

TABLE D-7

## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
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				
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5				
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5				
SB-005(A)	SB-005(A)-7	9/5/2003	7				
SB-006(A)	SB-006(A)-7'	3/31/2004	7				
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5				
SB-008(A)	SB-008(A)-2	8/26/2003	2				
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5				
SB-009(A)	SB-009(A)-2	8/27/2003	2				
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5				
SB-010(A)	SB-010(A)-2	8/27/2003	2				
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				
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				
SB-020(A)	SB-020(A)-4'	3/31/2004	4				
SB-020(A)	SB-020(A)-9'	3/31/2004	9				
SB-100(C)	SB100(C)3	8/22/2002	3	1.42	55.1	0.312 U	12.3
SB-100(C)	SB100(C)20	8/22/2002	20	3.84	149	0.37 U	18.9
SB-200(C)	SB200(C)3	8/22/2002	3	2.03	37.7	0.407 U	7.26
SB-200(C)	SB200(C)6	8/22/2002	6	1.88	32.4	0.403 U	10.8
SB-201(C)	SB201(C)3	8/22/2002	3	1.66	40.7	0.385 U	8.79
SB-201(C)	SB201(C)6	8/22/2002	6	6.88	37	0.427 U	14.8
SB-202(C)	SB202(C)2	8/22/2002	2	24.2	30.1	0.413 U	8.48
SB-202(C)	SB202(C)3	8/22/2002	3	1.84	31.8	0.397 U	8.94
SB-202(C)	SB202(C)7	8/22/2002	7	2.07	36.2	0.376 U	6.98
SB-203(C)	SB203(C)3	8/22/2002	3	6.99	69.9	0.388 U	8.06
SB-203(C)	SB203(C)7	8/22/2002	7	5.52	43.1	0.357 U	9.53
SB-204(C)	SB204(C)3	8/22/2002	3	5.33	44.4	0.388 U	6.63
SB-204(C)	SB204(C)8	8/22/2002	8	1.53	32.9	0.376 U	6.25
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5	2.04	34.3	0.5 U	12.2
SB-206(C)	SB206(C)-6	8/27/2002	6	1.95	52.6	0.5 U	8.61

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Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5	2.49	76.1	0.442 U	10.8
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5	1.92	45.5	0.5 U	10.2
SB-209(C)	SB209(C)-3	8/27/2002	3	1.59	41.4	0.5 U	8.7
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5	1.79	36.5	0.5 U	8.91
SB-211(C)	SB211(C)-3	8/27/2002	3	1.78	52.4	0.435 U	9.56
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5	1.24	53.7	0.5 U	8.48
SB-213(C)	SB213(C)-4	8/27/2002	4	1.65	56.7	0.455 U	11.5
SB-214(C)	SB214(C)-5	8/27/2002	5	1.59	38.6	0.403 U	7.74
SB-215(C)	SB215(C)-5	8/27/2002	5	1.87	37.3	0.391 U	10.2
SB-216(C)	SB216(C)-3	8/27/2002	3	1.58	40	0.5 U	9.36
SB-217(C)	SB217(C)-3	8/28/2002	3	2.52	46.5	0.5 U	7.67
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5	2.43	45.7	0.5 U	9.06
SB-219(C)	SB219(C)-4	8/28/2002	4	1.09	36.4	0.5 U	8.94
SB-220(C)	SB220 (C)-5	8/28/2002	5	1.18	31.8	0.5 U	6.06
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5	1.43	43	0.431 U	7.81
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5	1.38	35	0.4 U	9.73
SB-223(C)	SB223 (C)-6	8/29/2002	6	1.18	31.8	0.5 U	5.5
SB-224(C)	SB224 (C)-2	8/29/2002	2	1.32	24.6	0.45 U	5.25
SB-225(C)	SB225 (C)-3	8/29/2002	3	6.67	36.2	0.427 U	5.66
SB-226(C)	SB226 (C)-3	8/29/2002	3	0.991	24.8	0.362 U	4.08
SB-227(C)	SB227 (C)-8	8/29/2002	8	1.84	34.9	0.403 U	6.42
SB-228(C)	SB228 (C)-4	8/29/2002	4	1.51	51.9	0.424 U	92.2
SB-229(C)	SB229 (C)-8	8/29/2002	8	1.55	27.8	0.417 U	10.1
SB-230(C)	SB230 (C)-8	8/29/2002	8	1.71	33	0.26 U	6.43
SB-231(C)	SB231 (C)-2	8/29/2002	2	3.93	49.4	0.455 U	7.23
SB-239(C)	SB-239(C)-4	9/3/2002	4	1.77	40.9	0.329 U	10.3
SB-240(C)	SB-240(C)-6	9/3/2002	6	3.75	52.4	0.373 U	11.9
SB-241(C)	SB-241(C)-5	9/3/2002	5	1.69	40.9	0.403 U	12.4
SB-242(C)	SB-242(C)-4	9/3/2002	4	1.33	43.5	0.413 U	9.87
SB-243(C)	SB-243(C)-4	9/3/2002	4	1.81	40.5	0.668	8.61
SB-244(C)	SB-244(C)-3	9/3/2002	3	2.86	42.9	0.4 U	10.1
SB-245(C)	SB-245(C)-5	9/3/2002	5	1.52	33.7	0.336 U	7.56
SB-246(C)	SB-246(C)-5	9/3/2002	5	1.75	34.7	0.427 U	15.6
SB-247(C)	SB-247(C)-6	9/3/2002	6	1.41	34.4	0.336 U	7.4
SB-250(C)	SB-250(C)-4	9/9/2002	4	1.72	49.6	0.362 U	10

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Astoria, Oregon

Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
SB-251(C)	SB-251(C)-4	9/9/2002	4	2.12	44.9	0.329 U	6.78
SB-252(C)	SB-252(C)-5	9/9/2002	5	1.31	30.6	0.292 U	5.61
SB-253(C)	SB-253(C)-2	9/4/2003	2				
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5				
SB-254(C)	SB-254(C)-2	9/4/2003	2				
SB-254(C)	SB-254(C)-7	9/4/2003	7				
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5				
SB-255(C)	SB-255(C)-7	9/4/2003	7				
SB256(C)	SB256 (c) 6	3/31/2004	6	2.19	37.5	0.403 U	6.81
SB257(C)	SB257 (c) 8	3/31/2004	8				3.48
SB258(C)	SB258 (c) 8.5	3/31/2004	8.5				16.3
SB259(C)	SB259 (c) 8.5	3/31/2004	8.5				12.9
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				
SB-304(D)	SB-D-DUP-0819	8/19/2002	2				
SB-304(D)	SB-304-D-5.0	8/19/2002	5				
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				
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				
SB-307(D)	SB-307-D-2.0	8/19/2002	2				
SB-309(D)	SB-309-D-2.0	8/19/2002	2				
SB-309(D)	SB-309-D-5.0	8/19/2002	5				
SB-310(D)	SB-310-D-2.0	8/19/2002	2				
SB-310(D)	SB-310-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				
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-15.0	8/20/2002	15				
SB-315(D)	SB-315-D-2.0	8/20/2002	2				
SB-315(D)	SB-315-D-15.0	8/20/2002	15				
SB-316(D)	SB-316-D-2.0	8/20/2002	2				
SB-316(D)	SB-316-D-5.0	8/20/2002	5				

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

Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
SB-316(D)	SB-D-DUP-3	8/20/2002	5				
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				
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-410(F)	SB-410(F)-4'	3/31/2004	4				
SB-410(F)	SB-410(F)-9'	3/31/2004	9				
SB-601(N)	SB-601(N)-3	9/13/2002	3				
SB-601(N)	SB-601(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				
SB-604(N)	SB-604(N)-7	9/13/2002	7				
SB-605(N)	SB-605(N)-3	9/13/2002	3				
SB-605(N)	SB-605(N)-7	9/13/2002	7				
SB-608(N)	SB-608(N)-3	9/13/2002	3				
SB-608(N)	SB-608(N)-6	9/13/2002	6				
SB-615(N)	SB-615 (N)-7	9/12/2002	7				
SB-618(N)	SB-618 (N)-7	9/12/2002	7				
SB-620(N)	SB-620 (N)-7	9/12/2002	7				
SB-623(N)	SB-623 (N)-7	9/12/2002	7				
SB-624(N)	SB-624 (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				
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				
SB-700(P)	SB-700(P)-3	8/21/2002	3	2.33	46	0.5 U	7.75
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5	1.25	48.5	0.5 U	10.6
SB-701(P)	SB-701(P)-2	8/20/2002	2	1.23	29.9	0.5 U	3.97
SB-701(P)	SB-701(P)-11	8/20/2002	11	2.07	50.7	0.5 U	13.1
SB-701(P)	SB-701(P)-12	8/20/2002	12	1.34	36	0.5 U	10.2
SB-702(P)	SB-702(P)-2	8/21/2002	2	8.46	161	0.5 U	21.9
SB-702(P)	SB-702(P)-11	8/21/2002	11	0.811	29.6	0.5 U	5.11

**TABLE D-7****METALS IN SOIL**

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Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
SB-703(P)	SB-703(P)-2	8/21/2002	2	3.35	77.3	0.5 U	14.6
SB-703(P)	SB-703(P)-10	8/21/2002	10	1.87	40.1	0.5 U	7.96
SB-704(P)	SB-704(P)-2	8/21/2002	2	2.69	80.9	0.5 U	12.1
SB-704(P)	SB-704(P)-11	8/21/2002	11	1.16	31.9	0.5 U	10.2
SB-705(P)	SB-705(P)-3	8/20/2002	3	1.36	38.6	0.5 U	7.96
SB-705(P)	SB-705(P)-5.5	8/20/2002	5.5	5.77	98.3	0.5 U	28.3
SB-705(P)	SB-705(P)-9.5	8/20/2002	9.5	1.47	38.4	0.5 U	10.3
SB-705(P)	SB-705(P)-12	8/20/2002	12	1.89	33.4	0.5 U	7.73
SB-706(P)	SB-706(P)-2.5	8/21/2002	2.5	1.49	32.5	0.5 U	8
SB-706(P)	SB-706(P)-5.5	8/21/2002	5.5	4.18	84	0.5 U	16.1
SB-706(P)	SB-706(P)-9.5	8/21/2002	9.5	1.88	50.1	0.5 U	8.61
SB-706(P)	SB-706(P)-12	8/21/2002	12	2.28	38.2	0.5 U	8.72
SB-707(P)	SB-707(P)-2	8/21/2002	2	2.93	46.2	0.5 U	10.4
SB-707(P)	SB-707(P)-10	8/21/2002	10	12.8	40.8	0.5 U	7.01
SB-708(P)	SB-708(P)-3	8/20/2002	3	1.59	46.6	0.5 U	11

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Remedial Investigation/Feasibility Study  
Astoria Area-Wide Petroleum Site  
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Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
SB-708(P)	SB-708(P)-10	8/20/2002	10	1.33	31.3	0.5 U	6.71
SB-714(P)	SB-714(P)-10	8/21/2002	10				
SB-721(P)	SB-721(P)-3'	3/31/2004	3				
SB-721(P)	SB-721(P)-7'	3/31/2004	7				
SB-834(Q)	SB-834(Q)-2	9/5/2003	2				
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5				
SB-835(Q)	SB-835(Q)-2	9/5/2003	2				
SB-835(Q)	SB-835(Q)-7	9/5/2003	7				
SB-900(S)	SB-900(S)-4	8/26/2002	4			0.5 U	11.7 J
SB-900(S)	SB-900(S)-12	8/26/2002	12			0.379 U	9.62 J
SB-901(S)	SB-901 (S)-8	8/26/2002	8			0.5 U	7.01 J
SB-901(S)	SB-901 (S)-10	8/26/2002	10			0.5 U	13.9 J
SB-902(S)	SB-902 (S)-8	8/26/2002	8			0.5 U	7.52 J
SB-902(S)	SB-902 (S)-12	8/26/2002	12			0.5 U	9.89 J
SB-903(S)	SB-903 (S)-8	8/26/2002	8			0.455 U	6.09 J
SB-903(S)	SB-903 (S)-10	8/26/2002	10			0.424 U	9.24 J
SB-904(S)	SB-904 (S)-4	8/26/2002	4			0.5 U	9.64 J
SB-904(S)	SB-904 (S)-12	8/26/2002	12			0.5 U	11.6 J
SB-905(S)	SB-905 (S)-4	8/26/2002	4			0.5 U	8.11 J
SB-905(S)	SB-905 (S)-12	8/26/2002	12			0.427 U	7.47 J
SB-906(S)	SB-906 (S)-4	8/27/2002	4			0.424 U	12.4 J
SB-906(S)	SB-906 (S)-12	8/27/2002	12			0.446 U	11.5 J
SB-908(S)	SB-908 (S)-4	8/27/2002	4			0.397 U	8.94 J
SB-908(S)	SB-908 (S)-8	8/27/2002	8			0.427 U	7.37 J
SB-908(S)	SB-908 (S)-10	8/27/2002	10			0.37 U	9.77 J
SB-909(S)	SB-909 (S)-4	8/27/2002	4			0.352 U	9.65
SB-909(S)	SB-909 (S)-10	8/27/2002	10			0.4 U	13.1 J
SB-910(S)	SB-910 (S)-4	8/27/2002	4			0.5 U	7.92 J
SB-910(S)	SB-910 (S)-10	8/27/2002	10			0.442 U	7.31
SB-911(S)	SB-911 (S)-8	8/27/2002	8			0.407 U	7.36 J
SB-911(S)	SB-911 (S)-10	8/27/2002	10			0.5 U	11.3 J
TP-201(C)	TP201(C)6E	8/27/2002	-	1.48	48	0.5 U	6.48

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Locator ID	Sample ID	Sample Date	Depth	Arsenic, Total	Barium	Cadmium	Chromium
			feet	mg/kg	mg/kg	mg/kg	mg/kg
TP-202(C)	TP202(C)6W	8/27/2002	-	1.53	46.4	0.5 U	10.9

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## METALS IN SOIL

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Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-001(A)	SB-001(A)-7.5	8/27/2003	7.5		8.43			
SB-002(A)	SB-002(A)-2.5	8/27/2003	2.5		2.51			
SB-002(A)	SB-002(A)-7.5	8/27/2003	7.5		2.72			
SB-005(A)	SB-005(A)-2.5	9/5/2003	2.5		6.56			
SB-005(A)	SB-005(A)-7	9/5/2003	7		3.24			
SB-006(A)	SB-006(A)-7'	3/31/2004	7		2.34			
SB-007(A)	SB-007(A)-7.5	8/26/2003	7.5		4.51			
SB-008(A)	SB-008(A)-2	8/26/2003	2		7.09			
SB-008(A)	SB-008(A)-7.5	8/26/2003	7.5		4.24			
SB-009(A)	SB-009(A)-2	8/27/2003	2		4.66			
SB-009(A)	SB-009(A)-7.5	8/27/2003	7.5		3.27			
SB-010(A)	SB-010(A)-2	8/27/2003	2		2.76			
SB-010(A)	SB-010(A)-7.5	8/27/2003	7.5		2.86			
SB-011(A)	SB-011(A)-7.5	9/3/2003	7.5		3.31			
SB-019(A)	SB-019(A)-2.5	8/27/2003	2.5		2.62			
SB-019(A)	SB-019(A)-7.5	8/27/2003	7.5		7.44			
SB-020(A)	SB-020(A)-4'	3/31/2004	4		4.59			
SB-020(A)	SB-020(A)-9'	3/31/2004	9		2.48			
SB-100(C)	SB100(C)3	8/22/2002	3		4.69	0.551	0.549	0.312 U
SB-100(C)	SB100(C)20	8/22/2002	20		15.3	0.0862 U	1	0.37 U
SB-200(C)	SB200(C)3	8/22/2002	3		3.69	0.1 U	0.407 U	0.407 U
SB-200(C)	SB200(C)6	8/22/2002	6		4.03	0.0862 U	0.403 U	0.403 U
SB-201(C)	SB201(C)3	8/22/2002	3		5.54	0.1 U	0.385 U	0.385 U
SB-201(C)	SB201(C)6	8/22/2002	6		18.5	0.1 U	0.427 U	0.427 U
SB-202(C)	SB202(C)2	8/22/2002	2		23.1	0.0862 U	0.413 U	0.413 U
SB-202(C)	SB202(C)3	8/22/2002	3		3.39	0.1 U	0.397 U	0.397 U
SB-202(C)	SB202(C)7	8/22/2002	7		3.2	0.1 U	0.376 U	0.376 U
SB-203(C)	SB203(C)3	8/22/2002	3		5.18	0.0893 U	0.388 U	0.388 U
SB-203(C)	SB203(C)7	8/22/2002	7		4.97	0.1 U	0.357 U	0.357 U
SB-204(C)	SB204(C)3	8/22/2002	3		3.76	0.0893 U	0.388 U	0.388 U
SB-204(C)	SB204(C)8	8/22/2002	8		3.27	0.1 U	0.376 U	0.376 U
SB-205(C)	SB205(C)-4.5	8/27/2002	4.5		1.33	0.1 U	0.564	0.5 U
SB-206(C)	SB206(C)-6	8/27/2002	6		1.94	0.1 U	0.798	0.5 U



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## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-207(C)	SB207(C)-4.5	8/27/2002	4.5		3.22	0.1 U	0.641	0.442 U
SB-208(C)	SB208(C)-3.5	8/27/2002	3.5		2.49	0.1 U	0.592	0.5 U
SB-209(C)	SB209(C)-3	8/27/2002	3		6.68	0.0893 U	0.5 U	0.5 U
SB-210(C)	SB210(C)-3.5	8/27/2002	3.5		1.85	0.1 U	0.539	0.5 U
SB-211(C)	SB211(C)-3	8/27/2002	3		3.35	0.0862 U	0.435 U	0.435 U
SB-212(C)	SB212(C)-2.5	8/27/2002	2.5		1.84	0.1 U	0.5 U	0.5 U
SB-213(C)	SB213(C)-4	8/27/2002	4		2.67	0.0862 U	0.455 U	0.455 U
SB-214(C)	SB214(C)-5	8/27/2002	5		2.78	0.0862 U	0.403 U	0.403 U
SB-215(C)	SB215(C)-5	8/27/2002	5		2.47	0.1 U	0.391 U	0.391 U
SB-216(C)	SB216(C)-3	8/27/2002	3		2.26	0.0862 U	0.5 U	0.5 U
SB-217(C)	SB217(C)-3	8/28/2002	3		1.49	0.1 U	0.5 U	0.5 U
SB-218(C)	SB218(C)-2.5	8/28/2002	2.5		2.62	0.0862 U	0.5 U	0.5 U
SB-219(C)	SB219(C)-4	8/28/2002	4		0.981	0.0893 U	0.5 U	0.5 U
SB-220(C)	SB220 (C)-5	8/28/2002	5		8.5	0.1 U	0.5 U	0.5 U
SB-221(C)	SB221 (C)-4.5	8/28/2002	4.5		2.66	0.1 U	0.431 U	0.431 U
SB-222(C)	SB222 (C)-4.5	8/28/2002	4.5		3.25	0.1 U	0.4 U	0.4 U
SB-223(C)	SB223 (C)-6	8/29/2002	6		2.21	0.0862 U	0.5 U	0.5 U
SB-224(C)	SB224 (C)-2	8/29/2002	2		2.14	0.1 U	0.45 U	0.45 U
SB-225(C)	SB225 (C)-3	8/29/2002	3		2.54	0.1 U	0.427 U	0.427 U
SB-226(C)	SB226 (C)-3	8/29/2002	3		1.54	0.1 U	0.362 U	0.362 U
SB-227(C)	SB227 (C)-8	8/29/2002	8		2.76	0.1 U	0.403 U	0.403 U
SB-228(C)	SB228 (C)-4	8/29/2002	4		178	0.1 U	0.424 U	0.424 U
SB-229(C)	SB229 (C)-8	8/29/2002	8		2.61 U	0.1 U	0.417 U	0.417 U
SB-230(C)	SB230 (C)-8	8/29/2002	8		2.54	0.1 U	0.26 U	0.26 U
SB-231(C)	SB231 (C)-2	8/29/2002	2		4.49	0.1 U	0.455 U	0.455 U
SB-239(C)	SB-239(C)-4	9/3/2002	4		3.42	0.0893 U	0.329 U	0.329 U
SB-240(C)	SB-240(C)-6	9/3/2002	6		5.42	0.1 U	0.373 U	0.373 U
SB-241(C)	SB-241(C)-5	9/3/2002	5		4.24	0.1 U	0.403 U	0.403 U
SB-242(C)	SB-242(C)-4	9/3/2002	4		3.9	0.1 U	0.413 U	0.413 U
SB-243(C)	SB-243(C)-4	9/3/2002	4		5.26	0.1 U	0.42	0.391 U
SB-244(C)	SB-244(C)-3	9/3/2002	3		3.33	0.1 U	0.453	0.4 U
SB-245(C)	SB-245(C)-5	9/3/2002	5		2.33	0.1 U	0.336 U	0.336 U
SB-246(C)	SB-246(C)-5	9/3/2002	5		3.51	0.0893 U	0.427 U	0.427 U
SB-247(C)	SB-247(C)-6	9/3/2002	6		2.69	0.1 U	0.336 U	0.336 U
SB-250(C)	SB-250(C)-4	9/9/2002	4		7.47	0.1 U	0.362 U	0.362 U

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## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-251(C)	SB-251(C)-4	9/9/2002	4		4.16	0.0893 U	0.329 U	0.329 U
SB-252(C)	SB-252(C)-5	9/9/2002	5		2.5	0.1 U	0.292 U	0.292 U
SB-253(C)	SB-253(C)-2	9/4/2003	2		2.55			
SB-253(C)	SB-253(C)-7.5	9/4/2003	7.5		3.73			
SB-254(C)	SB-254(C)-2	9/4/2003	2		34.1			
SB-254(C)	SB-254(C)-7	9/4/2003	7		31.5			
SB-255(C)	SB-255(C)-2.5	9/4/2003	2.5		38.8			
SB-255(C)	SB-255(C)-7	9/4/2003	7		107			
SB256(C)	SB256 (c) 6	3/31/2004	6		2.68	0.0714 U	0.403 U	0.403 U
SB257(C)	SB257 (c) 8	3/31/2004	8	10 U				
SB258(C)	SB258 (c) 8.5	3/31/2004	8.5	10 U				
SB259(C)	SB259 (c) 8.5	3/31/2004	8.5	10 U				
SB-301(D)	SB-301-D-3.5	8/20/2002	3.5		18.9			
SB-304(D)	SB-304-D-2.0	8/19/2002	2		20.9			
SB-304(D)	SB-D-DUP-0819	8/19/2002	2		25.1			
SB-304(D)	SB-304-D-5.0	8/19/2002	5		8.16			
SB-305(D)	SB-305-D-2.0	8/19/2002	2		6.53			
SB-305(D)	SB-305-D-4.5	8/19/2002	4.5		3.38			
SB-306(D)	SB-306-D-2.0	8/19/2002	2		3.51			
SB-306(D)	SB-306-D-4.5	8/19/2002	4.5		1.54 U			
SB-307(D)	SB-307-D-2.0	8/19/2002	2		0.784 U			
SB-309(D)	SB-309-D-2.0	8/19/2002	2		5.22			
SB-309(D)	SB-309-D-5.0	8/19/2002	5		0.773 U			
SB-310(D)	SB-310-D-2.0	8/19/2002	2		0.829 U			
SB-310(D)	SB-310-D-5.0	8/19/2002	5		144			
SB-311(D)	SB-311-D-5.0	8/19/2002	5		32.5			
SB-312(D)	SB-312-D-5.0	8/19/2002	5		2.42			
SB-313(D)	SB-313-D-5.0	8/20/2002	5		23.7			
SB-313(D)	SB-313-D-18.0	8/20/2002	18		13.2			
SB-314(D)	SB-314-D-15.0	8/20/2002	15		4.36			
SB-315(D)	SB-315-D-2.0	8/20/2002	2		7.17			
SB-315(D)	SB-315-D-15.0	8/20/2002	15		3.72			
SB-316(D)	SB-316-D-2.0	8/20/2002	2		7.5			
SB-316(D)	SB-316-D-5.0	8/20/2002	5		7.96			

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## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-316(D)	SB-D-DUP-3	8/20/2002	5		9.2			
SB-316(D)	SB-316-D-10.0	8/20/2002	10		13.9			
SB-316(D)	SB-316-D-14.5	8/20/2002	14.5		5.96			
SB-318(D)	SB-318-D-10.0	8/20/2002	10		4.89			
SB-318(D)	SB-318-D-15.0	8/20/2002	15		7.76			
SB-410(F)	SB-410(F)-4'	3/31/2004	4		1.66			
SB-410(F)	SB-410(F)-9'	3/31/2004	9		5.42			
SB-601(N)	SB-601(N)-3	9/13/2002	3		4.32			
SB-601(N)	SB-601(N)-7	9/13/2002	7		10.7			
SB-602(N)	SB-602(N)-7	9/13/2002	7		3.13			
SB-603(N)	SB-603(N)-7	9/13/2002	7		3.58			
SB-604(N)	SB-604(N)-7	9/13/2002	7		27.4			
SB-605(N)	SB-605(N)-3	9/13/2002	3		3.84			
SB-605(N)	SB-605(N)-7	9/13/2002	7		3.47			
SB-608(N)	SB-608(N)-3	9/13/2002	3		3.25			
SB-608(N)	SB-608(N)-6	9/13/2002	6		11.2			
SB-615(N)	SB-615 (N)-7	9/12/2002	7		4.76			
SB-618(N)	SB-618 (N)-7	9/12/2002	7		7.6			
SB-620(N)	SB-620 (N)-7	9/12/2002	7		3.76			
SB-623(N)	SB-623 (N)-7	9/12/2002	7		4.91			
SB-624(N)	SB-624 (N)-7	9/12/2002	7		3.75			
SB-626(N)	SB-626 (N)-7	9/12/2002	7		6.45			
SB-627(N)	SB-627(N)-2	8/28/2003	2		31.4			
SB-629(N)	SB-629(N)-7.5	8/28/2003	7.5		2.49			
SB-632(N)	SB-632(N)-7.5	9/8/2003	7.5		27.7			
SB-700(P)	SB-700(P)-3	8/21/2002	3		53.2	0.0893 U	0.5 U	0.5 U
SB-700(P)	SB-700(P)-10.5	8/21/2002	10.5		9.04	0.0862 U	0.524	0.5 U
SB-701(P)	SB-701(P)-2	8/20/2002	2		2.15	0.0893 U	0.5 U	0.5 U
SB-701(P)	SB-701(P)-11	8/20/2002	11		3.46	0.1 U	0.5 U	0.5 U
SB-701(P)	SB-701(P)-12	8/20/2002	12		2.41	0.0893 U	0.5 U	0.5 U
SB-702(P)	SB-702(P)-2	8/21/2002	2		36.7	0.142	1.9	0.5 U
SB-702(P)	SB-702(P)-11	8/21/2002	11		2.08	0.134	0.5 U	0.5 U

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## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-703(P)	SB-703(P)-2	8/21/2002	2		33.9	0.0893 U	0.62	0.5 U
SB-703(P)	SB-703(P)-10	8/21/2002	10		2.24	0.1 U	0.519	0.5 U
SB-704(P)	SB-704(P)-2	8/21/2002	2		19.6	0.1 U	0.519	0.5 U
SB-704(P)	SB-704(P)-11	8/21/2002	11		2.12	0.0862 U	0.501	0.5 U
SB-705(P)	SB-705(P)-3	8/20/2002	3		2.24	0.0862 U	0.5 U	0.5 U
SB-705(P)	SB-705(P)-5.5	8/20/2002	5.5		9.35	0.1 U	0.569	0.5 U
SB-705(P)	SB-705(P)-9.5	8/20/2002	9.5		2.55	0.1 U	0.5 U	0.5 U
SB-705(P)	SB-705(P)-12	8/20/2002	12		2.29	0.1 U	0.5 U	0.5 U
SB-706(P)	SB-706(P)-2.5	8/21/2002	2.5		2.49	0.1 U	0.5 U	0.5 U
SB-706(P)	SB-706(P)-5.5	8/21/2002	5.5		5.61	0.0862 U	0.512	0.5 U
SB-706(P)	SB-706(P)-9.5	8/21/2002	9.5		3.85	0.1 U	0.637	0.5 U
SB-706(P)	SB-706(P)-12	8/21/2002	12		2.13	0.0893 U	0.5 U	0.5 U
SB-707(P)	SB-707(P)-2	8/21/2002	2		9.9	0.1 U	0.5 U	0.5 U
SB-707(P)	SB-707(P)-10	8/21/2002	10		2.03	0.0862 U	24.5	0.5 U
SB-708(P)	SB-708(P)-3	8/20/2002	3		4.19	0.1 U	0.5 U	0.5 U

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## METALS IN SOIL

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SB-708(P)	SB-708(P)-10	8/20/2002	10		2.6	0.0893 U	0.5 U	0.5 U
SB-714(P)	SB-714(P)-10	8/21/2002	10		4.57			
SB-721(P)	SB-721(P)-3'	3/31/2004	3		13			
SB-721(P)	SB-721(P)-7'	3/31/2004	7		5.36			
SB-834(Q)	SB-834(Q)-2	9/5/2003	2		3.21			
SB-834(Q)	SB-834(Q)-7.5	9/5/2003	7.5		3.63			
SB-835(Q)	SB-835(Q)-2	9/5/2003	2		17.9			
SB-835(Q)	SB-835(Q)-7	9/5/2003	7		2.49			
SB-900(S)	SB-900(S)-4	8/26/2002	4		45.1			
SB-900(S)	SB-900(S)-12	8/26/2002	12		7.91	J		
SB-901(S)	SB-901 (S)-8	8/26/2002	8		2.82	J		
SB-901(S)	SB-901 (S)-10	8/26/2002	10		4.84	J		
SB-902(S)	SB-902 (S)-8	8/26/2002	8		3.98			
SB-902(S)	SB-902 (S)-12	8/26/2002	12		4.46			
SB-903(S)	SB-903 (S)-8	8/26/2002	8		5.94			
SB-903(S)	SB-903 (S)-10	8/26/2002	10		2.74			
SB-904(S)	SB-904 (S)-4	8/26/2002	4		15.6			
SB-904(S)	SB-904 (S)-12	8/26/2002	12		2.93			
SB-905(S)	SB-905 (S)-4	8/26/2002	4		13.9			
SB-905(S)	SB-905 (S)-12	8/26/2002	12		2.75			
SB-906(S)	SB-906 (S)-4	8/27/2002	4		200			
SB-906(S)	SB-906 (S)-12	8/27/2002	12		3.22			
SB-908(S)	SB-908 (S)-4	8/27/2002	4		2.82	J		
SB-908(S)	SB-908 (S)-8	8/27/2002	8		2.57	J		
SB-908(S)	SB-908 (S)-10	8/27/2002	10		2.23	J		
SB-909(S)	SB-909 (S)-4	8/27/2002	4		53.1	J		
SB-909(S)	SB-909 (S)-10	8/27/2002	10		37.7	J		
SB-910(S)	SB-910 (S)-4	8/27/2002	4		12			
SB-910(S)	SB-910 (S)-10	8/27/2002	10		2.79	J		
SB-911(S)	SB-911 (S)-8	8/27/2002	8		3.55	J		
SB-911(S)	SB-911 (S)-10	8/27/2002	10		3.99	J		
TP-201(C)	TP201(C)6E	8/27/2002	-		1.81	0.1 U	0.611	0.5 U

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**METALS IN SOIL**

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

Locator ID	Sample ID	Sample Date	Depth	Chromium, Hexavalent	Lead	Mercury	Selenium	Silver
			feet	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TP-202(C)	TP202(C)6W	8/27/2002	-		3.41	0.0862 U	0.5 U	0.5 U