TABLES

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TABLE 1

SHORELINE INVESTIGATION SOIL SAMPLING SUMMARY

Former Rhone-Poulenc Site
Tukwila, Washington

Investigation Focus	Sample Location	Matrix Types	Sample Depths (feet bgs)	Analytes
Duwamish Waterway	SL-01 through SL-06[1]	Soil	0.5-2	Metals[2], TPH-G[3], TPH-Dx[4], PCBs[5], SVOCs[6], and VOCs[7]
			5-7	
			10-12	
			15-17	
	SL-07 through SL-09[8]		0.5-2	Metals[2], pH[9], and VOCs[7]
			5-7	
			10-12	
			15-17	
			20-22	
			25-27	
			30-32	
			35-37	
Slip No. 6	SL-10[10], SL-12[11], SL-14[12]	Soil	0.5-2	Metals[2], pH[9], and VOCs[7]
			5-7	
			10-12	
			15-17	
			20-22	
			25-27	
			30-32	
			35-37	
			40-42	
			45-47	
			50-52	
			54-55	
	SL-11[13], SL-13, SL-15		0.5-2	Metals[2], pH[9], and VOCs[7]
			5-7	
			10-12	
			15-17	
			20-22	
			25-27	
			30-32	
			35-37	
Geotechnical Analyses	SL-01	Soil	12-14.5	Moisture Content[14], Density[15], Grain Size Analysis[16], and Atterberg Limits[17]
	SL-03		11-13.5	
	SL-05		13-15	
	SL-08			
	SL-09			

Notes

1. Field duplicates were collected at SL-03 from 0.5 to 2 feet bgs, SL-04 from 5 to 7 feet bgs, and SL-05 from10-12 feet bgs, respectively.
2. Metals include Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Th, V, and Zn. Soil samples were analyzed using EPA Method 6010B except for mercury, which was analyzed using EPA Method 7471A for soil.
3. TPH-Gx will be analyzed using NWTPH method.
4. TPH-Dx will be analyzed using NWTPH method.
5. PCBs will be analyzed using EPA Method 8082A.
6. SVOCs will include pentachlorophenol and will be analyzed using EPA Method 8270D.
7. VOCs were analyzed using EPA 8260C.
8. Field duplicates were collected at SL-08 from 0.5-2 feet bgs and 5-7 feet bgs, respectively. A field duplicate was also collected at SL-09 from 5-7 feet bgs.
9. pH in soil was measured using EPA 9045D.
10. A field duplicate was collected at SL-10 from 50-52 feet bgs.
11. Field duplicates were collected at SL-12 from 15-17 feet bgs and 50-52 feet bgs.

Notes (cont.)

12. Field duplicates was collected at SL-14 from 10-12 feet bgs and 50-52 feet bgs.
13. A field duplicate was collected at SL-11 from 35-37 feet bgs.
14. Moisture content analyses performed using ASTM D2216.
15. Bulk Density analyses performed using ASTM D7263.
16. Hydrometer analyses performed using ASTM D422.
17. Atterberg Limits analyses performed using ASTM D4318.

Abbreviations

ASTM = American Society for Testing and Materials
bgs = below ground surface
EPA = U.S. Environmental Protection Agency
No. = number
PCBs = polychlorinated biphenyls
VOCs = volatile organic compounds
SVOCs = semivolatile organic compounds
TPH-D = total petroleum hydrocarbons diesel range
TPH-G = total petroleum hydrocarbons gasoline range

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TABLE 2

SHORELINE INVESTIGATION GROUNDWATER SAMPLING SUMMARY
Former Rhone-Poulenc Site
Tukwila, Washington

Investigation Focus	Sample Location	Matrix Typos	Sample Depths (feet bgs)	Analytes
Duwamish Waterway	SL-07	Groundwater	16-20	Metals[2], VOCs[3], and pH[4]
			21-25 (D)[1]	
			26-30	
			30-34	
	SL-08		11-15	
			16-20	
			21-25	
			26-30	
			30-34	
	SL-09		16-20 (D)[1]	
			21-25	
			26-30	
			30-34	
Slip No. 6	SL-10	Groundwater	16-20	Metals[2], VOCs[3], and pH[4]
			21-25	
			26-30	
			31-35	
			36-40	
			41-45	Metals[2], VOCs[3], pH[4], cations[5], anions[6], sulfide[7], ammonia[8], alkalinity[9], and specific gravity[10]
			46-50	Metals[2], VOCs[3], and pH[4]
			51-55	
	SL-11		16-20 (D)[1]	
			21-25	Metals[2], VOCs[3], pH[4], cations[5], anions[6], sulfide[7], ammonia[8], alkalinity[9], and specific gravity[10]
			26-30	Metals[2], VOCs[3], and pH[4]
			30-34	
	SI-12		16-20	
			21-25	Metals[2], VOCs[3], pH[4], cations[5], anions[6], sulfide[7], ammonia[8], alkalinity[9], and specific gravity[10]
			26-30	
			31-35	Metals[2], VOCs[3], and pH[4]
			36-40	
			41-45	Metals[2], VOCs[3], pH[4], cations[5], anions[6], sulfide[7], ammonia[8], alkalinity[9], and specific gravity[10]
			46-50 (D)[1]	Metals[2], VOCs[3], and pH[4]
			51-55	
	SL-13		16-20	
			21-25	
			26-30	
			31-35	
	SL-14		16-20 (D)[1]	
			21-25	
			26-30	
			31-35	
			36-40	Metals[2], VOCs[3], pH[4], cations[5], anions[6], sulfide[7], ammonia[8], alkalinity[9], and specific gravity[10]
			41-45	Metals[2], VOCs[3], and pH[4]
			46-50	
			51-55	
	SL-15		16-20	
			21-25 (D)[1]	
			21-25	
			26-30	

Notes
1. Sample and field duplicate collected at specified sample interval.
2. Metals included Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Th, V, and Zn. Water samples were analyzed using EPA Method 6010B except for mercury, arsenic, lead, and thallium. Mercury was analyzed using EPA Method 7470A. Arsenic lead, and thallium were analyzed using EPA Method 200.8.
3. VOCs analyzed using EPA 8260C.
4. pH in water will be measured using EPA 150.1.
5. Cations include Ca, Mg, Na, K, and Si and will be analyzed using EPA Method 200.8.
6. Anions include Cl^-, NO_3^-, SO_4^{-2}, and PO_4^{-3} and will be analyzed using EPA Method 300.0.

Notes (cont.)
7. Sulfide will be analyzed using Standard Method (SM) 4500.
8. Ammonia will be analyzed using EPA Method 350.1.
9. Alkalinity will be analyzed using SM 2320.
10. Specific gravity of liquids will be analyzed using ASTM D1298.

Abbreviations
ASTM = American Society for Testing and Materials
bgs = below ground surface
EPA = U.S. Environmental Protection Agency
No. = number
VOCs = volatile organic compounds

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TABLE 3

SOIL ANALYTICAL RESULTS FOR DUWAMISH SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Analyte / Sample Location	SL-01	SL-01	SL-01	SL-01	SL-02	SL-02	SL-02	SL-02	SL-03	SL-03	SL-03	SL-03	SL-03
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	0.5 to 2	5 to 7	10 to 12	15 to 17	0.5 to 2	0.5 to 2	5 to 7	10 to 12	15 to 17
Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
Sample Identification	FRP-082911-001	FRP-082911-002	FRP-082911-003	FRP-082911-004	FRP-082911-006	FRP-082911-007	FRP-082911-008	FRP-082911-009	FRP-082911-010	Field Duplicate FRP-082911-011	FRP-082911-012	FRP-082911-013	FRP-082911-014
Conventionals													
pH	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)													
Aluminum	11,400	12,700	14,500	9,370	9,550	9,740	9,380	7,180	10,600	11,300	9,750	14,600	13,000
Arsenic	4.4	3.8	3.9	1.1	3.2	2.6	2.0	1.3	4.2	3.6	2.7	3.7	3.2
Cadmium	0.3	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2	0.2 U	0.2 U	0.3 U
Chromium	19.7	18.2	18.6	14.3	13.2	13	12.1	12.8	16.3	17.3	13.8	17.1	15.2
Copper	2,180 J	216 J	21.8 J	53.6 J	202 J	12 J	12.1 J	10.9 J	51.7 J	47.9 J	33.3 J	22 J	18.4 J
Lead	19	4	4	3 U	8	2	2 U	3 U	12	11	5	2	3 U
Mercury	0.35 J	0.14 J	0.07 J	0.06 J	0.1 J	0.02 J	0.03 UJ	0.02 UJ	0.45 J	0.67 J	0.05 J	0.04 J	0.03 J
Nickel	18	13	13	7	11	9	8	6	13	14	10	11	9
Vanadium	51.5	45.6	51.9	48.6	43.4	43.2	43.3	43.1	47.2	49.2	44.6	56.4	53.7
Zinc	65	37	38	22	35	29	23	19	45	46	32	26	23
PCBs (µg/kg)													
Aroclor 1254	5,900	420	3.5 J	38	630	3.9 U	3.9 U	4.9	290 J	360 J	72	3.9 U	3.8 U
Aroclor 1260	1,700 U	78 U	3.8 U	7.4 U	160	3.9 U	3.9 U	3.8 U	300 J	290 J	9.4 U	3.9 U	3.8 U
SVOCs (µg/kg)													
1-Methylnaphthalene	16 J	35	55	19 U	20 U	22	18 U	18 U	19 U	13 J	19 U	19 U	18 U
2-Methylnaphthalene	28	31	59	19 U	20 U	17 J	18 U	18 U	18 J	19 J	19 U	19 U	18 U
4-Methylphenol	38 U	38 U	22 J	39 U	39 U	39 U	36 U	37 U	39 U	39 U	38 U	39 U	37 U
Acenaphthene	19 U	28	19 U	19 U	20 U	20 U	18 U	18 U	19 U	20 U	19 U	19 U	18 U
Anthracene	19 U	19 U	13 J	19 U	20 U	20 U	18 U	18 U	19 U	20 U	19 U	19 U	18 U
Benzo(a)anthracene	28 J	19 U	16 J	19 U	20 U	20 U	18 U	18 U	16 J	18 J	19 U	19 U	18 U
Benzo(a)pyrene	38	19 U	19 U	19 U	20 U	20 U	18 U	18 U	22	22	19 U	19 U	18 U
Benzo(g,h,i)perylene	45	19 U	19 U	19 U	20 U	20 U	18 U	18 U	21	19 J	19 U	19 U	18 U
Benzoic Acid	380 U	380 U	98 J	390 U	390 U	390 U	360 U	370 U	390 U	390 U	380 U	390 U	370 U
Chrysene	42	11 J	17 J	19 U	20 U	20 U	18 U	18 U	25	26	19 U	19 U	18 U
Dibenz(a,h)anthracene	16 J	19 U	19 U	19 U	20 U	20 U	18 U	18 U	19 U	20 U	19 U	19 U	18 U
Dibenzofuran	19 U	19 U	29	19 U	20 U	20 U	18 U	18 U	19 U	11 J	19 U	19 U	18 U
Fluoranthene	48	23	38	19 U	20 U	20 U	18 U	18 U	38	55	19 U	19 U	18 U
Fluorene	19 U	19 U	19	19 U	20 U	20 U	18 U	18 U	19 U	20 U	19 U	19 U	18 U
Indeno(1,2,3-cd)pyrene	42	19 U	19 U	19 U	20 U	20 U	18 U	18 U	18 J	19 J	19 U	19 U	18 U
Naphthalene	18 J	110	42	19 U	20 U	20 U	18 U	18 U	21	15 J	19 U	19 U	18 U
Pentachlorophenol	210	51 J	190 U	190 U	200 U	200 U	180 U	180 U	190 U	200 U	190 U	190 U	180 U
Phenanthrene	34 J	30	81	19 U	15 J	18 J	18 U	18 U	24	49	19 U	19 U	18 U
Phenol	19 U	19 U	19 U	19 U	20 U	20 U	18 U	18 U	19 U	20 U	19 U	19 U	18 U
Pyrene	42	17 J	31	19 U	20 U	20 U	18 U	18 U	26	42	19 U	19 U	18 U
Total Benzofluoranthenes	100	17 J	15 J	19 U	12 J	20 U	18 U	18 U	58	52	19 U	19 U	18 U
Total cPAHs	57.02	14.16	14.67	13 U	14.3	14 U	13 U	13 U	32.4	32.16	13 U	13 U	13 U
TPH (mg/kg)													
Diesel Range Organics	1,000	37	14	6.3 U	7.2	5.4 U	5.5 U	6.4 U	5.4 U	5.4 U	5.2 U	6.3 U	6.4 U
Lube Oil	430	18	14	13 U	11 U	11 U	11 U	13 U	18	17	10 U	13 U	13 U
VOCs (µg/kg)													
2-Butanone	5 UJ	4.6 J	8.6 J	6.5 UJ	2.9 J	6.2 UJ	5.7 U	6.3 U	3.3 J	6.5	5.9 U	7.5	6.3 J
4-Isopropyltoluene	1 U	1.2 U	1.9 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
Acetone	21 J	33 J	53 J	12 J	33 J	16 J	28	11 U	33	73	26	140	110
Benzene	0.7 J	0.6 J	1 J	1.3 U	1.2	1.2 U	28	1.3 U	1 J	1.4	1.2 U	0.8 J	1.3 J
Carbon Disulfide	1 U	2.4	5.3	1.9	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
cis-1,2-Dichloroethene	1 U	1.2 U	1.9 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
m, p-Xylene	1 U	1.5	1.9 U	1.3 U	0.7 J	1.2 U	1.1 U	1.3 U	1.2 U	0.7 J	1.2 U	1.3 U	1.4 U
Methylene Chloride	2 U	2.5 U	3.9 U	2.6 U	2.2 U	2.5 U	2.3 U	2.5 U	2.3 U	2.3 U	2.4 U	2.5 U	2.8 U
Naphthalene	5 U	2.5 J	9.7 U	6.5 U	5.5 U	6.2 U	5.7 U	6.3 U	5.8 U	5.7 U	5.9 U	6.3 U	7.1 U
sec-Butylbenzene	1 U	0.8 J	1.9 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
Tetrachloroethene	1 U	1.2 U	1.9 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U
Toluene	0.5 J	0.7 J	1.9 U	1.3 U	1.1 J	1.2 U	1.1 U	1.3 U	1 J	2.1	1.2 U	1.3 U	1.4 U
Trichloroethene	1 U	1.2 U	1.9 U	1.3 U	1.1 U	1.2 U	1.1 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.4 U

TABLE 3

SOIL ANALYTICAL RESULTS FOR DUWAMISH SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-04	SL-04	SL-04	SL-04	SL-04	SL-05	SL-05	SL-05	SL-05	SL-05	SL-06	SL-06	SL-06	SL-06
Sample Depth (feet)	0.5 to 2	5 to 7	5 to 7	10 to 12	15 to 17	0.5 to 2	5 to 7	10 to 12	10 to 12	15 to 17	0.5 to 2	5 to 7	10 to 12	15 to 17
Sample Date	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011	8/29/2011
Analyte / Sample Identification	FRP-082911-016	FRP-082911-017	Field Duplicate FRP-082911-018	FRP-082911-019	FRP-082911-020	FRP-082911-021	FRP-082911-022	FRP-082911-023	Field Duplicate FRP-082911-024	FRP-082911-025	FRP-082911-027	FRP-082911-028	FRP-082911-029	FRP-082911-030
Conventionals														
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)														
Aluminum	11,000	11,500	11,300	11,900	11,800	10,900	15,000	11,800	11,200	7,990	13,200	11,300	15,700	10,900
Arsenic	5.7	3.6	3.8	3.2	2.9	3.2	8.7	3.0	3.0	1.6	3.9	2.8	5.1	2.6
Cadmium	0.2	0.2 U	0.2 U	0.2 U	0.3 U	0.3	0.3	0.2 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.2 U
Chromium	17.3	15.8	14.8	14.7	14.9	22.7	17	14	13.5	11.2	19.2	14.1	18.4	15.3
Copper	54.2 J	37.2 J	28.2 J	17.2 J	19.2 J	27.2	21.9	18	17.5	10.6	77.1	18.5	21.6	21.4
Lead	18	10	10	2 U	3 U	8	12	2 U	2 U	2 U	15	3	6	3
Mercury	0.19 J	0.14 J	0.15 J	0.03 UJ	0.03 J	0.03	0.1	0.03	0.03	0.02 U	0.95	0.03	0.09	0.07
Nickel	13	12	12	9	9	30	13	10	10	7	19	10	14	12
Vanadium	46.6	46.6	45.7	49.8	48.4	46.2	50.7	48	47	42.4	52.6	42.5	51.3	47.9
Zinc	59	39	37	24	24	45	47	25	25	19	60	31	42	29
PCBs (µg/kg)														
Aroclor 1254	180	39	41	5.7 U	3.9 U	11	3.9 U	3.9 U	3.8 U	3.8 U	50	3.7 U	3.9 U	9.4 U
Aroclor 1260	100	18	32	3.8 U	3.9 U	20	3.9 U	3.9 U	3.8 U	3.8 U	53	3.7 U	3.9 U	7.6
SVOCs (µg/kg)														
1-Methylnaphthalene	100	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	61	51	16 J
2-Methylnaphthalene	100	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	170	48	22
4-Methylphenol	39 U	37 U	37 U	37 U	36 U	39 U	37 U	36 U	37 U	36 U	36 U	36 U	13 J	36 U
Acenaphthene	20 U	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Anthracene	20 U	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Benzo(a)anthracene	14 J	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	9.5 J	18 U
Benzo(a)pyrene	20	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Benzo(g,h,i)perylene	17 J	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Benzoic Acid	390 U	370 U	370 U	370 U	360 U	390 U	370 U	360 U	370 U	360 U	360 U	360 U	380 U	360 U
Chrysene	24	10 J	18 U	19 U	18 U	22	18 U	18 U	18 U	18 U	18 U	18 U	12 J	18 U
Dibenz(a,h)anthracene	20 U	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Dibenzofuran	120	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	11 J	21	18 U
Fluoranthene	28	11 J	13 J	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	14 J	28	18 U
Fluorene	20 U	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	15 J	12 J	18 U
Indeno(1,2,3-cd)pyrene	17 J	18 U	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Naphthalene	16 J	11 J	18 U	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	63	24	13 J
Pentachlorophenol	51 J	180 U	180 U	190 U	180 U	200 U	180 U	180 U	180 U	180 U	180	180 U	190 U	180 U
Phenanthrene	110	13 J	14 J	19 U	18 U	18 J	18 U	18 U	18 U	18 U	11 J	40	63	18 U
Phenol	20 U	150	35	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	18 U	19 U	18 U
Pyrene	23	18 U	10 J	19 U	18 U	20 U	18 U	18 U	18 U	18 U	18 U	15 J	26	18 U
Total Benzofluoranthenes	41	13 J	15 J	19 U	18 U	16 J	11 J	18 U	18 U	18 U	18 U	9.9 J	14 J	18 U
Total cPAHs	28.44	13.1	13.29	13 U	13 U	14.82	13 U	13 U	13 U	13 U	13 U	12.78	13.87	13 U
TPH (mg/kg)														
Diesel Range Organics	9.2	6	5.5 U	6.2 U	6.9 U	27	6.7 U	6.6 U	6.5 U	6.5 U	6.4	69	17	6 U
Lube Oil	17	13	14	12 U	14 U	420	13 U	13 U	13 U	13 U	15	11 U	23	12 U
VOCs (µg/kg)														
2-Butanone	4.9 J	6.6 U	3.4 J	3.8 J	3.6 J	6.2	9.8	3.5 J	6.1 UJ	6.5 UJ	4 J	6.3 UJ	7 UJ	2.1 J
4-Isopropyltoluene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U
Acetone	45	26	28	130	53	70	86	43	29	11	41	24	21	21
Benzene	0.7 J	0.8 J	0.9 J	0.8 J	1.5	1 J	2.6	1.2 J	0.7 J	1.3 U	1.2 J	0.5 J	0.9 J	1.1 U
Carbon Disulfide	2.8	1.3 U	1.4	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.4	1.3 U	1.3 U	1.3 U	3.9	1.9
cis-1,2-Dichloroethene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U
m, p-Xylene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U
Methylene Chloride	2.2 U	2.6 U	2.6 U	2.5 U	2.8 U	2.2 U	2.6 U	2.6 U	2.4 U	2.6 U	2.6 U	2.5 U	2.8 U	2.3 U
Naphthalene	5.5 U	6.6 U	6.4 U	6.3 U	6.9 U	5.4 U	6.5 U	6.4 U	6.1 U	6.5 U	6.5 U	6.3 U	7 U	5.6 U
sec-Butylbenzene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U
Tetrachloroethene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U
Toluene	0.5 J	1.3 U	1.3 U	1.3 U	1 J	0.5 J	0.4 J	1.3 U	1.2 U	1.3 U	1 J	1.3 U	1.4 U	0.6 J
Trichloroethene	1.1 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U	1.4 U	1.1 U

TABLE 3

SOIL ANALYTICAL RESULTS FOR DUWAMISH SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-07	SL-07	SL-07	SL-07	SL-07	SL-07	SL-07	SL-07	SL-08	SL-08	SL-08	SL-08	SL-08
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	0.5 to 2	0.5 to 2	5 to 7	5 to 7	10 to 12
Sample Date	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011
Analyte / Sample Identification	FRP-083011-001	FRP-083011-002	FRP-083011-003	FRP-083011-004	FRP-083011-005	FRP-083011-006	FRP-083011-007	FRP-083011-008	FRP-083011-010	Field Duplicate FRP-083011-011	FRP-083011-012	Field Duplicate FRP-083011-013	FRP-083011-014
Conventionals													
pH	6.55	7.02	6.64	6.09	6.91	7.28	7.66	8.86	8.09	8.08	8.00	7.77	7.78
Metals (mg/kg)													
Aluminum	9,590	7,340	9,460	11,900	6,790	8,460	7,540	9,040	11,500	11,100	9,970	10,500	10,400
Arsenic	1.5	1.7	2.0	3.2	1.8	1.9	1.3	1.3	3.3	3.2	2.0	2.0	2.4
Cadmium	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.3	0.2 U	0.2 U	0.2 U
Chromium	30	9.9	12.8	15	10.1	11.3	9.5	15.8	17.3	15.8	11.9	12.5	14.7
Copper	11.8	10.4	12.2	18	10.2	15.7	9.9	11.8	352	349	18.2	20.5	20.8
Lead	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	15	17	2	2 U	2 U
Mercury	0.03	0.02 U	0.03 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U	74	83	0.22	0.21	2.45
Nickel	40	7	8	9	7	11	7	11	14	13	9	10	9
Vanadium	32.9	37.5	50	53.5	36.3	38.1	38.1	43.9	49.7	46.6	36.6	37.5	43.3
Zinc	28	20	22	22	19	27	22	25	58	58	28	28	25
PCBs (µg/kg)													
Aroclor 1254	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOCs (µg/kg)													
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAHs	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)													
Diesel Range Organics	--	--	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--	--	--	--	--	--
VOCs (µg/kg)													
2-Butanone	5.6 U	6.1 U	6.6 U	6.2 U	6 U	7 U	6.9 U	5.7 U	5.8 U	6.9 U	5.9 U	8.6 U	6.3 U
4-Isopropyltoluene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
Acetone	20	50	43	20	11	19	19	11	62	43	33	25	49
Benzene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
Carbon Disulfide	1.1 U	1.2 U	1.3 U	1.2 U	2.6	7.8	4.6	5.9	3.6	3.3	1.2 U	1.7 U	1.3 U
cis-1,2-Dichloroethene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
m, p-Xylene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
Methylene Chloride	2.3 U	2.4 U	3.4	3.5	2.5	2.8 U	3.4	2.3 U	2.3 U	2.8 U	2.3 U	3.4 U	2.5 U
Naphthalene	5.6 U	6.1 U	6.6 U	6.2 U	6 U	7 U	6.9 U	5.7 U	5.8 U	6.9 U	5.9 U	8.6 U	6.3 U
sec-Butylbenzene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
Tetrachloroethene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U
Toluene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	2.7	1.4 U	1.1 U	66	5.8	1.2 U	1.7 U	1.3 U
Trichloroethene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.1 U	1.2 U	1.4 U	1.2 U	1.7 U	1.3 U

TABLE 3

SOIL ANALYTICAL RESULTS FOR DUWAMISH SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Analyte / Sample Location	SL-08	SL-08	SL-08	SL-08	SL-08	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09
Sample Depth (feet)	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	0.5 to 2	5 to 7	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37
Sample Date	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011
Sample Identification	FRP-083011-015	FRP-083011-016	FRP-083011-017	FRP-083011-018	FRP-083011-019	FRP-083011-021	FRP-083011-023	Field Duplicate FRP-083011-022	FRP-083011-024	FRP-083011-025	FRP-083011-026	FRP-083011-027	FRP-083011-028	FRP-083011-029
Conventionals														
pH	7.22	6.11	8.24	8.93	9.84	7.94	8.33	8.37	8.30	6.96	7.49	7.87	10.24	9.96
Metals (mg/kg)														
Aluminum	12,100	8,320	7,030	7,300	6,080	10,400	10,300	10,200	10,400	13,300	8,040	7,870	7,880	7,960
Arsenic	1.7	1.1	0.8	2.1	1.7	6.6	2.4	2.3	2.1	4.3	1.3	1.5	0.9	0.8
Cadmium	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
Chromium	14.9	12.1	9.7	8.4	8.5	22.9	14.4	13.6	12.6	17.1	13.4	14.1	13.2	10.8
Copper	16.1	8.5	9	10.6	9	94.1 J	16.5 J	15.9 J	17.9 J	34.3 J	11.4 J	12.8 J	10.5 J	10.6 J
Lead	3 U	2 U	2 U	2 U	2 U	12	2 U	2 U	2 U	3	2 U	2 U	2 U	2 U
Mercury	0.03	0.03 U	0.03 U	0.02 U	0.02 U	0.43 J	0.03 J	0.03 J	0.03 UJ	0.06 J	0.02 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Nickel	8	7	7	8	7	14	9	9	8	20	8	10	10	9
Vanadium	45.4	31.3	36.9	35.5	32.6	47.2	49.2	46.8	39.2	54	46.6	41.7	37.1	38.9
Zinc	26	23	21	22	20	47	36	34	21	30	20	24	23	23
PCBs (µg/kg)														
Aroclor 1254	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOCs (µg/kg)														
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic Acid	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenz(a,h)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAHs	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)														
Diesel Range Organics	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VOCs (µg/kg)														
2-Butanone	6.1 U	5.9 U	6.6 U	5.8 U	7.5 U	5.4 U	3.7 J	4.6 J	3 J	8.6 U	5.9 U	5.9 U	6.2 U	6.4 U
4-Isopropyltoluene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Acetone	31	14	10	12	12	39	42	50	29	18	13	13	11	9.8
Benzene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1 J	0.8 J	1.8	1.3	0.9 J	1.2 U	1.2 U	1.2 U	1.3 U
Carbon Disulfide	1.2 U	6	2.9	4.7	3.3	1.5	1.5 U	1.6 U	1.2 U	3.7	2.6	15	3.8	2.7
cis-1,2-Dichloroethene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
m, p-Xylene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Methylene Chloride	2.5 U	2.4 U	2.7 U	2.3 U	3.1	2.2 U	3 U	3.2 U	2.4 U	3.4 U	2.3 U	2.3 U	2.5 U	2.5 U
Naphthalene	6.1 U	5.9 U	6.6 U	5.8 U	7.5 U	5.4 U	7.5 U	7.9 U	6 U	8.6 U	5.9 U	5.9 U	6.2 U	6.4 U
sec-Butylbenzene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Tetrachloroethene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Toluene	1.2 U	1.2 U	1.3 U	1.2 U	2.4	1.8	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.9	1.6
Trichloroethene	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = analyte not detected at the reporting limit provided.
UJ = analyte not detected at the estimated reporting limit provided.

Abbreviations
-- = not analyzed
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
VOCs = volatile organic compounds
PCBs = polychlorinated biphenols
SVOC = semi-volatile organic compounds
TPH = total petroluem hydrocarbons

amec

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09	SL-09
Sample Depth (feet)	0.5 to 2	5 to 7	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37
Sample Date	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011	8/30/2011
Sample Identification / Analyte	FRP-083011-021	FRP-083011-023	Field Duplicate FRP-083011-022	FRP-083011-024	FRP-083011-025	FRP-083011-026	FRP-083011-027	FRP-083011-028	FRP-083011-029
Conventionals									
pH	7.94	8.33	8.37	8.30	6.96	7.49	7.87	10.24	9.96
Metals (mg/kg)									
Aluminum	10,400	10,300	10,200	10,400	13,300	8,040	7,870	7,880	7,960
Arsenic	6.6	2.4	2.3	2.1	4.3	1.3	1.5	0.9	0.8
Cadmium	0.4	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
Chromium	23	14	14	13	17	13	14	13	11
Copper	94.1 J	16.5 J	15.9 J	17.9 J	34.3 J	11.4 J	12.8 J	10.5 J	10.6 J
Lead	12	2 U	2 U	2 U	3	2 U	2 U	2 U	2 U
Mercury	0.43 J	0.03 J	0.03 J	0.03 UJ	0.06 J	0.02 UJ	0.03 UJ	0.03 UJ	0.03 UJ
Nickel	14	9	9	8	20	8	10	10	9
Vanadium	47.2	49.2	46.8	39.2	54	46.6	41.7	37.1	38.9
Zinc	47	36	34	21	30	20	24	23	23
VOCs (µg/kg)									
2-Butanone	5.4 U	3.7 J	4.6 J	3 J	8.6 U	5.9 U	5.9 U	6.2 U	6.4 U
4-Isopropyltoluene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Acetone	39	42	50	29	18	13	13	11	9.8
Benzene	1 J	0.8 J	1.8	1.3	0.9 J	1.2 U	1.2 U	1.2 U	1.3 U
Carbon Disulfide	1.5	1.5 U	1.6 U	1.2 U	3.7	2.6	15	3.8	2.7
cis-1,2-Dichloroethene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
m, p-Xylene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Methylene Chloride	2.2 U	3 U	3.2 U	2.4 U	3.4 U	2.3 U	2.3 U	2.5 U	2.5 U
Naphthalene	5.4 U	7.5 U	7.9 U	6 U	8.6 U	5.9 U	5.9 U	6.2 U	6.4 U
sec-Butylbenzene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Tetrachloroethene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U
Toluene	1.8	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.9	1.6
Trichloroethene	1.1 U	1.5 U	1.6 U	1.2 U	1.7 U	1.2 U	1.2 U	1.2 U	1.3 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	40 to 42	45 to 47	50 to 52	50 to 52	54 to 55
Sample Date	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011
Analyte / Sample Identification	FRP-090811-001	FRP-090811-002	FRP-090811-003	FRP-090811-004	FRP-090811-005	FRP-090811-006	FRP-090811-007	FRP-090811-008	FRP-090811-009	FRP-090811-010	FRP-090811-011	Field Duplicate FRP-090811-012	FRP-090811-013
Conventionals													
pH	7.48	6.96	6.10	6.54	7.64	8.53	8.59	10.27	9.55	8.13	8.02	8.10	8.46
Metals (mg/kg)													
Aluminum	10,000	8,580	11,400	8,690	7,990	7,920	6,890	5,980	9,780	7,450	7,410	6,720	8,950
Arsenic	3.5	1.6	2.5	3.3	3.2	3.6	0.9	1.0	2.1	1.5	1.3	1.1	1.8
Cadmium	0.3	0.2 U	0.4	0.2 U	0.2	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	16	14	16	12	13	12	13	11	11	10	8	8	10
Copper	27.9	25.4	29.6	24.2	22.7	22	8.9	8.0	14	9.3	10.5	8.8	14.3
Lead	8	5	19	10	5	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Mercury	0.13	0.05	0.07	0.05	0.04	0.05	0.02 U	0.02 U	0.03 U	0.03 U	0.03 U	0.02 U	0.02 U
Nickel	12	12	10	15	15	12	7	6	7	6	5	5	6
Vanadium	44.2	36.4	39.4	39.9	38.1	37.8	38.6	34.7	39.8	33.2	32.8	30.7	36.9
Zinc	41	27	46	41	40	42	22	18	22	16	16	15	19
VOCs (µg/kg)													
2-Butanone	4.2 J	2.9 J	6.9 U	6.9 U	5.5 U	4.4	6.5 U	6.5 U	4.1 J	5.8 U	6.1 U	3.2 J	6.5 U
4-Isopropyltoluene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.9 U	1.3 U	1.8	2	1.2 U	1.2 U	1.3 U	1.3 U
Acetone	35	21	18	24	18	29	11 U	11 U	27	13	11 U	23	18
Benzene	1.1	1.3 U	0.8 J	1.4 U	1.1 U	0.6 J	1.3 U	1.3 U	1.1 J	1.2 U	1.2 U	1.3 U	1.3 U
Carbon Disulfide	1.1	1.3 U	2.9	8.4	7.5	9.2	3.6	4.2	2.5	2.3	2	5.5	2.8
cis-1,2-Dichloroethene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.9 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U
m, p-Xylene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.5 J	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U
Methylene Chloride	2.1 U	2.5 U	2.7 U	2.7 U	2.2 U	1.7 U	2.6 U	2.6 U	2.4 U	2.3 U	2.4 U	2.5 U	2.6 U
Naphthalene	5.2 U	6.3 U	6.9 U	6.9 U	5.5 U	4.3 U	6.5 U	6.5 U	5.9 U	5.8 U	6.1 U	6.3 U	6.5 U
sec-Butylbenzene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.9 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U
Tetrachloroethene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.9 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U
Toluene	2	1.3 U	1.4 U	1.4 U	1.1 J	4.5	1.3 U	2.9	14	1.2 U	1.2 U	1.3 U	1.3 U
Trichloroethene	1 U	1.3 U	1.4 U	1.4 U	1.1 U	0.9 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-11	SL-12	SL-12	SL-12
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	35 to 37	0.5 to 2	5 to 7	10 to 12
Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011
Analyte / Sample Identification	FRP-090711-022	FRP-090711-023	FRP-090711-024	FRP-090711-025	FRP-090711-026	FRP-090711-027	FRP-090711-028	FRP-090711-029	Field Duplicate FRP-090711-030	FRP-090711-009	FRP-090711-010	FRP-090711-011
Conventionals												
pH	8.19	7.99	7.27	6.99	8.72	9.31	10.18	10.54	10.62	7.80	7.22	5.34
Metals (mg/kg)												
Aluminum	10,900	10,300	13,700	13,700	7,690	7,420	9,730	6,070	5,520	10,300	11,300	11,600
Arsenic	3.8	2.0	3.7	3.9	1.9	1.7	5.2	1.2	1.1	3.4	1.0	1.8
Cadmium	0.3	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U
Chromium	27	14	17	18	16	11	11	10	11	16	13	13
Copper	80.0	13.8	31	26.8	16.3	13.6	15	8.8	8.4	20.9	16.9	19.5
Lead	11	2 U	3	4	2 U	2 U	2 U	2 U	2 U	8	3	2 U
Mercury	0.21	0.02 U	0.04	0.04	0.02 U	0.02 U	0.02 U	0.03 U	0.03 U	0.19	0.02 U	0.03
Nickel	15	9	12	12	10	10	14	6	6	12	11	9
Vanadium	43.2	40.3	53.3	42.9	46	37	39.7	35.7	34.4	42.7	38.9	39
Zinc	64	26	29	28	24	25	39	19	19	39	28	27
VOCs (µg/kg)												
2-Butanone	6	6.2 U	6.3 U	6.4 U	5.9 U	6.2 U	7.2 U	7.2 U	7 U	4.9 J	10 U	3.6 J
4-Isopropyltoluene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.9	7.7	7.2	1.2 U	2 U	1.3 U
Acetone	38	31	23	26	18	16	23	24	16	44	43	27
Benzene	0.8 J	1 J	0.9 J	1 J	0.6 J	1.2 U	1.4 U	1.4 U	1.4 U	1.2 J	2 U	0.8 J
Carbon Disulfide	2.3	1.2 U	1.1 J	2.6	3.3	4	6.5	6.2	6.2	1.2 U	2 U	1.3 U
cis-1,2-Dichloroethene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.4 U	1.2 U	2 U	1.3 U
m, p-Xylene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.4 U	1.2 U	2 U	1.3 U
Methylene Chloride	14	20	16	19	16	20	22	22	1.4 J	2.4 U	4 U	2.7 U
Naphthalene	5.1 U	6.2 U	6.3 U	6.4 U	5.9 U	6.2 U	7.2 U	7.2 U	7 U	6 U	10 U	6.6 U
sec-Butylbenzene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.4 U	1.2 U	2 U	1.3 U
Tetrachloroethene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.4 U	1.2 U	2 U	1.3 U
Toluene	0.8 J	0.6 J	1.3 U	0.6 J	1.2 U	0.8 J	4.4	18	17	1.8	3	1.3 U
Trichloroethene	1 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U	1.4 U	1.4 U	1.4 U	1.2 U	2 U	1.3 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12
Sample Depth (feet)	15 to 17	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	40 to 42	45 to 47	50 to 52	50 to 52	54 to 55
Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/19/2011
Analyte / Sample Identification	FRP-090711-012	Field Duplicate FRP-090711-013	FRP-090711-014	FRP-090711-015	FRP-090711-016	FRP-090711-017	FRP-090711-018	FRP-090711-019	FRP-090711-020	Field Duplicate FRP-090711-021	FRP-091911-001
Conventionals											
pH	5.07	5.24	8.29	9.43	9.42	10.05	11.09	11.29	11.30	11.27	10.51
Metals (mg/kg)											
Aluminum	11,700	10,100	9,330	8,190	7,610	6,190	5,710	7,670	6,980	8,060	10,800
Arsenic	2.1	2.5	1.8	2.8	5.9	2.9	1.2	1.7	1.4	1.5	1.7
Cadmium	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U
Chromium	14	14	14	13	12	8	8	12	9	9	10
Copper	39.4	21.4	15.9	23.1	11.1	8.2	7.2	12.6	11.2	10.9	16.4
Lead	4	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	2 U
Mercury	0.04	0.03	0.03 U	0.02 U	0.03 U	0.03 U	0.02 U	0.02 U	0.03 U	0.03 U	0.02 U
Nickel	9	9	7	9	8	7	6	8	5	6	6
Vanadium	40.9	35.3	50.6	40	44.5	32.7	32.3	35.7	32.9	34.7	37.7
Zinc	31	23	24	24	23	20	18	20	17	18	20
VOCs (µg/kg)											
2-Butanone	4.3 J	3.8 J	5.2 U	5.3 U	5.3 U	5.9 U	5.9 J	11	36	36 J	9.8
4-Isopropyltoluene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.6	1 J	1.1	1.2 J	1.2 U
Acetone	35	32	20	18	17	14	39	89	190	190 J	64
Benzene	0.9 J	0.9 J	1 U	1 U	0.9 J	1.2 U	1.3 U	1.1 U	0.9 J	1 J	1.2 U
Carbon Disulfide	1.3 U	1.1 U	2.4	31	17	38	6.4	7.5	4.4	3.6	2.7 J
cis-1,2-Dichloroethene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.1 U	1 U	1.2 U	1.2 U
m, p-Xylene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.1 U	1 U	1.2 U	1.2 U
Methylene Chloride	2.5 U	2.3 U	2.1 U	2.1 U	2.1 U	2.4 U	2.6 U	2.3 U	2 U	2.5 U	2.5
Naphthalene	6.3 U	5.7 U	5.2 U	5.3 U	5.3 U	5.9 U	6.4 U	5.7 U	5.1 U	6.2 U	6 U
sec-Butylbenzene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.1 U	1 U	1.2 U	1.2 U
Tetrachloroethene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.1 U	1 U	1.2 U	1.2 U
Toluene	0.7 J	1.1 U	1 U	2.3	1.1 U	4.3	140	160	970	840	51
Trichloroethene	1.3 U	1.1 U	1 U	1 U	1.1 U	1.2 U	1.3 U	1.1 U	1 U	1.2 U	1.2 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-13	SL-14	SL-14	SL-14	SL-14
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	0.5 to 2	5 to 7	10 to 12	10 to 12
Sample Date	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/7/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Analyte / Sample Identification	FRP-090711-001	FRP-090711-002	FRP-090711-003	FRP-090711-004	FRP-090711-005	FRP-090711-006	FRP-090711-007	FRP-090711-008	FRP-090611-009	FRP-090611-010	FRP-090611-011	Field Duplicate FRP-090611-012
Conventionals												
pH	8.20	8.08	7.91	8.11	8.47	7.14	9.16	10.68	8.08	8.10	6.24	5.98
Metals (mg/kg)												
Aluminum	12,300	10,600	8,950	12,000	10,200	10,500	9,010	7,920	11,500	8,960	8,540	8,830
Arsenic	6.3	2.3	1.6	2.8	1.9	2.3	1.6	1.0	4.2	2.0	2.9 J	2.5 J
Cadmium	0.5	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.2 U
Chromium	19	12	12	16	13	17	13	11	17.3 J	11.9 J	11	13
Copper	93.9	19.7	14.2	22.2	18.2	15.2	10.9	10.7	93.9	107	41.4	35.1
Lead	16	2 U	2 U	3 U	3 U	3 U	2 U	2 U	14	9	14	15
Mercury	1.68	0.02	0.04	0.03	0.03 U	0.03	0.03 U	0.02 U	1.96	0.48	0.27	0.26
Nickel	17	8	7	11	8	11	9	10	17	10	9	10
Vanadium	50.9	36.8	33.5	56.0	52.1	47.4	44.8	39.8	44.8	35.6	35	35.1
Zinc	120	22	23	28	25	26	28	25	68	37	29	29
VOCs (µg/kg)												
2-Butanone	6.4 J	4.7 J	7.4 U	3.4 J	5.1 J	6 J	6.4 U	8.4 U	4.7 J	6.6 U	4.3 J	3.4 J
4-Isopropyltoluene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	1 U	1.2 U
Acetone	40	41	16	31	48	49	14	25	38	14	28	23
Benzene	1.6 U	1 J	1.5 U	0.8 J	0.9 J	1.7 U	1.3 U	1.7 U	0.9 J	1.3 U	0.9 J	1.2 U
Carbon Disulfide	1.3 J	1.2 U	0.7 J	7.1	6.7	11	3.1	26	1.5	1.3 U	4.7	14
cis-1,2-Dichloroethene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	2.3	0.9 J
m, p-Xylene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	1 U	1.2 U
Methylene Chloride	3.2 U	2.5 U	2.9 U	2.5 U	2.6 U	3.3 U	2.6 U	3.4 U	0.9 J	2.1 J	2.1 U	2.3 U
Naphthalene	7.9 U	6.2 U	7.4 U	6.4 U	6.4 U	8.3 U	6.4 U	8.4 U	5.1 U	6.6 U	5.2 U	5.8 U
sec-Butylbenzene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	1 U	1.2 U
Tetrachloroethene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	1 U	1.2 U
Toluene	1.4 J	1.2 U	1.5 U	1.3 U	1.3 U	21	1.3 U	89	1.9	0.8 J	1.6	0.6 J
Trichloroethene	1.6 U	1.2 U	1.5 U	1.3 U	1.3 U	1.7 U	1.3 U	1.7 U	1 U	1.3 U	0.9 J	1.2 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14
Sample Depth (feet)	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37	40 to 42	45 to 47	50 to 52	50 to 52	55 to 57
Sample Date	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Analyte / Sample Identification	FRP-090611-013	FRP-090611-014	FRP-090611-015	FRP-090611-016	FRP-090611-017	FRP-090611-018	FRP-090611-019	FRP-090611-020	Field Duplicate FRP-090611-021	FRP-090611-022
Conventionals										
pH	9.04	8.69	7.68	7.35	10.71	9.59	10.59	10.59	10.59	8.65
Metals (mg/kg)										
Aluminum	12,900	6,880	6,590	7,340	7,400	7,050	8,210	9,360	9,310	13,100
Arsenic	29.4 J	1.5 J	0.8 J	5.6 J	1 J	1.6 J	1.2 J	1.7 J	1.6 J	2.9 J
Cadmium	0.6	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chromium	22	14	10	11	12	9	10	10	10	13
Copper	42.1	10.9	10	14.8	9.6	8.2	10.8	13.7	15.4	22.9
Lead	22	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U
Mercury	0.15	0.03 U	0.03 U	0.03 U	0.03 U	0.02 U	0.03 U	0.02 U	0.03 U	0.03
Nickel	16	8	6	9	10	6	6	6	6	8
Vanadium	56.1	41.5	37.3	40.5	41.2	32.9	34.9	37.0	36.8	43.5
Zinc	55	24	19	23	22	16	17	19	18	24
VOCs (µg/kg)										
2-Butanone	16	6.7 U	6.2 U	6.6 U	2.9 J	5.6 U	5.2 J	11	11	3.4 J
4-Isopropyltoluene	24	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U
Acetone	150	14	13	11	22	9.5 U	39	53	57	22
Benzene	1.7 J	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	0.7 J	0.7 J	0.7 J	1.2 U
Carbon Disulfide	4.2	6.3	4.6	3.3	4.4	2.8	2.3	5.5	3.3	3.9
cis-1,2-Dichloroethene	2.5	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U
m, p-Xylene	2.1 U	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U
Methylene Chloride	4.3 U	2.7 U	2.5 U	2.7 U	1 J	1.3 J	0.9 J	1.3 J	2.4 U	0.9 J
Naphthalene	11 U	6.7 U	6.2 U	6.6 U	6 U	5.6 U	5.9 U	6.3 U	6 U	5.8 U
sec-Butylbenzene	2.1 U	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U
Tetrachloroethene	1.7 J	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U
Toluene	2.1 J	1.3 U	1.2 U	1.3 U	61	1 J	100	14	15	1.2 U
Trichloroethene	4	1.3 U	1.2 U	1.3 U	1.2 U	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U

TABLE 4

SOIL ANALYTICAL RESULTS FOR SLIP 6 SAMPLE LOCATIONS[1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15	SL-15
Sample Depth (feet)	0.5 to 2	5 to 7	10 to 12	15 to 17	20 to 22	25 to 27	30 to 32	35 to 37
Sample Date	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Analyte / Sample Identification	FRP-090611-001	FRP-090611-002	FRP-090611-003	FRP-090611-004	FRP-090611-005	FRP-090611-006	FRP-090611-007	FRP-090611-008
Conventionals								
pH	5.50	3.47	7.24	9.82	7.66	7.33	7.17	6.27
Metals (mg/kg)								
Aluminum	15,900	9,360	8,920	11,000	17,800	8,770	8,060	8,090
Arsenic	5.4	2.4	3.4	9.0	5.3	3.5	1.0	1.6
Cadmium	0.2	0.2 U	0.2	0.3	0.3	0.3 U	0.2 U	0.3 U
Chromium	25.5 J	11.9 J	13.2 J	15.5 J	22.3 J	18 J	11.2 J	10.2 J
Copper	99.4	31.6	59.4	26.6	63.1	26.5	10.5	10.6
Lead	10	5	7	10	5	54	2 U	3 U
Mercury	0.10	0.04	0.13	0.11	0.09	0.03 U	0.03 U	0.03 U
Nickel	21	9	13	12	18	13	8	7
Vanadium	49.7	40	32.7	42	66.3	43.8	43.2	38.5
Zinc	46	34	43	44	49	53	22	18
VOCs (µg/kg)								
2-Butanone	4.9	3.5 J	4.8 J	5 J	7.3 J	5.8 U	6.2 U	6.4 U
4-Isopropyltoluene	1 U	1.2 U	1.1 U	0.9 J	1.7 U	1.2 U	1.2 U	1.3 U
Acetone	36	37	66	56	45	16	19	19
Benzene	0.9 J	1.2 U	1.1 U	1.3 U	1.1 J	1.2 U	1.2 U	1.3 U
Carbon Disulfide	4.6	1.4	2.9	4.3	6.6	4	7.6	2.5
cis-1,2-Dichloroethene	1 U	1.2 U	1.1 U	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U
m, p-Xylene	1 U	1.2 U	1.1 U	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U
Methylene Chloride	0.8 J	2.4 U	0.9 J	2.5 U	3.3 U	1.4 J	1.0 J	2.5 U
Naphthalene	4.8 U	5.9 U	5.7 U	6.4 U	8.4 U	5.8 U	6.2 U	6.4 U
sec-Butylbenzene	1 U	1.2 U	1.1 U	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U
Tetrachloroethene	1 U	1.2 U	1.1 U	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U
Toluene	2	0.9 J	6.9	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U
Trichloroethene	1 U	1.2 U	1.1 U	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = analyte not detected at the reporting limit provided.
   UJ = analyte not detected at the estimated reporting limit provided.

Abbreviations
-- = not analyzed
mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
VOCs = volatile organic compounds

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TABLE 5

GROUNDWATER ANALYTICAL RESULTS FOR DUWAMISH RIVER SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-07	SL-07	SL-07	SL-07	SL-07	SL-08	SL-08
Sample Depth (feet)	16 to 20	21 to 25	21 to 25	26 to 30	30 to 34	11 to 15	16 to 20
Sample Date	9/1/2011	9/1/2011	9/1/2011	9/1/2011	9/2/2011	9/1/2011	9/1/2011
Anaylte / Sample Identification	FRP-090111-005	FRP-090111-006	Field Duplicate FRP-090111-007	FRP-090111-008	FRP-090211-001	FRP-090111-001	FRP-090111-002
Conventionals (mg/L)							
pH	7.51	7.14	7.10	7.83	7.45	6.31	6.16
Metals (µg/L)							
Aluminum	5,440	260 J	490 J	10,200	5,430	129,000	19,300
Arsenic	42.2	16	17.1	3.1	1 U	17.3	8.2
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chromium	24	5 U	5 U	19	8	83	19
Copper	103	2 U	2	18	7	121	29
Lead	5.4	0.2	0.2	1.6	0.5	13	3.9
Mercury	0.152	0.02 U	0.02 U	0.0444	0.02 U	1.58	2.76
Nickel	10 U	10 U	10 U	10 U	10 U	50	10
Thallium	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Vanadium	173	4	5	47	16	383	60
Zinc	30	10 U	10 U	20	50	160	40
VOCs (µg/L)							
1,2,4-Trimethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.5 J	0.4 U	0.4 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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TABLE 5

GROUNDWATER ANALYTICAL RESULTS FOR DUWAMISH RIVER SHORELINE SAMPLE LOCATIONS [1]
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-08	SL-08	SL-08	SL-09	SL-09	SL-09	SL-09	SL-09
Sample Depth (feet)	21 to 25	26 to 30	30 to 34	16 to 20	16 to 20	21 to 25	26 to 30	30 to 34
Sample Date	8/31/2011	9/1/2011	9/1/2011	8/31/2011	8/31/2011	8/31/2011	8/31/2011	9/2/2011
Anaylte / Sample Identification	FRP-083111-005	FRP-090111-003	FRP-090111-004	FRP-083111-001	Field Duplicate FRP-083111-002	FRP-083111-003	FRP-083111-004	FRP-090211-002
Conventionals (mg/L)								
pH	6.59	7.66	8.44	7.03	7.07	6.89	8.88	9.66
Metals (µg/L)								
Aluminum	2,190	8,020	7,860	3,050	3,450	10,700	2,830	17,100
Arsenic	9.2	4.6	2.6	6.3	6.1	4.1	2.1	5
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Chromium	5 U	11	15	7	8	28	43	54
Copper	4	9	12	15	16	52	47	57
Lead	0.3	1.2	1.3	1.2	1.2	2.9	3.0	5.1
Mercury	0.02 U	0.02 U	0.382	0.0994	0.104	0.123	0.045	0.0357
Nickel	10 U	10 U	10 U	10 U	10 U	10	10 U	20
Thallium	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Vanadium	10	28	22	127	128	43	125	212
Zinc	10 U	10	30	10 U	10 U	40	20	60
VOCs (µg/L)								
1,2,4-Trimethylbenzene	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.9 J
1,3,5-Trimethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J
1,4-Dichlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.2 J
Acrolein	5.0 U	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7
Carbon Disulfide	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4
m, p-Xylene	0.8 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1.8 J
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.9 J
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.8 J
trans-1,4-Dichloro-2-butene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = analyte not detected at the reporting limit provided.
   UJ = analyte not detected at the estimated reporting limit provided.

Abbreviations
-- = not analyzed
mg/L = milligrams per liter
µg/L = micrograms per liter
VOCs = volatile organic compounds

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TABLE 6

GROUNDWATER ANALYTICAL RESULTS FOR SLIP 6 SHORELINE SAMPLE LOCATIONS
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-09	SL-09	SL-09	SL-09	SL-09	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10	SL-10
Sample Depth (feet)	16 to 20	16 to 20	21 to 25	26 to 30	30 to 34	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55
Sample Date	8/31/2011	8/31/2011	8/31/2011	8/31/2011	9/2/2011	9/8/2011	9/8/2011	9/8/2011	9/8/2011	9/9/2011	9/9/2011	9/9/2011	9/9/2011
Anaylte / Sample Identification	FRP-083111-001	Field Duplicate FRP-083111-002	FRP-083111-003	FRP-083111-004	FRP-090211-002	FRP-090811-014	FRP-090811-015	FRP-090811-016	FRP-090811-017	FRP-090911-001	FRP-090911-002	FRP-090911-003	FRP-090911-004
Conventionals (mg/L)													
Alkalinity as Bicarbonate	--	--	--	--	--	--	--	--	--	--	816	--	--
Alkalinity as Carbonate	--	--	--	--	--	--	--	--	--	--	154	--	--
Alkalinity as Hydroxide	--	--	--	--	--	--	--	--	--	--	1 U	--	--
Alkalinity, Total	--	--	--	--	--	--	--	--	--	--	970	--	--
Ammonia (NH3) as Nitrogen (N)	--	--	--	--	--	--	--	--	--	--	8.93	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	5,770	--	--
Nitrate	--	--	--	--	--	--	--	--	--	--	1 U	--	--
Ortho-Phosphorus	--	--	--	--	--	--	--	--	--	--	7.9	--	--
pH	7.03	7.07	6.89	8.88	9.66	6.95	6.81	8.11	8.98	9.97	8.72	7.36	7.87
Sulfate	--	--	--	--	--	--	--	--	--	--	341	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	6.23	--	--
Hardness as $CaCO_3$	--	--	--	--	--	--	--	--	--	--	1,600		
Metals (µg/L)													
Aluminum	3,050	3,450	10,700	2,830	17,100	3,950	1,290	4,720	12,300	21,300	199,000	200,000	593,000
Arsenic	6.3	6.1	4.1	2.1	5.0	5.4	3.2	4.4	2.8	8	47	42	93
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2	4 U	10 U
Calcium	--	--	--	--	--	--	--	--	--	--	176,000	--	--
Chromium	7	8	28	43	54	9	7	11	26	108	629	800	2,180
Copper	15	16	52	47	57	28	5	6	13	105	628	641	1,590
Iron	--	--	--	--	--	--	--	--	--	--	248,000	--	--
Lead	1.2	1.2	2.9	3.0	5.1	9.6	0.6	0.9	1.4	9.7	84.5	94	196
Magnesium	--	--	--	--	--	--	--	--	--	--	288,000	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	2,860	--	--
Mercury	0.0994	0.104	0.123	0.045	0.0357	0.0369	0.02 U	0.02 U	0.02 U	0.0918	0.932	1.03	2.7
Nickel	10 U	10 U	10	10 U	20	10 U	10 U	10 U	10 U	40	210	220	610
Potassium	--	--	--	--	--	--	--	--	--	--	103,000	--	--
Silicon	--	--	--	--	--	--	--	--	--	--	40,800	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	3,840,000	--	--
Thallium	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50	100 U	200 U
Vanadium	127	128	43	125	212	17	24	18	54	178	602	446	1,540
Zinc	10 U	10 U	40	20	60	20	10 U	10 U	40	150	700	870	2,000
VOCs (µg/L)													
1,2,4-Trimethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.9 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	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	0.1 J	0.2 U	0.2 U	0.2 U
2-Butanone	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	5.0 U	5.0 U
4-Isopropyltoluene	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 J	0.2 U	0.2 U	0.2 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	1.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.7	0.2 U	0.2 U	0.2 U	0.1 J	0.2	0.2 J	0.2 U	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2	0.4	0.2 J	0.7	0.3	0.5
Chloroform	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	0.2 U
Chloromethane	0.5 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	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	1.8 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Methylene Chloride	0.5 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	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	0.5 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	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.9 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	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	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	1.8 J	0.2 U	0.2 U	0.2 U	0.2 U	11	17	0.4	2.2
trans-1,4-Dichloro-2-butene	1.0 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 UJ	1.0 UJ	1.0 UJ	1.0 UJ

TABLE 6

GROUNDWATER ANALYTICAL RESULTS FOR SLIP 6 SHORELINE SAMPLE LOCATIONS
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-11	SL-11	SL-11	SL-11	SL-11	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-12	SL-13	SL-13
Sample Depth (feet)	16 to 20	16 to 20	21 to 25	26 to 30	30 to 34	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	46 to 50	51 to 55	16 to 20	21 to 25
Sample Date	9/9/2011	9/9/2011	9/12/2011	9/12/2011	9/12/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/19/2011	9/19/2011	9/19/2011	9/19/2011	9/20/2011	9/20/2011
Sample Identification / Anaylte	FRP-090911-005	Field Duplicate FRP-090911-006	FRP-091211-003	FRP-091211-001	FRP-091211-002	FRP-091311-001	FRP-091311-002	FRP-091311-003	FRP-091311-006	FRP-091311-008	FRP-091911-002	FRP-091911-003	Field Duplicate FRP-091911-004	FRP-091911-005	FRP-092011-002	FRP-092011-003
Conventionals (mg/L)																
Alkalinity as Bicarbonate	--	--	357	--	--	--	451	264	--	--	1 U	--	--	--	--	--
Alkalinity as Carbonate	--	--	73.8	--	--	--	127	2,360	--	--	3,190	--	--	--	--	--
Alkalinity as Hydroxide	--	--	1 U	--	--	--	1 U	1 U	--	--	2,610	--	--	--	--	--
Alkalinity, Total	--	--	431	--	--	--	578	2,620	--	--	5,800	--	--	--	--	--
Ammonia (NH3) as Nitrogen (N)	--	--	1.13	--	--	--	0.935	12.3	--	--	14.8	--	--	--	--	--
Chloride	--	--	55.1	--	--	--	54	43.4	--	--	665	--	--	--	--	--
Nitrate	--	--	0.5 U	--	--	--	0.5 U	5 U	--	--	5.3	--	--	--	--	--
Ortho-Phosphorus	--	--	5.8	--	--	--	3.8	12.9	--	--	16.7	--	--	--	--	--
pH	8.15	8.08	9.03	9.84	10.10	7.09	9.15	10.40	9.08	10.10	11.40	11.50	11.50	11.20	7.49	7.07
Sulfate	--	--	171	--	--	--	59.5	6	--	--	74.6	--	--	--	--	--
Sulfide	--	--	0.136	--	--	--	7.15	36.3	--	--	52 J-	--	--	--	--	--
Hardness as $CaCO_3$	--	--	17.0	--	--	--	76.5	186	--	--	--	--	--	--	--	--
Metals (µg/L)																
Aluminum	5,670	5,290	6,110	88,800	9,460	4,170	21,500	71,000	82,400	163,000	32,100 J	52,900 J	158,000 J	135,000 J	10,700	18,900
Arsenic	4.6	4.8	3.7	40.3	13.4	9	14.1	80	61	56	31	67	80	89	8.6	15.2
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U
Calcium	--	--	5,140	--	--	--	23,500	51,100	--	--	20,000	--	--	--	--	--
Chromium	38	35	38	253	39	18	47	367	256	373	261	600	1,300	740	39	68
Copper	215	207	117	255	38	10	51	870	368	448	210	251	400	356	83	72
Iron	--	--	4,500	--	--	--	16,000	97,200	--	--	43,200	--	--	--	--	--
Lead	8.6	9	6.1	24.5	3.7	1.2	4.5	51.2	20.7	28.8	10.7	14	20	28	6.4	7.2
Magnesium	--	--	1,000	--	--	--	4,320	14,100	--	--	7,020	--	--	--	--	--
Manganese	--	--	78	--	--	--	236	2,000	--	--	379	--	--	--	--	--
Mercury	0.101	0.0971	0.0411 J	0.511 J	0.0387 J	0.02 U	0.138	0.452	0.243	0.272	0.4 U	0.4 U	0.4 U	0.542	0.181 J	0.175 J
Nickel	10 U	10 U	10 U	100	20	10 U	20	120	70	150	80	150	500 U	200	10 U	10 U
Potassium	--	--	1,520	--	--	--	2,770	7,790	--	--	87,200	--	--	--	--	--
Silicon	--	--	26,500	--	--	--	36,000	11,200	--	--	2,120 J-	--	--	--	--	--
Sodium	--	--	318,000	--	--	--	339,000	1,230,000	--	--	2,920,000	--	--	--	--	--
Thallium	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	2000 U	50 U	50 U	50 U
Vanadium	261	253	221	342	219	66	159	1,230	1,270	424	1,320 J	1,840 J	3,800 J	1,530 J	200	315
Zinc	10	10	10	290	20	10	30	290	180	450	270	420	700	600	20	20
VOCs (µg/L)																
1,2,4-Trimethylbenzene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	0.2 U	0.2 U	0.1 J	0.2 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone	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	25.0 U	25.0 U	25.0 U	25.0 U	5.0 U	5.0 U
4-Isopropyltoluene	0.2 U	0.2 U	0.2 U	0.2 J	0.9	0.2 U	0.2 U	0.2 U	0.2 U	0.3	2.2	1 U	1 U	1 U	0.2 U	0.2 U
Acetone	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	5.5.0 U	120	25.0 U	25.0 U	25.0 U	5.0 UJ	5.0 UJ
Acrolein	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	25.0 U	25.0 U	25.0 U	25.0 U	5.0 U	5.0 U
Benzene	0.2 U	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U	0.3 J	0.2 J	0.2	1.3	1.2 J	1 U	1 U	0.2 U	0.2 U
Carbon Disulfide	0.2 U	0.2 U	0.4	0.2 J	0.3	0.2 U	0.2 U	0.2 U	0.2 J	0.3	1.4	1 J	1.1	1	0.2 U	0.2 U
Chloroform	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Chloromethane	0.5 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	0.5 U	2.5 U	2.5 UJ	2.5 U	2.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Ethylbenzene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.2 J	0.4 U	0.4 U	0.4 U	0.4 U	0.2 J	2 U	2 U	2 U	2 U	0.4 U	0.4 U
Methylene Chloride	0.5 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	0.5 U	2.5 U	3.8 J	4.1	3.1	0.5 U	0.5 U
Naphthalene	0.5 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	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.5 U	0.5 U
o-Xylene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Styrene	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	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	10	0.2 U	0.2 U	160	1 U	24	390	430	440	250	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	1.0 UJ	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	5.0 U	5.0 U	5.0 U	5.0 U	1.0 UJ	1 J

TABLE 6

GROUNDWATER ANALYTICAL RESULTS FOR SLIP 6 SHORELINE SAMPLE LOCATIONS
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	SL-13	SL-13	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-14	SL-15	SL-15	SL-15	SL-15
Sample Depth (feet)	26 to 30	31 to 35	16 to 20	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	16 to 20	21 to 25	21 to 25	26 to 30
Sample Date	9/20/2011	9/21/2011	9/13/2011	9/13/2011	9/13/2011	9/13/2011	9/14/2011	9/14/2011	9/14/2011	9/14/2011	9/20/2011	9/21/2011	9/21/2011	9/21/2011	9/21/2011
Anaylte / Sample Identification	FRP-092011-004	FRP-092111-001	FRP-091311-004	Field Duplicate FRP-091311-005	FRP-091311-007	FRP-091311-009	FRP-091411-001	FRP-091411-002	FRP-091411-003	FRP-091411-004	FRP-092011-001	FRP-092111-002	FRP-092111-003	Field Duplicate FRP-092111-004	FRP-092111-005
Conventionals (mg/L)															
Alkalinity as Bicarbonate	--	--	--	--	--	--	--	328	--	--	--	--	--	--	--
Alkalinity as Carbonate	--	--	--	--	--	--	--	2,290	--	--	--	--	--	--	--
Alkalinity as Hydroxide	--	--	--	--	--	--	--	1 U	--	--	--	--	--	--	--
Alkalinity, Total	--	--	--	--	--	--	--	2,620	--	--	--	--	--	--	--
Ammonia (NH3) as Nitrogen (N)	--	--	--	--	--	--	--	17.2	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	3,800	--	--	--	--	--	--	--
Nitrate	--	--	--	--	--	--	--	5.4	--	--	--	--	--	--	--
Ortho-Phosphorus	--	--	--	--	--	--	--	10.4	--	--	--	--	--	--	--
pH	6.54	9.76	7.91	7.90	8.06	7.24	9.54	10.10	9.93	10.90	8.81	7.93	6.73	6.70	6.86
Sulfate	--	--	--	--	--	--	--	196	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	53.6	--	--	--	--	--	--	--
Hardness as $CaCO_3$	--	--	--	--	--	--	--	282	--	--	--	--	--	--	--
Metals (µg/L)															
Aluminum	82,900	48,400	14,800	14,900	39,900	64,200	2,050	107,000	79,500	244,000	880,000	321,000	17,100	17,000	13,400
Arsenic	24.9	19	24	25	24.8	15	7	32	40	80	96	107	8.5	9	10.3
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4	10 U	6	2 U	2 U	2 U
Calcium	--	--	--	--	--	--	--	74,100	--	--	--	--	--	--	--
Chromium	258	182	405	410	290	212	45	959	1,050	2,590	850	530	82	79	129
Copper	182	154	140	135	205	212	39	1,550	703	2,740	1,360	1,880	137	128	82
Iron	--	--	--	--	--	--	--	177,000	--	--	--	--	--	--	--
Lead	12.8	10.8	26.8	27.2	22.8	14	3.1	38.5	23.5	98.4	78.2	361	15.2	15	8.3
Magnesium	--	--	--	--	--	--	--	23,600	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	1,490	--	--	--	--	--	--	--
Mercury	0.193 J	0.136 J	0.336	0.341	0.69	0.699	0.0559	4.11	1.54	9.46	2.84 J	9.76 J	0.4 U	0.558 J	0.82 J
Nickel	110	70	30	30	40	60	10 U	200	200	550	510	340	20	20	20
Potassium	--	--	--	--	--	--	--	24,900	--	--	--	--	--	--	--
Silicon	--	--	--	--	--	--	--	16300 J-	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	3,890,000	--	--	--	--	--	--	--
Thallium	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U	200 U	100 U	50 U	50 U	50 U
Vanadium	361	391	987	983	679	261	392	1,180	2,040	4,290	2,220	1,320	398	385	720
Zinc	330	200	80	80	110	270	20	1,300	840	2,770	1,800	1,270	170	160	90
VOCs (µg/L)															
1,2,4-Trimethylbenzene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
1,3,5-Trimethylbenzene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
1,4-Dichlorobenzene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
2-Butanone	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	25.0 U	25.0 U	25.0 U	5.0 U	5.0 U	25.0 U
4-Isopropyltoluene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Acetone	5.0 UJ	5.0 UJ	5.8 U	5.8 U	5.0 U	3 5U	5.0 U	12	5.0 U	120	25.0 U	25.0 UJ	5.0 UJ	5.0 UJ	25.0 UJ
Acrolein	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ	5.0 UJ	25.0 UJ	25.0 U	25.0 U	5.0 U	5.0 U	25.0 U
Benzene	0.2 U	0.3	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.6	0.6	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Carbon Disulfide	0.2 U	0.3	0.2 U	0.2 U	0.2 U	0.2 U	1.0	0.4	0.3	1.7	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Chloroform	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Chloromethane	0.5 U	0.5 U	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	2.5 U	0.5 U	0.5 U	2.5 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.4 J	0.4 J	0.4	0.2	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Ethylbenzene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
m, p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2.0 U	2.0 U	2.0 U	0.4 U	0.4 U	2.0 U
Methylene Chloride	0.5 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	2.5 U	2.5 U	2.5 U	0.5 U	0.5 U	2.5 U
Naphthalene	0.5 U	0.5 U	6 J	4.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	2.5 U	0.5 U	0.5 U	2.5 U
o-Xylene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Styrene	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	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
Toluene	0.2 U	3.5	0.1 J	0.2 U	0.2 U	0.2 U	1.2	47	19	61	1.0 U	1.0 U	0.2 U	0.2 U	1.0 U
trans-1,4-Dichloro-2-butene	1.0 UJ	1.0 UJ	1.0 U	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 UJ	1.0 UJ	1.0 UJ	5.0 J

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = analyte not detected at the reporting limit provided.
   UJ = analyte not detected at the estimated reporting limit provided.

Abbreviations
-- = not analyzed
mg/L = milligrams per liter
µg/L = micrograms per liter
VOCs = volatile organic compounds

amec

TABLE 7

PORE WATER ANALYTICAL RESULTS FOR DUWAMISH RIVER SHORELINE SAMPLE LOCATIONS[1]

Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	RPPW-01	RPPW-01	RPPW-01	RPPW-02	RPPW-02	RPPW-02	RPPW-03	RPPW-03
Sample Depth (feet)	1	2	3	2	2	3	2	3
Sample Date	12/22/2011	12/22/2011	12/22/2011	12/23/2011	12/23/2011	12/22/2011	12/23/2011	12/23/2011
Anaylte / Sample Identification	RP122211-01	RP122211-02	RP122211-03	RP122311-01	Field Duplicate RP122311-02	RP122211-04	RP122311-03	RP122311-04
Conventionals (mg/L)								
pH	7.15	7.05	6.99	6.46	6.54	6.86	7.21	7.13
Metals (µg/L)								
Aluminum	480	450	1080	1630 J	250 J	250	1460	50 U
Arsenic	4.4	4.4	4.6	2	2	2.3	2	4
Chromium	25	30	30	5 U	5 U	5 U	5 U	5 U
Copper	6	7	8	5	2 U	2	5	2 U
Lead	1.1	0.8	1.2	2.3 J	0.4 J	0.8	3	0.1
Vanadium	129	178	177	10	5	8	12	6
VOCs (µg/L)								
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U

Notes
1. Laboratory data flags are as follows:
   U = not detected at provided reporting limit.
   U = result is estimated.

Abbreviations
µg = micrograms
L = liter
mg = milligrams

amec

TABLE 8

SHORELINE INVESTIGATION GEOTECHNICAL RESULTS SUMMARY
Former Rhone-Poulenc Site
Tukwila, Washington

Sample Location	Sample ID	Depth (ft bgs)	Sample Type	Specific Gravity ASTM D1298 (g/mL at 20°C)	Moisture Content (%) ASTM D2216	Bulk Density (pcf) ASTM D7263		Particle Size Analysis Dry Weight (ASTM D422)				Atterberg Limits (ASTM D4318)			
						Wet	Dry	Gravel	Sand	Silt	Clay	Plasticity Index (%)	Liquid Limit (%)	Plastic Limit (%)	USCS Classification
SL-01	FRP-082911-005	12 - 14.5	soil	--	26.12	115.9	91.9	0	77.4	34.8	1.8	NA	NA	NA	Non-Plastic
SL-03	FRP-082911-015	11-13.5	soil	--	25.32	113.8	90.8	0	50.6	44.1	5.3	NA	NA	NA	Non-Plastic
SL-05	FRP-082911-026	13-15	soil	--	33.72	115.8	86.6	0	56.2	41.5	2.2	NA	NA	NA	Non-Plastic
SL-07	FRP-083011-009	13-15	soil	--	24.41	118.8	95.5	0	69.7	28.2	2.2	NA	NA	NA	Non-Plastic
SL-08	FRP-083011-020	13-15	soil	--	30.98	118.1	90.2	0	28.3	64.7	7.1	NA	NA	NA	Non-Plastic
SL-09	FRP-083011-030	13-15	soil	--	34.65	116.2	86.3	0	35.6	60.1	4.3	NA	NA	NA	Non-Plastic
SL-10	FRP-090911-002	41-45	gw	0.994	--	--	--	--	--	--	--	--	--	--	--
SL-11	FRP-091211-003	21-25	gw	0.989	--	--	--	--	--	--	--	--	--	--	--
SL-12	FRP-091311-002	21-25	gw	0.984	--	--	--	--	--	--	--	--	--	--	--
SL-12	FRP-091311-003	26-30	gw	0.986	--	--	--	--	--	--	--	--	--	--	--
SL-14	FRP-091411-002	36-10	gw	0.994	--	--	--	--	--	--	--	--	--	--	--
SL-12	FRP-091911-002	41-45	gw	0.994	--	--	--	--	--	--	--	--	--	--	--

Abbreviations
-- = analysis not performed
ASTM = American Society of Testing and Materials
bgs = below ground surface
ft = feet
g = grams
gw = groundwater
mL = milliliter
NA = not applicable
°C = degrees Celcius
pcf = pounds per cubic foot
USCS = Unified Soil Classification System