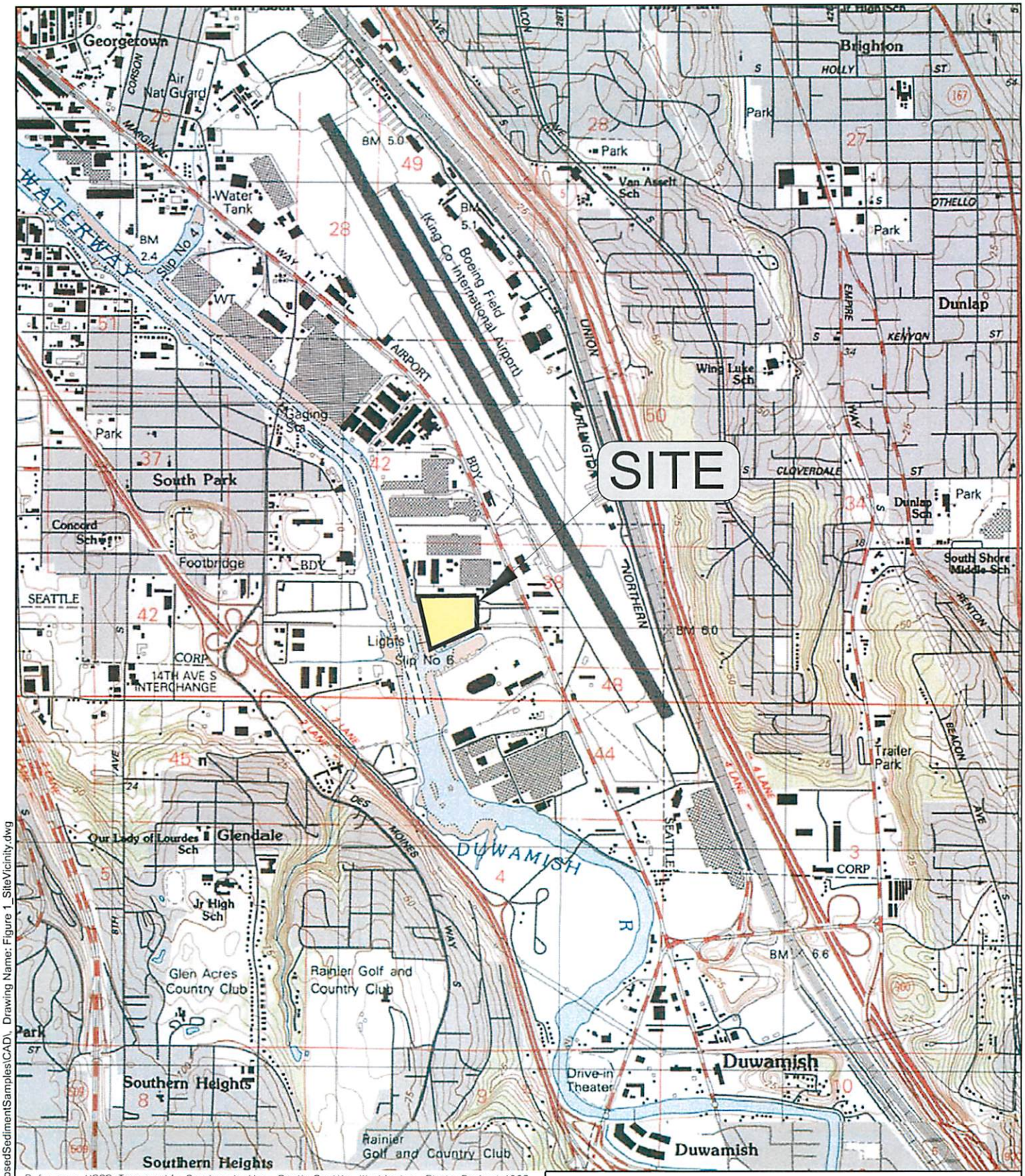
FIGURES



Reference: USGS Topographic Quadrangle Map, South Seattle, Washington, Photo Revised 1968

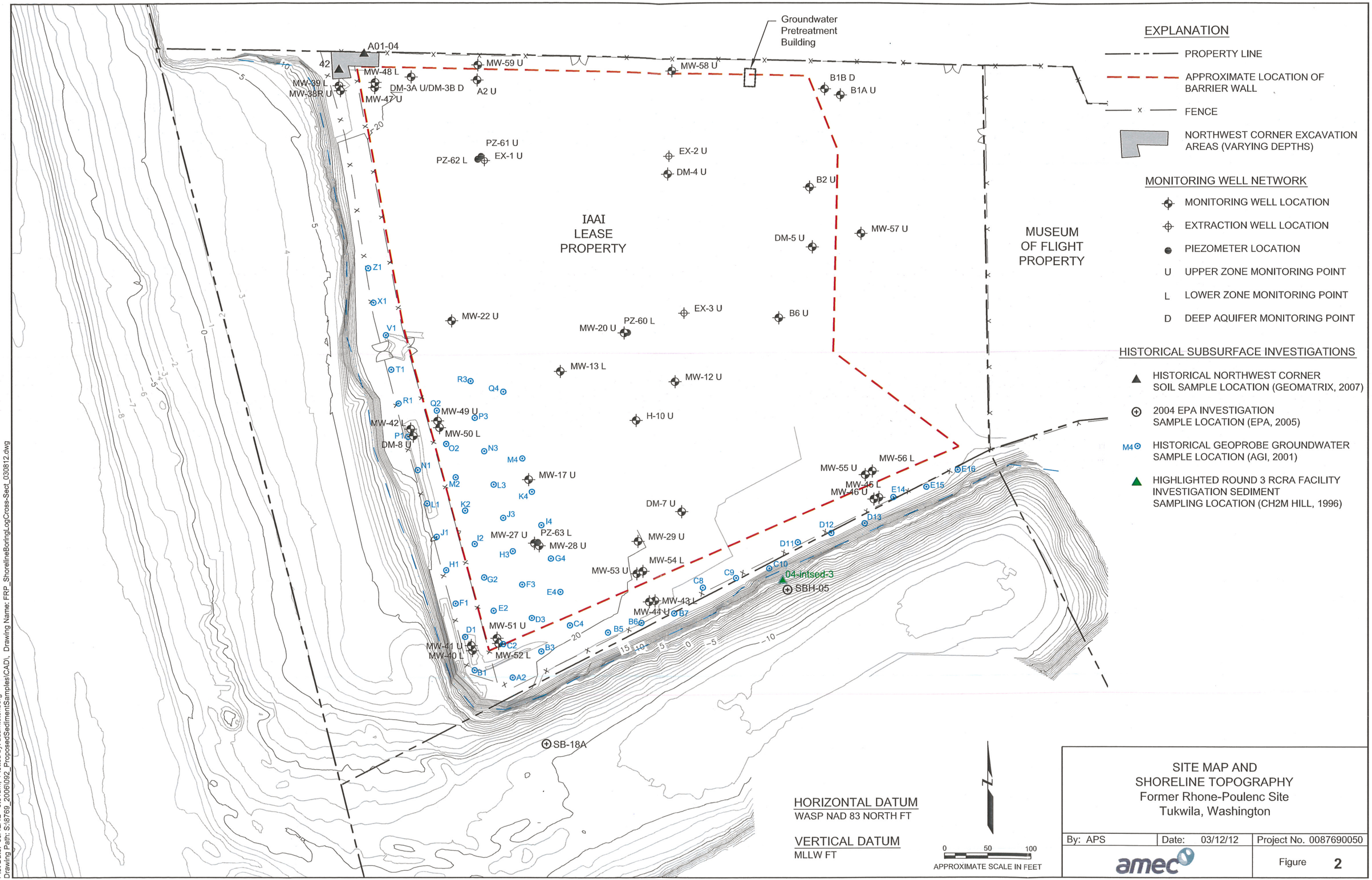
0 2000

SCALE (FEET)

SITE VICINITY MAP
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/02/12	Project No. 087690050
amec		Figure 1

Plot Date: 03/02/12 - 2:44pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: Figure 1_SiteVicinity.dwg



SITE MAP AND
SHORELINE TOPOGRAPHY
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/12/12	Project No. 0087690050
amec		Figure 2

Plot Date: 03/12/12 - 9:31am, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg

EXPLANATION

- DUWAMISH RIVERBANK SOIL SAMPLING LOCATION
- SLIP 6 AND SOUTHWEST CORNER SOIL AND GROUNDWATER SAMPLING LOCATION (15 TO 34 FEET IN DEPTH)
- SLIP 6 AND SOUTHWEST CORNER SOIL AND GROUNDWATER SAMPLING LOCATION (15 TO 57 FEET IN DEPTH)
- G GEOTECHNICAL SAMPLE LOCATION
- RPPW-1 O PORE WATER SAMPLE LOCATION
- B B' CROSS SECTION LOCATION

OTHER FEATURES

- PROPERTY LINE
- APPROXIMATE LOCATION OF BARRIER WALL
- AREAS WHERE BARRIER WALL REINSTALLED (SEE TEXT FOR DETAILS)
- FENCE

MONITORING WELL NETWORK

- MONITORING WELL LOCATION
- U UPPER ZONE MONITORING POINT
- L LOWER ZONE MONITORING POINT

HISTORICAL SUBSURFACE INVESTIGATION

- △ HIGHLIGHTED ROUND 3 RCRA FACILITY INVESTIGATION SEDIMENT SAMPLING LOCATION (CH2M HILL, 1996)

HORIZONTAL DATUM

WASP NAD 83 NORTH FT

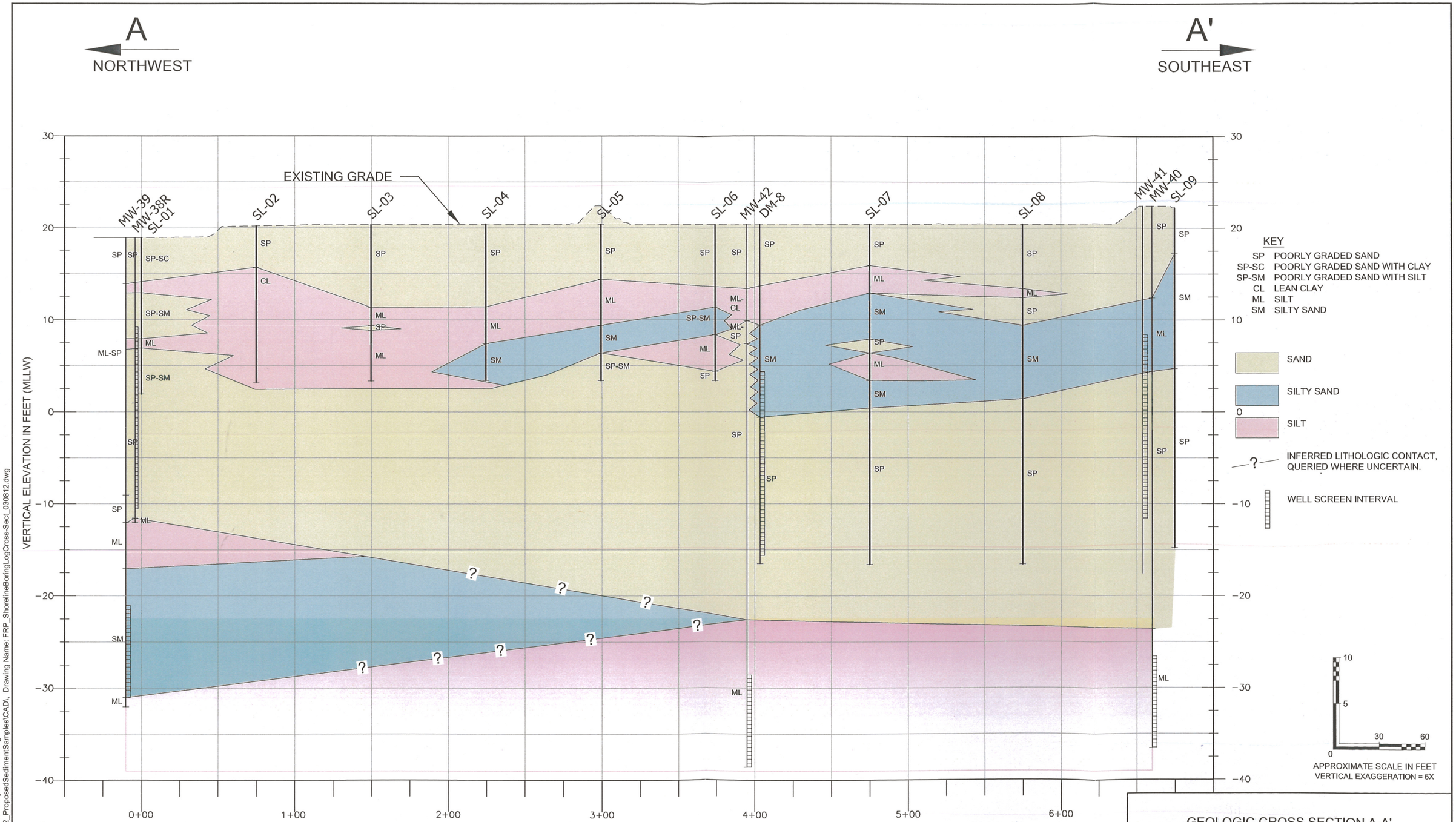
VERTICAL DATUM

MLLW FT

GEOLOGIC CROSS SECTION AND SAMPLE LOCATIONS
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/12/12	Project No. 0087690050
amec		Figure 3

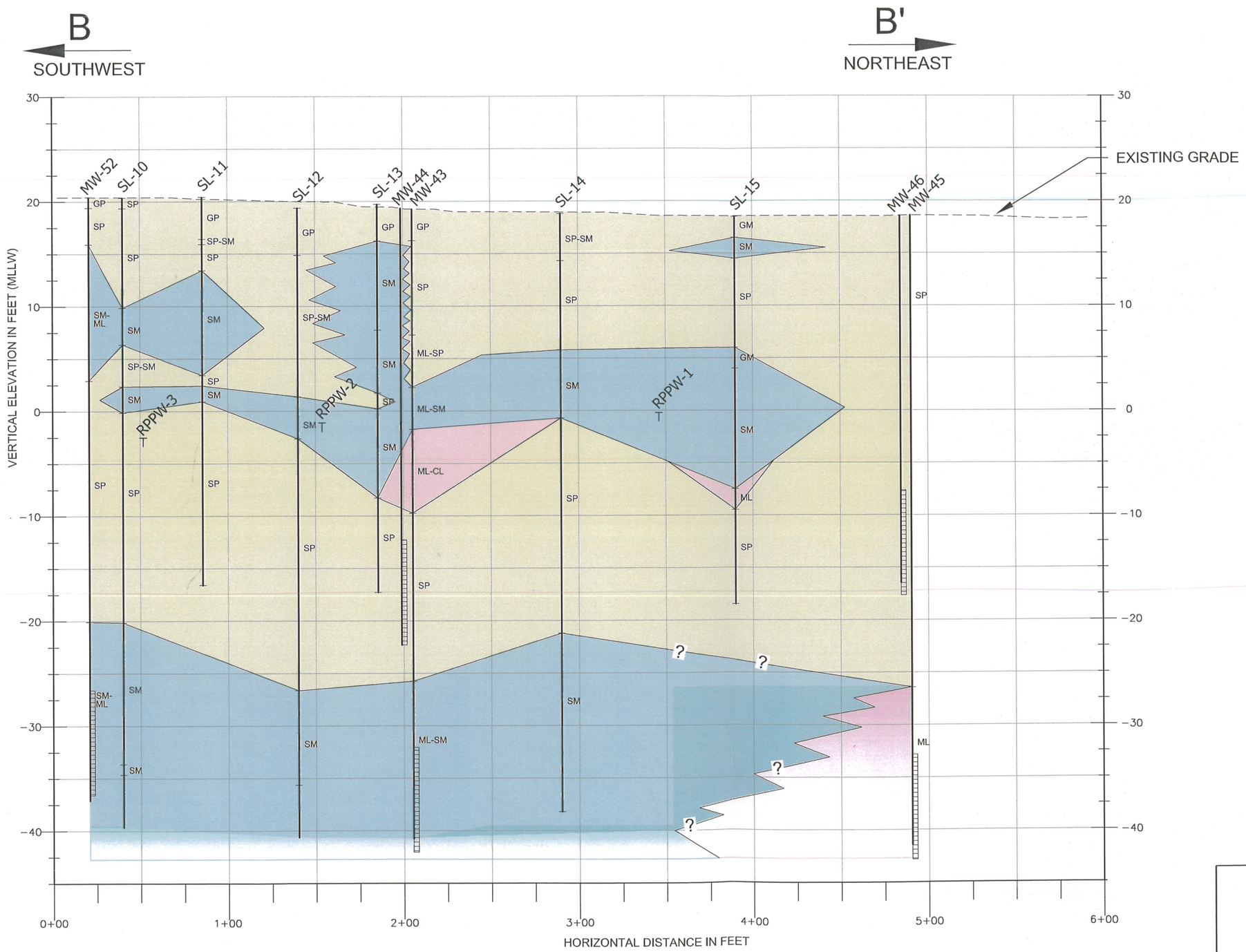
Plot Date: 03/12/12 - 9:37am, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg



GEOLOGIC CROSS SECTION A-A'
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/08/12	Project No. 0087690050
amec		Figure 4

Plot Date: 03/08/12 - 5:03pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg



KEY

GP	POORLY GRADED GRAVEL WITH SAND
GM	SILTY GRAVEL WITH SAND
SP	POORLY GRADED SAND
SP-SC	POORLY GRADED SAND WITH CLAY
SP-SM	POORLY GRADED SAND WITH SILT
CL	LEAN CLAY
ML	SILT
SM	SILTY SAND

SAND

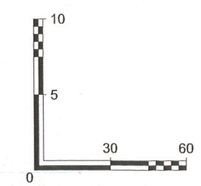
SILTY SAND

SILT

—?— INFERRED LITHOLOGIC CONTACT, QUERIED WHERE UNCERTAIN.

RPPW-1 PORE WATER SAMPLING LOCATION PROJECTED ONTO THE LINE OF CROSS SECTION.

WELL SCREEN INTERVAL



APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 6X

GEOLOGIC CROSS SECTION B-B'
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/08/12	Project No. 0087690050
amec		Figure 5

Plot Date: 03/08/12 - 5:05pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg

SL-01				
Depth (ft)	0.5-2	5-7	10-12	15-17
pH	--	--	--	--
Metals (mg/kg)				
Arsenic	4.4	3.8	3.9	1.1
Copper	2,180 J	216 J	21.8 J	53.6 J
Mercury	0.35 J	0.14 J	0.07 J	0.06 J
Vanadium	51.5	45.6	51.9	48.6
PCBs (µg/kg)				
Aroclor 1248	--	--	--	--
Aroclor 1254	5,900	420	3.5 J	38
Aroclor 1260	1,700 U	78 U	3.8 U	7.4 U
TPH (mg/kg)				
Diesel Range Organics	1,000	37	14	6.3 U
Lube Oil	430	18	14	13 U
VOCs (µg/kg)				
Toluene	0.5 J	0.7 J	1.9 U	1.3 U

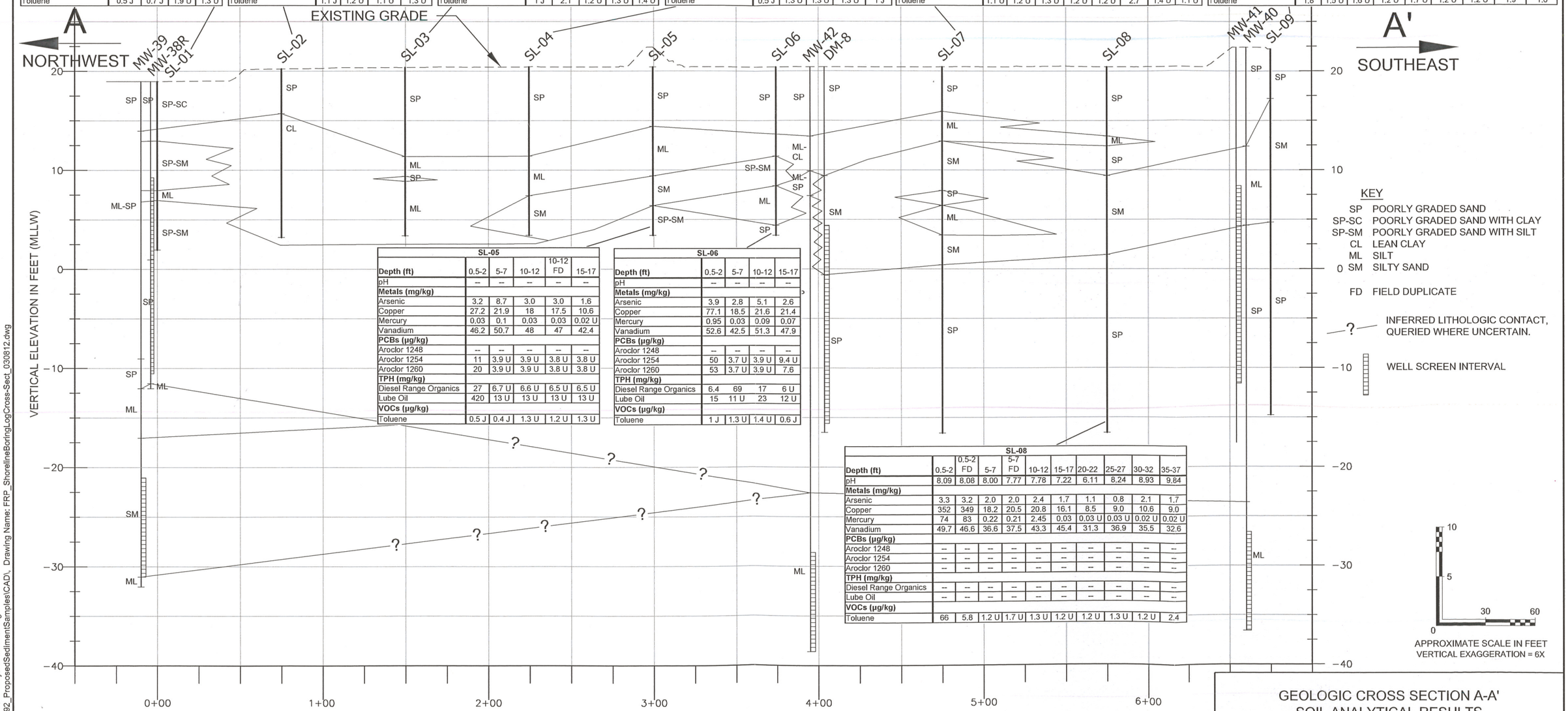
SL-02				
Depth (ft)	0.5-2	5-7	10-12	15-17
pH	--	--	--	--
Metals (mg/kg)				
Arsenic	3.2	2.6	2	1.3
Copper	202 J	12 J	12.1 J	10.9 J
Mercury	0.1 J	0.02 J	0.03 UJ	0.02 UJ
Vanadium	43.4	43.2	43.3	43.1
PCBs (µg/kg)				
Aroclor 1248	--	--	--	--
Aroclor 1254	630	3.9 U	3.9 U	4.9
Aroclor 1260	160	3.9 U	3.9 U	3.8 U
TPH (mg/kg)				
Diesel Range Organics	7.2	5.4 U	5.5 U	6.4 U
Lube Oil	11 U	11 U	11 U	13 U
VOCs (µg/kg)				
Toluene	1.1 J	1.2 U	1.1 U	1.3 U

SL-03					
Depth (ft)	0.5-2	0.5-2 FD	5-7	10-12	15-17
pH	--	--	--	--	--
Metals (mg/kg)					
Arsenic	4.2	3.6	2.7	3.7	3.2
Copper	51.7 J	47.9 J	33.3 J	22 J	18.4 J
Mercury	0.45 J	0.67 J	0.05 J	0.04 J	0.03 J
Vanadium	47.2	49.2	44.6	56.4	53.7
PCBs (ug/kg)					
Aroclor 1248	--	--	--	--	--
Aroclor 1254	290 J	360 J	72	3.9 U	3.8 U
Aroclor 1260	300 J	290 J	9.4 U	3.9 U	3.8 U
TPH (mg/kg)					
Diesel Range Organics	5.4 U	5.4 U	5.2 U	6.3 U	6.4 U
Lube Oil	18	17	10 U	13 U	13 U
VOCs (µg/kg)					
Toluene	1 J	2.1	1.2 U	1.3 U	1.4 U

SL-04					
Depth (ft)	0.5-2	5-7	5-7 FD	10-12	15-17
pH	--	--	--	--	--
Metals (mg/kg)					
Arsenic	5.7	3.6	3.8	3.2	2.9
Copper	54.2 J	37.2 J	28.2 J	17.2 J	19.2 J
Mercury	0.19 J	0.14 J	0.15 J	0.03 UJ	0.03 J
Vanadium	46.6	46.6	45.7	49.8	48.4
PCBs (µg/kg)					
Aroclor 1248	--	--	--	--	--
Aroclor 1254	180	39	41	5.7 U	3.9 U
Aroclor 1260	100	18	32	3.8 U	3.9 U
TPH (mg/kg)					
Diesel Range Organics	9.2	6	5.5 U	6.2 U	6.9 U
Lube Oil	17	13	14	12 U	14 U
VOCs (µg/kg)					
Toluene	0.5 J	1.3 U	1.3 U	1.3 U	1 J

SL-07								
Depth (ft)	0.5-2	5-7	10-12	15-17	20-22	25-27	30-32	35-37
pH	6.55	7.02	6.64	6.09	6.91	7.28	7.66	8.86
Metals (mg/kg)								
Arsenic	1.5	1.7	2.0	3.2	1.8	1.9	1.3	1.3
Copper	11.8	10.4	12.2	18	10.2	15.7	9.9	11.8
Mercury	0.03	0.02 U	0.03 U	0.03 U	0.02 U	0.02 U	0.02 U	0.02 U
Vanadium	32.9	37.5	50	53.5	36.3	38.1	38.1	43.9
PCBs (µg/kg)								
Aroclor 1248	--	--	--	--	--	--	--	--
Aroclor 1254	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--
TPH (mg/kg)								
Diesel Range Organics	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--
VOCs (µg/kg)								
Toluene	1.1 U	1.2 U	1.3 U	1.2 U	1.2 U	2.7	1.4 U	1.1 U

SL-09									
Depth (ft)	0.5-2	5-7	5-7 FD	10-12	15-17	20-22	25-27	30-32	35-37
pH	7.94	8.33	8.37	8.30	6.96	7.49	7.87	10.24	9.96
Metals (mg/kg)									
Arsenic	6.6	2.4	2.3	2.1	4.3	1.3	1.5	0.9	0.8
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
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
Vanadium	47.2	49.2	46.8	39.2	54	46.6	41.7	37.1	38.9
PCBs (µg/kg)									
Aroclor 1248	--	--	--	--	--	--	--	--	--
Aroclor 1254	--	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--	--
TPH (mg/kg)									
Diesel Range Organics	--	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--	--
VOCs (µg/kg)									
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



SL-05					
Depth (ft)	0.5-2	5-7	10-12	10-12 FD	15-17
pH	--	--	--	--	--
Metals (mg/kg)					
Arsenic	3.2	8.7	3.0	3.0	1.6
Copper	27.2	21.9	18	17.5	10.6
Mercury	0.03	0.1	0.03	0.03	0.02 U
Vanadium	46.2	50.7	48	47	42.4
PCBs (µg/kg)					
Aroclor 1248	--	--	--	--	--
Aroclor 1254	11	3.9 U	3.9 U	3.8 U	3.8 U
Aroclor 1260	20	3.9 U	3.9 U	3.8 U	3.8 U
TPH (mg/kg)					
Diesel Range Organics	27	6.7 U	6.6 U	6.5 U	6.5 U
Lube Oil	420	13 U	13 U	13 U	13 U
VOCs (µg/kg)					
Toluene	0.5 J	0.4 J	1.3 U	1.2 U	1.3 U

SL-06				
Depth (ft)	0.5-2	5-7	10-12	15-17
pH	--	--	--	--
Metals (mg/kg)				
Arsenic	3.9	2.8	5.1	2.6
Copper	77.1	18.5	21.6	21.4
Mercury	0.95	0.03	0.09	0.07
Vanadium	52.6	42.5	51.3	47.9
PCBs (µg/kg)				
Aroclor 1248	--	--	--	--
Aroclor 1254	50	3.7 U	3.9 U	9.4 U
Aroclor 1260	53	3.7 U	3.9 U	7.6
TPH (mg/kg)				
Diesel Range Organics	6.4	69	17	6 U
Lube Oil	15	11 U	23	12 U
VOCs (µg/kg)				
Toluene	1 J	1.3 U	1.4 U	0.6 J

SL-08										
Depth (ft)	0.5-2	0.5-2 FD	5-7	5-7 FD	10-12	15-17	20-22	25-27	30-32	35-37
pH	8.09	8.08	8.00	7.77	7.78	7.22	6.11	8.24	8.93	9.84
Metals (mg/kg)										
Arsenic	3.3	3.2	2.0	2.0	2.4	1.7	1.1	0.8	2.1	1.7
Copper	352	349	18.2	20.5	20.8	16.1	8.5	9.0	10.6	9.0
Mercury	74	83	0.22	0.21	2.45	0.03	0.03 U	0.03 U	0.02 U	0.02 U
Vanadium	49.7	46.6	36.6	37.5	43.3	45.4	31.3	36.9	35.5	32.6
PCBs (µg/kg)										
Aroclor 1248	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--	--	--
TPH (mg/kg)										
Diesel Range Organics	--	--	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--	--	--
VOCs (µg/kg)										
Toluene	66	5.8	1.2 U	1.7 U	1.3 U	1.2 U	1.2 U	1.3 U	1.2 U	2.4

GEOLOGIC CROSS SECTION A-A'
SOIL ANALYTICAL RESULTS
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS | Date: 03/08/12 | Project No. 0087690050

amec

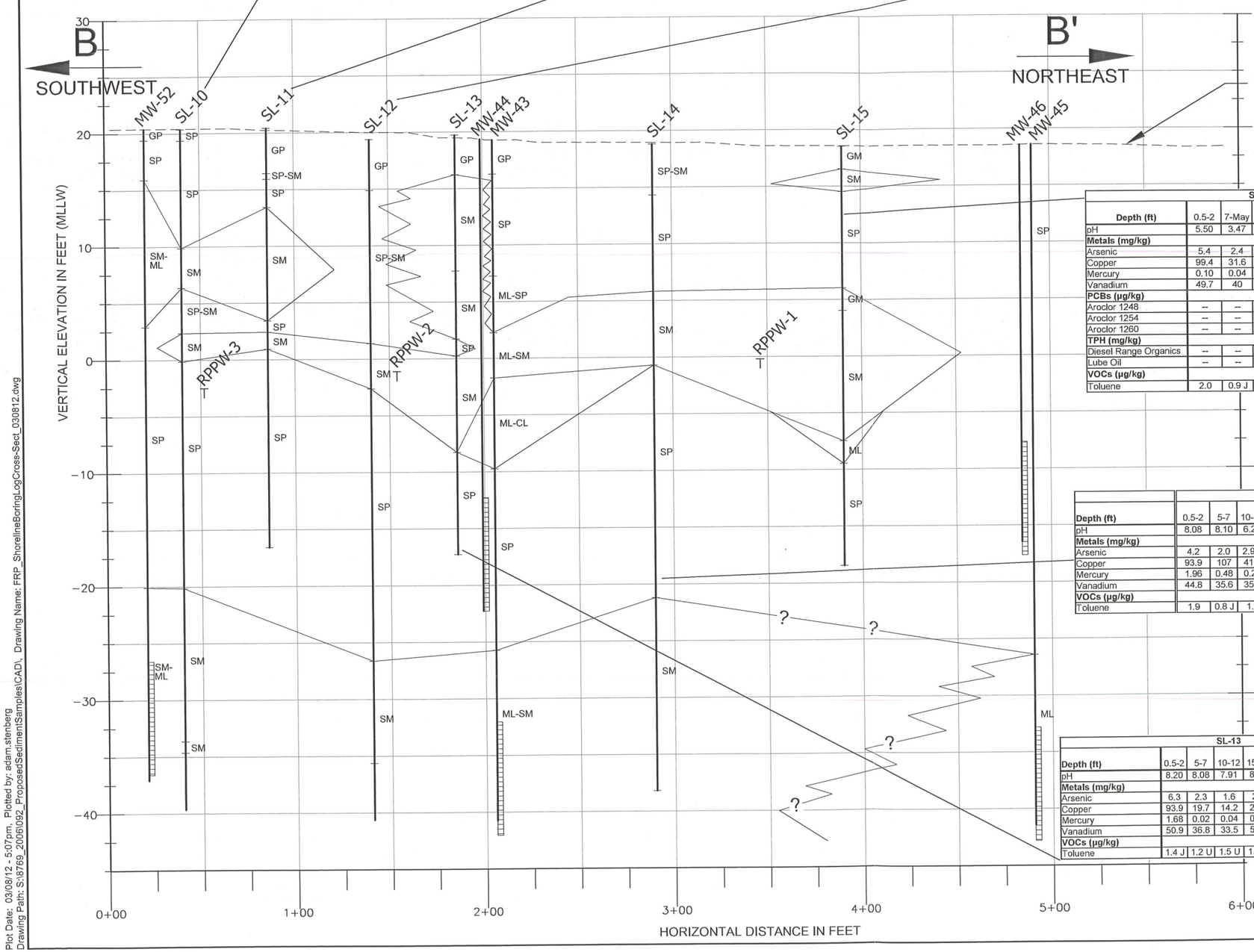
Figure 6

Plot Date: 03/08/12 - 5:06pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg

SL-10													
Depth (ft)	0.5-2	5-7	10-12	15-17	20-22	25-27	30-32	35-37	40-42	45-47	50-52	50-52 FD	54-55
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)													
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
Copper	27.9	25.4	29.6	24.2	22.7	22	8.9	8	14	9.3	10.5	8.8	14.3
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
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
VOCs (µg/kg)													
Toluene	2.0	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

SL-11									
Depth (ft)	0.5-2	5-7	10-12	15-17	20-22	25-27	30-32	35-37	35-37 FD
pH	8.19	7.99	7.27	6.99	8.72	9.31	10.18	10.54	10.62
Metals (mg/kg)									
Arsenic	3.8	2.0	3.7	3.9	1.9	1.7	5.2	1.2	1.1
Copper	80	13.8	31	26.8	16.3	13.6	15	8.8	8.4
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
Vanadium	43.2	40.3	53.3	42.9	46	37	39.7	35.7	34.4
VOCs (µg/kg)									
Toluene	0.8 J	0.6 J	1.3 U	0.6 J	1.2 U	0.8 J	4.4	18	17

SL-12														
Depth (ft)	0.5-2	5-7	10-12	15-17	15-17 FD	20-22	25-27	30-32	35-37	40-42	45-47	50-52	50-52 FD	54-55
pH	7.80	7.22	5.34	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)														
Arsenic	3.4	1.0	1.8	2.1	2.5	1.8	2.8	5.9	2.9	1.2	1.7	1.4	1.5	1.7
Copper	20.9	16.9	19.5	39.4	21.4	15.9	23.1	11.1	8.2	7.2	12.6	11.2	10.9	16.4
Mercury	0.19	0.02 U	0.03	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
Vanadium	42.7	38.9	39	40.9	35.3	50.6	40.0	44.5	32.7	32.3	35.7	32.9	34.7	37.7
VOCs (µg/kg)														
Toluene	1.8	3	1.3 U	0.7 J	1.1 U	1 U	2.3	1.1 U	4.3	140	160	970	840	51



SL-15								
Depth (ft)	0.5-2	7-May	10-12	15-17	20-22	25-27	30-32	35-37
pH	5.50	3.47	7.24	9.82	7.66	7.33	7.17	6.27
Metals (mg/kg)								
Arsenic	5.4	2.4	3.4	9.0	5.3	3.5	1.0	1.6
Copper	99.4	31.6	59.4	26.6	63.1	26.5	10.5	10.6
Mercury	0.10	0.04	0.13	0.11	0.09	0.03 U	0.03 U	0.03 U
Vanadium	49.7	40	32.7	42	66.3	43.8	43.2	38.5
PCBs (µg/kg)								
Aroclor 1248	--	--	--	--	--	--	--	--
Aroclor 1254	--	--	--	--	--	--	--	--
Aroclor 1260	--	--	--	--	--	--	--	--
TPH (mg/kg)								
Diesel Range Organics	--	--	--	--	--	--	--	--
Lube Oil	--	--	--	--	--	--	--	--
VOCs (µg/kg)								
Toluene	2.0	0.9 J	6.9	1.3 U	1.7 U	1.2 U	1.2 U	1.3 U

SL-14														
Depth (ft)	0.5-2	5-7	10-12	10-12 FD	15-17	20-22	25-27	30-32	35-37	40-42	45-47	50-52	50-52 FD	55-57
pH	8.08	8.10	6.24	5.98	9.04	8.69	7.68	7.35	10.71	9.59	10.59	10.59	10.59	8.65
Metals (mg/kg)														
Arsenic	4.2	2.0	2.9 J	2.5 J	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
Copper	93.9	107	41.4	35.1	42.1	10.9	10	14.8	9.6	8.2	10.8	13.7	15.4	22.9
Mercury	1.96	0.48	0.27	0.26	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
Vanadium	44.8	35.6	35.0	35.1	56.1	41.5	37.3	40.5	41.2	32.9	34.9	37	36.8	43.5
VOCs (µg/kg)														
Toluene	1.9	0.8 J	1.6	0.6 J	2.1 J	1.3 U	1.2 U	1.3 U	61	1 J	100	14	15	1.2 U

SL-13								
Depth (ft)	0.5-2	5-7	10-12	15-17	20-22	25-27	30-32	35-37
pH	8.20	8.08	7.91	8.11	8.47	7.14	9.16	10.68
Metals (mg/kg)								
Arsenic	6.3	2.3	1.6	2.8	1.9	2.3	1.6	1.0
Copper	93.9	19.7	14.2	22.2	18.2	15.2	10.9	10.7
Mercury	1.68	0.02	0.04	0.03	0.03 U	0.03	0.03 U	0.02 U
Vanadium	50.9	36.8	33.5	56.0	52.1	47.4	44.8	39.8
VOCs (µg/kg)								
Toluene	1.4 J	1.2 U	1.5 U	1.3 U	1.3 U	21	1.3 U	89

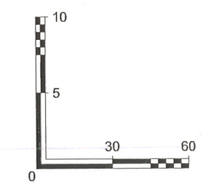
KEY

GP	POORLY GRADED GRAVEL WITH SAND
GM	SILTY GRAVEL WITH SAND
SP	POORLY GRADED SAND
SP-SC	POORLY GRADED SAND WITH CLAY
SP-SM	POORLY GRADED SAND WITH SILT
CL	LEAN CLAY
ML	SILT
SM	SILTY SAND
FD	FIELD DUPLICATE

—?— INFERRED LITHOLOGIC CONTACT, QUERIED WHERE UNCERTAIN.

RPPW-1 PORE WATER SAMPLING LOCATION PROJECTED ONTO THE LINE OF CROSS SECTION.

WELL SCREEN INTERVAL



APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 6X

GEOLOGIC CROSS SECTION B-B'
SOIL ANALYTICAL RESULTS
Former Rhone-Poulenc Site
Tukwila, Washington

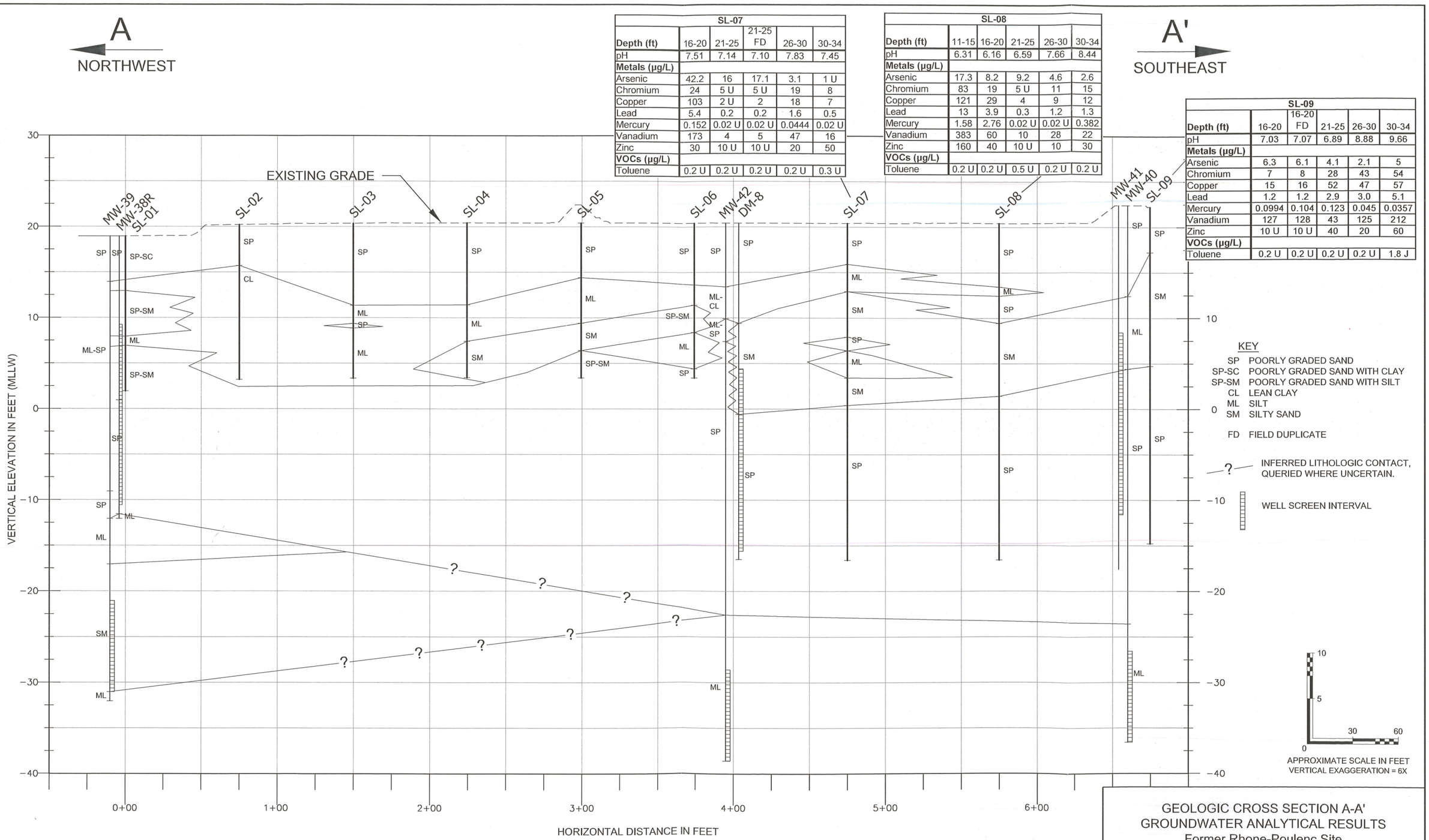
By: APS	Date: 03/08/12	Project No. 0087690050
amec		Figure 7

Plot Date: 03/08/12 - 5:07pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg

SL-07					
Depth (ft)	16-20	21-25	21-25 FD	26-30	30-34
pH	7.51	7.14	7.10	7.83	7.45
Metals (µg/L)					
Arsenic	42.2	16	17.1	3.1	1 U
Chromium	24	5 U	5 U	19	8
Copper	103	2 U	2	18	7
Lead	5.4	0.2	0.2	1.6	0.5
Mercury	0.152	0.02 U	0.02 U	0.0444	0.02 U
Vanadium	173	4	5	47	16
Zinc	30	10 U	10 U	20	50
VOCs (µg/L)					
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U

SL-08					
Depth (ft)	11-15	16-20	21-25	26-30	30-34
pH	6.31	6.16	6.59	7.66	8.44
Metals (µg/L)					
Arsenic	17.3	8.2	9.2	4.6	2.6
Chromium	83	19	5 U	11	15
Copper	121	29	4	9	12
Lead	13	3.9	0.3	1.2	1.3
Mercury	1.58	2.76	0.02 U	0.02 U	0.382
Vanadium	383	60	10	28	22
Zinc	160	40	10 U	10	30
VOCs (µg/L)					
Toluene	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U

SL-09					
Depth (ft)	16-20	16-20 FD	21-25	26-30	30-34
pH	7.03	7.07	6.89	8.88	9.66
Metals (µg/L)					
Arsenic	6.3	6.1	4.1	2.1	5
Chromium	7	8	28	43	54
Copper	15	16	52	47	57
Lead	1.2	1.2	2.9	3.0	5.1
Mercury	0.0994	0.104	0.123	0.045	0.0357
Vanadium	127	128	43	125	212
Zinc	10 U	10 U	40	20	60
VOCs (µg/L)					
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	1.8 J



GEOLOGIC CROSS SECTION A-A'
GROUNDWATER ANALYTICAL RESULTS
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/08/12	Project No. 0087690050
amec		Figure 8

Plot Date: 03/08/12 - 5:07pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg

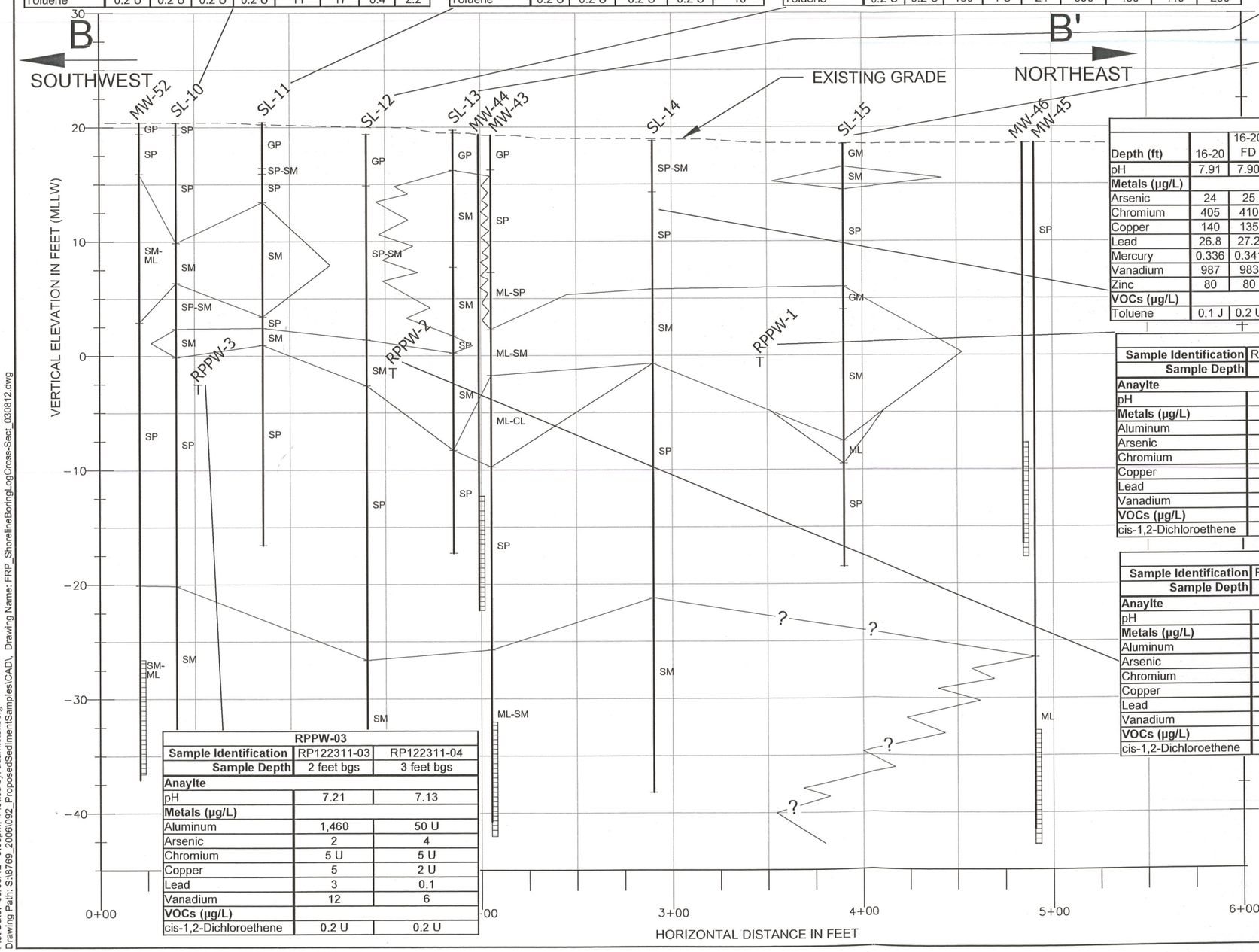
SL-10								
Depth (ft)	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55
pH	6.95	6.81	8.11	8.98	9.97	8.72	7.36	7.87
Metals (µg/L)								
Arsenic	5.4	3.2	4.4	2.8	8	47	42	93
Chromium	9	7	11	26	108	629	800	2,180
Copper	28	5	6	13	105	628	641	1,590
Lead	9.6	0.6	0.9	1.4	9.7	84.5	94	196
Mercury	0.0369	0.02 U	0.02 U	0.02 U	0.0918	0.932	1.03	2.7
Vanadium	17	24	18	54	178	602	446	1,540
Zinc	20	10 U	10 U	40	150	700	870	2,000
VOCs (µg/L)								
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	11	17	0.4	2.2

SL-11					
Depth (ft)	16-20	16-20 FD	21-25	26-30	30-34
pH	8.15	8.08	9.03	9.84	10.10
Metals (µg/L)					
Arsenic	4.6	4.8	3.7	40.3	13.4
Chromium	38	35	38	253	39
Copper	215	207	117	255	38
Lead	8.6	9	6.1	24.5	3.7
Mercury	0.101	0.0971	0.0411 J	0.511 J	0.0387 J
Vanadium	261	253	221	342	219
Zinc	10	10	10	290	20
VOCs (µg/L)					
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	10

SL-12									
Depth (ft)	16-20	21-25	26-30	31-35	36-40	41-45	46-50	46-50 FD	51-55
pH	7.09	9.15	10.40	9.08	10.10	11.40	11.50	11.50	11.20
Metals (µg/L)									
Arsenic	9	14.1	80	61	56	31	67	80	89
Chromium	18	47	367	256	373	261	600	1,300	740
Copper	10	51	870	368	448	210	251	400	356
Lead	1.2	4.5	51.2	20.7	28.8	10.7	14	20	28
Mercury	0.02 U	0.138	0.452	0.243	0.272	0.4 U	0.4 U	0.4 U	0.542
Vanadium	66	159	1,230	1,270	424	1,320 J	1,840 J	3,800 J	1,530 J
Zinc	10	30	290	180	450	270	420	700	600
VOCs (µg/L)									
Toluene	0.2 U	0.2 U	160	1 U	24	390	430	440	250

SL-13				
Depth (ft)	16-20	21-25	26-30	31-35
pH	7.49	7.07	6.54	9.76
Metals (µg/L)				
Arsenic	8.6	15.2	24.9	19
Chromium	39	68	258	182
Copper	83	72	182	154
Lead	6.4	7.2	12.8	10.8
Mercury	0.181 J	0.175 J	0.193 J	0.136 J
Vanadium	200	315	361	391
Zinc	20	20	330	200
VOCs (µg/L)				
Toluene	0.2 U	0.2 U	0.2 U	3.5

SL-15				
Depth (ft)	16-20	21-25	21-25 FD	26-30
pH	7.93	6.73	6.70	6.86
Metals (µg/L)				
Arsenic	107	8.5	9	10.3
Chromium	530	82	79	129
Copper	1,880	137	128	82
Lead	361	15.2	15	8.3
Mercury	9.76 J	0.4 U	0.558 J	0.82 J
Vanadium	1,320	398	385	720
Zinc	1,270	170	160	90
VOCs (µg/L)				
Toluene	1.0 U	0.2 U	0.2 U	1.0 U



SL-14									
Depth (ft)	16-20	16-20 FD	21-25	26-30	31-35	36-40	41-45	46-50	51-55
pH	7.91	7.90	8.06	7.24	9.54	10.10	9.93	10.90	8.81
Metals (µg/L)									
Arsenic	24	25	24.8	15	7	32	40	80	96
Chromium	405	410	290	212	45	959	1,050	2,590	850
Copper	140	135	205	212	39	1,550	703	2,740	1,360
Lead	26.8	27.2	22.8	14	3.1	38.5	23.5	98.4	78.2
Mercury	0.336	0.341	0.69	0.699	0.0559	4.11	1.54	9.46	2.84 J
Vanadium	987	983	679	261	392	1,180	2,040	4,290	2,220
Zinc	80	80	110	270	20	1,300	840	2,770	1,800
VOCs (µg/L)									
Toluene	0.1 J	0.2 U	0.2 U	0.2 U	1.2	47	19	61	1.0 U

RPPW-01			
Sample Identification	RP122211-01	RP122211-02	RP122211-03
Sample Depth	1 foot bgs	2 feet bgs	3 feet bgs
Anaylte			
pH	7.15	7.05	6.99
Metals (µg/L)			
Aluminum	480	450	1,080
Arsenic	4.4	4.4	4.6
Chromium	25	30	30
Copper	6	7	8
Lead	1.1	0.8	1.2
Vanadium	129	178	177
VOCs (µg/L)			
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U

RPPW-02			
Sample Identification	RP122311-01	RP122311-02 FD	RP122211-04
Sample Depth	2 feet bgs	2 feet bgs	3 feet bgs
Anaylte			
pH	6.46	6.54	6.86
Metals (µg/L)			
Aluminum	1,630	250	250
Arsenic	2	2	2.3
Chromium	5 U	5 U	5 U
Copper	5	2 U	2
Lead	2.3	0.4	0.8
Vanadium	10	5	8
VOCs (µg/L)			
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2

RPPW-03		
Sample Identification	RP122311-03	RP122311-04
Sample Depth	2 feet bgs	3 feet bgs
Anaylte		
pH	7.21	7.13
Metals (µg/L)		
Aluminum	1,460	50 U
Arsenic	2	4
Chromium	5 U	5 U
Copper	5	2 U
Lead	3	0.1
Vanadium	12	6
VOCs (µg/L)		
cis-1,2-Dichloroethene	0.2 U	0.2 U

KEY

- GP POORLY GRADED GRAVEL WITH SAND
- GM SILTY GRAVEL WITH SAND
- SP POORLY GRADED SAND
- SP-SC POORLY GRADED SAND WITH CLAY
- SP-SM POORLY GRADED SAND WITH SILT
- CL LEAN CLAY
- ML SILT
- SM SILTY SAND
- FD FIELD DUPLICATE
- —?— INFERRED LITHOLOGIC CONTACT, QUERIED WHERE UNCERTAIN.
- RPPW-1 PORE WATER SAMPLING LOCATION PROJECTED ONTO THE LINE OF CROSS SECTION.
- WELL SCREEN INTERVAL

10 5 0 30 60

APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 6X

GEOLOGIC CROSS SECTION B-B'
GROUNDWATER ANALYTICAL RESULTS
Former Rhone-Poulenc Site
Tukwila, Washington

By: APS	Date: 03/08/12	Project No. 0087690050
amec		Figure 9

Plot Date: 03/08/12 - 5:08pm, Plotted by: adam.stenberg
Drawing Path: S:\8769_2006\092_ProposedSedimentSamples\CAD\, Drawing Name: FRP_ShorelineBoringLogCross-Sect_030812.dwg