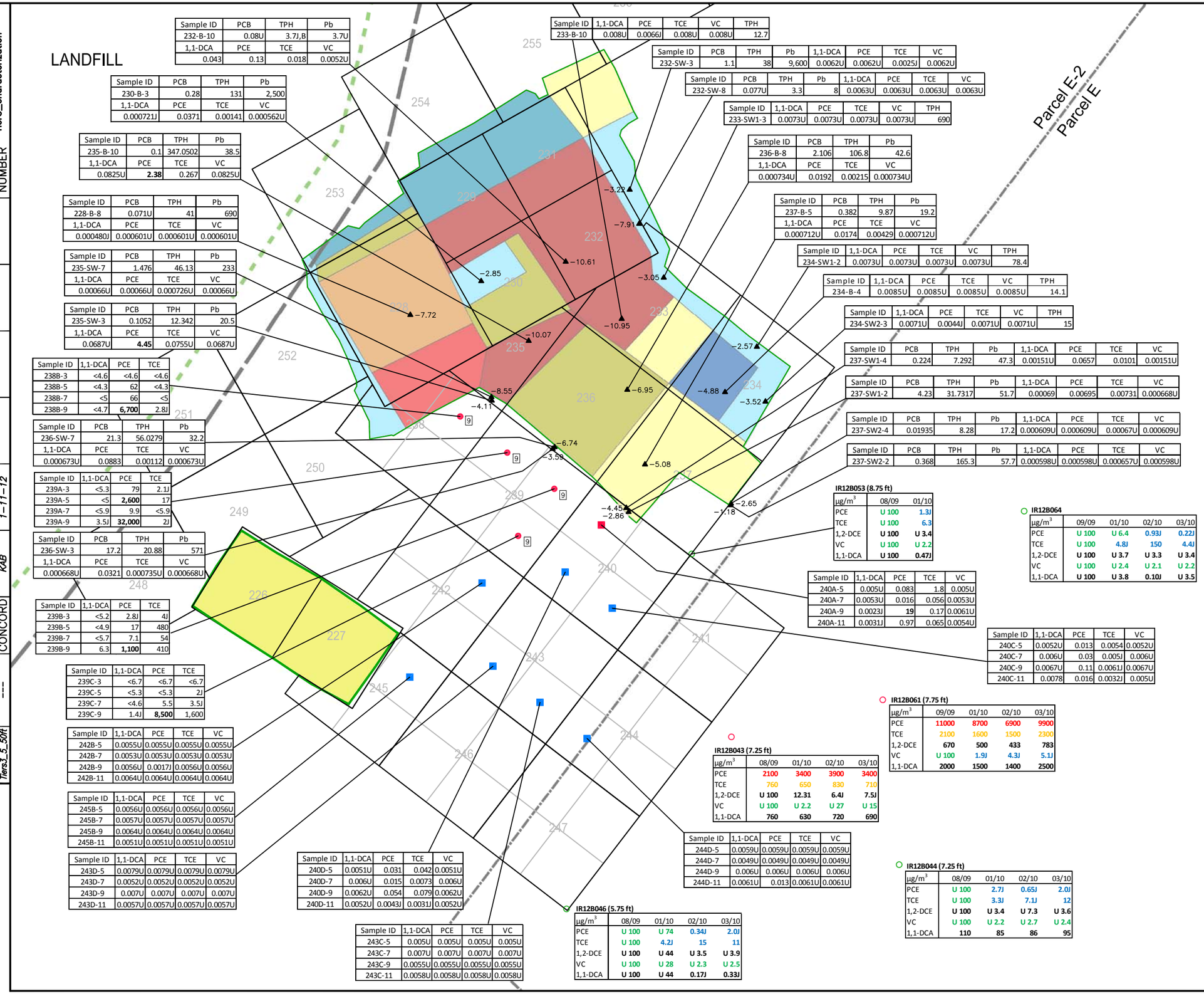

Sample ID	PCB	TPH	Pb
232-B-10	0.08U	3.7J,B	3.7U
1,1-DCA	PCE	TCE	VC
0.043	0.13	0.018	0.0052U

Sample ID	1,1-DCA	PCE	TCE	VC	TPH
233-B-10	0.008U	0.0066J	0.008U	0.008U	12.7

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
232-SW-3	1.1	38	9,600	0.0062U	0.0062U	0.0025J	0.0062U

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
232-SW-8	0.077U	3.3	8	0.0063U	0.0063U	0.0063U	0.0063U

Sample ID	1,1-DCA	PCE	TCE	VC	TPH
233-SW1-3	0.0073U	0.0073U	0.0073U	0.0073U	690

Sample ID	PCB	TPH	Pb
230-B-3	0.28	131	2,500
1,1-DCA	PCE	TCE	VC
0.000721J	0.0371	0.00141	0.000562U

Sample ID	PCB	TPH	Pb
235-B-10	0.1	347.0502	38.5
1,1-DCA	PCE	TCE	VC
0.0825U	**2.38**	0.267	0.0825U

Sample ID	PCB	TPH	Pb
236-B-8	2.106	106.8	42.6
1,1-DCA	PCE	TCE	VC
0.000734U	0.0192	0.00215	0.000734U

Sample ID	PCB	TPH	Pb
237-B-5	0.382	9.87	19.2
1,1-DCA	PCE	TCE	VC
0.000712U	0.0174	0.00429	0.000712U

Sample ID	PCB	TPH	Pb
228-B-8	0.071U	41	690
1,1-DCA	PCE	TCE	VC
0.000480U	0.000601U	0.000601U	0.000601U

Sample ID	1,1-DCA	PCE	TCE	VC	TPH
234-SW1-2	0.0073U	0.0073U	0.0073U	0.0073U	78.4

Sample ID	PCB	TPH	Pb
235-SW-7	1.476	46.13	233
1,1-DCA	PCE	TCE	VC
0.00066U	0.00066U	0.000726U	0.00066U

Sample ID	1,1-DCA	PCE	TCE	VC	TPH
234-B-4	0.0085U	0.0085U	0.0085U	0.0085U	14.1

Sample ID	PCB	TPH	Pb
235-SW-3	0.1052	12.342	20.5
1,1-DCA	PCE	TCE	VC
0.0687U	**4.45**	0.0755U	0.0687U

Sample ID	1,1-DCA	PCE	TCE	VC	TPH
234-SW2-3	0.0071U	0.0044J	0.0071U	0.0071U	15

Sample ID	1,1-DCA	PCE	TCE
238B-3	<4.6	<4.6	<4.6
238B-5	<4.3	62	<4.3
238B-7	<5	66	<5
238B-9	<4.7	**6,700**	2.8J

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
237-SW1-4	0.224	7.292	47.3	0.00151U	0.0657	0.0101	0.00151U

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
237-SW1-2	4.23	31.7317	51.7	0.00069	0.00695	0.00731	0.000668U

Sample ID	PCB	TPH	Pb
236-SW-7	21.3	56.0279	32.2
1,1-DCA	PCE	TCE	VC
0.000673U	0.0883	0.00112	0.000673U

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
237-SW2-4	0.01935	8.28	17.2	0.000609U	0.000609U	0.00067U	0.000609U

Sample ID	PCB	TPH	Pb	1,1-DCA	PCE	TCE	VC
237-SW2-2	0.368	165.3	57.7	0.000598U	0.000598U	0.000657U	0.000598U

Sample ID	1,1-DCA	PCE	TCE
239A-3	<5.3	79	2.1J
239A-5	<5	**2,600**	17
239A-7	<5.9	9.9	<5.9
239A-9	3.5J	**32,000**	2J

IR12B053 (8.75 ft)

µg/m³	08/09	01/10
PCE	U 100	1.3J
TCE	U 100	6.3
1,2-DCE	**U 100**	**U 3.4**
VC	U 100	U 2.2
1,1-DCA	**U 100**	**0.47J**

IR12B064

µg/m³	09/09	01/10	02/10	03/10
PCE	U 100	U 6.4	0.93J	0.22J
TCE	U 100	4.8J	150	4.4J
1,2-DCE	**U 100**	**U 3.7**	**U 3.3**	**U 3.4**
VC	U 100	U 2.4	U 2.1	U 2.2
1,1-DCA	**U 100**	**U 3.8**	**0.10J**	**U 3.5**

Sample ID	PCB	TPH	Pb
236-SW-3	17.2	20.88	571
1,1-DCA	PCE	TCE	VC
0.000668U	0.0321	0.000735U	0.000668U

Sample ID	1,1-DCA	PCE	TCE	VC
240A-5	0.005U	0.083	1.8	0.005U
240A-7	0.0053U	0.016	0.056	0.0053U
240A-9	0.0023J	**19**	0.17	0.0061U
240A-11	0.0031J	0.97	0.065	0.0054U

Sample ID	1,1-DCA	PCE	TCE
239B-3	<5.2	2.8J	4J
239B-5	<4.9	17	480
239B-7	<5.7	7.1	54
239B-9	6.3	**1,100**	410

Sample ID	1,1-DCA	PCE	TCE	VC
240C-5	0.0052U	0.013	0.0054	0.0052U
240C-7	0.006U	0.03	0.005J	0.006U
240C-9	0.0067U	0.11	0.0061J	0.0067U
240C-11	0.0078	0.016	0.0032J	0.005U

Sample ID	1,1-DCA	PCE	TCE
239C-3	<6.7	<6.7	<6.7
239C-5	<5.3	<5.3	2J
239C-7	<4.6	5.5	3.5J
239C-9	1.4J	**8,500**	1,600

IR12B061 (7.75 ft)

µg/m³	09/09	01/10	02/10	03/10
PCE	11000	8700	6900	9900
TCE	2100	1600	1500	2300
1,2-DCE	**670**	**500**	**433**	**783**
VC	U 100	1.9J	4.3J	5.1J
1,1-DCA	**2000**	**1500**	**1400**	**2500**

IR12B043 (7.25 ft)

µg/m³	08/09	01/10	02/10	03/10
PCE	2100	3400	3900	3400
TCE	760	650	830	710
1,2-DCE	**U 100**	**12.31**	**6.4J**	**7.5J**
VC	U 100	U 2.2	U 27	U 15
1,1-DCA	**760**	**630**	**720**	**690**

Sample ID	1,1-DCA	PCE	TCE	VC
242B-5	0.0055U	0.0055U	0.0055U	0.0055U
242B-7	0.0053U	0.0053U	0.0053U	0.0053U
242B-9	0.0056U	0.0017J	0.0056U	0.0056U
242B-11	0.0064U	0.0064U	0.0064U	0.0064U

Sample ID	1,1-DCA	PCE	TCE	VC
245B-5	0.0056U	0.0056U	0.0056U	0.0056U
245B-7	0.0057U	0.0057U	0.0057U	0.0057U
245B-9	0.0064U	0.0064U	0.0064U	0.0064U
245B-11	0.0051U	0.0051U	0.0051U	0.0051U

Sample ID	1,1-DCA	PCE	TCE	VC
243D-5	0.0079U	0.0079U	0.0079U	0.0079U
243D-7	0.0052U	0.0052U	0.0052U	0.0052U
243D-9	0.007U	0.007U	0.007U	0.007U
243D-11	0.0057U	0.0057U	0.0057U	0.0057U

Sample ID	1,1-DCA	PCE	TCE	VC
240D-5	0.0051U	0.031	0.042	0.0051U
240D-7	0.006U	0.015	0.0073	0.006U
240D-9	0.0062U	0.054	0.079	0.0062U
240D-11	0.0052U	0.0043J	0.0031J	0.0052U

Sample ID	1,1-DCA	PCE	TCE	VC
244D-5	0.0059U	0.0059U	0.0059U	0.0059U
244D-7	0.0049U	0.0049U	0.0049U	0.0049U
244D-9	0.006U	0.006U	0.006U	0.006U
244D-11	0.0061U	0.013	0.0061U	0.0061U

Sample ID	1,1-DCA	PCE	TCE	VC
243C-5	0.005U	0.005U	0.005U	0.005U
243C-7	0.007U	0.007U	0.007U	0.007U
243C-9	0.0055U	0.0055U	0.0055U	0.0055U
243C-11	0.0058U	0.0058U	0.0058U	0.0058U

IR12B046 (5.75 ft)

µg/m³	08/09	01/10	02/10	03/10
PCE	U 100	U 74	0.34J	2.0J
TCE	U 100	4.2J	15	11
1,2-DCE	**U 100**	**U 44**	**U 3.5**	**U 3.9**
VC	U 100	U 28	U 2.3	U 2.5
1,1-DCA	**U 100**	**U 44**	**0.17J**	**0.33J**

IR12B044 (7.25 ft)

µg/m³	08/09	01/10	02/10	03/10
PCE	U 100	2.7J	0.65J	2.0J
TCE	U 100	3.3J	7.1J	12
1,2-DCE	**U 100**	**U 3.4**	**U 7.3**	**U 3.6**
VC	U 100	U 2.2	U 2.7	U 2.4
1,1-DCA	**110**	**85**	**86**	**95**

● PRE–EXCAVATION CHARACTERIZATION SAMPLE EXCEEDING PCE ACTION LIMIT (9 DEPTH REACHED)

○ PRE–EXCAVATION SOIL VAPOR SAMPLE
- BELOW ACTION LIMIT
- EXCEED ACTION LIMIT

■ POTHOLE/CHARACTERIZATION SAMPLE
- BELOW ACTION LIMIT
- EXCEED ACTION LIMIT

▲ EXCAVATION CONFIRMATION SAMPLE
- B – BOTTOM
- SW – SIDEWALL

−4.88 SAMPLE DEPTH (FEET)

LIMIT OF EXCAVATION

Approximate Excavation Areas
- Excavation to 1-ft Depth
- Excavation to 3-ft Depth
- Excavation to 4-ft Depth
- Excavation to 4.5-ft Depth
- Excavation to 5-ft Depth
- Excavation to 5.5-ft Depth
- Excavation to 7-ft Depth
- Excavation to 8-ft Depth
- Excavation to 9-ft Depth
- Excavation to 10-ft Depth

PROJECT ACTION LIMITS (mg/kg)

Matrix	PCB	TPH	Lead (Pb)
Soil	74	3,500	19,700

Matrix	1,1-DCA	PCE	TCE	VC	TPH
Soil	2.8	0.48	2.9	0.024	3,500

Bold results are above Project Action Limits (PAL); over excavation and re-sampling will be performed per the SAP.

PCE = Tetrachloroethene; TCE = Trichloroethene; 1,1-DCA = 1,1-Dichloroethane; VC = Vinyl Chloride

Sidewall samples that plot inside the excavation limits are due to sloping of the excavation wall.

H heavy fuel hydrocarbons present in the sample
J estimated value
M hydrocarbon pattern resembling motor oil present in the sample chromatogram
U analyte not detected at reporting limit

20 0 20 40
Scale in Feet

Shaw®

Hunters Point Naval Shipyard
San Francisco, California
U.S. Department of the Navy
NAVFAC SW
San Diego, California

CHARACTERIZATION DATA TIER 5

TIME-CRITICAL REMOVAL ACTION FOR THE PCB HOT SPOT AREA AT PARCEL E-2

DRAWING NUMBER: Tier5_characterization
APPROVED BY
CHECKED BY
DRAWN BY: 1–11–12 KAB
OFFICE: CONCORD
X–REF: ---
IMAGE: Tiers3_5_50ft