

TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EX-1(S)	Ex-1/S-1	3/30/2004	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00424
EX-2(S)	Ex-2/S-1	3/30/2004	-	0.0134 U	0.0134 U	0.0076 J	0.00973 J	0.00986 J	0.00631 J	0.0114 J
EX-3(S)	Ex-3/S-1	3/31/2004	-	0.067 U	0.0202 J	0.0967	0.102	0.0941	0.0592 J	0.106
EX-4(S)	Ex-4/S-1	3/29/2004	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-001(A)	SB-001(A)-7.5	8/27/2003	7.5	0.0134 U	0.00516 J	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-001(A)	SB-001(A)-7.5	8/27/2003	7.5							
SB-002(A)	SB-002(A)-2.5	8/27/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-002(A)	SB-002(A)-2.5	8/27/2003	2.5							
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5							
SB-003(A)	SB-003(A)-5	9/4/2003	5	0.0268 U	0.0268 U	0.0105 J	0.0145 J	0.0124 J	0.0135 J	0.016 J
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5							
SB-005(A)	SB-005(A)-7	9/5/2003	7	0.0134 U	0.0134 U	0.0134 U	0.00469 J	0.0134 U	0.0134 U	0.0049 J
SB-005(A)	SB-005(A)-7	9/5/2003	7							
SB-006(A)	SB-006(A)-7'	3/31/2004	7	2.47	6.7 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
SB-006(A)	SB-006(A)-7'	3/31/2004	7							
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5	1.46 J	0.526	0.268 U	0.268 U	0.268 U	0.268 U	0.0797 J
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5							
SB-008(A)	SB-008(A)-2	8/26/2003	2	0.0987 J	0.207 J	2.53	2.59	3.14	1.67	3.05
SB-008(A)	SB-008(A)-2	8/26/2003	2							
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5							
SB-009(A)	SB-009(A)-2	8/27/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-009(A)	SB-009(A)-2	8/27/2003	2							
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5	2.68 U	2.17 J	0.268 U	0.268 U	0.268 U	0.268 U	0.0798 J
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5							
SB-010(A)	SB-010(A)-2	8/27/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-010(A)	SB-010(A)-2	8/27/2003	2							
SB-010(A)	SB-010(A)-7.5	8/27/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-010(A)	SB-010(A)-7.5	8/27/2003	7.5							
SB-011(A)	SB-011(A)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-011(A)	SB-011(A)-7.5	9/3/2003	7.5							
SB-013(A)	SB-013(A)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-013(A)	SB-013(A)-7.5	9/3/2003	7.5							
SB-015(A)	SB-015(A)-7	9/10/2003	7	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-015(A)	SB-015(A)-7	9/10/2003	7							
SB-016(A)	SB-016(A)-7	9/4/2003	7	0.0649 J	0.0466 J	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-017(A)	SB-017(A)-7.5	9/8/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-017(A)	SB-017(A)-7.5	9/8/2003	7.5							
SB-019(A)	SB-019(A)-2.5	8/27/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-019(A)	SB-019(A)-2.5	8/27/2003	2.5							
SB-019(A)	SB-019(A)-7.5	8/27/2003	7.5	0.449 J	0.22 J	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U

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Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-019(A)	SB-019(A)-7.5	8/27/2003	7.5							
SB-020(A)	SB-020(A)-4'	3/31/2004	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-020(A)	SB-020(A)-4'	3/31/2004	4							
SB-020(A)	SB-020(A)-9'	3/31/2004	9	0.00651 J	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-020(A)	SB-020(A)-9'	3/31/2004	9							
SB-021(A)	SB-021 (A)-11.5	9/14/2005	11.5	7.01	13.5 U	1.69 U	1.69 U	1.69 U	1.69 U	1.69 U
SB-021(A)	SB-021 (A)-11.5	9/14/2005	11.5							
SB-027(A)	SB-027 (A)-11	9/14/2005	11	8.7	14.8 U	1.55 U	1.55 U	1.55 U	1.55 U	1.55 U
SB-027(A)	SB-027 (A)-11	9/14/2005	11							
SB-029(A)	SB-029 (A)-12.5	9/14/2005	12.5	0.0169 U J	0.0169 U J	0.0169 U J	0.0169 U J	0.0169 U J	0.0169 U J	0.0169 U J
SB-029(A)	SB-029 (A)-12.5	9/14/2005	12.5							
SB-100(C)	SB100(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-100(C)	SB100(C)3	8/22/2002	3							
SB-100(C)	SB100(C)20	8/22/2002	20	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-100(C)	SB100(C)20	8/22/2002	20							
SB-101(C)	SB101(C)3	8/22/2002	3							
SB-101(C)	SB101(C)18	8/22/2002	18							
SB-102(C)	SB102(C)1-3	8/22/2002	2							
SB-102(C)	SB102(C)18	8/22/2002	18							
SB-103(C)	SB103(C)3	8/22/2002	3							
SB-103(C)	SB103(C)18	8/22/2002	18							
SB-104(C)	SB104(C)4	8/22/2002	4							
SB-104(C)	SB104(C)20	8/22/2002	20							
SB-200(C)	SB200(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-200(C)	SB200(C)3	8/22/2002	3							
SB-200(C)	SB200(C)6	8/22/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-200(C)	SB200(C)6	8/22/2002	6							
SB-201(C)	SB201(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-201(C)	SB201(C)3	8/22/2002	3							
SB-201(C)	SB201(C)6	8/22/2002	6	0.0268 U	0.0268 U	0.0342	0.031	0.0188 J	0.0268 U	0.0843
SB-201(C)	SB201(C)6	8/22/2002	6							
SB-202(C)	SB202(C)2	8/22/2002	2	1.68 U	1.68 U	1.68 U	0.741 J	1.68 U	1.68 U	1.51 J
SB-202(C)	SB202(C)2	8/22/2002	2							
SB-202(C)	SB202(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-202(C)	SB202(C)3	8/22/2002	3							
SB-202(C)	SB202(C)7	8/22/2002	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-202(C)	SB202(C)7	8/22/2002	7							
SB-203(C)	SB203(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-203(C)	SB203(C)3	8/22/2002	3							
SB-203(C)	SB203(C)7	8/22/2002	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-203(C)	SB203(C)7	8/22/2002	7							
SB-204(C)	SB204(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-204(C)	SB204(C)3	8/22/2002	3							
SB-204(C)	SB204(C)8	8/22/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-204(C)	SB204(C)8	8/22/2002	8							
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0268 U	0.0268 U	0.0134 U
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5							
SB-206(C)	SB206(C)-6	8/27/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-206(C)	SB206(C)-6	8/27/2002	6							
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5							
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5							
SB-209(C)	SB209(C)-3	8/27/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-209(C)	SB209(C)-3	8/27/2002	3							
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5							
SB-211(C)	SB211(C)-3	8/27/2002	3	0.0134 U	0.0134 U	0.0134 U	0.011 J	0.00371 J	0.0134 U	0.0132 J
SB-211(C)	SB211(C)-3	8/27/2002	3							
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5							
SB-213(C)	SB213(C)-4	8/27/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-213(C)	SB213(C)-4	8/27/2002	4							
SB-214(C)	SB214(C)-5	8/27/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-214(C)	SB214(C)-5	8/27/2002	5							
SB-215(C)	SB215(C)-5	8/27/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-215(C)	SB215(C)-5	8/27/2002	5							
SB-216(C)	SB216(C)-3	8/27/2002	3	0.0117 J	0.0117 J	0.00632 J	0.00491 J	0.0134 U	0.0134 U	0.0106 J
SB-216(C)	SB216(C)-3	8/27/2002	3							
SB-217(C)	SB217(C)-3	8/28/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-217(C)	SB217(C)-3	8/28/2002	3							
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00477 J
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5							
SB-219(C)	SB219(C)-4	8/28/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-219(C)	SB219(C)-4	8/28/2002	4							
SB-220(C)	SB220 (C)-5	8/28/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-220(C)	SB220 (C)-5	8/28/2002	5							
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5							
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5							
SB-223(C)	SB223 (C)-6	8/29/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-223(C)	SB223 (C)-6	8/29/2002	6							
SB-224(C)	SB224 (C)-2	8/29/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-224(C)	SB224 (C)-2	8/29/2002	2							
SB-225(C)	SB225 (C)-3	8/29/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-225(C)	SB225 (C)-3	8/29/2002	3							
SB-226(C)	SB226 (C)-3	8/29/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-226(C)	SB226 (C)-3	8/29/2002	3							
SB-227(C)	SB227 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-227(C)	SB227 (C)-8	8/29/2002	8							
SB-228(C)	SB228 (C)-4	8/29/2002	4	0.0268 U	0.0268 U	0.0268 U	0.0241 J	0.0255 J	0.0268 U	0.0189 J
SB-228(C)	SB228 (C)-4	8/29/2002	4							
SB-229(C)	SB229 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-229(C)	SB229 (C)-8	8/29/2002	8							
SB-230(C)	SB230 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-230(C)	SB230 (C)-8	8/29/2002	8							
SB-231(C)	SB231 (C)-2	8/29/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-231(C)	SB231 (C)-2	8/29/2002	2							
SB-232(C)	SB 232 (C)-8	8/30/2002	8	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-232(C)	SB 232 (C)-8	8/30/2002	8							
SB-233(C)	SB 233 (C)-3	8/30/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-233(C)	SB 233 (C)-3	8/30/2002	3							
SB-234(C)	SB 234 (C)-8	8/30/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-234(C)	SB 234 (C)-8	8/30/2002	8							
SB-235(C)	SB 235 (C)-6	8/30/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-235(C)	SB 235 (C)-6	8/30/2002	6							
SB-236(C)	SB 236 (C)-6	8/30/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-236(C)	SB 236 (C)-6	8/30/2002	6							
SB-237(C)	SB 237 (C)-6	8/30/2002	6	0.0152	0.0118 J	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00634 J
SB-237(C)	SB 237 (C)-6	8/30/2002	6							
SB-238(C)	SB 238 (C)-3	8/30/2002	3	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-238(C)	SB 238 (C)-3	8/30/2002	3							
SB-239(C)	SB-239(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-239(C)	SB-239(C)-4	9/3/2002	4							
SB-240(C)	SB-240(C)-6	9/3/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-240(C)	SB-240(C)-6	9/3/2002	6							
SB-241(C)	SB-241(C)-5	9/3/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-241(C)	SB-241(C)-5	9/3/2002	5							
SB-242(C)	SB-242(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-242(C)	SB-242(C)-4	9/3/2002	4							
SB-243(C)	SB-243(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-243(C)	SB-243(C)-4	9/3/2002	4							
SB-244(C)	SB-244(C)-3	9/3/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-244(C)	SB-244(C)-3	9/3/2002	3							
SB-245(C)	SB-245(C)-5	9/3/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-245(C)	SB-245(C)-5	9/3/2002	5							
SB-246(C)	SB-246(C)-5	9/3/2002	5	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-246(C)	SB-246(C)-5	9/3/2002	5							
SB-247(C)	SB-247(C)-6	9/3/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-247(C)	SB-247(C)-6	9/3/2002	6							
SB-250(C)	SB-250(C)-4	9/9/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-250(C)	SB-250(C)-4	9/9/2002	4							
SB-251(C)	SB-251(C)-4	9/9/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00363 J
SB-251(C)	SB-251(C)-4	9/9/2002	4							
SB-252(C)	SB-252(C)-5	9/9/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-252(C)	SB-252(C)-5	9/9/2002	5							
SB-253(C)	SB-253(C)-2	9/4/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-253(C)	SB-253(C)-2	9/4/2003	2							
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5							
SB-254(C)	SB-254(C)-2	9/4/2003	2	0.02 J	0.0598 J	0.117	0.167	0.249	0.067 U	0.199
SB-254(C)	SB-254(C)-2	9/4/2003	2							
SB-254(C)	SB-254(C)-7	9/4/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-254(C)	SB-254(C)-7	9/4/2003	7							
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5	0.357	1.79	0.27	0.118 J	0.151 J	0.151 J	0.434
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5							
SB-255(C)	SB-255(C)-7	9/4/2003	7	7.4	3.72	4.43	5.84	3.48	3.54	5.39
SB-255(C)	SB-255(C)-7	9/4/2003	7							
SB256(C)	SB256 (c) 6	3/31/2004	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB256(C)	SB256 (c) 6	3/31/2004	6							
SB-301(D)	SB-301-D-3.5	8/20/2002	3.5	0.257	0.286	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-301(D)	SB-301-D-3.5	8/20/2002	3.5							
SB-304(D)	SB-304-D-2.0	8/19/2002	2	0.345	0.0478 J	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-304(D)	SB-304-D-2.0	8/19/2002	2							
SB-304(D)	SB-D-DUP-0819	8/19/2002	2	0.134 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-304(D)	SB-D-DUP-0819	8/19/2002	2							
SB-304(D)	SB-304-D-5.0	8/19/2002	5	0.086	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-304(D)	SB-304-D-5.0	8/19/2002	5							
SB-305(D)	SB-305-D-2.0	8/19/2002	2	0.0702	0.032	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00442 J
SB-305(D)	SB-305-D-2.0	8/19/2002	2							
SB-305(D)	SB-305-D-4.5	8/19/2002	4.5	0.00887 J	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-305(D)	SB-305-D-4.5	8/19/2002	4.5							
SB-306(D)	SB-306-D-2.0	8/19/2002	2	0.494	0.0877 J	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-306(D)	SB-306-D-2.0	8/19/2002	2							
SB-306(D)	SB-306-D-4.5	8/19/2002	4.5	0.841	0.175	0.134 U	0.134 U	0.134 U	0.134 U	0.0408 J
SB-306(D)	SB-306-D-4.5	8/19/2002	4.5							
SB-307(D)	SB-307-D-2.0	8/19/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-307(D)	SB-307-D-2.0	8/19/2002	2							
SB-307(D)	SB-307-D-2.0	8/19/2002	2							
SB-309(D)	SB-309-D-2.0	8/19/2002	2	0.272	0.0826	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-309(D)	SB-309-D-2.0	8/19/2002	2							
SB-309(D)	SB-309-D-5.0	8/19/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-309(D)	SB-309-D-5.0	8/19/2002	5							
SB-309(D)	SB-309-D-5.0	8/19/2002	5							
SB-310(D)	SB-310-D-2.0	8/19/2002	2	0.0115 J	0.00393 J	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00369 J
SB-310(D)	SB-310-D-2.0	8/19/2002	2							
SB-310(D)	SB-310-D-5.0	8/19/2002	5	0.325	0.0572 J	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-310(D)	SB-310-D-5.0	8/19/2002	5							
SB-311(D)	SB-311-D-5.0	8/19/2002	5	0.0268 U	0.0166 J	0.265	0.405	0.447	0.384	0.374
SB-311(D)	SB-311-D-5.0	8/19/2002	5							
SB-311(D)	SB-311-D-5.0	8/19/2002	5							
SB-312(D)	SB-312-D-5.0	8/19/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-312(D)	SB-312-D-5.0	8/19/2002	5							
SB-312(D)	SB-312-D-5.0	8/19/2002	5							
SB-313(D)	SB-313-D-5.0	8/20/2002	5							
SB-313(D)	SB-313-D-18.0	8/20/2002	18							
SB-314(D)	SB-314-D-2.0	8/20/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-314(D)	SB-314-D-10.0	8/20/2002	10	0.414	1.34 U	0.005 J	0.0134 U	0.0134 U	0.0134 U	0.0249
SB-314(D)	SB-314-D-15.0	8/20/2002	15	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-314(D)	SB-314-D-15.0	8/20/2002	15							
SB-314(D)	SB-314-D-15.0	8/20/2002	15							
SB-315(D)	SB-315-D-2.0	8/20/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-315(D)	SB-315-D-2.0	8/20/2002	2							
SB-315(D)	SB-315-D-2.0	8/20/2002	2							
SB-315(D)	SB-315-D-5.0	8/20/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-315(D)	SB-315-D-15.0	8/20/2002	15							
SB-315(D)	SB-315-D-15.0	8/20/2002	15							
SB-316(D)	SB-316-D-2.0	8/20/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-316(D)	SB-316-D-2.0	8/20/2002	2							
SB-316(D)	SB-316-D-2.0	8/20/2002	2							
SB-316(D)	SB-316-D-5.0	8/20/2002	5							
SB-316(D)	SB-D-DUP-3	8/20/2002	5	0.00889 J	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.0268 U
SB-316(D)	SB-D-DUP-3	8/20/2002	5							
SB-316(D)	SB-316-D-10.0	8/20/2002	10	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-316(D)	SB-316-D-10.0	8/20/2002	10							
SB-316(D)	SB-316-D-14.5	8/20/2002	14.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-316(D)	SB-316-D-14.5	8/20/2002	14.5							
SB-318(D)	SB-318-D-10.0	8/20/2002	10							
SB-318(D)	SB-318-D-15.0	8/20/2002	15							
SB-320(D)	SB-320(D)-2	9/10/2003	2							
SB-320(D)	SB-320(D)-5	9/10/2003	5							
SB-321(D)	SB-321(D)-2	9/9/2003	2							
SB-321(D)	SB-321(D)-5	9/9/2003	5							
SB-322(D)	SB-322(D)-2	9/10/2003	2							
SB-322(D)	SB-322(D)-5	9/10/2003	5							
SB-323(D)	SB-323(D)-7	9/10/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-323(D)	SB-323(D)-7	9/10/2003	7							
SB-324(D)	SB-324(D)-2	9/10/2003	2							
SB-324(D)	SB-324(D)-5	9/10/2003	5							
SB-324(D)	SB-324(D)-10	9/10/2003	10							
SB-324(D)	SB-324(D)-15	9/10/2003	15							
SB-324(D)	SB-324(D)-DUP	9/10/2003	15							
SB-325(D)	SB-325(D)-2	9/10/2003	2							
SB-325(D)	SB-325(D)-DUP	9/10/2003	2							
SB-325(D)	SB-325(D)-5	9/10/2003	5							
SB-325(D)	SB-325(D)-10	9/10/2003	10							
SB-325(D)	SB-325(D)-15	9/10/2003	15							
SB-326(D)	SB-326(D)-2	9/9/2003	2							
SB-326(D)	SB-326(D)-5	9/9/2003	5							
SB-326(D)	SB-326(D)-10	9/9/2003	10							
SB-327(D)	SB-327(D)-2	9/10/2003	2							
SB-327(D)	SB-327(D)-5	9/10/2003	5							
SB-327(D)	SB-327(D)-10	9/10/2003	10							
SB-327(D)	SB-327(D)-15	9/10/2003	15							
SB-328(D)	SB-328(D)-2	9/10/2003	2							
SB-328(D)	SB-328(D)-5	9/10/2003	5							
SB-328(D)	SB-328(D)-10	9/10/2003	10							
SB-328(D)	SB-328(D)-15	9/10/2003	15							
SB-402(F)	SB-402(F)-2.5	8/23/2002	2.5							
SB-405(F)	SB-405(F)-7.5	8/22/2002	7.5							
SB-406(F)	SB-406(F)-2.5	8/22/2002	2.5	0.0134 U	0.0134 U	0.00903 J	0.0171	0.0122 J	0.00808 J	0.0186
SB-407(F)	SB407/S-2(6-8)	8/22/2002	7							
SB-407(F)	SB-407(F)-7.5	8/22/2002	7.5	0.067 U J	0.0216 J	0.067 U J	0.067 U J	0.067 U J	0.067 U J	0.067 U J
SB-407(F)	SB-407(F)-7.5	8/22/2002	7.5							
SB-408(F)	SB-408(F)-2.5	8/22/2002	2.5	0.134 U	0.134 U	0.0134	0.0582	0.0267	0.036	0.065 J
SB-408(F)	SB-408(F)-2.5	8/22/2002	2.5							
SB-408(F)	SB408/S-2(6-7)	8/22/2002	6.5							
SB-408(F)	SB-408(F)-7.5	8/22/2002	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-410(F)	SB-410(F)-2'	3/31/2004	2							
SB-410(F)	SB-410(F)-4'	3/31/2004	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-410(F)	SB-410(F)-4'	3/31/2004	4							
SB-410(F)	SB-410(F)-9'	3/31/2004	9							
SB-600(N)	SB-600(N)-7	9/13/2002	7							
SB-601(N)	SB-601(N)-3	9/13/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-601(N)	SB-601(N)-3	9/13/2002	3							
SB-601(N)	SB-601(N)-7	9/13/2002	7	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-601(N)	SB-601(N)-7	9/13/2002	7							
SB-602(N)	SB-602(N)-3	9/13/2002	3							

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-602(N)	SB-602(N)-7	9/13/2002	7	1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	1 U
SB-602(N)	SB-602(N)-7	9/13/2002	7	0.565	1 U	1 U	1 U	1 U	0.1 U	0.1 U
SB-602(N)	SB-602(N)-7	9/13/2002	7							
SB-602(N)	SB-602(N)-7	9/13/2002	7							
SB-603(N)	SB-603(N)-7	9/13/2002	7	0.134	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-603(N)	SB-603(N)-7	9/13/2002	7							
SB-603(N)	SB-603(N)-7	9/13/2002	7							
SB-604(N)	SB-604(N)-3	9/13/2002	3							
SB-604(N)	SB-604(N)-7	9/13/2002	7	0.67 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-604(N)	SB-604(N)-7	9/13/2002	7							
SB-605(N)	SB-605(N)-3	9/13/2002	3	0.0195	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-605(N)	SB-605(N)-3	9/13/2002	3							
SB-605(N)	SB-605(N)-7	9/13/2002	7	0.529	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-605(N)	SB-605(N)-7	9/13/2002	7							
SB-606(N)	SB-606(N)-3	9/13/2002	3							
SB-606(N)	SB-606(N)-7	9/13/2002	7							
SB-607(N)	SB-607(N)-11	9/13/2002	11							
SB-608(N)	SB-608(N)-3	9/13/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-608(N)	SB-608(N)-3	9/13/2002	3							
SB-608(N)	SB-608(N)-6	9/13/2002	6							
SB-609(N)	SB-609(N)-3	9/13/2002	3							
SB-609(N)	SB-609(N)-7	9/13/2002	7							
SB-612(N)	SB-612 (N)-7	9/12/2002	7	0.484	0.149	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
SB-612(N)	SB-612 (N)-7	9/12/2002	7							
SB-612(N)	SB-612 (N)-7	9/12/2002	7							
SB-613(N)	SB-613 (N)-5.5	9/12/2002	5.5							
SB-614(N)	SB-614 (N)-7	9/12/2002	7							
SB-615(N)	SB-615 (N)-7	9/12/2002	7							
SB-616(N)	SB-616 (N)-7	9/12/2002	7							
SB-617(N)	SB-617 (N)-3	9/12/2002	3	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-617(N)	SB-617 (N)-3	9/12/2002	3							
SB-617(N)	SB-617 (N)-3	9/12/2002	3							
SB-617(N)	SB-617 (N)-5.5	9/12/2002	5.5							
SB-618(N)	SB-618 (N)-1.5	9/12/2002	1.5							
SB-618(N)	SB-618 (N)-7	9/12/2002	7	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U	1.65 U
SB-618(N)	SB-618 (N)-7	9/12/2002	7							
SB-618(N)	SB-618 (N)-7	9/12/2002	7							
SB-619(N)	SB-619 (N)-7	9/12/2002	7	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-619(N)	SB-619 (N)-7	9/12/2002	7							
SB-619(N)	SB-619 (N)-7	9/12/2002	7							
SB-619(N)	SB-619 (N)-11	9/12/2002	11	0.351	0.294	0.01 U	0.01 U	0.01 U	0.01 U	0.0115
SB-619(N)	SB-619 (N)-11	9/12/2002	11							
SB-619(N)	SB-619 (N)-11	9/12/2002	11							
SB-619(N)	SB-619 (N)-11	9/12/2002	11							



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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-620(N)	SB-620 (N)-3	9/12/2002	3							
SB-620(N)	SB-620 (N)-7	9/12/2002	7	0.758	0.558	0.0123	0.01 U	0.013	0.0109	0.0362
SB-620(N)	SB-620 (N)-7	9/12/2002	7							
SB-620(N)	SB-620 (N)-7	9/12/2002	7							
SB-620(N)	SB-620 (N)-7	9/12/2002	7							
SB-621(N)	SB-621 (N)-7	9/12/2002	7							
SB-622(N)	SB-622 (N)-2	9/12/2002	2							
SB-622(N)	SB-622 (N)-7	9/12/2002	7							
SB-622(N)	SB-622 (N)-7	9/12/2002	7							
SB-623(N)	SB-623 (N)-7	9/12/2002	7							
SB-623(N)	SB-623 (N)-7	9/12/2002	7							
SB-624(N)	SB-624 (N)-2	9/12/2002	2							
SB-624(N)	SB-624 (N)-7	9/12/2002	7	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
SB-624(N)	SB-624 (N)-7	9/12/2002	7							
SB-625(N)	SB-625 (N)-2	9/12/2002	2							
SB-625(N)	SB-625 (N)-7	9/12/2002	7	0.0203	0.275	0.01 U	0.01 U	0.01 U	0.01 U	0.0181
SB-625(N)	SB-625 (N)-7	9/12/2002	7							
SB-625(N)	SB-625 (N)-7	9/12/2002	7							
SB-625(N)	SB-625 (N)-10	9/12/2002	10							
SB-626(N)	SB-626 (N)-7	9/12/2002	7	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-626(N)	SB-626 (N)-7	9/12/2002	7							
SB-626(N)	SB-626 (N)-7	9/12/2002	7							
SB-627(N)	SB-627(N)-2	8/28/2003	2	0.067 U	0.067 U	0.0387 J	0.0577 J	0.0759	0.0433 J	0.0629 J
SB-627(N)	SB-627(N)-2	8/28/2003	2							
SB-629(N)	SB-629(N)-7.5	8/28/2003	7.5	3.02 U	1.35	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
SB-629(N)	SB-629(N)-7.5	8/28/2003	7.5							
SB-632(N)	SB-632(N)-7.5	9/8/2003	7.5	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U
SB-632(N)	SB-632(N)-7.5	9/8/2003	7.5							
SB-700(P)	SB-700(P)-3	8/21/2002	3							
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5	0.0346	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5							
SB-701(P)	SB-701(P)-2	8/20/2002	2							
SB-701(P)	SB-701(P)-11	8/20/2002	11	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-701(P)	SB-701(P)-11	8/20/2002	11							
SB-701(P)	SB-701(P)-12	8/20/2002	12							
SB-702(P)	SB-702(P)-2	8/21/2002	2							
SB-702(P)	SB-702(P)-11	8/21/2002	11	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-702(P)	SB-702(P)-11	8/21/2002	11							
SB-703(P)	SB-703(P)-2	8/21/2002	2							
SB-703(P)	SB-703(P)-10	8/21/2002	10							
SB-704(P)	SB-704(P)-2	8/21/2002	2							
SB-704(P)	SB-704(P)-11	8/21/2002	11							
SB-705(P)	SB-705(P)-9.5	8/20/2002	9.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

**TABLE D-4**

**RBDMSVOCs IN SOIL**

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-706(P)	SB-706(P)-5.5	8/21/2002	5.5							
SB-706(P)	SB-706(P)-9.5	8/21/2002	9.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00531 J
SB-707(P)	SB-707(P)-10	8/21/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-707(P)	SB-707(P)-10	8/21/2002	10							

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-708(P)	SB-708(P)-10	8/20/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-709(P)	SB-709(P)-3	8/21/2002	3							
SB-709(P)	SB-709(P)-10	8/21/2002	10							
SB-709(P)	SB-709(P)-10	8/21/2002	10							
SB-710(P)	SB-710(P)-3	8/21/2002	3	0.0268 U	0.0268 U	0.0268 U	0.0117 J	0.0536 U	0.0268 U	0.0368
SB-710(P)	SB-710(P)-3	8/21/2002	3							
SB-710(P)	SB-710(P)-5.5	8/21/2002	5.5							
SB-710(P)	SB-710(P)-5.5	8/21/2002	5.5							
SB-711(P)	SB-711(P)-3	8/21/2002	3							
SB-711(P)	SB-711(P)-10	8/21/2002	10							
SB-712(P)	SB-712(P)-2	8/21/2002	2							
SB-712(P)	SB-712(P)-2	8/21/2002	2							
SB-712(P)	SB-712(P)-10	8/21/2002	10	0.215	0.62	0.326	0.151	0.324	0.268	0.698
SB-714(P)	SB-714(P)-7.5	8/21/2002	7.5	0.833	1.34 U	0.0427	0.0284	0.0289	0.0169	0.0639
SB-714(P)	SB-714(P)-10	8/21/2002	10							
SB-716(P)	SB-716(P)-3	8/20/2002	3							
SB-716(P)	SB-716(P)-10	8/20/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-716(P)	SB-716(P)-10	8/20/2002	10							
SB-717(P)	SB-717(P)-3	8/20/2002	3							
SB-717(P)	SB-717(P)-10	8/20/2002	10							
SB-719(P)	SB-719(P)-12	8/23/2002	12	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-720(P)	SB-720(P)-2	8/23/2002	2	0.0076 J	0.0139	0.225	0.238	0.233	0.187	0.285
SB-720(P)	SB-720(P)-11.5	8/23/2002	11.5	0.604	0.382	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SB-721(P)	SB-721(P)-7'	3/31/2004	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-721(P)	SB-721(P)-7'	3/31/2004	7							
SB-820(Q)	SB-820 (Q)-0C	8/29/2002	-	0.067 U	0.067 U	0.067 U	0.067 U	0.0272 J	0.067 U	0.0238 J
SB-820(Q)	SB-820 (Q)-0C	8/29/2002	-							
SB-834(Q)	SB-834(Q)-2	9/5/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-834(Q)	SB-834(Q)-2	9/5/2003	2							
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5							
SB-835(Q)	SB-835(Q)-2	9/5/2003	2	0.0134 U	0.0134 U	0.0108 J	0.0169	0.0205	0.0162	0.0244
SB-835(Q)	SB-835(Q)-2	9/5/2003	2							
SB-835(Q)	SB-835(Q)-7	9/5/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-835(Q)	SB-835(Q)-7	9/5/2003	7							
SB-900(S)	SB-900(S)-4	8/26/2002	4	0.0134 U	0.00544 J	0.00997 J	0.00982 J	0.0134 U	0.00397 J	0.0155
SB-900(S)	SB-900(S)-4	8/26/2002	4							
SB-900(S)	SB-900(S)-12	8/26/2002	12	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-900(S)	SB-900(S)-12	8/26/2002	12							

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Acenaphthene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Chrysene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-902(S)	SB-902 (S)-12	8/26/2002	12	0.134 U	0.027	0.067 U	0.0134 U	0.0134 U	0.0134 U	0.067 U
SB-902(S)	SB-902 (S)-12	8/26/2002	12							
SB-903(S)	SB-903 (S)-10	8/26/2002	10	1.68 U	0.359	0.335 U	0.0134 U	0.00753 J	0.00481 J	0.335 U
SB-903(S)	SB-903 (S)-10	8/26/2002	10							
SB-904(S)	SB-904 (S)-12	8/26/2002	12	1.49	0.43	0.335 U	0.0134 U	0.067 U	0.067 U	0.335 U
SB-904(S)	SB-904 (S)-12	8/26/2002	12							
SB-905(S)	SB-905 (S)-12	8/26/2002	12	0.067 U	0.067 U	0.067 U	0.0134 U	0.0134 U	0.0134 U	0.067 U
SB-905(S)	SB-905 (S)-12	8/26/2002	12							
SB-906(S)	SB-906 (S)-4	8/27/2002	4	0.067 U	0.067 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00707 J
SB-906(S)	SB-906 (S)-4	8/27/2002	4							
SB-906(S)	SB-906 (S)-12	8/27/2002	12	0.633	0.379	0.0208	0.00686 J	0.067 U	0.067 U	0.066
SB-906(S)	SB-906 (S)-12	8/27/2002	12							
SB-908(S)	SB-908 (S)-4	8/27/2002	4	1.34 U	1.34 U	0.254 J	0.148 J	0.0868 J	0.148 J	0.585
SB-908(S)	SB-908 (S)-4	8/27/2002	4							
SB-908(S)	SB-908 (S)-8	8/27/2002	8	0.67 U	0.67 U	0.67 U	0.0809 J	0.268 U	0.268 U	0.302 J
SB-908(S)	SB-908 (S)-8	8/27/2002	8							
SB-908(S)	SB-908 (S)-10	8/27/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-908(S)	SB-908 (S)-10	8/27/2002	10							
SB-909(S)	SB-909 (S)-4	8/27/2002	4	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.134 U	0.0389 J
SB-910(S)	SB-910 (S)-4	8/27/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-910(S)	SB-910 (S)-4	8/27/2002	4							
SB-912(S)	SB-912(S)-2	9/3/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-912(S)	SB-912(S)-2	9/3/2003	2							
SB-912(S)	SB-912(S)-7	9/3/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-912(S)	SB-912(S)-7	9/3/2003	7							
SB-913(S)	SB-913(S)-2	9/3/2003	2	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
SB-913(S)	SB-913(S)-2	9/3/2003	2							
SB-913(S)	SB-913(S)-7	9/3/2003	7	0.335 U	0.335 U	0.335 U	0.335 U	0.335 U	0.335 U	0.335 U
SB-913(S)	SB-913(S)-7	9/3/2003	7							
SB-914(S)	SB-914(S)-2	9/3/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-914(S)	SB-914(S)-2	9/3/2003	2							
SB-914(S)	SB-914(S)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-914(S)	SB-914(S)-7.5	9/3/2003	7.5							
SB-915(S)	SB-915(s)-5.0	3/31/2004	5	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SS-1	FMNBP-SS-1	9/6/2006	-	1.29	1.29	0.146 U	0.146 U	0.146 U	0.146 U	0.146 U
SS-1	FMNBP-SS-1	9/6/2006	-							
SS-4	FMNBP-SS-4	9/6/2006	-	0.53	0.386	0.141 U	0.141 U	0.141 U	0.141 U	0.141 U
SS-4	FMNBP-SS-4	9/6/2006	-							
TP-201(C)	TP201(C)6E	8/27/2002	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
TP-201(C)	TP201(C)6E	8/27/2002	-							
TP-202(C)	TP202(C)6W	8/27/2002	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
TP-202(C)	TP202(C)6W	8/27/2002	-							

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EX-1(S)	Ex-1/S-1	3/30/2004	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0056 J
EX-2(S)	Ex-2/S-1	3/30/2004	-	0.0134 U	0.00865 J	0.0134 U	0.0083 J	0.0352	0.0162
EX-3(S)	Ex-3/S-1	3/31/2004	-	0.0233 J	0.152	0.067 U	0.0629 J	0.067 U	0.194
EX-4(S)	Ex-4/S-1	3/29/2004	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-001(A)	SB-001(A)-7.5	8/27/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-001(A)	SB-001(A)-7.5	8/27/2003	7.5					0.0134 U	
SB-002(A)	SB-002(A)-2.5	8/27/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-002(A)	SB-002(A)-2.5	8/27/2003	2.5					0.0134 U	
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0287 J	0.0134 U
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5					0.0134 U	
SB-003(A)	SB-003(A)-5	9/4/2003	5	0.0268 U	0.0244 J	0.0268 U	0.0182 J	0.00983 J	0.031
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5					0.0134 U	
SB-005(A)	SB-005(A)-7	9/5/2003	7	0.0134 U	0.00753 J	0.0134 U	0.00376 J	0.0167 J	0.0087 J
SB-005(A)	SB-005(A)-7	9/5/2003	7					0.0134 U	
SB-006(A)	SB-006(A)-7'	3/31/2004	7	0.67 U	0.273 J	6.7	0.67 U	38	1.09
SB-006(A)	SB-006(A)-7'	3/31/2004	7					61.2	
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5	0.268 U	0.128 J	3.22	0.268 U	53.4	0.388
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5					44.9	
SB-008(A)	SB-008(A)-2	8/26/2003	2	0.661	3.92	0.268 U	1.64	0.2 U	3.58
SB-008(A)	SB-008(A)-2	8/26/2003	2					0.268 U	
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5					0.0134 U	
SB-009(A)	SB-009(A)-2	8/27/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.208	0.0134 U
SB-009(A)	SB-009(A)-2	8/27/2003	2					0.0134 U	
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5	0.268 U	2.68 U	7.8	0.268 U	11.3	0.969
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5					10.5	
SB-010(A)	SB-010(A)-2	8/27/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.262	0.0134 U
SB-010(A)	SB-010(A)-2	8/27/2003	2					0.0134 U	
SB-010(A)	SB-010(A)-7.5	8/27/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0438 J	0.0134 U
SB-010(A)	SB-010(A)-7.5	8/27/2003	7.5					0.0134 U	
SB-011(A)	SB-011(A)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-011(A)	SB-011(A)-7.5	9/3/2003	7.5					0.0134 U	
SB-013(A)	SB-013(A)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-013(A)	SB-013(A)-7.5	9/3/2003	7.5					0.0134 U	
SB-015(A)	SB-015(A)-7	9/10/2003	7	0.134 U	0.134 U	0.134 U	0.134 U	7.06	0.134 U
SB-015(A)	SB-015(A)-7	9/10/2003	7					15.7	
SB-016(A)	SB-016(A)-7	9/4/2003	7	0.067 U	0.067 U	0.151	0.067 U	0.552	0.067 U
SB-017(A)	SB-017(A)-7.5	9/8/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-017(A)	SB-017(A)-7.5	9/8/2003	7.5					0.00659 J	
SB-019(A)	SB-019(A)-2.5	8/27/2003	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-019(A)	SB-019(A)-2.5	8/27/2003	2.5					0.0134 U	
SB-019(A)	SB-019(A)-7.5	8/27/2003	7.5	0.67 U	0.67 U	0.823	0.67 U	85.3	0.336 J

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-019(A)	SB-019(A)-7.5	8/27/2003	7.5					35.6	
SB-020(A)	SB-020(A)-4'	3/31/2004	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-020(A)	SB-020(A)-4'	3/31/2004	4					0.0134 U	
SB-020(A)	SB-020(A)-9'	3/31/2004	9	0.0134 U	0.0201 U	0.0134 U	0.0134 U	0.2 U	0.0082 J
SB-020(A)	SB-020(A)-9'	3/31/2004	9					0.00541 J	
SB-021(A)	SB-021 (A)-11.5	9/14/2005	11.5	1.69 U	1.69 U	23.4	1.69 U	45.4 J	6.03
SB-021(A)	SB-021 (A)-11.5	9/14/2005	11.5					58.4	
SB-027(A)	SB-027 (A)-11	9/14/2005	11	1.55 U	2.33 U	25.4	1.55 U	41.9 J	5.93
SB-027(A)	SB-027 (A)-11	9/14/2005	11					64.9	
SB-029(A)	SB-029 (A)-12.5	9/14/2005	12.5	0.0169 U J	0.0169 U J	0.0169 U J	0.0169 U J	0.122 U J	0.0169 U J
SB-029(A)	SB-029 (A)-12.5	9/14/2005	12.5					0.0169 U J	
SB-100(C)	SB100(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0039 J
SB-100(C)	SB100(C)3	8/22/2002	3					0.00837 J	
SB-100(C)	SB100(C)20	8/22/2002	20	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0179 BJ	0.0134 U
SB-100(C)	SB100(C)20	8/22/2002	20					0.0134 U	
SB-101(C)	SB101(C)3	8/22/2002	3					0.001 U B	
SB-101(C)	SB101(C)18	8/22/2002	18					0.001 U B	
SB-102(C)	SB102(C)1-3	8/22/2002	2					0.001 U B	
SB-102(C)	SB102(C)18	8/22/2002	18					0.001 U B	
SB-103(C)	SB103(C)3	8/22/2002	3					0.001 U B	
SB-103(C)	SB103(C)18	8/22/2002	18					0.001 U B	
SB-104(C)	SB104(C)4	8/22/2002	4					0.001 U B	
SB-104(C)	SB104(C)20	8/22/2002	20					0.001 U	
SB-200(C)	SB200(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-200(C)	SB200(C)3	8/22/2002	3					0.0134 U	
SB-200(C)	SB200(C)6	8/22/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-200(C)	SB200(C)6	8/22/2002	6					0.0134 U	
SB-201(C)	SB201(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-201(C)	SB201(C)3	8/22/2002	3					0.0134 U	
SB-201(C)	SB201(C)6	8/22/2002	6	0.0268 U	0.0112 J	0.0268 U	0.0268 U	0.001 U	0.0934
SB-201(C)	SB201(C)6	8/22/2002	6					0.0268 U	
SB-202(C)	SB202(C)2	8/22/2002	2	1.68 U	1.68 U	1.68 U	1.68 U	0.00664 J,B	2.88
SB-202(C)	SB202(C)2	8/22/2002	2					1.68 U	
SB-202(C)	SB202(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-202(C)	SB202(C)3	8/22/2002	3					0.0134 U	
SB-202(C)	SB202(C)7	8/22/2002	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-202(C)	SB202(C)7	8/22/2002	7					0.000354 J	
SB-203(C)	SB203(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-203(C)	SB203(C)3	8/22/2002	3					0.001 U	
SB-203(C)	SB203(C)7	8/22/2002	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-203(C)	SB203(C)7	8/22/2002	7					0.0134 U	
SB-204(C)	SB204(C)3	8/22/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U

TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-204(C)	SB204(C)3	8/22/2002	3					0.0134 U	
SB-204(C)	SB204(C)8	8/22/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-204(C)	SB204(C)8	8/22/2002	8					0.0134 U	
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0079 J
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5					0.0134 U	
SB-206(C)	SB206(C)-6	8/27/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-206(C)	SB206(C)-6	8/27/2002	6					0.0134 U	
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5					0.0134 U	
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5					0.0134 U	
SB-209(C)	SB209(C)-3	8/27/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-209(C)	SB209(C)-3	8/27/2002	3					0.0134 U	
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5					0.0134 U	
SB-211(C)	SB211(C)-3	8/27/2002	3	0.00545 J	0.0134 U	0.0134 U	0.00711 J	0.001 U	0.0045 J
SB-211(C)	SB211(C)-3	8/27/2002	3					0.0134 U	
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5					0.0134 U	
SB-213(C)	SB213(C)-4	8/27/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-213(C)	SB213(C)-4	8/27/2002	4					0.0134 U	
SB-214(C)	SB214(C)-5	8/27/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-214(C)	SB214(C)-5	8/27/2002	5					0.0134 U	
SB-215(C)	SB215(C)-5	8/27/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0056 J
SB-215(C)	SB215(C)-5	8/27/2002	5					0.0134 U	
SB-216(C)	SB216(C)-3	8/27/2002	3	0.0134 U	0.00404 J	0.0127 J	0.0134 U	0.001 U B	0.0351
SB-216(C)	SB216(C)-3	8/27/2002	3					0.0134 U	
SB-217(C)	SB217(C)-3	8/28/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-217(C)	SB217(C)-3	8/28/2002	3					0.0134 U	
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0108 J
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5					0.0134 U	
SB-219(C)	SB219(C)-4	8/28/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-219(C)	SB219(C)-4	8/28/2002	4					0.001 U	
SB-220(C)	SB220 (C)-5	8/28/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-220(C)	SB220 (C)-5	8/28/2002	5					0.0134 U	
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5					0.0134 U	
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5					0.0134 U	
SB-223(C)	SB223 (C)-6	8/29/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U	0.0268 U
SB-223(C)	SB223 (C)-6	8/29/2002	6					0.0268 U	
SB-224(C)	SB224 (C)-2	8/29/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-224(C)	SB224 (C)-2	8/29/2002	2					0.0134 U	
SB-225(C)	SB225 (C)-3	8/29/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U

TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-225(C)	SB225 (C)-3	8/29/2002	3					0.0134 U	
SB-226(C)	SB226 (C)-3	8/29/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-226(C)	SB226 (C)-3	8/29/2002	3					0.0134 U	
SB-227(C)	SB227 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-227(C)	SB227 (C)-8	8/29/2002	8					0.0134 U	
SB-228(C)	SB228 (C)-4	8/29/2002	4	0.0268 U	0.014 J	0.0268 U	0.00816 J	0.001 U	0.0233 J
SB-228(C)	SB228 (C)-4	8/29/2002	4					0.0268 U	
SB-229(C)	SB229 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-229(C)	SB229 (C)-8	8/29/2002	8					0.0134 U	
SB-230(C)	SB230 (C)-8	8/29/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-230(C)	SB230 (C)-8	8/29/2002	8					0.0134 U	
SB-231(C)	SB231 (C)-2	8/29/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-231(C)	SB231 (C)-2	8/29/2002	2					0.0134 U	
SB-232(C)	SB 232 (C)-8	8/30/2002	8	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U	0.0268 U
SB-232(C)	SB 232 (C)-8	8/30/2002	8					0.0268 U	
SB-233(C)	SB 233 (C)-3	8/30/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-233(C)	SB 233 (C)-3	8/30/2002	3					0.0134 U	
SB-234(C)	SB 234 (C)-8	8/30/2002	8	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-234(C)	SB 234 (C)-8	8/30/2002	8					0.0134 U	
SB-235(C)	SB 235 (C)-6	8/30/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-235(C)	SB 235 (C)-6	8/30/2002	6					0.0134 U	
SB-236(C)	SB 236 (C)-6	8/30/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U	0.0107 J
SB-236(C)	SB 236 (C)-6	8/30/2002	6					0.0268 U	
SB-237(C)	SB 237 (C)-6	8/30/2002	6	0.0134 U	0.0134 U	0.0394	0.0134 U	0.001 U	0.0119 J
SB-237(C)	SB 237 (C)-6	8/30/2002	6					0.0134 U	
SB-238(C)	SB 238 (C)-3	8/30/2002	3	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U B	0.0268 U
SB-238(C)	SB 238 (C)-3	8/30/2002	3					0.0268 U	
SB-239(C)	SB-239(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-239(C)	SB-239(C)-4	9/3/2002	4					0.0134 U	
SB-240(C)	SB-240(C)-6	9/3/2002	6	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U	0.0268 U
SB-240(C)	SB-240(C)-6	9/3/2002	6					0.0268 U	
SB-241(C)	SB-241(C)-5	9/3/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-241(C)	SB-241(C)-5	9/3/2002	5					0.0134 U	
SB-242(C)	SB-242(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-242(C)	SB-242(C)-4	9/3/2002	4					0.0134 U	
SB-243(C)	SB-243(C)-4	9/3/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-243(C)	SB-243(C)-4	9/3/2002	4					0.0134 U	
SB-244(C)	SB-244(C)-3	9/3/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-244(C)	SB-244(C)-3	9/3/2002	3					0.0134 U	
SB-245(C)	SB-245(C)-5	9/3/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-245(C)	SB-245(C)-5	9/3/2002	5					0.0134 U	
SB-246(C)	SB-246(C)-5	9/3/2002	5	0.0268 U	0.0268 U	0.0268 U	0.0268 U	0.001 U	0.0268 U
SB-246(C)	SB-246(C)-5	9/3/2002	5					0.0268 U	
SB-247(C)	SB-247(C)-6	9/3/2002	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U



TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-247(C)	SB-247(C)-6	9/3/2002	6					0.0134 U	
SB-250(C)	SB-250(C)-4	9/9/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00126 B	0.0134 U
SB-250(C)	SB-250(C)-4	9/9/2002	4					0.0134 U	
SB-251(C)	SB-251(C)-4	9/9/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00129 B	0.0134 U
SB-251(C)	SB-251(C)-4	9/9/2002	4					0.0134 U	
SB-252(C)	SB-252(C)-5	9/9/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U B	0.0134 U
SB-252(C)	SB-252(C)-5	9/9/2002	5					0.0134 U	
SB-253(C)	SB-253(C)-2	9/4/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-253(C)	SB-253(C)-2	9/4/2003	2					0.0134 U	
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5					0.0134 U	
SB-254(C)	SB-254(C)-2	9/4/2003	2	0.0439 J	0.215	0.0267 J	0.1	0.0255 J	0.263
SB-254(C)	SB-254(C)-2	9/4/2003	2					0.067 U	
SB-254(C)	SB-254(C)-7	9/4/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-254(C)	SB-254(C)-7	9/4/2003	7					0.0134 U	
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5	0.168 U	0.843	0.52	0.0623 J	0.0621 J	0.776
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5					0.0147 J	
SB-255(C)	SB-255(C)-7	9/4/2003	7	0.694	24.5	8.15	4.23	4.23	24.4
SB-255(C)	SB-255(C)-7	9/4/2003	7					10.2	
SB256(C)	SB256 (c) 6	3/31/2004	6	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB256(C)	SB256 (c) 6	3/31/2004	6					0.0134 U	
SB-301(D)	SB-301-D-3.5	8/20/2002	3.5	0.067 U	0.0277 J	0.734	0.067 U	1.63	0.0918
SB-301(D)	SB-301-D-3.5	8/20/2002	3.5					0.578	
SB-304(D)	SB-304-D-2.0	8/19/2002	2	0.134 U	0.134 U	0.395	0.134 U	1.08	0.1 J
SB-304(D)	SB-304-D-2.0	8/19/2002	2					1.06	
SB-304(D)	SB-D-DUP-0819	8/19/2002	2	0.067 U	0.067 U	0.067 U	0.067 U	0.211	0.0695
SB-304(D)	SB-D-DUP-0819	8/19/2002	2					0.211	
SB-304(D)	SB-304-D-5.0	8/19/2002	5	0.067 U	0.067 U	0.124	0.067 U	1.38	0.0329 J
SB-304(D)	SB-304-D-5.0	8/19/2002	5					0.448	
SB-305(D)	SB-305-D-2.0	8/19/2002	2	0.0134 U	0.00652 J	0.136	0.0134 U	0.56	0.0245
SB-305(D)	SB-305-D-2.0	8/19/2002	2					0.25	
SB-305(D)	SB-305-D-4.5	8/19/2002	4.5	0.0134 U	0.0134 U	0.0191	0.0134 U	0.529	0.0134 U
SB-305(D)	SB-305-D-4.5	8/19/2002	4.5					0.154	
SB-306(D)	SB-306-D-2.0	8/19/2002	2	0.134 U	0.0434 J	1.03	0.134 U	1.34	0.124 J
SB-306(D)	SB-306-D-2.0	8/19/2002	2					1.35	
SB-306(D)	SB-306-D-4.5	8/19/2002	4.5	0.134 U	0.0872 J	1.52	0.134 U	0.319 J	0.192
SB-306(D)	SB-306-D-4.5	8/19/2002	4.5					0.67 U	
SB-307(D)	SB-307-D-2.0	8/19/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-307(D)	SB-307-D-2.0	8/19/2002	2					0.2 U	
SB-307(D)	SB-307-D-2.0	8/19/2002	2					0.0134 U	
SB-309(D)	SB-309-D-2.0	8/19/2002	2	0.067 U	0.0353 J	0.552	0.067 U	0.0655 J	0.0801
SB-309(D)	SB-309-D-2.0	8/19/2002	2					0.134 U	
SB-309(D)	SB-309-D-5.0	8/19/2002	5	0.0134 U	0.0134 U	0.00644 J	0.0134 U	0.000521 U	0.0041 J

TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-309(D)	SB-309-D-5.0	8/19/2002	5					0.2 U	
SB-309(D)	SB-309-D-5.0	8/19/2002	5					0.0134 U	
SB-310(D)	SB-310-D-2.0	8/19/2002	2	0.0134 U	0.00439 J	0.0254	0.0134 U	0.535	0.0076 J
SB-310(D)	SB-310-D-2.0	8/19/2002	2					0.14	
SB-310(D)	SB-310-D-5.0	8/19/2002	5	0.134 U	0.0401 J	0.666	0.134 U	2.68	0.0712 J
SB-310(D)	SB-310-D-5.0	8/19/2002	5					1.57	
SB-311(D)	SB-311-D-5.0	8/19/2002	5	0.112	0.507	0.0268 U	0.45	0.000345 U	0.671
SB-311(D)	SB-311-D-5.0	8/19/2002	5					0.0172 J	
SB-311(D)	SB-311-D-5.0	8/19/2002	5					0.0246 J	
SB-312(D)	SB-312-D-5.0	8/19/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00106 U	0.0134 U
SB-312(D)	SB-312-D-5.0	8/19/2002	5					0.0924 J	
SB-312(D)	SB-312-D-5.0	8/19/2002	5					0.0134 U	
SB-313(D)	SB-313-D-5.0	8/20/2002	5					0.705	
SB-313(D)	SB-313-D-18.0	8/20/2002	18					0.486	
SB-314(D)	SB-314-D-2.0	8/20/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-314(D)	SB-314-D-10.0	8/20/2002	10	0.0134 U	0.134 U	1.66	0.0134 U	2.09	0.428
SB-314(D)	SB-314-D-15.0	8/20/2002	15	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0198	0.0134 U
SB-314(D)	SB-314-D-15.0	8/20/2002	15					0.106 J	
SB-314(D)	SB-314-D-15.0	8/20/2002	15					0.0509	
SB-315(D)	SB-315-D-2.0	8/20/2002	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00124 U	0.0134 U
SB-315(D)	SB-315-D-2.0	8/20/2002	2					0.2 U	
SB-315(D)	SB-315-D-2.0	8/20/2002	2					0.0134 U	
SB-315(D)	SB-315-D-5.0	8/20/2002	5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-315(D)	SB-315-D-15.0	8/20/2002	15					0.0101	
SB-315(D)	SB-315-D-15.0	8/20/2002	15					0.0417 J	
SB-316(D)	SB-316-D-2.0	8/20/2002	2	0.0134 U	0.00948 J	0.0134 U	0.0134 U	0.00225 U	0.0136
SB-316(D)	SB-316-D-2.0	8/20/2002	2					0.2 U	
SB-316(D)	SB-316-D-2.0	8/20/2002	2					0.0134 U	
SB-316(D)	SB-316-D-5.0	8/20/2002	5					3.21	
SB-316(D)	SB-D-DUP-3	8/20/2002	5	0.0268 U	0.0104 J	0.0268 U	0.0268 U	1.64	0.0254 J
SB-316(D)	SB-D-DUP-3	8/20/2002	5					0.515	
SB-316(D)	SB-316-D-10.0	8/20/2002	10	0.067 U	0.067 U	0.067 U	0.067 U	5.96	0.067 U
SB-316(D)	SB-316-D-10.0	8/20/2002	10					0.981	
SB-316(D)	SB-316-D-14.5	8/20/2002	14.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	4.58	0.0134 U
SB-316(D)	SB-316-D-14.5	8/20/2002	14.5					0.272	
SB-318(D)	SB-318-D-10.0	8/20/2002	10					8.34	
SB-318(D)	SB-318-D-15.0	8/20/2002	15					6.57	
SB-320(D)	SB-320(D)-2	9/10/2003	2					0.0204	
SB-320(D)	SB-320(D)-5	9/10/2003	5					0.2 U	
SB-321(D)	SB-321(D)-2	9/9/2003	2					0.2 U	
SB-321(D)	SB-321(D)-5	9/9/2003	5					0.285	
SB-322(D)	SB-322(D)-2	9/10/2003	2					0.2 U	
SB-322(D)	SB-322(D)-5	9/10/2003	5					0.0273	
SB-323(D)	SB-323(D)-7	9/10/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth feet	Dibenzo(a,h) anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno(1,2,3- cd)pyrene mg/kg	Naphthalene mg/kg	Pyrene mg/kg
SB-323(D)	SB-323(D)-7	9/10/2003	7					0.2 U	
SB-324(D)	SB-324(D)-2	9/10/2003	2					0.218	
SB-324(D)	SB-324(D)-5	9/10/2003	5					0.0299	
SB-324(D)	SB-324(D)-10	9/10/2003	10					0.791	
SB-324(D)	SB-324(D)-15	9/10/2003	15					0.413	
SB-324(D)	SB-324(D)-DUP	9/10/2003	15					2.59	
SB-325(D)	SB-325(D)-2	9/10/2003	2					0.2 U	
SB-325(D)	SB-325(D)-DUP	9/10/2003	2					0.2 U	
SB-325(D)	SB-325(D)-5	9/10/2003	5					0.2 U	
SB-325(D)	SB-325(D)-10	9/10/2003	10					0.0141	
SB-325(D)	SB-325(D)-15	9/10/2003	15					0.2 U	
SB-326(D)	SB-326(D)-2	9/9/2003	2					0.0344	
SB-326(D)	SB-326(D)-5	9/9/2003	5					1.24	
SB-326(D)	SB-326(D)-10	9/9/2003	10					1.32	
SB-327(D)	SB-327(D)-2	9/10/2003	2					0.0329 J	
SB-327(D)	SB-327(D)-5	9/10/2003	5					0.2 U	
SB-327(D)	SB-327(D)-10	9/10/2003	10					2.85	
SB-327(D)	SB-327(D)-15	9/10/2003	15					4.19	
SB-328(D)	SB-328(D)-2	9/10/2003	2					0.031 J	
SB-328(D)	SB-328(D)-5	9/10/2003	5					0.0234 J	
SB-328(D)	SB-328(D)-10	9/10/2003	10					9.58	
SB-328(D)	SB-328(D)-15	9/10/2003	15					0.11	
SB-402(F)	SB-402(F)-2.5	8/23/2002	2.5					0.00732	
SB-405(F)	SB-405(F)-7.5	8/22/2002	7.5					6.49	
SB-406(F)	SB-406(F)-2.5	8/22/2002	2.5	0.00415 J	0.0205	0.0134 U	0.0186	0.00892 J	0.0241
SB-407(F)	SB407/S-2(6-8)	8/22/2002	7					1.46	
SB-407(F)	SB-407(F)-7.5	8/22/2002	7.5	0.067 U J	0.0186 J	0.0263 J	0.067 U J	1.01 J	0.0215 J
SB-407(F)	SB-407(F)-7.5	8/22/2002	7.5					0.588 J	
SB-408(F)	SB-408(F)-2.5	8/22/2002	2.5	0.015	0.0678 J	0.134 U	0.0672	0.001 U	0.084
SB-408(F)	SB-408(F)-2.5	8/22/2002	2.5					0.134 U	
SB-408(F)	SB408/S-2(6-7)	8/22/2002	6.5					1.37	
SB-408(F)	SB-408(F)-7.5	8/22/2002	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0276	0.0061 J
SB-410(F)	SB-410(F)-2'	3/31/2004	2					0.023 J	
SB-410(F)	SB-410(F)-4'	3/31/2004	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-410(F)	SB-410(F)-4'	3/31/2004	4					0.0134 U	
SB-410(F)	SB-410(F)-9'	3/31/2004	9					0.2 U	
SB-600(N)	SB-600(N)-7	9/13/2002	7					69	
SB-601(N)	SB-601(N)-3	9/13/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-601(N)	SB-601(N)-3	9/13/2002	3					0.0134 U	
SB-601(N)	SB-601(N)-7	9/13/2002	7	0.067 U	0.067 U	0.067 U	0.067 U	94.4	0.067 U
SB-601(N)	SB-601(N)-7	9/13/2002	7					36.3	
SB-602(N)	SB-602(N)-3	9/13/2002	3					0.502	

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-602(N)	SB-602(N)-7	9/13/2002	7	0.1 U	0.1 U	1 U	1 U	141	0.145
SB-602(N)	SB-602(N)-7	9/13/2002	7	1 U	1 U	0.841	0.1 U	11.3	1 U
SB-602(N)	SB-602(N)-7	9/13/2002	7					71.1	
SB-602(N)	SB-602(N)-7	9/13/2002	7					91.8	
SB-603(N)	SB-603(N)-7	9/13/2002	7	0.067 U	0.067 U	0.67 U	0.067 U	40.3	0.067 U
SB-603(N)	SB-603(N)-7	9/13/2002	7					33.3	
SB-603(N)	SB-603(N)-7	9/13/2002	7					79.7	
SB-604(N)	SB-604(N)-3	9/13/2002	3					0.05 U	
SB-604(N)	SB-604(N)-7	9/13/2002	7	0.134 U	0.134 U	0.319	0.134 U	58.3	0.134 U
SB-604(N)	SB-604(N)-7	9/13/2002	7					20.8	
SB-605(N)	SB-605(N)-3	9/13/2002	3	0.0134 U	0.0134 U	0.0403	0.0134 U	5.22	0.0134 U
SB-605(N)	SB-605(N)-3	9/13/2002	3					0.348	
SB-605(N)	SB-605(N)-7	9/13/2002	7	0.134 U	0.134 U	1.34 U	0.134 U	132	0.145
SB-605(N)	SB-605(N)-7	9/13/2002	7					38.7	
SB-606(N)	SB-606(N)-3	9/13/2002	3					0.05 U	
SB-606(N)	SB-606(N)-7	9/13/2002	7					0.05 U	
SB-607(N)	SB-607(N)-11	9/13/2002	11					0.0947	
SB-608(N)	SB-608(N)-3	9/13/2002	3	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-608(N)	SB-608(N)-3	9/13/2002	3					0.0134 U	
SB-608(N)	SB-608(N)-6	9/13/2002	6					0.2 U	
SB-609(N)	SB-609(N)-3	9/13/2002	3					0.2 U	
SB-609(N)	SB-609(N)-7	9/13/2002	7					0.2 U	
SB-612(N)	SB-612 (N)-7	9/12/2002	7	0.1 U	0.1 U	0.722	0.1 U	38.3	0.164
SB-612(N)	SB-612 (N)-7	9/12/2002	7					94.1	
SB-612(N)	SB-612 (N)-7	9/12/2002	7					38.5	
SB-613(N)	SB-613 (N)-5.5	9/12/2002	5.5					34.1	
SB-614(N)	SB-614 (N)-7	9/12/2002	7					30.6	
SB-615(N)	SB-615 (N)-7	9/12/2002	7					25.3	
SB-616(N)	SB-616 (N)-7	9/12/2002	7					81.3	
SB-617(N)	SB-617 (N)-3	9/12/2002	3	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-617(N)	SB-617 (N)-3	9/12/2002	3					0.05 U	
SB-617(N)	SB-617 (N)-3	9/12/2002	3					0.2 U	
SB-617(N)	SB-617 (N)-5.5	9/12/2002	5.5					0.113	
SB-618(N)	SB-618 (N)-1.5	9/12/2002	1.5					0.226	
SB-618(N)	SB-618 (N)-7	9/12/2002	7	1.65 U	1.65 U	2.55	1.65 U	40.2	1.65 U
SB-618(N)	SB-618 (N)-7	9/12/2002	7					42.8	
SB-618(N)	SB-618 (N)-7	9/12/2002	7					36.1	
SB-619(N)	SB-619 (N)-7	9/12/2002	7	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-619(N)	SB-619 (N)-7	9/12/2002	7					0.2 U	
SB-619(N)	SB-619 (N)-7	9/12/2002	7					0.05 U	
SB-619(N)	SB-619 (N)-11	9/12/2002	11	0.01 U	0.0527	1.81	0.01 U	21.3	0.133
SB-619(N)	SB-619 (N)-11	9/12/2002	11			0.443		16.6	
SB-619(N)	SB-619 (N)-11	9/12/2002	11					80.4	
SB-619(N)	SB-619 (N)-11	9/12/2002	11					1.43	

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-620(N)	SB-620 (N)-3	9/12/2002	3					0.0517	
SB-620(N)	SB-620 (N)-7	9/12/2002	7	0.01 U	0.126	1.3	0.01 U	9.28	0.453
SB-620(N)	SB-620 (N)-7	9/12/2002	7					12.3	
SB-620(N)	SB-620 (N)-7	9/12/2002	7					56.1	
SB-620(N)	SB-620 (N)-7	9/12/2002	7					30.6	
SB-621(N)	SB-621 (N)-7	9/12/2002	7					0.05 U	
SB-622(N)	SB-622 (N)-2	9/12/2002	2					0.05 U	
SB-622(N)	SB-622 (N)-7	9/12/2002	7					0.001 U	
SB-622(N)	SB-622 (N)-7	9/12/2002	7					0.05 U	
SB-623(N)	SB-623 (N)-7	9/12/2002	7					18.3	
SB-623(N)	SB-623 (N)-7	9/12/2002	7					26	
SB-624(N)	SB-624 (N)-2	9/12/2002	2					0.05 U	
SB-624(N)	SB-624 (N)-7	9/12/2002	7	3.3 U	3.3 U	5.58	3.3 U	9.65	3.3 U
SB-624(N)	SB-624 (N)-7	9/12/2002	7					6.07	
SB-625(N)	SB-625 (N)-2	9/12/2002	2					0.05 U	
SB-625(N)	SB-625 (N)-7	9/12/2002	7	0.01 U	0.0145	0.0268	0.01 U	0.0377	0.01 U
SB-625(N)	SB-625 (N)-7	9/12/2002	7					0.05 U	
SB-625(N)	SB-625 (N)-7	9/12/2002	7					0.2 U	
SB-625(N)	SB-625 (N)-10	9/12/2002	10					0.898	
SB-626(N)	SB-626 (N)-7	9/12/2002	7	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
SB-626(N)	SB-626 (N)-7	9/12/2002	7					65.9	
SB-626(N)	SB-626 (N)-7	9/12/2002	7					96.2	
SB-627(N)	SB-627(N)-2	8/28/2003	2	0.0227 J	0.0526 J	0.067 U	0.0743	0.0335 J	0.074
SB-627(N)	SB-627(N)-2	8/28/2003	2					0.0291 J	
SB-629(N)	SB-629(N)-7.5	8/28/2003	7.5	0.67 U	0.67 U	7.06	0.67 U	25.5	0.671
SB-629(N)	SB-629(N)-7.5	8/28/2003	7.5					25.5	
SB-632(N)	SB-632(N)-7.5	9/8/2003	7.5	0.134 U	0.134 U	0.0589 J	0.134 U	38.9	0.134 U
SB-632(N)	SB-632(N)-7.5	9/8/2003	7.5					36.6	
SB-700(P)	SB-700(P)-3	8/21/2002	3					0.001 U	
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5	0.0134 U	0.0134 U	0.0168	0.0134 U	1.81	0.0134 U
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5					1.94	
SB-701(P)	SB-701(P)-2	8/20/2002	2					0.001 U	
SB-701(P)	SB-701(P)-11	8/20/2002	11	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-701(P)	SB-701(P)-11	8/20/2002	11					0.0134 U	
SB-701(P)	SB-701(P)-12	8/20/2002	12					0.0465	
SB-702(P)	SB-702(P)-2	8/21/2002	2					0.001 U	
SB-702(P)	SB-702(P)-11	8/21/2002	11	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.00183	0.0134 U
SB-702(P)	SB-702(P)-11	8/21/2002	11					0.0134 U	
SB-703(P)	SB-703(P)-2	8/21/2002	2					0.00104	
SB-703(P)	SB-703(P)-10	8/21/2002	10					0.000874 J	
SB-704(P)	SB-704(P)-2	8/21/2002	2					0.001 U	
SB-704(P)	SB-704(P)-11	8/21/2002	11					0.001 U	
SB-705(P)	SB-705(P)-9.5	8/20/2002	9.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U

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**RBDMSVOCs IN SOIL**

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-706(P)	SB-706(P)-5.5	8/21/2002	5.5					0.000541 J	
SB-706(P)	SB-706(P)-9.5	8/21/2002	9.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-707(P)	SB-707(P)-10	8/21/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-707(P)	SB-707(P)-10	8/21/2002	10					0.0134 U	

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## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-708(P)	SB-708(P)-10	8/20/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-709(P)	SB-709(P)-3	8/21/2002	3					0.000698 U B	
SB-709(P)	SB-709(P)-10	8/21/2002	10					0.001 U B	
SB-709(P)	SB-709(P)-10	8/21/2002	10						
SB-710(P)	SB-710(P)-3	8/21/2002	3	0.0268 U	0.0106 J	0.0268 U	0.00864 J	0.000591 J	0.0163 J
SB-710(P)	SB-710(P)-3	8/21/2002	3					0.0268 U	
SB-710(P)	SB-710(P)-5.5	8/21/2002	5.5					0.00099	
SB-710(P)	SB-710(P)-5.5	8/21/2002	5.5					0.00217	
SB-711(P)	SB-711(P)-3	8/21/2002	3					0.00041 U JB	
SB-711(P)	SB-711(P)-10	8/21/2002	10					0.000623 U JB	
SB-712(P)	SB-712(P)-2	8/21/2002	2					0.00345	
SB-712(P)	SB-712(P)-2	8/21/2002	2					0.00354	
SB-712(P)	SB-712(P)-10	8/21/2002	10	0.0475 J	1.02	0.318	0.116 J	0.134 U	0.753
SB-714(P)	SB-714(P)-7.5	8/21/2002	7.5	0.00513 J	0.0869 J	1.78	0.0133 J	39.7	0.567
SB-714(P)	SB-714(P)-10	8/21/2002	10					37	
SB-716(P)	SB-716(P)-3	8/20/2002	3					0.00052 J	
SB-716(P)	SB-716(P)-10	8/20/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.000576 J	0.0134 U
SB-716(P)	SB-716(P)-10	8/20/2002	10					0.0134 U	
SB-717(P)	SB-717(P)-3	8/20/2002	3					0.000488 J	
SB-717(P)	SB-717(P)-10	8/20/2002	10					0.000501 J	
SB-719(P)	SB-719(P)-12	8/23/2002	12	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-720(P)	SB-720(P)-2	8/23/2002	2	0.052	0.331	0.0134 U	0.143	0.0134 U	0.335
SB-720(P)	SB-720(P)-11.5	8/23/2002	11.5	0.067 U	0.0401 J	1.24	0.067 U	24.1	0.181
SB-721(P)	SB-721(P)-7'	3/31/2004	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-721(P)	SB-721(P)-7'	3/31/2004	7					0.0134 U	
SB-820(Q)	SB-820 (Q)-0C	8/29/2002	-	0.067 U	0.0286 J	0.067 U	0.0252 J	0.07 J	0.0225 J
SB-820(Q)	SB-820 (Q)-0C	8/29/2002	-					0.067 U	
SB-834(Q)	SB-834(Q)-2	9/5/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0808 J	0.0134 U
SB-834(Q)	SB-834(Q)-2	9/5/2003	2					0.0134 U	
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.127 J	0.0134 U
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5					0.0134 U	
SB-835(Q)	SB-835(Q)-2	9/5/2003	2	0.00498 J	0.0229	0.0134 U	0.0149	0.2 U	0.0244
SB-835(Q)	SB-835(Q)-2	9/5/2003	2					0.0134 U	
SB-835(Q)	SB-835(Q)-7	9/5/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-835(Q)	SB-835(Q)-7	9/5/2003	7					0.0134 U	
SB-900(S)	SB-900(S)-4	8/26/2002	4	0.0134 U	0.0204	0.0134 U	0.00763 J	0.00071 J	0.0301
SB-900(S)	SB-900(S)-4	8/26/2002	4					0.00822 J	
SB-900(S)	SB-900(S)-12	8/26/2002	12	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0886 J	0.0134 U
SB-900(S)	SB-900(S)-12	8/26/2002	12					1.34 U	

TABLE D-4

## RBDMSVOCs IN SOIL

Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3- cd)pyrene	Naphthalene	Pyrene
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-902(S)	SB-902 (S)-12	8/26/2002	12	0.0134 U	0.0134 U	0.198	0.0134 U	0.001 U	0.067 U
SB-902(S)	SB-902 (S)-12	8/26/2002	12					0.335 U	
SB-903(S)	SB-903 (S)-10	8/26/2002	10	0.0134 U	0.103 J	2.03	0.0134 U	1 U	0.202 J
SB-903(S)	SB-903 (S)-10	8/26/2002	10					3.35 U	
SB-904(S)	SB-904 (S)-12	8/26/2002	12	0.0134 U	0.335 U	2.49	0.0134 U	15.1	0.193 J
SB-904(S)	SB-904 (S)-12	8/26/2002	12					4.06	
SB-905(S)	SB-905 (S)-12	8/26/2002	12	0.0134 U	0.067 U	0.067 U	0.00438 J	0.00884	0.067 U
SB-905(S)	SB-905 (S)-12	8/26/2002	12					0.067 U	
SB-906(S)	SB-906 (S)-4	8/27/2002	4	0.0134 U	0.0134 U	0.067 U	0.00516 J	0.001 U	0.0121 J
SB-906(S)	SB-906 (S)-4	8/27/2002	4					0.067 U	
SB-906(S)	SB-906 (S)-12	8/27/2002	12	0.0134 U	0.335 U	2.05	0.00544 J	0.146 J	0.216
SB-906(S)	SB-906 (S)-12	8/27/2002	12					3.35 U	
SB-908(S)	SB-908 (S)-4	8/27/2002	4	0.268 U	0.67 U	1.34 U	0.268 U	0.2 U	0.462
SB-908(S)	SB-908 (S)-4	8/27/2002	4					3.35 U	
SB-908(S)	SB-908 (S)-8	8/27/2002	8	0.268 U	0.67 U	0.67 U	0.268 U	0.001 U	0.264 J
SB-908(S)	SB-908 (S)-8	8/27/2002	8					0.67 U	
SB-908(S)	SB-908 (S)-10	8/27/2002	10	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.0134 U
SB-908(S)	SB-908 (S)-10	8/27/2002	10					0.001 U	
SB-909(S)	SB-909 (S)-4	8/27/2002	4	0.134 U	0.0494 J	0.134 U	0.134 U	0.134 U	0.0412 J
SB-910(S)	SB-910 (S)-4	8/27/2002	4	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.001 U	0.0134 U
SB-910(S)	SB-910 (S)-4	8/27/2002	4					0.0134 U	
SB-912(S)	SB-912(S)-2	9/3/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-912(S)	SB-912(S)-2	9/3/2003	2					0.0134 U	
SB-912(S)	SB-912(S)-7	9/3/2003	7	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-912(S)	SB-912(S)-7	9/3/2003	7					0.0134 U	
SB-913(S)	SB-913(S)-2	9/3/2003	2	0.67 U	0.67 U	0.67 U	0.67 U	0.2 U	0.67 U
SB-913(S)	SB-913(S)-2	9/3/2003	2					0.67 U	
SB-913(S)	SB-913(S)-7	9/3/2003	7	0.335 U	0.335 U	0.335 U	0.335 U	0.2 U	0.335 U
SB-913(S)	SB-913(S)-7	9/3/2003	7					0.335 U	
SB-914(S)	SB-914(S)-2	9/3/2003	2	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-914(S)	SB-914(S)-2	9/3/2003	2					0.0134 U	
SB-914(S)	SB-914(S)-7.5	9/3/2003	7.5	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.2 U	0.0134 U
SB-914(S)	SB-914(S)-7.5	9/3/2003	7.5					0.0134 U	
SB-915(S)	SB-915(s)-5.0	3/31/2004	5	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
SS-1	FMNBP-SS-1	9/6/2006	-	0.146 U	480	1.73	0.146 U	14.5	0.797
SS-1	FMNBP-SS-1	9/6/2006	-					29	
SS-4	FMNBP-SS-4	9/6/2006	-	0.141 U	0.141 U	0.878	0.141 U	1.55 U	0.225
SS-4	FMNBP-SS-4	9/6/2006	-					4.55	
TP-201(C)	TP201(C)6E	8/27/2002	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.000672 J	0.0134 U
TP-201(C)	TP201(C)6E	8/27/2002	-					0.0134 U	
TP-202(C)	TP202(C)6W	8/27/2002	-	0.0134 U	0.0134 U	0.0134 U	0.0134 U	0.000461 J	0.0134 U
TP-202(C)	TP202(C)6W	8/27/2002	-					0.0134 U	