**SD-PCM021**						**SD-PCM022**						**SD-PCM023**						**SD-PCM223**						**SD-PCM024**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM02015**			**SD-PCM02016**			**SD-PCM02115**			**SD-PCM02116**			**SD-PCM02215**			**SD-PCM02216**			**SD-PCM02315**			**SD-PCM02316**			**SD-PCM22315**			**SD-PCM22316**			**SD-PCM02415**			**SD-PCM02416**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																					
Total Organic Carbon(percent)	—	2.07			3.39		J	0.118			0.309		J	0.052			0.117		J	0.034			0.09		J	0.054			0.131		J	0.037			0.044		J
Metals (mg/kg)																																					
Arsenic	57	4.8			9.1			2.5			1.9			1.7			2.5			1.7			2.5		J	1.6			2		J	1.9			1.9		
Cadmium	5.1	0.5			0.5	U		0.2			0.2	U		0.2			0.2	U		0.2	U		0.2	U		0.2			0.2	U		0.2			0.2	U	
Chromium	260	29.1			26			17.7			20.1			22.5			27.8		J	22.9			16.2		J	20.1			15.4		J	18			17		J
Copper	390	36.8			36.9			15.9			14.2			14.1			15.1			12.9			11.3			13.9			13			17.5			17.2		
Lead	450	8			9			2	U		2	U		2	U		3			2	U		2	U		2	U		3			2	U		2		
Mercury	0.41	0.04			0.08			0.02	U		0.02	U		0.02	U		0.02	U		0.02	U		0.02	U		0.02	U		0.03	U		0.02	U		0.02	U	
Silver	6.1	0.5	U		0.7	U		0.4	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U	
Zinc	410	64			73			32			30			26.8			33			28			28			30			29			33			32		
Non-ionizable Organic Compounds																																					
Aromatic Hydrocarbons (µg/kg)																																					
Total LPAHs	5,200	57	J		45.3	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		8.8	J		19	U		18	U	
Naphthalene	2,100	20	U		7.7	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Acenaphthylene	1,300	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Acenaphthene	500	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Fluorene	540	20	U		5.8	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Phenanthrene	1,500	43			26			20	U		19	U		19	U		19	U		20	U		19	U		27	U		8.8	J		19	U		18	U	
Anthracene	960	14	J		5.8	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
2-Methylnaphthalene	670	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Total HPAHs	12,000	240	J		226.5	J		40	U		38	U		2.8	J		38	U		40	U		38	U		53	U		29.6	J		38	U		37	U	
Fluoranthene	1,700	49			44			20	U		19	U		19	U		19	U		20	U		19	U		27	U		11	J		19	U		18	U	
Pyrene	2,600	44			38			20	U		19	U		19	U		19	U		20	U		19	U		27	U		9.8	J		19	U		18	U	
Benz[a]anthracene	1,300	19	J		15	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Chrysene	1,400	35			35			20	U		19	U		19	U		19	U		20	U		19	U		27	U		8.8	J		19	U		18	U	
Total benzofluoranthenes	3,200	51			46			40	U		38	U		38	U		38	U		40	U		38	U		53	U		39	U		38	U		37	U	
Benzo[a]pyrene	1,600	11	J		15	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Indeno[1,2,3-c,d]pyrene	600	14	J		14	J	J	20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Dibenzo[a,h]anthracene	230	5.2			5.5		J	5	U		4.8	U		2.8	J		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
Benzo[g,h,i]perylene	670	12	J		14	J	J	20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Chlorinated Benzenes (µg/kg)																																					
1,2-Dichlorobenzene	35	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
1,4-Dichlorobenzene	110	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
1,2,4-Trichlorobenzene	31	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
Hexachlorobenzene	22	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
Phthalate Esters (µg/kg)																																					
Dimethyl phthalate	71	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
Diethyl phthalate	200	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Di-n-butyl phthalate	1,400	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Butyl benzyl phthalate	63	59			12			5	U		4.8	U		4.7	U		4.8	U		2.5	QJ	J	4.8	U		10	Q	J	4.9	U		4.8	U		4.6	U	
Bis[2-ethylhexyl] phthalate	1,300	110			98			50	U		48	U		47	U		48	U		50	U		48	U		66	U		29	J		48	U		46	U	
Di-n-octyl phthalate	6,200	20	U		9.6	J		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Shoreline Area Samples at Approximately +4 feet MLLW**																																			
	Location	**SD-PCM020**						**SD-PCM021**						**SD-PCM022**						**SD-PCM023**						**SD-PCM223**						**SD-PCM024**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM02015**			**SD-PCM02016**			**SD-PCM02115**			**SD-PCM02116**			**SD-PCM02215**			**SD-PCM02216**			**SD-PCM02315**			**SD-PCM02316**			**SD-PCM22315**			**SD-PCM22316**			**SD-PCM02415**			**SD-PCM02416**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																					
Miscellaneous (µg/kg)																																					
Dibenzofuran	540	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Hexachlorobutadiene	11	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
N-nitrosodiphenylamine	28	4.9	U		4.8	U		5	U		4.8	U		4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
Ionizable Organic Compounds (µg/kg)																																					
Phenol	420	260			24			8.9	J		19	U		9.4	J		19	U		20	U		19	U	UJ	27	B	U	140		J	19	U		18	U	
2-Methylphenol	63	4.9	U		4.8	U	UJ	5	U		4.8	U	UJ	4.7	U		4.8	U		5	U		4.8	U		6.6	U		4.9	U		4.8	U		4.6	U	
4-Methylphenol	670	86			20			20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
2,4-Dimethylphenol	29	25	U		24	U		25	U		24	U		24	U		24	U		25	U		24	U		33	U		24	U		24	U		23	U	
Pentachlorophenol	360	13	J	J	19	U	UJ	20	U	UJ	19	U	UJ	19	U		19	U		20	U		19	U		27	U		20	U		19	U		18	U	
Benzyl alcohol	57	20	U		19	U		20	U		19	U		19	U		19	U		20	U		19	U		27	U		20	U	UJ	19	U		18	U	UJ
Benzoic acid	650	1300		J	260			200	U		190	U		190	U		190	U		200	U		190	U		270	U		200	U		190	U		180	U	
PCBs (µg/kg)																																					
Aroclor 1016	NE	3.8	U		3.9	U		4	U		3.8	U		4	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		4	U	
Aroclor 1221	NE	3.8	U		3.9	U		4	U		3.8	U		4	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		4	U	
Aroclor 1232	NE	3.8	U		3.9	U		4	U		3.8	U		4	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		4	U	
Aroclor 1242	NE	58	Y	UY	3.9	U		4	U		3.8	U		4	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		4	U	
Aroclor 1248	NE	3.8	U		26			4	U		6.2			4	U		2.1	J		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U		4	U	
Aroclor 1254	NE	30	P	J	40	P	J	4	U		3.8	U		4	U		3.6	J		3.9	U		3.8	U		3.9	U		4.7			3.9	U		4	U	
Aroclor 1260	NE	27			11			4	U		3.8	U		4	U		3.8	U		3.9	U		3.8	U		3.9	U		5.1			3.9	U		4	U	
Total PCBs (µg/kg Dry-Weight)	130	57		J [5]	77	P	J [5]	4	U		6.2			4	U		5.7	J	J [5]	3.9	U		3.8	U		3.9	U		9.8			3.9	U		4	U	
Total PCBs (mg/kg OC) [4]	12.0	2.8		J [6]	2.3	P	J [6]	—			—			—			—			—			—			—			—			—			—		

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Outfall Samples**																																	
	Location	**SD-PCM025**						**SD-PCM026**						**SD-PCM027**						**SD-PCM028**						**SD-PCM029**						**SD-PCM030**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**			**2/25/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/25/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM02515**			**SD-PCM02516**			**SD-PCM02615**			**SD-PCM02616**			**SD-PCM02715**			**SD-PCM02716**			**SD-PCM02815**			**SD-PCM02816**			**SD-PCM02915**			**SD-PCM02916**			**SD-PCM03015**			**SD-PCM03016**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																					
Total Organic Carbon(percent)	—	0.054			0.985		J	0.058			0.06		J	0.072			0.057		J	0.036			0.041		J	0.049			0.073		J	0.168			1.07		J
Metals (mg/kg)																																					
Arsenic	57	1.8			2.8			1.7			2.1			1.4		J	2.1			2.1			2.1			2.4			2.5			1.6			7.8		
Cadmium	5.1	0.2	U		0.2	U		0.2			0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.2			0.2	U		0.2			0.4	U	
Chromium	260	14.5			16.6			19.7			17		J	15.9			15		J	18.4			15.2		J	28			18.2		J	30			29.7		J
Copper	390	11.7			15.8			17.6			13.5			11.1			15.7		J	12.3			15.1		J	13.8			15.3		J	15.5			32.2		J
Lead	450	2	U		3			2	U		2	U		2	U		2			2	U		2	U		2			2			2	U		8		
Mercury	0.41	0.03	U		0.02	U		0.04			0.02	U		0.02	U		0.02	U		0.02	U		0.02	U		0.02	U		0.03	U		0.02	U		0.06		
Silver	6.1	0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.5	U	
Zinc	410	25			35			28			28			25			26			26			29			33			29			26			64		
Non-ionizable Organic Compounds																																					
Aromatic Hydrocarbons (µg/kg)																																					
Total LPAHs	5,200	19	U		15J			20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		69	J	
Naphthalene	2,100	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		19	J	
Acenaphthylene	1,300	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Acenaphthene	500	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Fluorene	540	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Phenanthrene	1,500	19	U		15	J		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		39		
Anthracene	960	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		11	J	
2-Methylnaphthalene	670	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Total HPAHs	12,000	38	U		89.1	J		4.3	J		39	U		12	J		39	U		37	U		40	U		38	U		40	U		6.9	J		358.5		
Fluoranthene	1,700	19	U		24			20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		6.9	J		67		
Pyrene	2,600	19	U		21			20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		58		
Benz[a]anthracene	1,300	19	U		6.6	J		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		26		
Chrysene	1,400	19	U		10	J		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		50		
Total benzofluoranthenes	3,200	38	U		20	J		39	U		39	U		39	U		39	U		37	U		40	U		38	U		40	U		40	U		68		
Benzo[a]pyrene	1,600	19	U		7.5	J		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		28		
Indeno[1,2,3-c,d]pyrene	600	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		23		
Dibenzo[a,h]anthracene	230	4.7	U		4.7	U		4.3	J		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		6.5		
Benzo[g,h,i]perylene	670	19	U		19	U		23			20	U		12	J		20	U		19	U		20	U		19	U		20	U		20	U		32		
Chlorinated Benzenes (µg/kg)																																					
1,2-Dichlorobenzene	35	4.7	U		4.7	U		3.3	J		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		4.9	U	
1,4-Dichlorobenzene	110	4.7	U		4.7	U		3.4	J		4.9	U		4.8	U		4.9	U	UJ	4.6	U		5	U	UJ	4.7	U		5	U	UJ	4.9	U		4.9	U	UJ
1,2,4-Trichlorobenzene	31	4.7	U		4.7	U		3.5	J		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		4.9	U	
Hexachlorobenzene	22	4.7	U		4.7	U		3.8	J		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		3.2	J	
Phthalate Esters (µg/kg)																																					
Dimethyl phthalate	71	4.7	U		4.7	U		3.1	J		4.9	U		4.8	U		2.6	J		4.6	U		5	U		4.7	U		5	U		4.9	U		4.9	U	
Diethyl phthalate	200	19	U		19	U		20	U		20	U		76	B	U	20	U		19			20	U		19	U		20	U		29	B	U	20	U	
Di-n-butyl phthalate	1,400	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Butyl benzyl phthalate	63	4.7	U		4.7	U		3.7	J	J	4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		8.7		
Bis[2-ethylhexyl] phthalate	1,300	47	U		34	J		49	U		49	U		48	U		49	U		46	U		50	U		47	U		50	U		29	J		170		
Di-n-octyl phthalate	6,200	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Outfall Samples**																																	
	Location	**SD-PCM025**						**SD-PCM026**						**SD-PCM027**						**SD-PCM028**						**SD-PCM029**						**SD-PCM030**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**			**2/25/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/24/2015**			**3/11/2016**			**2/25/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM02515**			**SD-PCM02516**			**SD-PCM02615**			**SD-PCM02616**			**SD-PCM02715**			**SD-PCM02716**			**SD-PCM02815**			**SD-PCM02816**			**SD-PCM02915**			**SD-PCM02916**			**SD-PCM03015**			**SD-PCM03016**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																			
Miscellaneous (µg/kg)																																			
Dibenzofuran	540	19	U		19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		20	U		20	U	
Hexachlorobutadiene	11	4.7	U		4.7	U		3	J		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		4.9	U	
N-nitrosodiphenylamine	28	4.7	U		4.7	U		4.9	U		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U		5	U		4.9	U		4.9	U	
Ionizable Organic Compounds (µg/kg)																																			
Phenol	420	19	U	UJ	19	U		9.8	J		18	J		19	U		9.8	J		19	U		20	U		19	U	UJ	20	U		20	U		110		
2-Methylphenol	63	4.7	U	UJ	4.7	U	UJ	4.9	U		4.9	U		4.8	U		4.9	U		4.6	U		5	U		4.7	U	UJ	5	U		4.9	U		5.9		
4-Methylphenol	670	19	U	UJ	19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U	UJ	20	U		20	U		20	U	
2,4-Dimethylphenol	29	23	U	UJ	23	U		25	U		25	U		24	U		25	U		23	U		25	U		24	U	UJ	25	U		25	U		25	U	
Pentachlorophenol	360	19	U	UJ	19	U	UJ	20	U		20	U		19	U		20	U	UJ	19	U		20	U	UJ	19	U	UJ	20	U	UJ	20	U		12	QJ	J
Benzyl alcohol	57	19	U	UJ	19	U		20	U		20	U		19	U		20	U		19	U		20	U		19	U		20	U		15	J		20	U	
Benzoic acid	650	190	U	UJ	190	U		200	U		200	U		190	U		200	U		190	U		200	U		190	U	UJ	200	U		200	U		710		
PCBs (µg/kg)																																			
Aroclor 1016	NE	3.7	U		3.8	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U	
Aroclor 1221	NE	3.7	U		3.8	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U	
Aroclor 1232	NE	3.7	U		3.8	U		3.9	U		3.9	U		3.8	U		39	Y	UY	3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U	
Aroclor 1242	NE	3.7	U		3.8	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		3.9	U	
Aroclor 1248	NE	3.7	U		3.8	U		3.9	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		12	Y	UY
Aroclor 1254	NE	3.7	U		6.7			3.9	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		18		
Aroclor 1260	NE	3.7	U		2.2	J		3.9	U		2.9	J		3.8	U		3.9	U		3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		9.8		
Total PCBs (µg/kg Dry-Weight)	130	3.7	U		8.9	J	J [5]	3.9	U		2.9	J	J [5]	3.8	U		39	Y	UY	3.8	U		3.9	U		3.8	U		3.9	U		3.9	U		27.8	Y	UY
Total PCBs (mg/kg OC) [4]	12.0	—			0.9		J [6]	—			—			—			—			—			—			—			—			—			2.6		J [6]

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Shoreline Area Samples at Approximately +7 feet MLLW**																																			
	Location	**SD-PCM031**						**SD-PCM032**						**SD-PCM033**						**SD-PCM034**						**SD-PCM035**						**SD-PCM036**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM03115**			**SD-PCM03116**			**SD-PCM03215**			**SD-PCM03216**			**SD-PCM03315**			**SD-PCM03316**			**SD-PCM03415**			**SD-PCM03416**			**SD-PCM03515**			**SD-PCM03516**			**SD-PCM03615**			**SD-PCM03616**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Conventionals																																					
Total Organic Carbon(percent)	—	2.65			1.47		J	8.7			7.27		J	0.47			0.283		J	1.19			2.06		J	1.46			2.03		J	0.97			1.12		J
Metals (mg/kg)																																					
Arsenic	57	2.8			3.4			15			15			1.3			1.9			3.2			3.2			3.3			2.8			2.4			2.1		
Cadmium	5.1	0.3			0.3	U		1	U		1	U		0.3			0.2	U		0.2	U		0.2	U		0.2	U		0.2	U		0.3			0.2	U	
Chromium	260	18.9			19.4			27			30			26.8			21.5			20.9			17.7			19.1			16.4			23.2			19.4		
Copper	390	24.6			19.9			50			55			22.9			18.2			19.3			18			20			30.9			22.6			24.4		
Lead	450	4			4			20			20			2	U		2	U		4			3			3			3			5			3		
Mercury	0.41	0.03	U		0.03	U		0.1			0.2	U		0.02	U		0.02	U		0.03	U		0.03	U		0.02	U		0.02	U		0.02			0.02	U	
Silver	6.1	0.4	U		0.4	U		2	U		2	U		0.3	U		0.3	U		0.3	U		0.3	U		0.3	U		0.4	U		0.4	U		0.3	U	
Zinc	410	35			34			138			151			30			31			31			32			30			32			34			35		
Non-ionizable Organic Compounds																																					
Aromatic Hydrocarbons (µg/kg)																																					
Total LPAHs	5,200	121	J		52.5	J		296			99	J		18	U		19	U		34			17	J		54.1	J		28			13	J		8.8	J	
Naphthalene	2,100	12	J		19	U		56			13	J		18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
Acenaphthylene	1,300	19	U		19	U		20	U		20	U		18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
Acenaphthene	500	17	J		7.5	J		20	U		20	U		18	U		19	U		20	U		19	U		5.6	J		20	U		19	U		20	U	
Fluorene	540	18	J		10	J		20	U		20	U		18	U		19	U		20	U		19	U		7.5	J		20	U		19	U		20	U	
Phenanthrene	1,500	68			35			130			66			18	U		19	U		34			17	J		41			28			13	J		8.8	J	
Anthracene	960	5.8	J		19	U		110			20			18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
2-Methylnaphthalene	670	6.7	J		19	U		20	U		20	U		18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
Total HPAHs	12,000	86	J		77.6	J		629			779			37	U		37	U		32	J		27	J		41.5	J		34	J		25	J		80.1	J	
Fluoranthene	1,700	33			28			140			150			18	U		19	U		16	J		16	J		20			20			14	J		16	J	
Pyrene	2,600	27			21			130			120			18	U		19	U		16	J		11	J		14	J		14	J		11	J		9.8	J	
Benz[a]anthracene	1,300	19	U		6.6	J		40			53			18	U		19	U		20	U		19	U		19	U		20	U		19	U		6.9	J	
Chrysene	1,400	12	J		12	J		110			120			18	U		19	U		20	U		19	U		7.5	J		20	U		19	U		9.8	J	
Total benzofluoranthenes	3,200	14	J		10	J		130			180			37	U		37	U		40	U		38	U		37	U		39	U		37	U		15	J	
Benzo[a]pyrene	1,600	19	U		19	U		37			51			18	U		19	U		20	U		19	U		19	U		20	U		19	U		9.8	J	
Indeno[1,2,3-c,d]pyrene	600	19	U		19	U		29			38		J	18	U		19	U		20	U		19	U		19	U		20	U		19	U		5.9	J	J
Dibenzo[a,h]anthracene	230	4.8	U		4.7	U		13			18		J	4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Benzo[g,h,i]perylene	670	19	U		19	U		20	U		49		J	18	U		19	U		20	U		19	U		19	U		20	U		19	U		6.9	J	J
Chlorinated Benzenes (µg/kg)																																					
1,2-Dichlorobenzene	35	4.8	U		4.7	U		3.5	J		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
1,4-Dichlorobenzene	110	4.8	U		4.7	U		5	U		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
1,2,4-Trichlorobenzene	31	4.8	U		4.7	U		5	U		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Hexachlorobenzene	22	4.8	U		4.7	U		5	U		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Phthalate Esters (µg/kg)																																					
Dimethyl phthalate	71	4.8	U		4.7	U		5	U		8.7			4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Diethyl phthalate	200	19	U		19	U		20	U		20	U		18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
Di-n-butyl phthalate	1,400	19	U		19	U		20	U		20	U		18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	
Butyl benzyl phthalate	63	4.8	U		4.7	U		39	Q	J	39			4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Bis[2-ethylhexyl] phthalate	1,300	48	U		47	U		410			260			46	U		46	U		50	U		47	U		47	U		49	U		46	U		49	U	
Di-n-octyl phthalate	6,200	19	U		19	U		40			23			18	U		19	U		20	U		19	U		19	U		20	U		19	U		20	U	

TABLE 2

SEDIMENT MANAGEMENT STANDARDS CHEMICALS OF CONCERN ANALYTICAL RESULTS [1, 2]

Post-Construction Surface Sediment Monitoring
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**Shoreline Area Samples at Approximately +7 feet MLLW**																																			
	Location	**SD-PCM031**						**SD-PCM032**						**SD-PCM033**						**SD-PCM034**						**SD-PCM035**						**SD-PCM036**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**			**3/12/2015**			**3/9/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM03115**			**SD-PCM03116**			**SD-PCM03215**			**SD-PCM03216**			**SD-PCM03315**			**SD-PCM03316**			**SD-PCM03415**			**SD-PCM03416**			**SD-PCM03515**			**SD-PCM03516**			**SD-PCM03615**			**SD-PCM03616**		
Analyte	**SMS SQS Criteria** [3]	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Non-ionizable Organic Compounds (cont.)																																					
Miscellaneous (µg/kg)																																					
Dibenzofuran	540	19	U		19	U		20	U		7.9	J		18	U		19	U		20	U		19	U		5.6	J		20	U		19	U		20	U	
Hexachlorobutadiene	11	4.8	U		4.7	U		5	U		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
N-nitrosodiphenylamine	28	4.8	U		4.7	U		5	U		5	U		4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U		4.6	U		4.9	U	
Ionizable Organic Compounds (µg/kg)																																					
Phenol	420	63			25			570			73			18	U		19	U		20	U		19	U		19	U		9.7	J		19	U		20	U	
2-Methylphenol	63	12	M	N	4.7	U	UJ	5	U		5	U	UJ	4.6	U		4.6	U		5	U		4.7	U		4.7	U		4.9	U	UJ	4.6	U		4.9	U	UJ
4-Methylphenol	670	98			30			130			20	U		18	U		19	U		20	U		19	U		19			20	U		19	U		20	U	
2,4-Dimethylphenol	29	24	U		24	U		25	U		25	U		23	U		23	U		25	U		24	U		23	U		24	U		23	U		25	U	
Pentachlorophenol	360	19	U	UJ	19	U	UJ	18	J	J	20	U	UJ	18	U	UJ	19	U		20	U		19	U		19	U	UJ	20	U	UJ	19	U	UJ	20	U	UJ
Benzyl alcohol	57	56			19	U		360			100			19	U		19	U		20	U		19	U		28			20	U		19	U		20	U	
Benzoic acid	650	680	Q	J	270			2600	Q	J	530			180	U		65	J		200	U		190	U		84	JQ	J	200	U		190	U		200	U	
PCBs (µg/kg)																																					
Aroclor 1016	NE	4	U		4	U		4	U		4	U		3.9	U		3.8	U		4	U		3.8	U		3.8	U		4	U		3.8	U		4	U	
Aroclor 1221	NE	4	U		4	U		4	U		4	U		3.9	U		3.8	U		4	U		3.8	U		3.8	U		4	U		3.8	U		4	U	
Aroclor 1232	NE	4	U		4	U		4	U		4	U		3.9	U		3.8	U		4	U		3.8	U		3.8	U		4	U		3.8	U		4	U	
Aroclor 1242	NE	4	U		4	U		4	U		4	U		3.9	U		3.8	U		4	U		3.8	U		3.8	U		4	U		3.8	U		4	U	
Aroclor 1248	NE	4	U		5.9	Y	UY	40	Y	UY	32			3.9	U		3.8	U		4	U		9.6	Y	UY	3.8	U		5.9	Y	UY	3.8	U		4	U	
Aroclor 1254	NE	9.9	Y	UY	14	Y	UY	68			66			3.9	U		3.8	U		9.9	Y	UY	9.6	Y	UY	9.4	Y	UY	14	Y	UY	9.5	Y	UY	9.9	Y	UY
Aroclor 1260	NE	4	U		4	U		53	P	J	29			3.9	U		3.8	U		3.7	J		3.8	U		4.8			18			3.8	U		4	U	
Total PCBs (µg/kg Dry-Weight)	130	9.9	Y	UY	14	Y	UY	121	P	J [5]	127			3.9	U		3.8	U		3.7	J	J [5]	9.6	Y	UY	4.8			18			9.5	Y	UY	9.9	Y	UY
Total PCBs (mg/kg OC) [4]	12.0	0.4		UY	1.0	Y	UJ	—			—			—			—			0.3		J [6]	0.5	Y	UJ	0.3			0.9		J [6]	1.0		UY	0.9	Y	UJ

Note(s)

1. Laboratory data flags (Q1) are as follows:
   - U = analyte not detected at the reporting limit provided.
   - J = estimated concentration when the value is less than the RL.
   - Q = detected analyte with an initial or continuing calibration that does not meet established acceptance criteria.
   - Y = analyte not detected at the reporting limit provided. The reporting limit is raised due to chromatographic interferences.
   - P = Analyte detected on both chromatographic columns; RPD >40% with no chromatographic interference.
   - B = analyte detected in associated method blank at concentration greater than 1/2 RL, or 5% analyte concentration.
   - M = estimated value for analyte detected with poor spectral match.
2. Validation qualifiers (Q2) are defined as follows:
   - J = analyte positively identified; value is approximate concentration in sample.
   - N = The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
   - U = material was analyzed for, but was not detected above the level of the associated value.
   - UJ = material was not detected; reporting limit is estimated and may be inaccurate or imprecise.
   - UY = material was not detected; raised reporting limit.
3. Criteria obtained from Table 3 of Construction and Post-Construction Sediment Monitoring QAPP (AMEC et al. 2012).
4. — = no carbon-normalized value was calculated when results for organic carbon were outside the normal carbon normalization range of 0.5 to 4.0%.
5. If 20% of total detected Aroclors are qualified as estimated, the total calculated PCB concentration will also be considered estimated and assigned a "J" qualifier.
6. If the total calculated PCB concentration is considered to be estimated and assigned a "J" qualifier, or the if the total organic carbon percentage is considered to be estimated and assigned a "J" qualifier, then the organic carbon normalized value will also be assigned a "J" qualifier.

Abbreviation(s)

ft = feet
HPAHs = high-molecular-weight polycyclic aromatic hydrocarbons
LPAHs = low-molecular-weight polycyclic aromatic hydrocarbons
mg/kg = milligrams per kilogram
mg/kg OC = milligrams per kilogram organic carbon
MLLW = mean lower low water
NE = not established
PCBs = polychlorinated biphenyls
Q1 = laboratory qualifiers
Q2 = validation qualifiers
QAPP = Quality Assurance Project Plan
RL = reporting limit
RPD = relative percent difference
SMS SQS = Washington Sediment Management Standards Sediment Quality Standards (173-204-320 WAC)
µg/kg = micrograms per kilogram
µg/kg Dry-Weight = micrograms per kilograms dry weight
WAC = Washington Administrative Code

TABLE 3

DIOXINS AND FURANS ANALYTICAL RESULTS [1, 2]
Post-Construction Surface Sediment Monitoring—Year 1
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

Sampling Area		In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW																	
Location		SD-PCM001						SD-PCM004						SD-PCM008					
Monitoring Year		Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)			Year 0 (2015)			Year 1 (2016)		
Collection Date		3/11/2015			3/9/2016			3/11/2015			3/9/2016			2/24/2015			3/10/2016		
Sample Depth (ft)		0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33			0 - 0.33		
Sample ID		SD-PCM00115			SD-PCM00116			SD-PCM00415			SD-PCM00416			SD-PCM00815			SD-PCM00816		
Analyte		Value	Q1	Q2	Value	Q1	Q2	Value	Q1	Q2	Value	Q1	Q2	Value	Q1	Q2	Value	Q1	Q2
Dioxins and Furans (ng/kg)	**TEF [3]**																		
2,3,7,8-TCDD	1	0.131	JEMPC		0.0336	U		0.134	JEMPC		0.196	JEMPC		0.0252	U		0.0339	U	
2,3,7,8-TCDF	0.1	0.0438	U		0.0711	U		0.0579	U		0.165	JEMPC		0.031	U		0.0439	U	
1,2,3,7,8-PeCDD	1	0.0597	JEMPC		0.0711	U		0.03	U		0.309	J		0.0329	U		0.0698	JEMPC	
1,2,3,7,8-PeCDF	0.03	0.133	JEMPC		0.0928	JEMPC		0.292	JEMPC		0.174	JX	UJ	0.0717	BJEMPC	J	0.0518	JEMPC	
2,3,4,7,8-PeCDF	0.3	0.0537	U		0.0612	U		0.158	BJEMPC	U	0.228	JEMPC		0.0349	U		0.0518	U	
1,2,3,4,7,8-HxCDD	0.1	0.0498	JEMPC		0.128	JEMPC		0.0579	J		0.39	J		0.031	U		0.13	JEMPC	
1,2,3,6,7,8-HxCDD	0.1	0.0557	U		0.395	BJEMPC	UJ	0.0699	BJEMPC	U	1.16			0.0329	U		0.179	BJEMPC	UJ
1,2,3,7,8,9-HxCDD	0.1	0.0995	JEMPC		0.347	BJ	J	0.0639	JEMPC		0.842	BJ		0.0388	JEMPC		0.0837	BJEMPC	J
1,2,3,4,7,8-HxCDF	0.1	0.0896	BJ	J	0.207	J		0.124	BJEMPC	J	0.72	J		0.0349	U		0.0937	U	
1,2,3,6,7,8-HxCDF	0.1	0.145	BJEMPC	U	0.13	JEMPC		0.218	BJEMPC	U	0.331	JEMPC		0.0329	BJEMPC	U	0.0937	U	
1,2,3,7,8,9-HxCDF	0.1	0.117	BJ	U	0.0928	BJ	UJ	0.164	BJEMPC	U	0.12	BJEMPC	UJ	0.0659	BJEMPC	U	0.12	U	
2,3,4,6,7,8-HxCDF	0.1	0.0637	BJEMPC	J	0.148	JEMPC		0.108	BJ	J	0.433	J		0.0368	BJEMPC	J	0.0977	U	
1,2,3,4,6,7,8-HpCDD	0.01	1.14	B	J	8.79	B	J	0.865	BJ	J	30.1			0.587	BJEMPC	U	3.26	B	U
1,2,3,4,6,7,8-HpCDF	0.01	0.129	BJEMPC	U	2.19			0.246	BJEMPC	U	6.41			0.095	BJEMPC	J	0.483	J	
1,2,3,4,7,8,9-HpCDF	0.01	0.0438	J		0.113	J		0.0759	J		0.487	JEMPC		0.031	U		0.0518	U	
OCDD	0.0003	8.77	B	U	86.3	B	J	5.46	B	U	268			3.76	B	U	29.4	B	U
OCDF	0.0003	0.392	J		8.21			0.25	J		20.4			0.0523	U		1.27	BJEMPC	UJ
Total HpCDD		3.17		J	22.6	EMPC	J	2.42		J	71.8			1.48	EMPC	U	8.76	EMPC	U
Total HpCDF		0.356	EMPC	J	7.71			0.626	EMPC	J	19.9	EMPC		0.179	EMPC	J	1.46		
Total HxCDD		1.1	EMPC	J	5.2	EMPC	J	1.06	EMPC	J	11.7	EMPC		0.469	EMPC	J	2.7	EMPC	J
Total HxCDF		0.912	EMPC	J	3.08	EMPC		2.07	EMPC	J	9.38	EMPC		0.39	EMPC	J	0.488	EMPC	
Total PeCDD		0.199	EMPC		1.03	EMPC	J	0.126	EMPC		2.63	EMPC		0.0329	U		0.459	EMPC	U
Total PeCDF		1.19	EMPC	J	1.34	EMPC		2.9	EMPC	J	4.86	EMPC		0.333	EMPC	J	0.255	EMPC	
Total TCDD		0.972	EMPC		1.4	EMPC	U	0.436	EMPC		2.09	EMPC	J	0.565			0.926	EMPC	U
Total TCDF		1.5	EMPC	J	0.993	EMPC		2.57	EMPC	J	4.69	EMPC		0.303	EMPC	J	0.0652	EMPC	
WHO 2005 [3] TEQ (ND = 0 including EMPC)		0.27			0.195			0.28			1.12			0.03			0.00483		
WHO 2005 [3] TEQ (ND = 1/2 EDL including EMPC)		0.28			0.306			0.3			1.29			0.07			0.128		

TABLE 3

DIOXINS AND FURANS ANALYTICAL RESULTS [1, 2]
Post-Construction Surface Sediment Monitoring—Year 1
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

	Sampling Area	**In-water Dredging Area Samples Below -5 feet MLLW**																	
	Location	**SD-PCM010**						**SD-PCM015**						**SD-PCM019**					
	Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
	Collection Date	**3/11/2015**			**3/9/2016**			**3/11/2015**			**3/10/2016**			**2/24/2015**			**3/11/2016**		
	Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
	Sample ID	**SD-PCM01015**			**SD-PCM01016**			**SD-PCM01515**			**SD-PCM01516**			**SD-PCM01915**			**SD-PCM01916**		
Analyte		**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Dioxins and Furans (ng/kg)	**TEF [3]**																		
2,3,7,8-TCDD	1	0.164	JEMPC		0.19	JEMPC		0.0299	U		0.0277	U		0.124	JEMPC		0.0456	U	
2,3,7,8-TCDF	0.1	0.0818	J		0.234	J		0.0539	JEMPC		0.0257	U		0.0415	U		0.0342	U	
1,2,3,7,8-PeCDD	1	0.0439	U		0.377	J		0.0359	U		0.145	J		0.0592	JEMPC		0.0684	U	
1,2,3,7,8-PeCDF	0.03	0.134	J		0.254	JEMPC		0.176	J		0.0911	JEMPC		0.118	BJEMPC	J	0.101	J	
2,3,4,7,8-PeCDF	0.3	0.0658	BJEMPC	U	0.322	J		0.0778	BJ	U	0.0396	JEMPC		0.0395	U		0.0665	U	
1,2,3,4,7,8-HxCDD	0.1	0.0658	JEMPC		0.391	JEMPC		0.0299	U		0.0574	U		0.0415	U		0.0722	U	
1,2,3,6,7,8-HxCDD	0.1	0.201	BJEMPC	U	1.34			0.0559	BJ	U	0.131	BJ	UJ	0.101	BJEMPC	U	0.0741	U	
1,2,3,7,8,9-HxCDD	0.1	0.104	JEMPC		0.841	JEMPC		0.0379	JEMPC		0.216	BJEMPC	J	0.109	JEMPC		0.0779	U	
1,2,3,4,7,8-HxCDF	0.1	0.156	BJEMPC	J	1.58			0.136	BJEMPC	J	0.0653	JEMPC		0.0533	BJEMPC	J	0.0608	U	
1,2,3,6,7,8-HxCDF	0.1	0.138	BJEMPC	U	0.52	J		0.176	BJ	U	0.0851	JEMPC		0.0987	BJEMPC	U	0.057	U	
1,2,3,7,8,9-HxCDF	0.1	0.144	BJEMPC	U	0.421	J		0.144	BJ	U	0.101	BJEMPC	UJ	0.101	BJEMPC	U	0.0856	U	
2,3,4,6,7,8-HxCDF	0.1	0.0598	BJEMPC	J	0.564	J		0.128	BJEMPC	J	0.0495	J		0.0454	U		0.0646	U	
1,2,3,4,6,7,8-HpCDD	0.01	4.69	B		39.6			0.862	BJ	J	1.91	B	U	1.73	B	U	1.25	B	U
1,2,3,4,6,7,8-HpCDF	0.01	0.816	JEMPC		10.1			0.228	BJ	U	0.226	JEMPC		0.193	BJ	J	0.202	JEMPC	
1,2,3,4,7,8,9-HpCDF	0.01	0.116	JEMPC		1.03			0.0579	JEMPC		0.0693	U		0.0336	U		0.0837	U	
OCDD	0.0003	31.8	B	J	392			6.47	B	U	16.9	B	U	9.62	B	U	9.95	B	U
OCDF	0.0003	1.84	J		31.7			0.571	J		0.941	BJEMPC	UJ	0.075	U		0.451	BJEMPC	UJ
Total HpCDD		12.6			92.6			2		J	4.68	EMPC	U	5.08		U	2.81		U
Total HpCDF		2.58	EMPC		41.1	EMPC		0.808	EMPC		0.492	EMPC	U	0.259	EMPC	J	0.66	EMPC	J
Total HxCDD		2.55	EMPC		13.7	EMPC		0.414	EMPC	J	1.62	EMPC	J	1.9	EMPC	J	0.586	EMPC	J
Total HxCDF		1.97	EMPC	J	16.6	EMPC		1.5	EMPC	J	0.507	EMPC		0.7	EMPC	J	0.267	EMPC	J
Total PeCDD		0.448	EMPC		3.27	EMPC		0.0403	EMPC		0.407	EMPC	U	0.421	EMPC		0.046		U
Total PeCDF		1.89	EMPC	J	6.39	EMPC		2.17	EMPC	J	0.297	EMPC		0.889	EMPC	J	0.176	EMPC	
Total TCDD		0.746	EMPC		2.57	EMPC	J	0.348	EMPC		0.698	EMPC	U	0.64	EMPC		0.522		U
Total TCDF		2	EMPC	J	5.2	EMPC		1.87	EMPC	J	0.065			0.896	EMPC	J	0.0477		
WHO 2005 [3] TEQ (ND = 0 including EMPC)		0.35			1.57			0.12			0.15			0.26			0.00303		
WHO 2005 [3] TEQ (ND = 1/2 EDL including EMPC)		0.37			1.73			0.15			0.219			0.27			0.106		

Note(s)

1. Laboratory data flags (Q1) are as follows:
   U = analyte not detected at the reporting limit provided.
   B = analyte detected in an associated method blank at a concentration greater than 1/2 the RL or 5% of the analyte concentration in the sample.
   EMPC = value calculated for 2,3,7,8-substituted isomers for which the quantitation and/or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria.
   J = estimated concentration when the value is less than the RL.
2. Validaton qualifiers (Q2) are defined as follows:
   J = analyte positively identified; value is approximate concentration in sample.
   U = material was analyzed for, but was not detected above the level of the associated value.
3. Source: Van den Berg et al. 2006.

Abbreviation(s)

EDL = estimated detection limit
EMPC = estimated maximum possible concentration
ft = feet
MLLW = mean lower low water
ND = non detected
ng/kg = nanograms per kilogram
Q1 = laboratory qualifiers
Q2 = validation qualifiers
RL = reporting limit
TEF = toxicity equivalency factors
TEQ = toxic equivalency quotient

TABLE 4

GRAIN-SIZE ANALYSIS RESULTS [1,2]

Post-Construction Surface Sediment Monitoring—Year 0
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

Sampling Area	In-water Work Area Samples Above -5 feet MLLW and Below +4 feet MLLW																		In-water Dredging Area Samples Below -5 feet MLLW														
Location	**SD-PCM002**						**SD-PCM005**						**SD-PCM007**						**SD-PCM011**						**SD-PCM014**						**SD-PCM018**		
Monitoring Year	**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**			**Year 0 (2015)**			**Year 1 (2016)**		
Collection Date	**3/10/2015**			**3/9/2016**			**3/10/2015**			**3/10/2016**			**2/24/2015**			**3/10/2016**			**3/10/2015**			**3/9/2016**			**3/10/2015**			**3/9/2016**			**2/24/2015**			**3/11/2016**		
Sample Depth (ft)	**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**			**0 - 0.33**		
Sample ID	**SD-PCM00215**			**SD-PCM00216**			**SD-PCM00515**			**SD-PCM00516**			**SD-PCM00715**			**SD-PCM00716**			**SD-PCM01115**			**SD-PCM01116**			**SD-PCM01415**			**SD-PCM01416**			**SD-PCM01815**			**SD-PCM01816**		
Analyte	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**	**Value**	**Q1**	**Q2**
Grain Size (%)																																				
Gravel	26.7			29.7			27.5			20.8			25.8			25.7			28			27.8			17.6			28.4			22.9			28		
Very Coarse Sand	26.6			24.4			24.7			20.6			25.6			24.5			28			29			25.2			25.1			23.6			29.8		
Coarse Sand	26.8			24.8			27.4			27.9			25.1			22.5			26.3			23.3			34.8			18.3			28.2			29.6		
Medium Sand	14.6			13.1			16			21.1			17.7			15.7			14.5			10.5			19.4			8.5			19.8			11		
Fine Sand	2.5			2.2			2.6			5.1			3.0			3.4			2.3			1.9			2.4			2.1			3.4			0.6		
Very Fine Sand	0.4			0.6			0.5			1.1			0.3			1.9			0.4			1.9			0.4			2.7			0.7			0.2		
Coarse Silt	2.3	U		0.4			1.1	U		3.5	U		2.4	U		1.4			0.5	U		1.4			0.2	U		4.7			1.4	U		0.9	U	
Medium Silt	2.3	U		1.4			1.1	U		3.5	U		2.4	U		1.4			0.5	U		1.3			0.2	U		3.2			1.4	U		0.9	U	
Fine Silt	2.3	U		0.9			1.1	U		3.5	U		2.4	U		1.1			0.5	U		1			0.2	U		2.7			1.4	U		0.9	U	
Very Fine Silt	2.3	U		0.8			1.1	U		3.5	U		2.4	U		0.9			0.5	U		0.6			0.2	U		1.7			1.4	U		0.9	U	
8-9 Phi Clay	2.3	U		0.6			1.1	U		3.5	U		2.4	U		0.6			0.5	U		0.5			0.2	U		0.9			1.4	U		0.9	U	
9-10 Phi Clay	2.3	U		0.2			1.1	U		3.5	U		2.4	U		0.3			0.5	U		0.1			0.2	U		0.5			1.4	U		0.9	U	
> 10 Phi Clay	2.3	U		0.6			1.1	U		3.5	U		2.4	U		0.5			0.5	U		0.7			0.2	U		1.3			1.4	U		0.9	U	
Total Fines	2.3			5			1.1			3.5			2.4			6.3			0.5			5.6			0.2			14.8			1.4			0.9		

Note(s)

1. Laboratory data flags (Q1) are as follows:
   U = analyte not detected at the reporting limit provided.
2. No validation qualifiers (Q2) assigned.

Abbreviation(s)

ft = feet
MLLW = mean lower low water
Q1 = laboratory qualifiers
Q2 = validation qualifiers

TABLE 5

FREQUENCY OF DETECTION OF CHEMICAL ANALYTES
Post-Construction Surface Sediment Monitoring—Year 1
Duwamish Sediment Other Area and Southwest Bank
Corrective Measure and Habitat Project
Boeing Plant 2
Seattle/Tukwila, Washington

		Year 0 (2015)				Year 1 (2016)			
Analyte	**SMS SQS Criteria**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**
Conventionals									
Total Organic Carbon (percent)	–	40	40	0.034	8.7	40	40	0.038	7.27
Metals (mg/kg)									
Arsenic	57	40	40	1.2	15	40	40	1.8	15
Cadmium	5.1	40	22	0.2	0.5	40	0	–	–
Chromium	260	40	40	13.2	34.5	40	40	12.1	30
Copper	390	40	40	11.1	50	40	40	11.3	55
Lead	450	40	9	2	20	40	30	2	20
Mercury	0.41	40	6	0.02	0.1	40	10	0.03	0.08
Silver	6.1	40	0	–	–	40	0	–	–
Zinc	410	40	40	25	138	40	40	23	151
Non-ionizable Organic Compounds									
Aromatic Hydrocarbons (µg/kg)									
Total LPAHs									
Naphthalene	2100	40	2	12	56	40	6	5.8	19
Acenaphthylene	1300	40	0	–	–	40	0	–	–
Acenaphthene	500	40	2	5.6	17	40	1	7.5	7.5
Fluorene	540	40	2	7.5	18	40	2	5.8	10
Phenanthrene	1500	40	7	11	130	40	17	5.7	66
Anthracene	960	40	3	5.8	110	40	9	5.8	20
2-Methylnaphthalene	670	40	1	6.7	6.7	40	2	7.7	7.8
Total HPAHs									
Fluoranthene	1700	40	9	4.8	140	40	21	5.7	150
Pyrene	2600	40	8	6.8	130	40	20	6.6	120
Benz[a]anthracene	1300	40	3	7.8	40	40	12	5.5	53
Chrysene	1400	40	5	7.5	110	40	16	7.6	120
Total benzofluoranthenes	3200	40	5	10	130	40	17	10	180
Benzo[a]pyrene	1600	40	3	6.9	37	40	13	6.8	51
Indeno[1,2,3-c,d]pyrene	600	40	3	6.5	29	40	10	5.9	38
Dibenzo[a,h]anthracene	230	40	8	2.5	13	40	9	4.6	18
Benzo[g,h,i]perylene	670	40	5	12	39	40	10	6.9	49
Chlorinated Benzenes (µg/kg)									
1,2-Dichlorobenzene	35	40	4	2.8	3.5	40	1	2.8	2.8
1,4-Dichlorobenzene	110	40	3	2.5	3.4	40	0	–	–
1,2,4-Trichlorobenzene	31	40	3	2.6	3.5	40	0	–	–
Hexachlorobenzene	22	40	3	3.2	3.8	40	2	3.1	3.2

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Seattle/Tukwila, Washington

		Year 0 (2015)				Year 1 (2016)			
Analyte	**SMS SQS Criteria**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**
Phthalate Esters (µg/kg)									
Dimethyl phthalate	71	40	2	2.7	3.1	40	4	2.4	8.7
Diethyl phthalate	200	40	5	19	76	40	2	22	24
Di-n-butyl phthalate	1400	40	0	–	–	40	0	–	–
Butyl benzyl phthalate	63	40	12	2.5	59	40	10	3.2	39
Bis[2-ethylhexyl] phthalate	1300	40	4	29	410	40	12	29	260
Di-n-octyl phthalate	6200	40	1	40	40	40	3	9.6	23
Miscellaneous (µg/kg)									
Dibenzofuran	540	40	1	5.6	5.6	40	2	6	7.9
Hexachlorobutadiene	11	40	3	2.4	3	40	0	–	–
N-nitrosodiphenylamine	28	40	0	–	–	40	0	–	–
Ionizable Organic Compounds (µg/kg)									
Phenol	420	40	11	8.9	570	40	14	8.5	140
2-Methylphenol	63	40	1	12	12	40	2	2.6	5.9
4-Methylphenol	670	40	4	19	130	40	3	20	30
2,4-Dimethylphenol	29	40	0	–	–	40	0	–	–
Pentachlorophenol	360	40	2	13	18	40	1	12	12
Benzyl alcohol	57	40	3	28	360	40	7	12	200
Benzoic acid	650	40	6	62	2600	40	11	65	710
PCBs (µg/kg)									
Aroclor 1016	–	40	0	–	–	40	0	–	–
Aroclor 1221	–	40	0	–	–	40	0	–	–
Aroclor 1232	–	40	0	–	–	40	0	–	–
Aroclor 1242	–	40	0	–	–	40	0	–	–
Aroclor 1248	–	40	0	–	–	40	12	2.1	32
Aroclor 1254	–	40	3	5.2	68	40	19	3.6	66
Aroclor 1260	–	40	5	3.6	53	40	20	2.2	29
Dioxins and Furans (ng/kg) [1]									
2,3,7,8-TCDD	–	6	4	0.124	0.164	6	2	0.19	0.196
2,3,7,8-TCDF	–	6	2	0.0539	0.0818	6	2	0.165	0.234
1,2,3,7,8-PeCDD	–	6	2	0.0592	0.0597	6	4	0.0698	0.377
1,2,3,7,8-PeCDF	–	6	6	0.0717	0.292	6	5	0.0518	0.254
2,3,4,7,8-PeCDF	–	6	0	–	–	6	3	0.0396	0.322
1,2,3,4,7,8-HxCDD	–	6	3	0.0498	0.0658	6	4	0.128	0.391
1,2,3,6,7,8-HxCDD	–	6	0	–	–	6	2	1.16	1.34
1,2,3,7,8,9-HxCDD	–	6	6	0.0379	0.109	6	5	0.0837	0.842
1,2,3,4,7,8-HxCDF	–	6	5	0.0533	0.156	6	4	0.0653	1.58
1,2,3,6,7,8-HxCDF	–	6	0	–	–	6	4	0.0851	0.52
1,2,3,7,8,9-HxCDF	–	6	0	–	–	6	1	0.421	0.421
2,3,4,6,7,8-HxCDF	–	6	5	0.0368	0.128	6	4	0.0495	0.564

TABLE 5

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Seattle/Tukwila, Washington

		Year 0 (2015)				Year 1 (2016)			
Analyte	**SMS SQS Criteria**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**	**Number of Analyses**	**Number of Detections**	**Minimum Detected Value**	**Maximum Detected Value**
Dioxins and Furans (ng/kg) (cont.)									
1,2,3,4,6,7,8-HpCDD	–	6	4	0.862	4.69	6	3	8.79	39.6
1,2,3,4,6,7,8-HpCDF	–	6	3	0.095	0.816	6	6	0.202	10.1
1,2,3,4,7,8,9-HpCDF	–	6	4	0.0579	0.116	6	3	0.113	1.03
OCDD	–	6	1	31.8	31.8	6	3	86.3	392
OCDF	–	6	4	0.25	1.84	6	3	8.21	31.7
Total HpCDD	–	6	4	2	12.6	6	3	22.6	92.6
Total HpCDF	–	6	6	0.179	2.58	6	5	0.66	41.1
Total HxCDD	–	6	6	0.414	2.55	6	6	0.586	13.7
Total HxCDF	–	6	6	0.39	2.07	6	6	0.267	16.6
Total PeCDD	–	6	5	0.126	0.448	6	3	1.03	3.27
Total PeCDF	–	6	6	0.333	2.9	6	6	0.176	6.39
Total TCDD	–	6	6	0.348	0.972	6	2	2.09	2.57
Total TCDF	–	6	6	0.303	2.57	6	6	0.0477	5.2

Note(s)

1. Detected values for dioxins/furans include EMPC values. The frequency of detections reported in the Year 0 monitoring report (Amec Foster Wheeler et al. 2016) for dioxins/furans did not include EMPC values as detected compounds.

Abbreviation(s)

EMPC = estimated maximum possible concentration
HPAHs = high-molecular-weight polycyclic aromatic hydrocarbons
LPAHs = low-molecular-weight polycyclic aromatic hydrocarbons
mg/kg = milligrams per kilogram
ng/kg = nanograms per kilogram
PCBs = polychlorinated biphenyls
SMS SQS = Washington Sediment Management Standards Sediment Quality Standards (173-204-320 WAC)
µg/kg = micrograms per kilogram
WAC = Washington Administrative Code