TETRA TECH, INC.

October 16, 2020

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Berkeley, California 94710

Sara Ziff
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105

Submitted Electronically Only

Subject: Phase V, Western Transition Area Sample Results
Richmond Field Station
University of California, Berkeley

Dear Ms. Nakashima and Ms. Ziff:

On behalf of the University of California Berkeley, Tetra Tech, Inc. has prepared this summary of data collected as a part of the Richmond Field Station (RFS), Phase V, Western Transition Area (WTA) field investigation. Phase V addresses remaining data gaps identified in the Final Current Conditions Report, dated November 21, 2008, and subsequent investigations, as presented in the Final Phase V Field Sampling Plan, dated January 5, 2017.

Two primary investigation areas are identified within the Phase V investigation scope:

1. Sediment and Pore Water in the old/unremediated portions of Western Stege Marsh. Conduct discrete sampling to identify polychlorinated biphenyls (PCB) and metals concentrations in sediment and pore water within the portion of the marsh not subject to remediation from 2002 to 2004. Results from this investigation are presented in the Final Phase V Sampling Results Technical Memorandum, Western Stege Marsh, dated October 18, 2018.

2. Exploratory Pothole Investigations in the WTA. Investigate the contents of fill, with specific focus on the fill area created during the 1950s to late 1960s and previously-identified geophysical anomalies. Results from this investigation are presented in this letter report.

The WTA constitutes the western portion of the Transition Area. The Transition Area occupies approximately 5.5 acres and is bounded to the north by the Upland Area at the location of a buried, former seawall and historic shoreline beyond the sea wall believed to have been the edge of the historical mudflats; and to the south by Western Stege Marsh at the 5-foot elevation upper extent of the marsh as measured by the National Geodetic Vertical Datum 29. The Transition Area includes the Eastern

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Transition Area (ETA) consisting of imported clean fill material. These features are presented on Figure 1. Figure 2 identifies the Phase V investigation areas.

Scope of Work

The WTA is believed to consist entirely of fill placed on top of historical mudflats. Fill contents were investigated to determine if fill contents are a source of chemicals to groundwater or marsh receptors through exposure or leaching. Specific areas of concern include: (1) the 1950's to late 1960's fill area; (2) the areas of metal detection in the remainder of the WTA identified in a 2015 geophysical survey; and (3) other areas with geophysical anomalies that have been identified in previous magnetometer or geophysical surveys. The historic fill areas and geophysical survey results are shown on Figure 3.

The method for investigating the fill material consisted of digging limited trenches in locations throughout the WTA in order to view the fill content and collect soil samples; this method is termed "potholing." The potholing was completed with the use of a backhoe and 2-foot bucket; potholes were completed at 38 locations from November 6 through 13, 2019.

The vertical limits of the potholing was the depth of Bay Mud to determine the extent of the buried debris. Pothole locations were identified to coincide with areas of high readings identified during the geophysical surveys. Pothole locations were moved in the event of shallow refusal or inaccessibility due to heavy vegetation. The pothole locations are shown on Figure 3.

Field Sampling Activities

At 38 pothole locations, soil samples were collected from 0-0.5 feet below ground surface (bgs) at each location and from 1.5-2 feet bgs at half the locations. Surface samples were collected from the soil surface using a shovel (to loosen the soil) and a disposable scoop. Subsurface soil samples were collected from the bottom of the excavation at 1.5 feet bgs using a disposable scoop. Samples were analyzed for metals, PCBs, and polycyclic aromatic hydrocarbons (PAH).

Two additional exploratory potholes WTA-38.2 and WTA-38.3 were implemented adjacent to WTA-38. A strong geophysical anomaly was identified at the area of WTA-38, and as samples were already collected from WTA-38, UC Berkeley conducted additional exploratory excavations at WTA-38.2 and WTA-38.3, located each approximately 15 feet and 30 feet east of WTA-38, respectively. The purpose of the exploratory excavations was to investigate possible drums or other significant metal debris within the geophysical anomaly. Significant concrete was identified; however, no drums or significant metal was observed at the exploratory excavations.

Additional subsurface soil samples were to be collected directly in areas with visual evidence of contamination, which occurred in sediment at the Bay Mud interface at pothole locations WTA-17, -19, -20, and -30. Further discussion regarding this contamination is presented in the Field Observations section. These sediment samples were analyzed for metals, PCB, PAH, and total petroleum hydrocarbons (TPH).

An incremental sample methodology (ISM) sample consisting of 75 increments was also collected from the excavated soil at each of the 38 pothole locations. The ISM samples were not included in the original

field sampling plan, but were collected to help characterize PCB concentrations within the entire volume of soil excavated from each pothole, defined as the decision unit.

Archived soil samples were collected every 2 feet until Bay Mud was encountered. Archive sample depths were estimated at 3.5 to 4.0 feet, 5.5 to 6.0 feet, and 7.5 to 8.0 feet bgs. The analysis of the archive samples was based on comments received from DTSC on April 14, 2020, and based on DTSC and EPA review of the shallow soil sample results and photograph log. The final sample registry is included as Table 1; the photograph log is included as an attachment. Note that archive sample WTA-28-3.5-4.0 was erroneously reported as collected, and requested for analysis by DTSC, but the sample was not actually collected due to groundwater entering the pothole excavation.

Field Observations

Potholes generally varied in size from 4 feet to 8 feet long, and from 2 to 11.5 feet in depth, based on depth of Bay Mud where excavations were completed. The depth to Bay Mud was aptly shallower at potholes closer to the marsh edge. The deepest trenches were located south of the Building 201, where the grade was increased during the construction of Building 201. The average depth of all excavations was 5.3 feet. Photographs of each pothole are included in the photograph log.

Field observations confirmed the site history and conceptual site model in that most potholes contained construction and miscellaneous commercial debris. Observed debris included concrete, bricks, rebar and other metal, pyrite cinders, tiles, laboratory supplies, bottles, and even a portion of a newspaper. The former sea wall as encountered at WTA-05. Observed soil types were not consistent across the WTA, as each pothole had both unique and sometimes shared characteristics with other potholes, including brown and dark brown sandy soil and silty sand, grey colored soil, and soil with specks of grey-white powder for example. Note that the observed grey-white powder was not consistent with historic observations of mercury fulminate, which was much more limited and darker. Elevated mercury was not identified at these observed locations. No consistent horizontal or vertical layering or layers of soil was observed across the potholes.

Groundwater was observed in several of the potholes located closest to the marsh edge, most with no notable observations. At WTA-26 the groundwater exhibited apparent biological organic sheen; no readings indicating petroleum contamination were observed at those potholes on the Photo-Ionizing Detector (PID).

Petroleum odors and unnatural, dark soil were observed at the estimated depth to groundwater and Bay Mud interface at WTA-17, -19, -20. Slight petroleum odor was detected at groundwater at WTA-30; petroleum odors and sheen were observed on tile debris within the pothole. Sediment samples were collected from each of the locations at the Bay Mud interface.

Sample Results

Tetra Tech provided an initial summary of the initial data results, photograph log and recommendations for which archived samples should be analyzed to DTSC and EPA on February 7, 2020. The initial summary and photograph log provided the basis for DTSC's recommendations of which archive samples

were to be analyzed. Table 2 provides a statistical summary table of all results. A summary of the 135 initial and archive sample results is provided below.

Metals. Arsenic concentrations exceed background levels in 18 samples; no human health criteria are exceeded. Cobalt concentrations exceed background levels in one sample; no human health criteria are exceeded. Lead concentrations exceed human health screening criteria in five samples. Mercury concentrations exceed human health criteria in one sample. Thallium concentrations exceed human health criteria in one sample. No other metals results exceed human health criteria. Metals results compared to human health screening criteria are presented in Table 3.

Antimony, cadmium, chromium, copper, lead mercury, selenium, thallium, silver, vanadium, and zinc results demonstrate widespread exceedances of ecological screening criteria. Metals results compared to ecological screening criteria are presented in Table 4.

PAHs. Benzo(a)anthracene concentrations exceed human health criteria in four samples. Benzo(a)pyrene concentrations exceed human health criteria in nine samples. Benzo(b)fluoranthene concentrations exceed human health criteria in three samples. Dibenz(a,h)anthracene concentrations exceed human health criteria in three samples. Benzo(a)pyrene equivalency factor concentrations exceed human health criteria in six samples. There are no exceedances of ecological screening criteria. PAH results compared to human health and ecological criteria are presented in Table 5.

PCBs. Total PCB concentrations are detected below 1 mg/kg at 19 pothole locations. Sample results from 14 potholes exhibit Total PCB concentrations between 1 mg/kg and 5 mg/kg. Sample results from two potholes exhibit Total PCB concentrations between 5 mg/kg and 10 mg/kg. Sample results from one pothole exhibits Total PCB concentrations between 10 mg/kg and 15 mg/kg. Sample results from three potholes exhibit Total PCB concentrations greater than 15 mg/kg. PCB results compared to the concentrations ranges identified above are presented in Table 6 and depicted graphically on Figure 4.

TPH. Samples collected from WTA-17, -19, -20, and -30 were analyzed for TPH due to the observations of dark, odorous sediment at the Bay Mud interface. No TPH results exceed the screening criteria. TPH results are presented in Table 7.

Recommended Supplemental Sampling

UC Berkeley recommends supplemental sampling to be conducted within the WTA to delineate the extent of the dark, odorous sediment at the Bay Mud interface identified at WTA-17, -19, -20, and -30. The sampling approach will consist of mobilizing a push-technology drilling rig, such as a Geoprobe, to visually identify the presence of the substance. Continuous coring will be completed, and each core will be observed by a California-registered Geologist for the presence or absence of the dark, odorous sediment. Sample locations will begin by surrounding the known locations and stepping out horizontally until the substance is no longer identified. Proposed initial locations are shown on Figure 5; subsequent locations will be identified in the field based on visual observations of the cores.

UC Berkeley recommends supplemental sampling for PCB results identified within the adjacent Mercury Fulminate Area removal action completed in January 2020. During the removal action, concentrations of PCBs were identified in confirmation samples at the southwestern-most portion of the excavation. While the area is not directly within the WTA, based on discussions with DTSC and EPA, UC Berkeley agreed to include follow-up sampling as a part of this Phase V investigation, given the proximity to the WTA and PCBs as a primary chemical of concern in the Phase V investigation. The location of the MFA excavation relative to the WTA is shown on Figure 5.

Discrete samples will be collected at 0.5 and 2.5 feet bgs at 18 locations, as shown on Figure 6. Samples will be collected from the continuous core from the direct push drill rig with disposal trowels. Samples will be analyzed for PCBs by EPA Method 8082 with Soxhlet Extraction. All sample collection, handling, chain-of-custody, and shipping protocols will be consistent with the Final Phase V Field Sampling Plan.

If you have any questions or comments regarding this submittal, please call me at (415) 497-9060 or Greg Haet at (510) 812-1541.

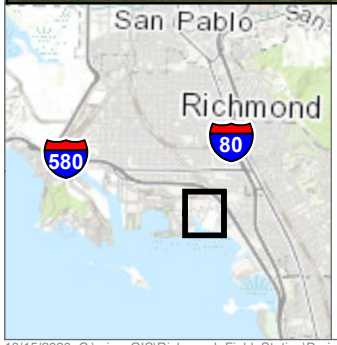
Sincerely,

Jason Brodersen, P.G.
Project Manager

Attachments: Figures
Tables
Photograph Log

cc: Alicia Bihler, UC Berkeley EH&S
Bill Marsh, Edgcomb Law Group

FIGURES



- Bay Trail
- Meeker Slough
- Western Stege Marsh
- Transition Area (Including Bulb)
- Upland
- Richmond Field Station Site Boundary

Notes:

EBRPD	East Bay Regional Park District
EERC	Earthquake Engineering Research Center
EPA	Environmental Protection Agency
NRLF	Northern Regional Library Facility
RFS	Richmond Field Station

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Richmond Field Station Site
University of California, Berkeley

FIGURE 1
SITE MAP

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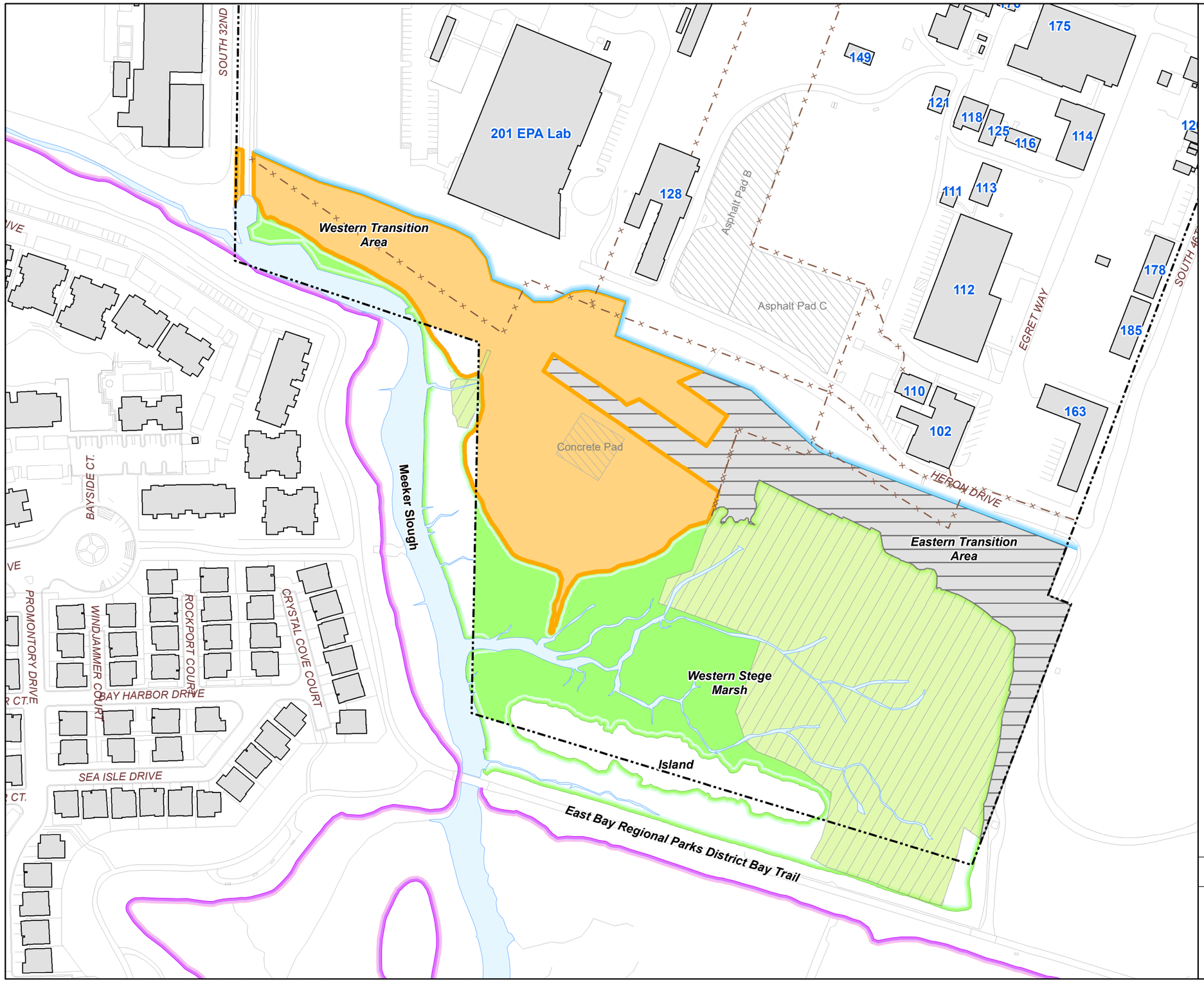

Western Stege Marsh

- Phase V Investigation Area – Old Marsh within UC Property Boundary
- Western Stege Marsh (4.5 ft NGVD)
- Remediated Portion of Western Stege Marsh

Transition Area

- Phase V Investigation Area - Western Transition Area on UC Property
- Western Transition Area
- Eastern Transition Area

- Fence Line
- Surface Water
- Former Seawall
- Marsh Boundary West of Meeker Slough (4.5 ft NGVD)
- Richmond Field Station Site

0 75 150 300
Feet

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Richmond Field Station Site
University of California, Berkeley

FIGURE 2
PHASE V INVESTIGATION AREAS

10/15/2020 C:\misc_GIS\Richmond_Field_Station\Projects\010_Phase_V_FSP\Figure3_InvestigationAreas.mxd - michelle.handley

WTA-13
WTA-14
WTA-16
WTA-12
WTA-15
WTA-18
WTA-19
WTA-17
WTA-36
WTA-5
WTA-10
WTA-4
WTA-20
WTA-7
WTA-9
WTA-31
WTA-8
WTA-2
WTA-21
WTA-1
WTA-30
WTA-3
WTA-22
WTA-32
WTA-6
WTA-23
WTA-33
WTA-34
WTA-11
Bulb2
WTA-38
WTA-35
WTA-37
WTA-29
WTA-27
WTA-28
Bulb1
WTA-24
WTA-25
WTA-26

Asphalt Pad B
Asphalt Pad C
Concrete Pad
Meeker Slough

- Pothole Excavation Locations
- Phase V Investigation Area - Western Transition Area on UC Property
- Western Transition
- Eastern Transition Area (Clean Imported Fill)
- 1950-1960s Fill Area
- 2006 DTSC Geophysical Survey Result
- 2014 DTSC Geophysical Survey Result
- 2015 Subtronics Geophysical Survey Result
- Groundwater Piezometer
- Approximate 100-foot Offset from Jurisdictional Marsh Boundary (BCDC Shoreline Band)
- Fence Line
- Surface Water
- Former Seawall
- Existing Building
- Richmond Field Station Site

Notes:

Elevated geophysical results from within the Phase IV FSP field investigation are not shown.
All results from the 2014 Subtronics geophysical investigation were from within the Phase IV FSP field investigation area and are not shown.

N

0 30 60 120
Feet

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Richmond Field Station Site
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FIGURE 3
POTHOLE LOCATIONS

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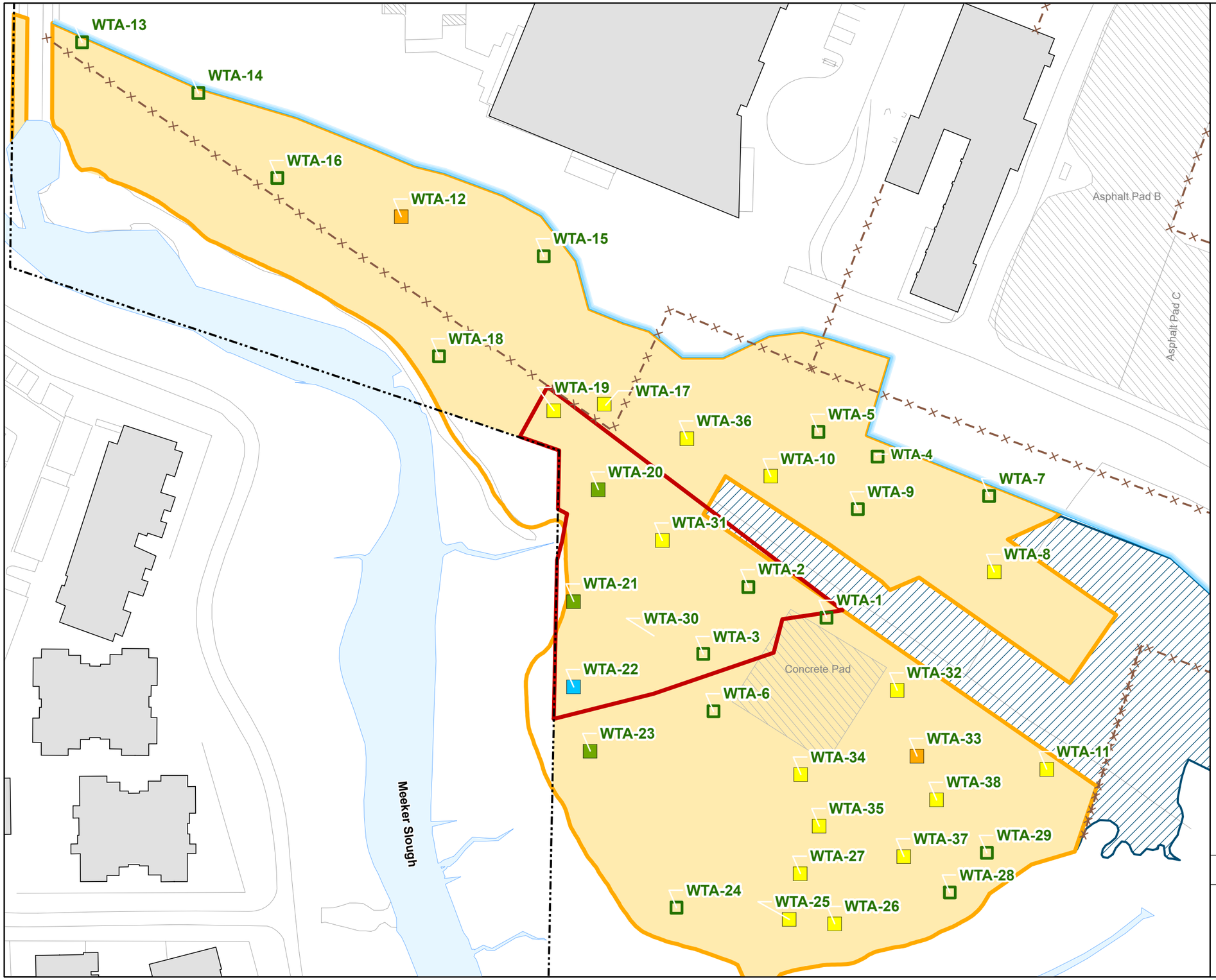

- Not Detected
- 1 - 5 mg/kg
- 5 - 10 mg/kg
- 10 - 15 mg/kg
- 15+ mg/kg
- Phase V Investigation Area - Western Transition Area on UC Property
- Western Transition
- Eastern Transition Area (Clean Imported Fill)
- 1950-1960s Fill
- Fence Line
- Surface Water
- Former Seawall
- Existing Building
- Richmond Field Station Site

Notes:
mg/kg milligrams per kilogram
PCB polychlorinated biphenyls

0 30 60 120
Feet

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Richmond Field Station Site
University of California, Berkeley

FIGURE 4
PCB SAMPLE RESULTS

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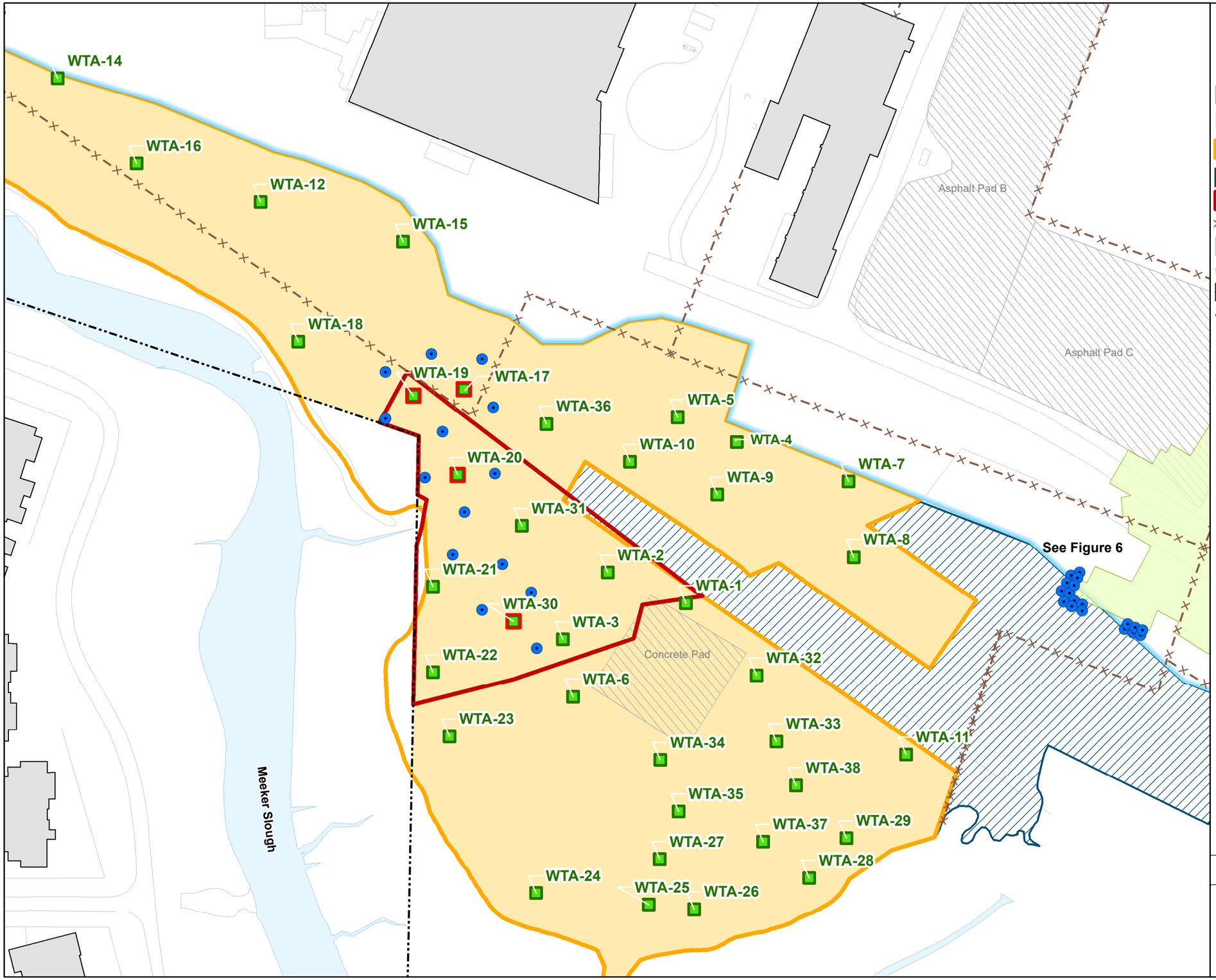

- Proposed Location
- Pothole Excavation Locations
- Pothole Trench with Observed Dark, Odorous
- MFA Excavation Boundary
- Phase V Investigation Area - Western Transition Area on UC Property
- Western Transition
- Eastern Transition Area (Clean Imported Fill)
- 1950-1960s Fill
- Fence Line
- Surface Water
- Former Seawall
- Existing Building
- Richmond Field Station Site

Notes:
MFA mercury fulminate area
PCB polychlorinated biphenyls

0 30 60 120
Feet

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Richmond Field Station Site
University of California, Berkeley

FIGURE 5
PROPOSED INVESTIGATION LOCATIONS

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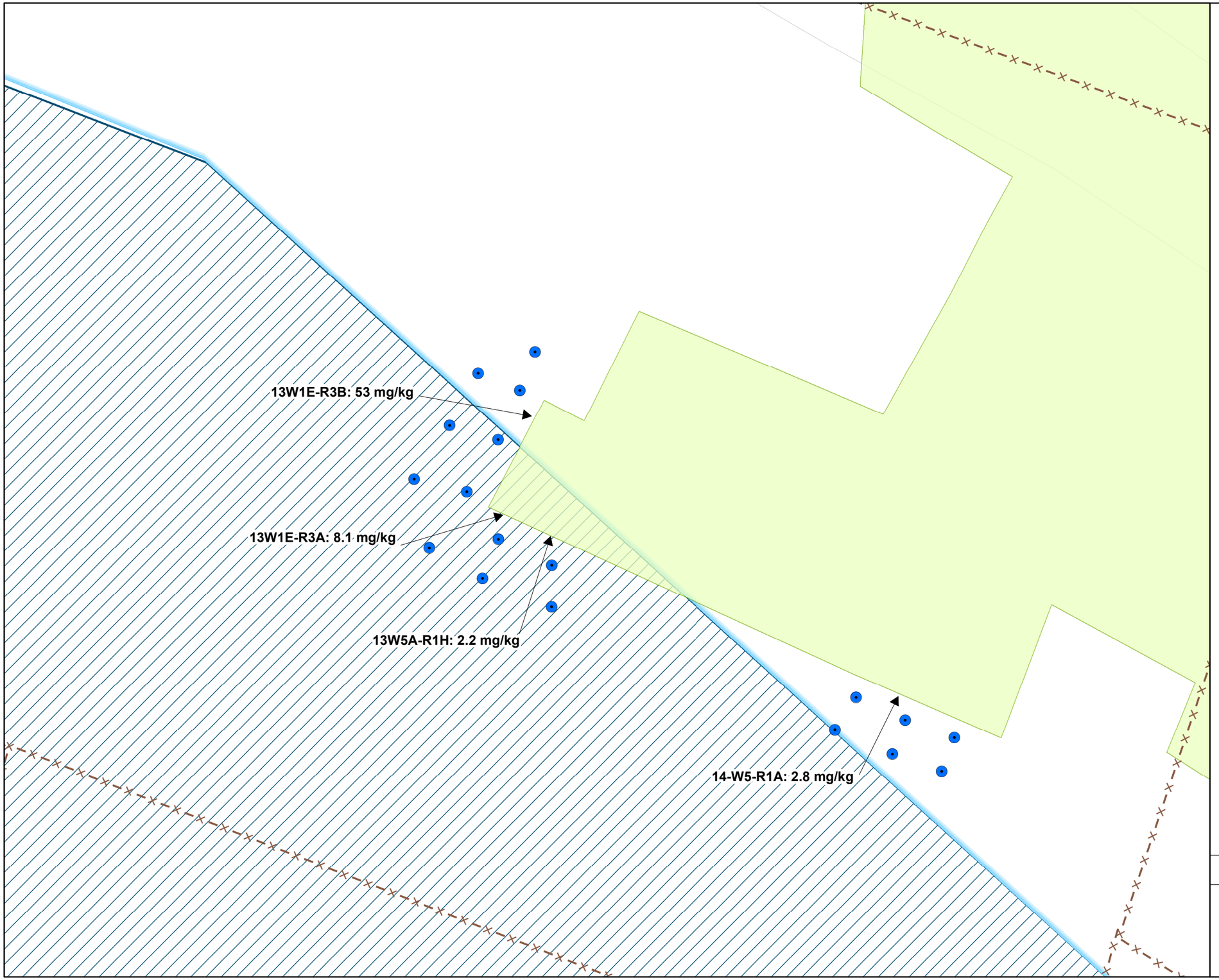

Proposed Location for PCB Samples
MFA Excavation Boundary
Eastern Transition Area (Clean Imported Fill)
Fence Line
Former Seawall

Notes:
mg/kg milligrams per kilogram
PCB polychlorinated biphenyls

N

0 4.5 9 18
Feet

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Richmond Field Station Site
University of California, Berkeley

FIGURE 6
PROPOSED SAMPLE LOCATIONS ADJACENT TO MFA EXCAVATION

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TABLES

Table 1: Sampling Registry

Phase V WTA Sampling

University of California, Berkeley, Richmond Field Station Site

Sample Information				Analysis			
Point Location ID	Sample ID	Sample Date	Depth (feet bgs)	Metals (EPA Method 6020A/ 7400 series)	PAH (EPA Method 8270-SIM)	PCB (EPA Method 8082)	TPH (EPA Method 8015B)
WTA-01	WTA-01-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-01-1.5-2	11/6/2019	1.5 - 2.0	X	X	X	
WTA-02	WTA-02-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-02_1.5-2.0	11/6/2019	1.5 - 2.0	X		X	
WTA-03	WTA-03-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-03-1.5-2	11/6/2019	1.5 - 2.0	X	X	X	
WTA-04	WTA-04-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-04_1.5-2.0	11/6/2019	1.5 - 2.0	X		X	
WTA-05	WTA-05-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-05-1.5-2	11/6/2019	1.5 - 2.0	X	X	X	
	WTA-05_3.5-4.0	11/6/2019	3.5 - 4.0	X			
WTA-06	WTA-06-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-06_1.5-2.0	11/6/2019	1.5 - 2.0	X		X	
WTA-07	WTA-07-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-07-1.5-2	11/6/2019	1.5 - 2.0	X	X	X	
WTA-08	WTA-08-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-08_1.5-2.0	11/6/2019	1.5 - 2.0	X		X	
WTA-09	WTA-09-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-09-1.5-2	11/6/2019	1.5 - 2.0	X	X	X	
	WTA-09_3	11/6/2019	3.0 - 3.0	X			
WTA-10	WTA-10-0-0.5	11/6/2019	0.0 - 0.5	X	X	X	
	WTA-10_1.5-2.0	11/6/2019	1.5 - 2.0	X		X	
WTA-11	WTA-11-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-11-1.5-2	11/7/2019	1.5 - 2.0	X	X	X	
WTA-12	WTA-12-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-12_1.5-2.0	11/7/2019	1.5 - 2.0	X		X	
	WTA-12_3.5-4.0	11/7/2019	3.5 - 4.0	X			
	WTA-12_5.5-6.0	11/7/2019	5.5 - 6.0	X			
WTA-13	WTA-13-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-13-1.5-2	11/7/2019	1.5 - 2.0	X	X	X	
	WTA-13_3.5-4.0	11/7/2019	3.5 - 4.0	X			
WTA-14	WTA-14-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-14_1.5-2.0	11/7/2019	1.5 - 2.0	X		X	
WTA-15	WTA-15-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-15-1.5-2	11/7/2019	1.5 - 2.0	X	X	X	
WTA-16	WTA-16-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-16_1.5-2.0	11/7/2019	1.5 - 2.0	X		X	
	WTA-16_3.5-4.0	11/7/2019	3.5 - 4.0	X			
	WTA-16_5.5-6.0	11/7/2019	5.5 - 6.0	X			

Table 1: Sampling Registry

Phase V WTA Sampling

University of California, Berkeley, Richmond Field Station Site

Sample Information				Analysis			
Point Location ID	**Sample ID**	**Sample Date**	**Depth (feet bgs)**	**Metals (EPA Method 6020A/ 7400 series)**	**PAH (EPA Method 8270-SIM)**	**PCB (EPA Method 8082)**	**TPH (EPA Method 8015B)**
WTA-17	WTA-17-0-0.5	11/7/2019	0.0 - 0.5	X	X	X	
	WTA-17-1.5-2	11/7/2019	1.5 - 2.0	X	X	X	
	WTA-17-7-P	11/7/2019	7.0 - 7.0	X	X	X	X
	WTA-17_3.5-4.0	11/7/2019	3.5 - 4.0	X			
	WTA-17_5.5-6.0	11/7/2019	5.5 - 6.0	X			
WTA-18	WTA-18-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-18_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
WTA-19	WTA-19-0-0.5-T1	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-19-0-0.5-T2	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-19-0-0.5-T3A	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-19-0-0.5-T3B	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-19-0-0.5-T3C	11/8/2019	0.0 - 0.5	X		X	
	WTA-19-1.5-2-T1	11/8/2019	1.5 - 2.0	X	X	X	
	WTA-19-1.5-2-T2	11/8/2019	1.5 - 2.0	X	X	X	
	WTA-19-1.5-2-T3A	11/8/2019	1.5 - 2.0	X	X	X	
	WTA-19-1.5-2-T3B	11/8/2019	1.5 - 2.0	X	X	X	
	WTA-19-1.5-2-T3C	11/8/2019	1.5 - 2.0	X	X	X	
	WTA-19-6.5-P	11/8/2019	6.5 - 6.5	X	X	X	X
	WTA-19_3.5-4.0	11/8/2019	3.5 - 4.0	X			
WTA-20	WTA-20-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-20-6.5-P	11/8/2019	6.5 - 6.5	X	X	X	X
	WTA-20_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
	WTA-20_3.5-4.0	11/8/2019	3.5 - 4.0	X			
	WTA-20_5.5-6.0	11/8/2019	5.5 - 6.0	X			
WTA-21	WTA-21-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-21-1.5-2	11/8/2019	1.5 - 2.0	X	X	X	
WTA-22	WTA-22-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-22_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
WTA-23	WTA-23-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-23-1.5-2	11/8/2019	1.5 - 2.0	X	X	X	
WTA-24	WTA-24-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-24_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
WTA-25	WTA-25-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-25-1.5-2	11/8/2019	1.5 - 2.0	X	X	X	
WTA-26	WTA-26-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-26_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
	WTA-26_3.5	11/8/2019	3.5 - 3.5	X			
WTA-27	WTA-27-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-27-1.5-2	11/8/2019	1.5 - 2.0	X	X	X	

Table 1: Sampling Registry

Phase V WTA Sampling

University of California, Berkeley, Richmond Field Station Site

Sample Information				Analysis			
Point Location ID	**Sample ID**	**Sample Date**	**Depth (feet bgs)**	**Metals (EPA Method 6020A/ 7400 series)**	**PAH (EPA Method 8270-SIM)**	**PCB (EPA Method 8082)**	**TPH (EPA Method 8015B)**
WTA-28	WTA-28-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-28_1.5-2.0	11/8/2019	1.5 - 2.0	X		X	
WTA-29	WTA-29-0-0.5	11/8/2019	0.0 - 0.5	X	X	X	
	WTA-29-1.5-2	11/8/2019	1.5 - 2.0	X	X	X	
WTA-30	WTA-30-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-30-7-P	11/13/2019	7.0 - 7.0	X	X	X	X
	WTA-30_1.5-2.0	11/13/2019	1.5 - 2.0	X		X	
	WTA-30_3.5-4.0	11/13/2019	3.5 - 4.0	X			
	WTA-30_5.5-6.0	11/13/2019	5.5 - 6.0	X			
WTA-31	WTA-31-0-0.5-T1	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-31-0-0.5-T2	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-31-0-0.5-T3A	11/13/2019	0.0 - 0.5	X		X	
	WTA-31-0-0.5-T3B	11/13/2019	0.0 - 0.5	X		X	
	WTA-31-0-0.5-T3C	11/13/2019	0.0 - 0.5	X		X	
	WTA-31-1.5-2-T1	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-31-1.5-2-T2	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-31-1.5-2-T3A	11/13/2019	1.5 - 2.0	X		X	
	WTA-31-1.5-2-T3B	11/13/2019	1.5 - 2.0	X		X	
	WTA-31-1.5-2-T3C	11/13/2019	1.5 - 2.0	X		X	
WTA-32	WTA-32-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-32_1.5-2.0	11/13/2019	1.5 - 2.0	X		X	
WTA-33	WTA-33-0-0.5-T1	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-33-0-0.5-T2	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-33-0-0.5-T3A	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-33-0-0.5-T3B	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-33-0-0.5-T3C	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-33-1.5-2-T1	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-33-1.5-2-T2	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-33-1.5-2-T3A	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-33-1.5-2-T3B	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-33-1.5-2-T3C	11/13/2019	1.5 - 2.0	X	X	X	
WTA-34	WTA-34-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-34_1.5-2.0	11/13/2019	1.5 - 2.0	X		X	
	WTA-34_3.5-4.0	11/13/2019	3.5 - 4.0	X			
	WTA-34_5.5-6.0	11/13/2019	5.5 - 6.0	X			
WTA-35	WTA-35-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-35-1.5-2	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-35_5.5-6.0	11/13/2019	5.5 - 6.0	X			

Table 1: Sampling Registry

Phase V WTA Sampling

University of California, Berkeley, Richmond Field Station Site

Sample Information				Analysis			
Point Location ID	**Sample ID**	**Sample Date**	**Depth (feet bgs)**	**Metals (EPA Method 6020A/ 7400 series)**	**PAH (EPA Method 8270-SIM)**	**PCB (EPA Method 8082)**	**TPH (EPA Method 8015B)**
WTA-36	WTA-36-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-36_1.5-2.0	11/13/2019	1.5 - 2.0	X		X	
WTA-37	WTA-37-0-0.5	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-37_1.5-2.0	11/13/2019	1.5 - 2.0	X		X	
WTA-38	WTA-38-0-0.5-T1	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-38-0-0.5-T2	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-38-0-0.5-T3A	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-38-0-0.5-T3B	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-38-0-0.5-T3C	11/13/2019	0.0 - 0.5	X	X	X	
	WTA-38-1.5-2-T1	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-38-1.5-2-T2	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-38-1.5-2-T3A	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-38-1.5-2-T3B	11/13/2019	1.5 - 2.0	X	X	X	
	WTA-38-1.5-2-T3C	11/13/2019	1.5 - 2.0	X	X	X	

Notes:

bgs	Below ground surface
EPA	U.S. Environmental Protection Agency
ID	Identification
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
TPH	Total petroleum hydrocarbons

TABLE 2: STATISTICAL SUMMARY OF CHEMICALS DETECTED IN SOIL

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Analyte	Detection Frequency	Minimum Detected Result	Average Detected Result	Maximum Detected Result	Location of Maximum Detected Result	Number of Locations with Detected Results	Maintenance Worker Screening Criteria	Number of Samples with Results > Maintenance Worker Screening Criteria	Off-Site Receptors Screening Criteria	Number of Samples with Results > Off-Site Receptors Screening Criteria	Plant Ecological Screening Criteria	Number of Samples with Results > Plant Ecological Screening Criteria	Invertebrates Ecological Screening Criteria	Number of Samples with Results > Invertebrates Ecological Screening Criteria	Bird Ecological Screening Criteria	Number of Samples with Results > Bird Ecological Screening Criteria	Mammal Ecological Screening Criteria	Number of Samples with Results > Mammal Ecological Screening Criteria	Ambient Criteria	Number of Samples with Results > Ambient Criteria
Metals (mg/kg)																				
ANTIMONY	112/130	0.11 J	0.760	7.6	WTA-30	34	2,720	0	NC	-	5	5	78	0	NC	-	0.27	78	NC	-
ARSENIC	130/130	2.3	23.2	550	WTA-20	38	1.58	130	745	0	18	14	60	5	43	5	46	5	16	18
BARIUM	130/130	47.8	207	657	WTA-30	38	52,600	0	686,000	0	500	2	330	9	NC	-	2,000	0	NC	-
BERYLLIUM	130/130	0.15 J	0.517	0.95	WTA-31	38	128	0	1,330	0	10	0	40	0	NC	-	21	0	NC	-
CADMIUM	98/130	0.035 J	1.47	36	WTA-19	29	73	0	762	0	32	1	140	0	0.77	33	0.36	65	NC	-
CHROMIUM	130/130	33.4	64.0	227	WTA-30	38	100,000	0	NC	-	1	130	0.4	130	NC	-	130	2	NC	-
COBALT	130/130	3.1	16.2	96	WTA-30	38	34.1	6	356	0	13	70	NC	-	120	0	230	0	73	1
COPPER	130/130	14.1	222	5,570	WTA-12	38	100,000	0	NC	-	70	57	80	43	28	116	49	88	NC	-
LEAD	130/130	5.4	53.6	515	WTA-30	38	320	5	NC	-	120	13	1,700	0	11	120	56	21	NC	-
MERCURY	124/124	0.041 J	33.0	3,500	WTA-30	38	990	1	412,000	0	0.3	97	0.1	117	3	39	4.95	27	NC	-
MOLYBDENUM	130/130	0.12 J	1.74	38	WTA-17	38	34,000	0	NC	-	2	16	NC	-	NC	-	NC	-	NC	-
NICKEL	130/130	25.8	77.6	550	WTA-33	38	1,180	0	12,300	0	38	124	280	1	210	1	130	9	280	1
SELENIUM	112/130	0.27 J	1.14	14	WTA-20	37	33,500	0	27,400,000	0	0.52	85	4.1	3	1.2	26	0.63	71	NC	-
SILVER	119/130	0.059 J	2.50	171	WTA-30	38	34,000	0	NC	-	560	0	NC	-	4.2	8	14	4	NC	-
THALLIUM	114/130	0.051 J	0.218	3.8	WTA-17	37	68	0	NC	-	1	3	NC	-	NC	-	NC	-	NC	-
VANADIUM	130/130	17	46.6	176	WTA-05	38	34,000	0	NC	-	2	130	NC	-	7.8	130	280	0	NC	-
ZINC	130/130	20.2	294	7,200	WTA-19	38	100,000	0	NC	-	160	33	120	57	46	121	79	103	NC	-
Polycyclic aromatic hydrocarbon (mg/kg)																				
ACENAPHTHENE	5/86	0.0046 J	0.0255	0.052	WTA-33	2	100,000	0	NC	-	20	0	NC	-	NC	-	NC	-	NC	-
ACENAPHTHYLENE	9/86	0.015 J	0.0886	0.4	WTA-33	6	100,000	0	NC	-	20	0	NC	-	NC	-	NC	-	NC	-
ANTHRACENE	15/86	0.0067 J	0.0572	0.34	WTA-33	9	100,000	0	NC	-	20	0	NC	-	NC	-	NC	-	NC	-
BENZO(A)ANTHRACENE	56/86	0.0033 J	0.136	1.7 J	WTA-30	29	5.87	0	11,500	0	NC	-	NC	-	NC	-	NC	-	NC	-
BENZO(A)PYRENE	53/86	0.0063 J	0.112	1.2	WTA-33	28	0.963	1	1,150	0	NC	-	NC	-	NC	-	NC	-	NC	-
BENZO(B)FLUORANTHENE	70/86	0.0046 J	0.168	2	WTA-33	33	5.87	0	11,500	0	NC	-	NC	-	NC	-	NC	-	NC	-
BENZO(G,H,I)PERYLENE	52/86	0.0077 J	0.0766	0.66	WTA-33	25	75,600	0	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
BENZO(K)FLUORANTHENE	26/86	0.0066 J	0.0909	0.68	WTA-33	16	5.87	0	11,500	0	NC	-	NC	-	NC	-	NC	-	NC	-
CHRYSENE	63/86	0.0034 J	0.189	2.7 J	WTA-30	30	58.7	0	115,000	0	NC	-	NC	-	NC	-	NC	-	NC	-
DIBENZ(A,H)ANTHRACENE	12/86	0.011 J	0.101	0.37	WTA-26	9	0.963	0	2,670	0	NC	-	NC	-	NC	-	NC	-	NC	-
FLUORANTHENE	65/86	0.0034 J	0.181	4.7	WTA-33	31	100,000	0	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
FLUORENE	11/86	0.0072 J	0.0690	0.46	WTA-33	5	100,000	0	NC	-	20	0	30	0	NC	-	NC	-	NC	-
INDENO(1,2,3-CD)PYRENE	33/86	0.0059 J	0.0882	0.66	WTA-33	18	5.87	0	11,500	0	NC	-	NC	-	NC	-	NC	-	NC	-
NAPHTHALENE	22/86	0.0042 J	0.0803	1	WTA-33	12	450	0	3.57	0	NC	-	NC	-	NC	-	NC	-	NC	-
PHENANTHRENE	58/86	0.011 J	0.214	5.8	WTA-33	30	100,000	0	NC	-	20	0	NC	-	NC	-	NC	-	NC	-
PYRENE	71/86	0.0045 J	0.186	3.6	WTA-33	33	75,600	0	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
BAP EQ (EPA)	71/86	0.000680	0.132	1.79	WTA-33	33	0.96	3	1,150	0	NC	-	NC	-	NC	-	NC	-	0.4	6
PCBs (mg/kg)																				
AROCLOR-1248	81/112	0.075 J	6.08	250	WTA-20	33	3.5	7	5,620	0	NC	-	NC	-	NC	-	NC	-	NC	-
AROCLOR-1254	57/112	0.09 J	1.47	16	WTA-23	31	3.5	4	5,620	0	40	0	NC	-	NC	-	NC	-	NC	-
AROCLOR-1260	32/112	0.061 J+	0.611	2.5	WTA-31	13	3.5	0	5,620	0	NC	-	NC	-	NC	-	NC	-	NC	-
TOTAL AROCLOR	83/112	0.0750	7.18	250	WTA-20	33	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-

TABLE 2: STATISTICAL SUMMARY OF CHEMICALS DETECTED IN SOIL (Continued)

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Analyte	Detection Frequency	Minimum Detected Result	Average Detected Result	Maximum Detected Result	Location of Maximum Detected Result	Number of Locations with Detected Results	Maintenance Worker Screening Criteria	Number of Samples with Results > Maintenance Worker Screening Criteria	Off-Site Receptors Screening Criteria	Number of Samples with Results > Off-Site Receptors Screening Criteria	Plant Ecological Screening Criteria	Number of Samples with Results > Plant Ecological Screening Criteria	Invertebrates Ecological Screening Criteria	Number of Samples with Results > Invertebrates Ecological Screening Criteria	Bird Ecological Screening Criteria	Number of Samples with Results > Bird Ecological Screening Criteria	Mammal Ecological Screening Criteria	Number of Samples with Results > Mammal Ecological Screening Criteria	Ambient Criteria	Number of Samples with Results > Ambient Criteria
Total Petroleum Hydrocarbons (TPH) (mg/kg)																				
Diesel/Motor Oil Range (extractables)																				
DIESEL RANGE ORGANICS	4/4	240 Y	493	830 Y	WTA-19	4	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
MOTOR OIL RANGE	4/4	770	1,160	1,500	WTA-19, WTA-30	4	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-
Gasoline Range (purgeables)																				
GASOLINE RANGE ORGANICS	2/4	0.2 J	0.215	0.23 J	WTA-30	2	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-	NC	-

Notes: Human Health and Ambient Screening Criteria based on Final Soil Management Plan, Revision 1, dated April 12, 2017

Ecological Screening Criteria are based on the Final Phase IV Sampling Results Technical Memorandum, dated May 16, 2016

Risk-based concentrations are shown with three significant figures, except where the default value of 100,000 mg/kg applies (where calculated value exceeds 100,000 mg/kg).

-	Not available
BAP (EQ)	Benzo(a)pyrene equivalent
EPA	U.S. Environmental Protection Agency
J	Estimated value
mg/kg	Milligrams per kilogram
NC	No criteria
PCB	Polychlorinated biphenyl
TPH	Total petroleum hydrocarbons
Y	Chromatographic pattern resembles hydrocarbon fuel pattern and was quantitated using the standard it resembled most

Table 3: Soil Detected Metals Compared to Human Health Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Category I Criteria				109	16	2,110	29	68.1	100,000	73	10,900	320	77	1,360	280	1,340	1,360	2.72	1,360	81,600
Category II On-Site Management Criteria				1,090	16	21,100	290	681	100,000	199	100,000	800	187	13,600	606	13,400	13,600	27.2	13,600	100,000
Maintenance Worker Screening Criteria				2,720	1.58	52,600	128	73	100,000	34.1	100,000	320	990	34,000	1,180	33,500	34,000	68	34,000	100,000
Off-Site Receptors Screening Criteria				-	745	686,000	1,330	762	-	356	-	-	412,000	-	12,300	27,400,000	-	-	-	-
Background Level				-	16	-	-	-	-	73	-	-	-	-	280	-	-	-	-	-
WTA-01-0-0.5	WTA-01	0.0 - 0.5	MG/KG	0.3 UJ	8.7	83	0.28 J	0.93 UJ	51	11	65 J+	17	1.2	0.5 J	53	0.69 J	0.16 J	0.34 U	38	100 J-
WTA-01-1.5-2	WTA-01	1.5 - 2.0	MG/KG	0.33 UJ	9.9	100	0.41 J	0.75 UJ	53	11	79	19	3.1	0.74	54	0.71 J	0.26 J	0.11 J	40	120
WTA-02-0-0.5	WTA-02	0.0 - 0.5	MG/KG	0.16 UJ	5	80	0.28 J	0.48 UJ	47	8.5	54	15	1.4	0.35 J	47	0.51 J	0.13 J	0.33 U	37	93
WTA-02_1.5-2.0	WTA-02	1.5 - 2.0	MG/KG	0.6	6.8	129	0.45 J	0.29	40.1	9.4	48	13.9	5.5	1.4	43.2	1.4	0.13	0.53	30.4	72.6
WTA-03-0-0.5	WTA-03	0.0 - 0.5	MG/KG	0.16 UJ	7.2	110	0.39 J	0.94 UJ	60	10	36	12	0.45	0.44 J	69	0.59 J	0.64 U	0.32 U	46	65
WTA-03-1.5-2	WTA-03	1.5 - 2.0	MG/KG	0.21 UJ	6.5	180	0.49 J	0.44 UJ	65	14	150	20	0.59	0.48 J	70	0.57 J	0.17 J	0.1 J	46	110
WTA-04-0-0.5	WTA-04	0.0 - 0.5	MG/KG	3.3	*21*	200	0.51 J	1.2	54	13	120	170	9.7	0.87	71	1.5 J	0.6 J	0.18 J	45	1,300
WTA-04_1.5-2.0	WTA-04	1.5 - 2.0	MG/KG	0.43	8.6	501	0.56 J	0.31	45.6	70	27.4	18.2	0.84	1.2	77.1	1.9	0.13	0.25	50.9	51
WTA-05-0-0.5	WTA-05	0.0 - 0.5	MG/KG	0.54 UJ	*18*	160	0.57 J	1.1	60	13	100	34	19	1	63	1.2 J	0.37 J	0.16 J	47	190
WTA-05-1.5-2	WTA-05	1.5 - 2.0	MG/KG	0.3 UJ	11	160	0.58 J	0.48 UJ	62	11	160	19	7.3	0.44 J	58	0.94 J	0.31 J	0.12 J	47	91
WTA-05_3.5-4.0	WTA-05	3.5 - 4.0	MG/KG	0.69	9.9	158	0.46 J	0.86	40.1	14.5	163	150	27.5	1.7	147	1.5	0.32	0.16	176	191
WTA-06-0-0.5	WTA-06	0.0 - 0.5	MG/KG	0.089 UJ	4.3	49	0.21 J	0.18 UJ	44	6.8	24	7.6	0.27	0.19 J	42	0.57 J	0.67 U	0.34 U	31	45
WTA-06_1.5-2.0	WTA-06	1.5 - 2.0	MG/KG	0.13 J	3.6	47.8	0.21 J	0.12	38.4	5.5	19.5	8.4	0.31	0.5	33.7	0.93	0.091 J	0.054 J	30	34.4
WTA-07-0-0.5	WTA-07	0.0 - 0.5	MG/KG	0.23 UJ	9.1	130	0.54 J	0.72 UJ	38	8.5	89	19	1.8	0.49 J	48	0.86 J	0.38 J	0.13 J	32	150
WTA-07-1.5-2	WTA-07	1.5 - 2.0	MG/KG	0.14 UJ	5.7	140	0.55 J	0.35 UJ	66	9.9	26	7.8	0.54	0.17 J	66	0.65 J	0.69 U	0.094 J	42	45
WTA-08-0-0.5	WTA-08	0.0 - 0.5	MG/KG	0.49 UJ	15	160	0.51 J	1 UJ	70	13	110	35	6.5	0.79	72	1.1 J	0.45 J	0.15 J	45	180
WTA-08_1.5-2.0	WTA-08	1.5 - 2.0	MG/KG	0.46	11.9	118	0.43 J	0.64	58.7	10.2	1,320	19.1	3.2	1.4	54.2	1.8	1.7	0.12	42.3	116
WTA-09-0-0.5	WTA-09	0.0 - 0.5	MG/KG	0.36 UJ	13	79	0.35 J	0.79 UJ	60	12	74	30	1.7	0.52 J	61	1.3 J	0.3 J	0.36 U	49	130
WTA-09-1.5-2	WTA-09	1.5 - 2.0	MG/KG	0.42 UJ	16	96	0.26 J	0.63 UJ	50	9.3	100	110	1.2	0.38 J	65	0.79 J	0.19 J	0.34 J	44	130
WTA-09_3	WTA-09	3.0 - 3.0	MG/KG	0.28	10.4	92.8	0.37 J	0.29	37.1	8.6	48.7	12.6	7.9	0.64	35.2	1.3	0.16	0.097 J	34.1	64.6
WTA-10-0-0.5	WTA-10	0.0 - 0.5	MG/KG	0.23 UJ	8.1	110	0.46 J	0.45 UJ	67	13	53	18	1.6	0.47 J	77	0.9 J	0.15 J	0.35 U	48	88
WTA-10_1.5-2.0	WTA-10	1.5 - 2.0	MG/KG	0.24	7.8	82.5	0.33 J	0.36	49.3	9.5	52.7	15.6	1.1	0.62	48.7	1.5	0.19	0.11	40.8	83.1
WTA-11-0-0.5	WTA-11	0.0 - 0.5	MG/KG	0.35 UJ	16	200	0.64 J	0.78 UJ	65	17	88	30	5.5	0.69	71	1.3 J	0.34 J	0.17 J	56	160
WTA-11-1.5-2	WTA-11	1.5 - 2.0	MG/KG	0.48 UJ	7.5	160	0.62 J	0.54 UJ	49	12	51	34	4.1	0.42 J	40	0.74 J	0.17 J	0.093 J	45	110
WTA-12-0-0.5	WTA-12	0.0 - 0.5	MG/KG	0.35 UJ	8.9	160	0.5 J	0.57 UJ	62	13	72	48	1.5	0.69	59	0.99 J	0.25 J	0.099 J	48	130
WTA-12_1.5-2.0	WTA-12	1.5 - 2.0	MG/KG	0.75	6	124	0.28 J	0.12	72	8.2	33.4	8.4	0.13	0.99	69.3	1.1	0.096 J	0.077 J	36	42.3
WTA-12_3.5-4.0	WTA-12	3.5 - 4.0	MG/KG	2.9	*27.5*	305	0.54 J	1.1	67.9	14.8	5,570	469	0.43	1.5	95.5	2	1.4	0.12	46.7	2,220
WTA-12_5.5-6.0	WTA-12	5.5 - 6.0	MG/KG	2.1	*40.1*	377	0.47 J	2.5	64.5	12.7	1,370	384	1.1	2.2	103	1.9	8.5	0.13	43	1,650
WTA-13-0-0.5	WTA-13	0.0 - 0.5	MG/KG	0.54 J-	6.8	160 J+	0.55 J	0.96	59	13	44	54	0.22	0.57 J	55	0.71 UJ	0.23 J	0.15 J	44	300
WTA-13-1.5-2	WTA-13	1.5 - 2.0	MG/KG	0.3 J	4.6	190	0.53 J	0.38 J	54	16	22	15	0.14	0.37 J	52	0.47 UJ	0.69 U	0.11 J	39	43
WTA-13_3.5-4.0	WTA-13	3.5 - 4.0	MG/KG	0.32	5.4	239	0.41 J	0.23	43.5	7.4	19.2	6.1	0.049 J	0.43	40.1	1.3	0.059 J	0.13	35.2	34.7
WTA-14-0-0.5	WTA-14	0.0 - 0.5	MG/KG	0.75 J	*18*	210	0.54 J	1.6	65	15	76	37	0.3 J+	0.6 J	66	0.72 UJ	1.1	0.2 J	52	250
WTA-14_1.5-2.0	WTA-14	1.5 - 2.0	MG/KG	0.13 J	3.1	123	0.56 J	0.035 J	42.3	7.8	16.7	5.4	0.041 J	0.3	31.9	1.1	0.08 J	0.089 J	30.6	24.3
WTA-15-0-0.5	WTA-15	0.0 - 0.5	MG/KG	0.33 J	6.9	160	0.5 J	0.49 J	50	9.1	45	28	0.4	0.37 J	48	0.6 UJ	0.2 J	0.12 J	40	90
WTA-15-1.5-2	WTA-15	1.5 - 2.0	MG/KG	0.14 J	5.6	180	0.54 J	0.31 J	49	14	27	12	0.27	0.27 J	57	0.64 UJ	0.72 U	0.36 U	42	57

Table 3: Soil Detected Metals Compared to Human Health Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Category I Criteria				109	16	2,110	29	68.1	100,000	73	10,900	320	77	1,360	280	1,340	1,360	2.72	1,360	81,600
Category II On-Site Management Criteria				1,090	16	21,100	290	681	100,000	199	100,000	800	187	13,600	606	13,400	13,600	27.2	13,600	100,000
Maintenance Worker Screening Criteria				2,720	1.58	52,600	128	73	100,000	34.1	100,000	320	990	34,000	1,180	33,500	34,000	68	34,000	100,000
Off-Site Receptors Screening Criteria				-	745	686,000	1,330	762	-	356	-	-	412,000	-	12,300	27,400,000	-	-	-	-
Background Level				-	16	-	-	-	-	73	-	-	-	-	280	-	-	-	-	-
WTA-16-0-0.5	WTA-16	0.0 - 0.5	MG/KG	0.21 J	4.3	160	0.53 J	0.38 J	75	9.4	29	25	0.15	0.27 J	66	0.52 UJ	0.11 J	0.33 U	44	88
WTA-16_1.5-2.0	WTA-16	1.5 - 2.0	MG/KG	0.12 J	3.7	147	0.6 J	0.17	36.7	13.8	19.4	14.1	0.16	0.38	36.3	2	0.085 J	0.055 J	72.2	62
WTA-16_3.5-4.0	WTA-16	3.5 - 4.0	MG/KG	0.18 J	5.5	145	0.52 J	0.16	49.1	20.7	22.1	16.2	0.08 J	0.47	60.7	1.8	0.094 J	0.063 J	75.6	56.6
WTA-16_5.5-6.0	WTA-16	5.5 - 6.0	MG/KG	3.6	*204*	325	0.38 J	4.2	43.7	17.6	958	351	28.7	10	45.2	3.1	1.1	1	45.7	1,790
WTA-17-0-0.5	WTA-17	0.0 - 0.5	MG/KG	0.22 J	6.8	180	0.5 J	0.4 J	52	11	51	19	1.4	0.58 J	55	0.35 UJ	0.23 J	0.096 J	40	77
WTA-17-1.5-2	WTA-17	1.5 - 2.0	MG/KG	0.48 J	12	220	0.59 J	0.65 J	52	21	75	48	5.1	0.6 J	58	0.82 UJ	0.21 J	0.23 J	44	130
WTA-17-7-P	WTA-17	7.0 - 7.0	MG/KG	5.5	*340*	100	0.15 J	13	39	18	3,300	200	69	38	65	5.7	6.3	3.8	33	3,300
WTA-17_3.5-4.0	WTA-17	3.5 - 4.0	MG/KG	0.41	7.5	162	0.59 J	0.32	49	12.4	38.4	18.6	0.31	0.73	51.8	1.8	0.14	0.13	41	84.9
WTA-17_5.5-6.0	WTA-17	5.5 - 6.0	MG/KG	0.31	7.2	137	0.47 J	0.24	45.6	10.8	31.6	19.2	0.28	0.51	48.4	1.5	0.13	0.097 J	39.1	67.3
WTA-18-0-0.5	WTA-18	0.0 - 0.5	MG/KG	0.43 J	6.2	180	0.54 J	0.69	66	12	43	47	0.31	0.38 J	58	0.61 UJ	0.18 J	0.09 J	44	120
WTA-18_1.5-2.0	WTA-18	1.5 - 2.0	MG/KG	0.58	5.3	157	0.41 J	0.3	40.4	33	29.2	30.8	0.22	0.39	44.6	1.1	0.31	0.091 J	30.2	81.9
WTA-19-0-0.5-T1	WTA-19	0.0 - 0.5	MG/KG	0.42 J	6	200	0.59 J	0.66 J	61	12	71	58	0.29	0.34 J	62	0.81 UJ	1.5	0.094 J	45	180
WTA-19-0-0.5-T2	WTA-19	0.0 - 0.5	MG/KG	0.44 J	8.4	470	0.61 J	0.74	61	40	71	51	0.2	0.84	130	0.8 UJ	1.2	0.14 J	54	160
WTA-19-0-0.5-T3A	WTA-19	0.0 - 0.5	MG/KG	0.38 J	6.1	240	0.57 J	0.62 J	61	23	67	46	0.24	0.34 J	75	0.72 UJ	1.4	0.09 J	44	150
WTA-19-0-0.5-T3B	WTA-19	0.0 - 0.5	MG/KG	0.4 J	6.3	190	0.55 J	0.63	64	12	60	48	0.3	0.28 J	62	0.71 UJ	1.1	0.092 J	46	140
WTA-19-0-0.5-T3C	WTA-19	0.0 - 0.5	MG/KG	0.56 J	7	200	0.55 J	0.68	63	12	74	55	0.25	0.33 J	62	0.67 UJ	2	0.099 J	44	180
WTA-19-1.5-2-T1	WTA-19	1.5 - 2.0	MG/KG	0.27 J	7.3	170	0.41 J	0.35 J	54	13	120	13	0.1	0.41 J	57	2.2 U	0.96	0.36 U	52	100
WTA-19-1.5-2-T2	WTA-19	1.5 - 2.0	MG/KG	0.21 J	9.4	250	0.77	0.46 J	68	15	28	11	0.086	0.5 J	79	0.73 UJ	0.68 U	0.096 J	67	52
WTA-19-1.5-2-T3A	WTA-19	1.5 - 2.0	MG/KG	0.23 J	6.8	220	0.49 J	0.49 J	64	13	52	18	0.13	0.3 J	68	0.88 UJ	1	0.34 U	52	120
WTA-19-1.5-2-T3B	WTA-19	1.5 - 2.0	MG/KG	0.29 J	7.3	220	0.51 J	0.51 UJ	59	14	39	12	0.11	0.31 J	67	2.2 U	0.51 J	0.37 U	47	82
WTA-19-1.5-2-T3C	WTA-19	1.5 - 2.0	MG/KG	0.25 J	6.5	230	0.42 J	0.48 UJ	55	14	49	20	0.1	0.32 J	68	0.3 J	1.6	0.088 J	41	110
WTA-19-6.5-P	WTA-19	6.5 - 6.5	MG/KG	5.8 J-	*500*	120	0.31 J	36	69	12	2,000	260 J-	57	24	52	9.6	4.8	2	53	7,200
WTA-19_3.5-4.0	WTA-19	3.5 - 4.0	MG/KG	0.26	9.2	196	0.44 J	0.15	46.4	13.5	24.7	7.5	0.086 J	0.52	56.7	0.94	0.11	0.3	43.7	49.5
WTA-20-0-0.5	WTA-20	0.0 - 0.5	MG/KG	0.27 J	8	130	0.43 J	0.73 UJ	63	11	72	24	2.6	0.59 J	61	0.45 J	0.33 J	0.11 J	40	150
WTA-20-6.5-P	WTA-20	6.5 - 6.5	MG/KG	5.8	*550*	250	0.54 J	19	96	21	2,800	440	110	12	81	14	5.7	2.6	76	3,700
WTA-20_1.5-2.0	WTA-20	1.5 - 2.0	MG/KG	0.28	8.1	148	0.42 J	0.38	53	11.3	49.9	20	3.3	0.79	65.4	1.3	0.29	0.15	37.2	97.3
WTA-20_3.5-4.0	WTA-20	3.5 - 4.0	MG/KG	0.31	8.9	170	0.43 J	0.26	44.3	12.2	39	17.6	1.2	0.52	55.2	1.2	0.35	0.12	40.1	70.2
WTA-20_5.5-6.0	WTA-20	5.5 - 6.0	MG/KG	0.36	9.4	418	0.55 J	0.43	47.8	53.1	32.2	16.9	0.82	0.78	75	1	0.27	0.17	49	85.1
WTA-21-0-0.5	WTA-21	0.0 - 0.5	MG/KG	0.28 J	9.6	200	0.64	0.59 UJ	97	18	88	28	1.4	0.5 J	110	0.58 J	0.5 J	0.14 J	62	210
WTA-21-1.5-2	WTA-21	1.5 - 2.0	MG/KG	0.64 J	8.7	200	0.45 J	0.69 UJ	57	15	100	64	0.29 J-	0.5 J	58	0.37 J	0.27 J	0.11 J	39	150
WTA-22-0-0.5	WTA-22	0.0 - 0.5	MG/KG	0.8 J	10	230	0.49 J	2.2	63	13	380	150	3.4	1.5	64	0.42 J	17	0.15 J	45	490
WTA-22_1.5-2.0	WTA-22	1.5 - 2.0	MG/KG	2.3	*43*	230	0.29 J	1.7	33.4	9.2	821	315	13.3	5.1	40.2	1.5	15.5	0.34	28.5	556
WTA-23-0-0.5	WTA-23	0.0 - 0.5	MG/KG	0.23 J	4.9	220	0.6 J	0.62 UJ	58	13	66	28	0.97	0.33 J	56	0.38 J	1.9	0.34 U	38	89
WTA-23-1.5-2	WTA-23	1.5 - 2.0	MG/KG	0.19 J	4.1	220	0.66 J	0.64 UJ	60	14	54	24	13	0.32 J	60	0.39 J	1.1	0.37 U	37	99
WTA-24-0-0.5	WTA-24	0.0 - 0.5	MG/KG	0.24 J	6.6	190	0.55 J	0.54 UJ	57	15	57	23	0.48	0.35 J	67	0.35 J	0.31 J	0.099 J	43	81

Table 3: Soil Detected Metals Compared to Human Health Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Category I Criteria				109	16	2,110	29	68.1	100,000	73	10,900	320	77	1,360	280	1,340	1,360	2.72	1,360	81,600
Category II On-Site Management Criteria				1,090	16	21,100	290	681	100,000	199	100,000	800	187	13,600	606	13,400	13,600	27.2	13,600	100,000
Maintenance Worker Screening Criteria				2,720	1.58	52,600	128	73	100,000	34.1	100,000	320	990	34,000	1,180	33,500	34,000	68	34,000	100,000
Off-Site Receptors Screening Criteria				-	745	686,000	1,330	762	-	356	-	-	412,000	-	12,300	27,400,000	-	-	-	-
Background Level				-	16	-	-	-	-	73	-	-	-	-	280	-	-	-	-	-
WTA-24_1.5-2.0	WTA-24	1.5 - 2.0	MG/KG	0.22	5.3	104	0.35 J	0.18	41.3	8.4	36.4	14	0.46	0.26	40.9	1	0.23	0.094 J	27.3	50.9
WTA-25-0-0.5	WTA-25	0.0 - 0.5	MG/KG	0.36 J	9.6	200	0.56 J	0.64 UJ	54	15	130	36	1.6	0.8	65	0.64 J	0.26 J	0.16 J	43	110
WTA-25-1.5-2	WTA-25	1.5 - 2.0	MG/KG	0.11 J	3.9	200	0.61 J	0.25 UJ	53	11	21	8.5	0.21	0.17 J	53	0.41 J	0.74 U	0.1 J	39	38
WTA-26-0-0.5	WTA-26	0.0 - 0.5	MG/KG	0.19 J	4.8	170	0.43 J	0.35 UJ	51	11	40	23	1.8	0.35 J	49	0.37 J	0.91	0.31 U	40	87
WTA-26_1.5-2.0	WTA-26	1.5 - 2.0	MG/KG	0.29	7.8	215	0.41 J	0.32	37.8	14.2	47.3	16.3	0.71	0.98	64.4	0.91	0.24	0.12	32.4	70.1
WTA-26_3.5	WTA-26	3.5 - 3.5	MG/KG	0.27	7.8	148	0.51 J	0.31	47.8	10.7	44.4	23.4	0.47	0.42	60.3	0.96	2	0.1	33.2	155
WTA-27-0-0.5	WTA-27	0.0 - 0.5	MG/KG	0.2 J	8.4	200	0.5 J	0.4 UJ	56	22	43	16	0.57	0.5 J	82	0.53 J	0.15 J	0.12 J	35	86
WTA-27-1.5-2	WTA-27	1.5 - 2.0	MG/KG	0.27 J	9.2	300	0.52 J	0.48 UJ	81	17	55	22	0.54	0.67 J	110	0.44 J	0.22 J	0.13 J	44	110
WTA-28-0-0.5	WTA-28	0.0 - 0.5	MG/KG	0.33 J	13	240	0.59 J	0.64 UJ	57	15	100	31	5.5	0.46 J	59	0.73 J	1.9	0.12 J	51	130
WTA-28_1.5-2.0	WTA-28	1.5 - 2.0	MG/KG	0.33	6	135	0.34 J	0.31	36.1	7.9	46.6	17.2	5.2	0.33	31.7	0.89	0.46	0.1	31.9	52.2
WTA-29-0-0.5	WTA-29	0.0 - 0.5	MG/KG	0.36 J	14	170	0.53 J	0.69 UJ	48	14	79	31	4.3	0.62 J	59	0.77 J	0.53 J	0.13 J	44	140
WTA-29-1.5-2	WTA-29	1.5 - 2.0	MG/KG	0.67 J	10	280	0.54 J	0.66 UJ	54	14	120	92	2.3	1.2	54	0.63 J	2.2	0.12 J	44	190
WTA-30-0-0.5	WTA-30	0.0 - 0.5	MG/KG	0.57 J-	7.5	210 J-	0.66 J	0.58 J	99 J+	16	68 J-	34 J-	0.37 J	0.8	110 J+	0.5 J	0.21 J	0.17 J	57	140 J-
WTA-30-7-P	WTA-30	7.0 - 7.0	MG/KG	2.3 J	*150*	300	0.59 J	4.2	58	*96*	670	250	3,500	3	130	0.92 J	17	0.21 J	49	850
WTA-30_1.5-2.0	WTA-30	1.5 - 2.0	MG/KG	0.32	4.3	157	0.42 J	0.24	44	7.3	68.4	26.5	0.68	0.28	49	0.83	0.23	0.11	29.7	98.4
WTA-30_3.5-4.0	WTA-30	3.5 - 4.0	MG/KG	0.47	7.1	218	0.49 J	0.41	41.7	15.3	102	58.8	6.6	1.1	51	1.1	0.91	0.14	35.9	116
WTA-30_5.5-6.0	WTA-30	5.5 - 6.0	MG/KG	7.6	14.7	657	0.39 J	3.5	227	13.7	1,390	515	8	5.9	158	1.9	171	0.14	35.9	1,070
WTA-31-0-0.5-T1	WTA-31	0.0 - 0.5	MG/KG	0.51 J	12	150	0.6 J	0.81	73	13	230	18	1.1	0.74	80	0.45 J	0.4 J	0.17 J	57	200
WTA-31-0-0.5-T2	WTA-31	0.0 - 0.5	MG/KG	0.28 J	7.9	120	0.44 J	0.36 J	70	12	58	14	1.3	0.51 J	76	0.45 J	0.13 J	0.11 J	50	84
WTA-31-0-0.5-T3A	WTA-31	0.0 - 0.5	MG/KG	0.27 J	7.9	120	0.48 J	0.33 J	87	14	45	15	NA	0.6 J	100	0.65 J	0.15 J	0.1 J	52	83
WTA-31-0-0.5-T3B	WTA-31	0.0 - 0.5	MG/KG	0.23 J	7.1	120	0.43 J	0.36 J	73	13	41	18	NA	0.43 J	79	0.45 J	0.13 J	0.098 J	50	79
WTA-31-0-0.5-T3C	WTA-31	0.0 - 0.5	MG/KG	0.25 J	7.2	120	0.44 J	0.35 J	76	13	46	15	NA	0.43 J	83	0.82 J	0.12 J	0.099 J	54	82
WTA-31-1.5-2-T1	WTA-31	1.5 - 2.0	MG/KG	0.28 J	6.8	230	0.66 J	0.38 J	97	21	56	15	1.5	0.48 J	120	0.46 J	0.73 U	0.13 J	57	78
WTA-31-1.5-2-T2	WTA-31	1.5 - 2.0	MG/KG	0.4 J	15	270	0.95	0.51 J	120	35	83	29	2.7	1.3	150	1.3 J	0.16 J	0.17 J	87	140
WTA-31-1.5-2-T3A	WTA-31	1.5 - 2.0	MG/KG	0.27 J	7.9	180	0.56 J	0.32 J	110	16	57	15	NA	0.52 J	130	0.45 J	0.14 J	0.11 J	62	110
WTA-31-1.5-2-T3B	WTA-31	1.5 - 2.0	MG/KG	0.27 J	7.1	210	0.61 J	0.29 J	93	17	56	14	NA	0.41 J	100	0.33 J	0.11 J	0.13 J	55	80
WTA-31-1.5-2-T3C	WTA-31	1.5 - 2.0	MG/KG	0.2 J	7.4	190	0.67 J	0.27 J	100	13	51	13	NA	0.42 J	80	0.29 J	0.7 U	0.35 U	52	84
WTA-32-0-0.5	WTA-32	0.0 - 0.5	MG/KG	0.45 J	7.7	200	0.55 J	0.53 J	60	19	90	32	4	0.33 J	59	0.42 J	0.16 J	0.14 J	59	120
WTA-32_1.5-2.0	WTA-32	1.5 - 2.0	MG/KG	0.41	10	234	0.47 J	0.77	70.6	18	46.1	18.6	0.4	0.79	97.8	1.2	0.23	0.13	37.5	263
WTA-33-0-0.5-T1	WTA-33	0.0 - 0.5	MG/KG	0.28 J	8.9	240	0.56 J	0.57 J	95	25	41	14	0.49	0.55 J	120	0.37 J	0.61 U	0.13 J	50	150
WTA-33-0-0.5-T2	WTA-33	0.0 - 0.5	MG/KG	0.47 J	12	280	0.59 J	0.55 J	76	16	67	26	1.5	0.57 J	85	0.55 J	0.21 J	0.15 J	50	110
WTA-33-0-0.5-T3A	WTA-33	0.0 - 0.5	MG/KG	0.58 J	15	390	0.59 J	0.78	62	16	69	27	1.5	1.4	110	0.8 J	0.22 J	0.24 J	51	120
WTA-33-0-0.5-T3B	WTA-33	0.0 - 0.5	MG/KG	0.48 J	13	370	0.52 J	0.68 J	71	23	57	24	1.3	1	88	0.57 J	0.18 J	0.13 J	50	160
WTA-33-0-0.5-T3C	WTA-33	0.0 - 0.5	MG/KG	0.39 J	11	210	0.58 J	0.46 J	65	16	75	23	1.4	0.49 J	69	0.61 J	0.17 J	0.13 J	54	120
WTA-33-1.5-2-T1	WTA-33	1.5 - 2.0	MG/KG	0.45 J	13	370	0.65 J	2.5	94	21	88	37	3.7	1.4	160	0.57 J	0.24 J	0.18 J	49	180

Table 3: Soil Detected Metals Compared to Human Health Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Category I Criteria				109	16	2,110	29	68.1	100,000	73	10,900	320	77	1,360	280	1,340	1,360	2.72	1,360	81,600
Category II On-Site Management Criteria				1,090	16	21,100	290	681	100,000	199	100,000	800	187	13,600	606	13,400	13,600	27.2	13,600	100,000
Maintenance Worker Screening Criteria				2,720	1.58	52,600	128	73	100,000	34.1	100,000	320	990	34,000	1,180	33,500	34,000	68	34,000	100,000
Off-Site Receptors Screening Criteria				-	745	686,000	1,330	762	-	356	-	-	412,000	-	12,300	27,400,000	-	-	-	-
Background Level				-	16	-	-	-	-	73	-	-	-	-	280	-	-	-	-	-
WTA-33-1.5-2-T2	WTA-33	1.5 - 2.0	MG/KG	0.58 J	13	300	0.62 J	3.1	95	21	88	32	2.2	4.2	120	0.43 J	0.31 J	0.18 J	53	160
WTA-33-1.5-2-T3A	WTA-33	1.5 - 2.0	MG/KG	0.47 J	12	310	0.78	1.7	110	23	77	33	2.6	1	200	0.62 J	0.23 J	0.18 J	54	150
WTA-33-1.5-2-T3B	WTA-33	1.5 - 2.0	MG/KG	1.1 J	10	330	0.61 J	1.3	120	36	57	55	3.2	0.88	200	0.5 J	0.18 J	0.15 J	50	130
WTA-33-1.5-2-T3C	WTA-33	1.5 - 2.0	MG/KG	0.31 J	12	260	0.6 J	1.4	80	22	66	34	3.2	1.4	*550*	0.54 J	0.22 J	0.17 J	44	130
WTA-34-0-0.5	WTA-34	0.0 - 0.5	MG/KG	0.55 J-	8.1	210	0.61 J	0.6 J	59 J+	14	99 J+	31	2.4	0.65 J	58	0.72 J	0.27 J	0.15 J	38 J+	130
WTA-34_1.5-2.0	WTA-34	1.5 - 2.0	MG/KG	0.2 U	2.3	144	0.46 J	0.036 J	34.4	3.1	14.1	5.5	0.14	0.12 J	25.8	1.1	0.14	0.051 J	17	20.2
WTA-34_3.5-4.0	WTA-34	3.5 - 4.0	MG/KG	0.69	8.4	250	0.49 J	0.35	51.2	18.3	49.9	130	0.43	0.59	57.8	1.7	0.22	0.1	39.5	98.9
WTA-34_5.5-6.0	WTA-34	5.5 - 6.0	MG/KG	0.59	7.7	184	0.39 J	1	41.1	13.2	106	61	18.2	3.8	45.1	1.4	0.43	0.11	29.5	257
WTA-35-0-0.5	WTA-35	0.0 - 0.5	MG/KG	0.24 J	8.7	230	0.69	0.45 J	77	14	47	14	0.54	0.33 J	86	0.38 J	0.68 U	0.12 J	52	91
WTA-35-1.5-2	WTA-35	1.5 - 2.0	MG/KG	0.2 J	6.8	220	0.66 J	0.26 J	64	13	34	12	0.74	0.24 J	79	0.27 J	0.17 J	0.37 U	44	61
WTA-35_5.5-6.0	WTA-35	5.5 - 6.0	MG/KG	0.68	9.2	267	0.5 J	0.57	58.5	18.6	215	34.3	0.73	1	51.1	1.2	0.43	0.19	43.2	227
WTA-36-0-0.5	WTA-36	0.0 - 0.5	MG/KG	0.63 J	*19*	140	0.47 J	1.2	57	12	210	38	12	2.2	66	0.98 J	0.56 J	0.28 J	46	250
WTA-36_1.5-2.0	WTA-36	1.5 - 2.0	MG/KG	5.6	*16.2*	117	0.25 J	0.8	36.6	8.4	179	35.3	10.4	1.3	40.5	1	0.53	0.19	30.2	180
WTA-37-0-0.5	WTA-37	0.0 - 0.5	MG/KG	0.51 J	15	270	0.7	0.89	72	18	92	59	3.5	0.82	76	0.75 J	2	0.14 J	53	210
WTA-37_1.5-2.0	WTA-37	1.5 - 2.0	MG/KG	0.53	12	227	0.44 J	0.34	46.2	11.7	50.7	22.5	2.8	0.6	52.1	1.2	0.35	0.15	42.9	102
WTA-38-0-0.5-T1	WTA-38	0.0 - 0.5	MG/KG	0.38 J	*19*	270	0.7	0.94	66	20	100	29	5.4	0.68	67	0.82 J	0.29 J	0.18 J	59	180
WTA-38-0-0.5-T2	WTA-38	0.0 - 0.5	MG/KG	0.37 J	*18*	250	0.66	0.96	59	18	100	33	6.4	0.74	65	0.91 J	0.29 J	0.16 J	54	170
WTA-38-0-0.5-T3A	WTA-38	0.0 - 0.5	MG/KG	0.47 J	*34*	340	0.73	0.95	56	19	110	33	4.8	1	65	1.1 J	0.36 J	0.2 J	59	190
WTA-38-0-0.5-T3B	WTA-38	0.0 - 0.5	MG/KG	0.41 J	*25*	280	0.72	0.87	63	19	220	49	6	0.73	66	0.96 J	0.35 J	0.18 J	58	180
WTA-38-0-0.5-T3C	WTA-38	0.0 - 0.5	MG/KG	0.47 J	*23*	290	0.73	1.7	62	18	110	37	5	1.5	66	1.1 J	0.52 J	0.18 J	58	220
WTA-38-1.5-2-T1	WTA-38	1.5 - 2.0	MG/KG	0.33 J	13	260	0.72	2	77	17	71	28	1.7	8.2	110	0.66 J	0.23 J	0.13 J	47	110
WTA-38-1.5-2-T2	WTA-38	1.5 - 2.0	MG/KG	0.29 J	9.9	230	0.55 J	2.3	87	20	78	62	1.8	5.3	120	0.48 J	0.19 J	0.12 J	47	150
WTA-38-1.5-2-T3A	WTA-38	1.5 - 2.0	MG/KG	0.24 J	10	300	0.61 J	0.51 J	170	23	58	25	0.64	11	170	0.5 J	0.15 J	0.11 J	51	120
WTA-38-1.5-2-T3B	WTA-38	1.5 - 2.0	MG/KG	0.23 J	9	310	0.63 J	0.38 J	96	22	50	21	0.79	8.4	150	0.61 J	0.16 J	0.1 J	53	110
WTA-38-1.5-2-T3C	WTA-38	1.5 - 2.0	MG/KG	0.26 J	10	270	0.63	0.52 J	96	22	54	26	0.7	11	130	0.55 J	0.18 J	0.11 J	53	110

Table 3: Soil Detected Metals Compared to Human Health Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Category I Criteria				109	16	2,110	29	68.1	100,000	73	10,900	320	77	1,360	280	1,340	1,360	2.72	1,360	81,600
Category II On-Site Management Criteria				1,090	16	21,100	290	681	100,000	199	100,000	800	187	13,600	606	13,400	13,600	27.2	13,600	100,000
Maintenance Worker Screening Criteria				2,720	1.58	52,600	128	73	100,000	34.1	100,000	320	990	34,000	1,180	33,500	34,000	68	34,000	100,000
Off-Site Receptors Screening Criteria				-	745	686,000	1,330	762	-	356	-	-	412,000	-	12,300	27,400,000	-	-	-	-
Background Level				-	16	-	-	-	-	73	-	-	-	-	280	-	-	-	-	-

Notes:
Human health screening criteria based on the Final Soil Management Plan, Revision 1, dated April 12, 2017

Chemicals that were not detected in any samples were excluded from this table.

51	Gray highlights indicate the result exceeds either the Maintenance Worker Screening Criteria or Off-Site Receptors (Inhalation) Screening Criteria
51	Outlined boxes indicate the result exceeds the Category I Screening Criteria
51	Italics indicate the result exceeds the other criteria.
	Arsenic, cobalt, lead, or nickel sample are not screened against concentrations below their background levels.
-	Not applicable
MG/KG	Milligrams per kilogram
J	Estimated value
SCR	Site Characterization Report
U	Nondetect
NA	Sample not analyzed due to insufficient sample mass

Table 4: Soil Detected Metals Compared to Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Plant Ecological Screening Criteria				5	18	500	10	32	1	13	70	120	0.3	2	38	0.52	560	1	2	160
Invertebrate Ecological Screening Criteria				78	60	330	40	140	0.4	-	80	1,700	0.1	-	280	4.1	-	-	-	120
Bird Ecological Screening Criteria				-	43	-	-	0.77	-	120	28	11	3	-	210	1.2	4.2	-	7.8	46
Mammal Ecological Screening Criteria				0.27	46	2,000	21	0.36	130	230	49	56	4.95	-	130	0.63	14	-	280	79
Background Level					16					73					280					
WTA-01-0-0.5	WTA-01	0.0 - 0.5	MG/KG	0.3 UJ	8.7	83	0.28 J	0.93 UJ	***51***	11	**65 J+**	17	***1.2***	0.5 J	53	*0.69 J*	0.16 J	0.34 U	*38*	100 J-
WTA-01-1.5-2	WTA-01	1.5 - 2.0	MG/KG	0.33 UJ	9.9	100	0.41 J	0.75 UJ	***53***	11	*79*	19	***3.1***	0.74	54	*0.71 J*	0.26 J	0.11 J	*40*	120
WTA-02-0-0.5	WTA-02	0.0 - 0.5	MG/KG	0.16 UJ	5	80	0.28 J	0.48 UJ	***47***	8.5	54	15	***1.4***	0.35 J	47	0.51 J	0.13 J	0.33 U	*37*	93
WTA-02_1.5-2.0	WTA-02	1.5 - 2.0	MG/KG	0.6	6.8	129	0.45 J	0.29	***40.1***	9.4	48	13.9	***5.5***	1.4	43.2	*1.4*	0.13	0.53	*30.4*	72.6
WTA-03-0-0.5	WTA-03	0.0 - 0.5	MG/KG	0.16 UJ	7.2	110	0.39 J	0.94 UJ	***60***	10	36	12	***0.45***	0.44 J	69	*0.59 J*	0.64 U	0.32 U	*46*	65
WTA-03-1.5-2	WTA-03	1.5 - 2.0	MG/KG	0.21 UJ	6.5	180	0.49 J	0.44 UJ	***65***	14	***150***	20	***0.59***	0.48 J	70	*0.57 J*	0.17 J	0.1 J	*46*	110
WTA-04-0-0.5	WTA-04	0.0 - 0.5	MG/KG	3.3	*21*	200	0.51 J	1.2	***54***	13	***120***	*170*	***9.7***	0.87	71	*1.5 J*	0.6 J	0.18 J	*45*	***1,300***
WTA-04_1.5-2.0	WTA-04	1.5 - 2.0	MG/KG	0.43	8.6	***501***	0.56 J	0.31	***45.6***	70	27.4	18.2	***0.84***	1.2	77.1	*1.9*	0.13	0.25	*50.9*	51
WTA-05-0-0.5	WTA-05	0.0 - 0.5	MG/KG	0.54 UJ	18	160	0.57 J	1.1	***60***	13	***100***	34	***19***	1	63	*1.2 J*	0.37 J	0.16 J	*47*	***190***
WTA-05-1.5-2	WTA-05	1.5 - 2.0	MG/KG	0.3 UJ	11	160	0.58 J	0.48 UJ	***62***	11	***160***	19	***7.3***	0.44 J	58	*0.94 J*	0.31 J	0.12 J	*47*	91
WTA-05_3.5-4.0	WTA-05	3.5 - 4.0	MG/KG	0.69	9.9	158	0.46 J	0.86	***40.1***	14.5	***163***	*150*	***27.5***	1.7	147	*1.5*	0.32	0.16	*176*	***191***
WTA-06-0-0.5	WTA-06	0.0 - 0.5	MG/KG	0.089 UJ	4.3	49	0.21 J	0.18 UJ	***44***	6.8	24	7.6	**0.27**	0.19 J	42	*0.57 J*	0.67 U	0.34 U	*31*	45
WTA-06_1.5-2.0	WTA-06	1.5 - 2.0	MG/KG	0.13 J	3.6	47.8	0.21 J	0.12	***38.4***	5.5	19.5	8.4	***0.31***	0.5	33.7	*0.93*	0.091 J	0.054 J	*30*	34.4
WTA-07-0-0.5	WTA-07	0.0 - 0.5	MG/KG	0.23 UJ	9.1	130	0.54 J	0.72 UJ	***38***	8.5	***89***	19	***1.8***	0.49 J	48	*0.86 J*	0.38 J	0.13 J	*32*	**150**
WTA-07-1.5-2	WTA-07	1.5 - 2.0	MG/KG	0.14 UJ	5.7	140	0.55 J	0.35 UJ	***66***	9.9	26	7.8	***0.54***	0.17 J	66	*0.65 J*	0.69 U	0.094 J	*42*	45
WTA-08-0-0.5	WTA-08	0.0 - 0.5	MG/KG	0.49 UJ	15	160	0.51 J	1 UJ	***70***	13	***110***	35	***6.5***	0.79	72	*1.1 J*	0.45 J	0.15 J	*45*	***180***
WTA-08_1.5-2.0	WTA-08	1.5 - 2.0	MG/KG	0.46	11.9	118	0.43 J	0.64	***58.7***	10.2	***1,320***	19.1	***3.2***	1.4	54.2	*1.8*	1.7	0.12	*42.3*	116
WTA-09-0-0.5	WTA-09	0.0 - 0.5	MG/KG	0.36 UJ	13	79	0.35 J	0.79 UJ	***60***	12	*74*	30	***1.7***	0.52 J	61	*1.3 J*	0.3 J	0.36 U	*49*	**130**
WTA-09-1.5-2	WTA-09	1.5 - 2.0	MG/KG	0.42 UJ	16	96	0.26 J	0.63 UJ	***50***	9.3	***100***	110	***1.2***	0.38 J	65	*0.79 J*	0.19 J	0.34 J	*44*	**130**
WTA-09_3	WTA-09	3.0 - 3.0	MG/KG	0.28	10.4	92.8	0.37 J	0.29	***37.1***	8.6	48.7	12.6	***7.9***	0.64	35.2	*1.3*	0.16	0.097 J	*34.1*	64.6
WTA-10-0-0.5	WTA-10	0.0 - 0.5	MG/KG	0.23 UJ	8.1	110	0.46 J	0.45 UJ	***67***	13	53	18	***1.6***	0.47 J	77	*0.9 J*	0.15 J	0.35 U	*48*	88
WTA-10_1.5-2.0	WTA-10	1.5 - 2.0	MG/KG	0.24	7.8	82.5	0.33 J	0.36	***49.3***	9.5	52.7	15.6	***1.1***	0.62	48.7	*1.5*	0.19	0.11	*40.8*	83.1
WTA-11-0-0.5	WTA-11	0.0 - 0.5	MG/KG	0.35 UJ	16	200	0.64 J	0.78 UJ	***65***	17	***88***	30	***5.5***	0.69	71	*1.3 J*	0.34 J	0.17 J	*56*	**160**
WTA-11-1.5-2	WTA-11	1.5 - 2.0	MG/KG	0.48 UJ	7.5	160	0.62 J	0.54 UJ	***49***	12	51	34	***4.1***	0.42 J	40	*0.74 J*	0.17 J	0.093 J	*45*	110
WTA-12-0-0.5	WTA-12	0.0 - 0.5	MG/KG	0.35 UJ	8.9	160	0.5 J	0.57 UJ	***62***	13	*72*	48	***1.5***	0.69	59	*0.99 J*	0.25 J	0.099 J	*48*	**130**
WTA-12_1.5-2.0	WTA-12	1.5 - 2.0	MG/KG	0.75	6	124	0.28 J	0.12	***72***	8.2	33.4	8.4	**0.13**	0.99	69.3	*1.1*	0.096 J	0.077 J	*36*	42.3
WTA-12_3.5-4.0	WTA-12	3.5 - 4.0	MG/KG	2.9	*27.5*	305	0.54 J	1.1	***67.9***	14.8	***5,570***	*469*	***0.43***	1.5	95.5	*2*	1.4	0.12	*46.7*	***2,220***
WTA-12_5.5-6.0	WTA-12	5.5 - 6.0	MG/KG	2.1	*40.1*	**377**	0.47 J	2.5	***64.5***	12.7	***1,370***	*384*	***1.1***	*2.2*	103	*1.9*	8.5	0.13	*43*	***1,650***
WTA-13-0-0.5	WTA-13	0.0 - 0.5	MG/KG	0.54 J-	6.8	160 J+	0.55 J	0.96	***59***	13	44	54	**0.22**	0.57 J	55	0.71 UJ	0.23 J	0.15 J	*44*	***300***
WTA-13-1.5-2	WTA-13	1.5 - 2.0	MG/KG	0.3 J	4.6	190	0.53 J	0.38 J	***54***	16	22	15	**0.14**	0.37 J	52	0.47 UJ	0.69 U	0.11 J	*39*	43
WTA-13_3.5-4.0	WTA-13	3.5 - 4.0	MG/KG	0.32	5.4	239	0.41 J	0.23	***43.5***	7.4	19.2	6.1	0.049 J	0.43	40.1	*1.3*	0.059 J	0.13	*35.2*	34.7
WTA-14-0-0.5	WTA-14	0.0 - 0.5	MG/KG	0.75 J	18	210	0.54 J	1.6	***65***	15	*76*	37	**0.3 J+**	0.6 J	66	0.72 UJ	1.1	0.2 J	*52*	***250***
WTA-14_1.5-2.0	WTA-14	1.5 - 2.0	MG/KG	0.13 J	3.1	123	0.56 J	0.035 J	***42.3***	7.8	16.7	5.4	0.041 J	0.3	31.9	*1.1*	0.08 J	0.089 J	*30.6*	24.3
WTA-15-0-0.5	WTA-15	0.0 - 0.5	MG/KG	0.33 J	6.9	160	0.5 J	0.49 J	***50***	9.1	45	28	***0.4***	0.37 J	48	0.6 UJ	0.2 J	0.12 J	*40*	90
WTA-15-1.5-2	WTA-15	1.5 - 2.0	MG/KG	0.14 J	5.6	180	0.54 J	0.31 J	***49***	14	27	12	**0.27**	0.27 J	57	0.64 UJ	0.72 U	0.36 U	*42*	57
WTA-16-0-0.5	WTA-16	0.0 - 0.5	MG/KG	0.21 J	4.3	160	0.53 J	0.38 J	***75***	9.4	29	25	**0.15**	0.27 J	66	0.52 UJ	0.11 J	0.33 U	*44*	88
WTA-16_1.5-2.0	WTA-16	1.5 - 2.0	MG/KG	0.12 J	3.7	147	0.6 J	0.17	***36.7***	13.8	19.4	14.1	**0.16**	0.38	36.3	*2*	0.085 J	0.055 J	*72.2*	62
WTA-16_3.5-4.0	WTA-16	3.5 - 4.0	MG/KG	0.18 J	5.5	145	0.52 J	0.16	***49.1***	20.7	22.1	16.2	0.08 J	0.47	60.7	*1.8*	0.094 J	0.063 J	*75.6*	56.6
WTA-16_5.5-6.0	WTA-16	5.5 - 6.0	MG/KG	3.6	***204***	325	0.38 J	4.2	***43.7***	17.6	***958***	*351*	***28.7***	*10*	45.2	*3.1*	1.1	1	*45.7*	***1,790***
WTA-17-0-0.5	WTA-17	0.0 - 0.5	MG/KG	0.22 J	6.8	180	0.5 J	0.4 J	***52***	11	51	19	***1.4***	0.58 J	55	0.35 UJ	0.23 J	0.096 J	*40*	77
WTA-17-1.5-2	WTA-17	1.5 - 2.0	MG/KG	0.48 J	12	220	0.59 J	0.65 J	***52***	21	*75*	48	***5.1***	0.6 J	58	0.82 UJ	0.21 J	0.23 J	*44*	**130**

Table 4: Soil Detected Metals Compared to Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Plant Ecological Screening Criteria				5	18	500	10	32	1	13	70	120	0.3	2	38	0.52	560	1	2	160
Invertebrate Ecological Screening Criteria				78	60	330	40	140	0.4	-	80	1,700	0.1	-	280	4.1	-	-	-	120
Bird Ecological Screening Criteria				-	43	-	-	0.77	-	120	28	11	3	-	210	1.2	4.2	-	7.8	46
Mammal Ecological Screening Criteria				0.27	46	2,000	21	0.36	130	230	49	56	4.95	-	130	0.63	14	-	280	79
Background Level					16					73					280					
WTA-17-7-P	WTA-17	7.0 - 7.0	MG/KG	*5.5*	***340***	100	0.15 J	13	***39***	18	***3,300***	*200*	***69***	*38*	65	***5.7***	6.3	*3.8*	*33*	***3,300***
WTA-17_3.5-4.0	WTA-17	3.5 - 4.0	MG/KG	0.41	7.5	162	0.59 J	0.32	***49***	12.4	38.4	18.6	***0.31***	0.73	51.8	*1.8*	0.14	0.13	*41*	84.9
WTA-17_5.5-6.0	WTA-17	5.5 - 6.0	MG/KG	0.31	7.2	137	0.47 J	0.24	***45.6***	10.8	31.6	19.2	**0.28**	0.51	48.4	*1.5*	0.13	0.097 J	*39.1*	67.3
WTA-18-0-0.5	WTA-18	0.0 - 0.5	MG/KG	0.43 J	6.2	180	0.54 J	0.69	***66***	12	43	47	***0.31***	0.38 J	58	0.61 UJ	0.18 J	0.09 J	*44*	120
WTA-18_1.5-2.0	WTA-18	1.5 - 2.0	MG/KG	0.58	5.3	157	0.41 J	0.3	***40.4***	33	29.2	30.8	**0.22**	0.39	44.6	*1.1*	0.31	0.091 J	*30.2*	81.9
WTA-19-0-0.5-T1	WTA-19	0.0 - 0.5	MG/KG	0.42 J	6	200	0.59 J	0.66 J	***61***	12	*71*	58	**0.29**	0.34 J	62	0.81 UJ	1.5	0.094 J	*45*	***180***
WTA-19-0-0.5-T2	WTA-19	0.0 - 0.5	MG/KG	0.44 J	8.4	**470**	0.61 J	0.74	***61***	40	*71*	51	**0.2**	0.84	130	0.8 UJ	1.2	0.14 J	*54*	**160**
WTA-19-0-0.5-T3A	WTA-19	0.0 - 0.5	MG/KG	0.38 J	6.1	240	0.57 J	0.62 J	***61***	23	67	46	**0.24**	0.34 J	75	0.72 UJ	1.4	0.09 J	*44*	**150**
WTA-19-0-0.5-T3B	WTA-19	0.0 - 0.5	MG/KG	0.4 J	6.3	190	0.55 J	0.63	***64***	12	60	48	**0.3**	0.28 J	62	0.71 UJ	1.1	0.092 J	*46*	**140**
WTA-19-0-0.5-T3C	WTA-19	0.0 - 0.5	MG/KG	0.56 J	7	200	0.55 J	0.68	***63***	12	*74*	55	**0.25**	0.33 J	62	0.67 UJ	2	0.099 J	*44*	***180***
WTA-19-1.5-2-T1	WTA-19	1.5 - 2.0	MG/KG	0.27 J	7.3	170	0.41 J	0.35 J	***54***	13	***120***	13	0.1	0.41 J	57	2.2 U	0.96	0.36 U	*52*	100
WTA-19-1.5-2-T2	WTA-19	1.5 - 2.0	MG/KG	0.21 J	9.4	250	0.77	0.46 J	***68***	15	28	11	0.086	0.5 J	79	0.73 UJ	0.68 U	0.096 J	*67*	52
WTA-19-1.5-2-T3A	WTA-19	1.5 - 2.0	MG/KG	0.23 J	6.8	220	0.49 J	0.49 J	***64***	13	52	18	**0.13**	0.3 J	68	0.88 UJ	1	0.34 U	*52*	120
WTA-19-1.5-2-T3B	WTA-19	1.5 - 2.0	MG/KG	0.29 J	7.3	220	0.51 J	0.51 UJ	***59***	14	39	12	**0.11**	0.31 J	67	2.2 U	0.51 J	0.37 U	*47*	82
WTA-19-1.5-2-T3C	WTA-19	1.5 - 2.0	MG/KG	0.25 J	6.5	230	0.42 J	0.48 UJ	***55***	14	49	20	0.1	0.32 J	68	0.3 J	1.6	0.088 J	*41*	110
WTA-19-6.5-P	WTA-19	6.5 - 6.5	MG/KG	*5.8 J-*	***500***	120	0.31 J	*36*	***69***	12	***2,000***	*260 J-*	***57***	*24*	52	***9.6***	4.8	*2*	*53*	***7,200***
WTA-19_3.5-4.0	WTA-19	3.5 - 4.0	MG/KG	0.26	9.2	196	0.44 J	0.15	***46.4***	13.5	24.7	7.5	0.086 J	0.52	56.7	*0.94*	0.11	0.3	*43.7*	49.5
WTA-20-0-0.5	WTA-20	0.0 - 0.5	MG/KG	0.27 J	8	130	0.43 J	0.73 UJ	***63***	11	*72*	24	***2.6***	0.59 J	61	0.45 J	0.33 J	0.11 J	*40*	**150**
WTA-20-6.5-P	WTA-20	6.5 - 6.5	MG/KG	*5.8*	***550***	250	0.54 J	19	***96***	21	***2,800***	*440*	***110***	*12*	81	***14***	5.7	*2.6*	*76*	***3,700***
WTA-20_1.5-2.0	WTA-20	1.5 - 2.0	MG/KG	0.28	8.1	148	0.42 J	0.38	***53***	11.3	49.9	20	***3.3***	0.79	65.4	*1.3*	0.29	0.15	*37.2*	97.3
WTA-20_3.5-4.0	WTA-20	3.5 - 4.0	MG/KG	0.31	8.9	170	0.43 J	0.26	***44.3***	12.2	39	17.6	***1.2***	0.52	55.2	*1.2*	0.35	0.12	*40.1*	70.2
WTA-20_5.5-6.0	WTA-20	5.5 - 6.0	MG/KG	0.36	9.4	**418**	0.55 J	0.43	***47.8***	53.1	32.2	16.9	***0.82***	0.78	75	*1*	0.27	0.17	*49*	85.1
WTA-21-0-0.5	WTA-21	0.0 - 0.5	MG/KG	0.28 J	9.6	200	0.64	0.59 UJ	***97***	18	***88***	28	***1.4***	0.5 J	110	*0.58 J*	0.5 J	0.14 J	*62*	***210***
WTA-21-1.5-2	WTA-21	1.5 - 2.0	MG/KG	0.64 J	8.7	200	0.45 J	0.69 UJ	***57***	15	***100***	64	**0.29 J-**	0.5 J	58	0.37 J	0.27 J	0.11 J	*39*	**150**
WTA-22-0-0.5	WTA-22	0.0 - 0.5	MG/KG	0.8 J	10	230	0.49 J	2.2	***63***	13	***380***	*150*	***3.4***	1.5	64	0.42 J	17	0.15 J	*45*	***490***
WTA-22_1.5-2.0	WTA-22	1.5 - 2.0	MG/KG	2.3	*43*	230	0.29 J	1.7	***33.4***	9.2	***821***	*315*	***13.3***	*5.1*	40.2	*1.5*	15.5	0.34	*28.5*	***556***
WTA-23-0-0.5	WTA-23	0.0 - 0.5	MG/KG	0.23 J	4.9	220	0.6 J	0.62 UJ	***58***	13	66	28	***0.97***	0.33 J	56	0.38 J	1.9	0.34 U	*38*	89
WTA-23-1.5-2	WTA-23	1.5 - 2.0	MG/KG	0.19 J	4.1	220	0.66 J	0.64 UJ	***60***	14	54	24	***13***	0.32 J	60	0.39 J	1.1	0.37 U	*37*	99
WTA-24-0-0.5	WTA-24	0.0 - 0.5	MG/KG	0.24 J	6.6	190	0.55 J	0.54 UJ	***57***	15	57	23	***0.48***	0.35 J	67	0.35 J	0.31 J	0.099 J	*43*	81
WTA-24_1.5-2.0	WTA-24	1.5 - 2.0	MG/KG	0.22	5.3	104	0.35 J	0.18	***41.3***	8.4	36.4	14	***0.46***	0.26	40.9	*1*	0.23	0.094 J	*27.3*	50.9
WTA-25-0-0.5	WTA-25	0.0 - 0.5	MG/KG	0.36 J	9.6	200	0.56 J	0.64 UJ	***54***	15	***130***	36	***1.6***	0.8	65	*0.64 J*	0.26 J	0.16 J	*43*	110
WTA-25-1.5-2	WTA-25	1.5 - 2.0	MG/KG	0.11 J	3.9	200	0.61 J	0.25 UJ	***53***	11	21	8.5	**0.21**	0.17 J	53	0.41 J	0.74 U	0.1 J	*39*	38
WTA-26-0-0.5	WTA-26	0.0 - 0.5	MG/KG	0.19 J	4.8	170	0.43 J	0.35 UJ	***51***	11	40	23	***1.8***	0.35 J	49	0.37 J	0.91	0.31 U	*40*	87
WTA-26_1.5-2.0	WTA-26	1.5 - 2.0	MG/KG	0.29	7.8	215	0.41 J	0.32	***37.8***	14.2	47.3	16.3	***0.71***	0.98	64.4	*0.91*	0.24	0.12	*32.4*	70.1
WTA-26_3.5	WTA-26	3.5 - 3.5	MG/KG	0.27	7.8	148	0.51 J	0.31	***47.8***	10.7	44.4	23.4	***0.47***	0.42	60.3	*0.96*	2	0.1	*33.2*	**155**
WTA-27-0-0.5	WTA-27	0.0 - 0.5	MG/KG	0.2 J	8.4	200	0.5 J	0.4 UJ	***56***	22	43	16	***0.57***	0.5 J	82	*0.53 J*	0.15 J	0.12 J	*35*	86
WTA-27-1.5-2	WTA-27	1.5 - 2.0	MG/KG	0.27 J	9.2	300	0.52 J	0.48 UJ	***81***	17	55	22	***0.54***	0.67 J	110	0.44 J	0.22 J	0.13 J	*44*	110
WTA-28-0-0.5	WTA-28	0.0 - 0.5	MG/KG	0.33 J	13	240	0.59 J	0.64 UJ	***57***	15	***100***	31	***5.5***	0.46 J	59	*0.73 J*	1.9	0.12 J	*51*	**130**
WTA-28_1.5-2.0	WTA-28	1.5 - 2.0	MG/KG	0.33	6	135	0.34 J	0.31	***36.1***	7.9	46.6	17.2	***5.2***	0.33	31.7	*0.89*	0.46	0.1	*31.9*	52.2
WTA-29-0-0.5	WTA-29	0.0 - 0.5	MG/KG	0.36 J	14	170	0.53 J	0.69 UJ	***48***	14	*79*	31	***4.3***	0.62 J	59	*0.77 J*	0.53 J	0.13 J	*44*	**140**

Table 4: Soil Detected Metals Compared to Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Plant Ecological Screening Criteria				5	18	500	10	32	1	13	70	120	0.3	2	38	0.52	560	1	2	160
Invertebrate Ecological Screening Criteria				78	60	330	40	140	0.4	-	80	1,700	0.1	-	280	4.1	-	-	-	120
Bird Ecological Screening Criteria				-	43	-	-	0.77	-	120	28	11	3	-	210	1.2	4.2	-	7.8	46
Mammal Ecological Screening Criteria				0.27	46	2,000	21	0.36	130	230	49	56	4.95	-	130	0.63	14	-	280	79
Background Level					16					73					280					
WTA-29-1.5-2	WTA-29	1.5 - 2.0	MG/KG	0.67 J	10	280	0.54 J	0.66 UJ	***54***	14	***120***	92	***2.3***	1.2	54	*0.63 J*	2.2	0.12 J	*44*	***190***
WTA-30-0-0.5	WTA-30	0.0 - 0.5	MG/KG	0.57 J-	7.5	210 J-	0.66 J	0.58 J	***99 J+***	16	68 J-	34 J-	***0.37 J***	0.8	110 J+	0.5 J	0.21 J	0.17 J	*57*	**140 J-**
WTA-30-7-P	WTA-30	7.0 - 7.0	MG/KG	2.3 J	***150***	300	0.59 J	4.2	***58***	96	***670***	*250*	***3,500***	*3*	130	*0.92 J*	17	0.21 J	*49*	***850***
WTA-30_1.5-2.0	WTA-30	1.5 - 2.0	MG/KG	0.32	4.3	157	0.42 J	0.24	***44***	7.3	68.4	26.5	***0.68***	0.28	49	*0.83*	0.23	0.11	*29.7*	98.4
WTA-30_3.5-4.0	WTA-30	3.5 - 4.0	MG/KG	0.47	7.1	218	0.49 J	0.41	***41.7***	15.3	***102***	58.8	***6.6***	1.1	51	*1.1*	0.91	0.14	*35.9*	116
WTA-30_5.5-6.0	WTA-30	5.5 - 6.0	MG/KG	*7.6*	14.7	***657***	0.39 J	3.5	***227***	13.7	***1,390***	*515*	***8***	*5.9*	158	*1.9*	171	0.14	*35.9*	***1,070***
WTA-31-0-0.5-T1	WTA-31	0.0 - 0.5	MG/KG	0.51 J	12	150	0.6 J	0.81	***73***	13	***230***	18	***1.1***	0.74	80	0.45 J	0.4 J	0.17 J	*57*	***200***
WTA-31-0-0.5-T2	WTA-31	0.0 - 0.5	MG/KG	0.28 J	7.9	120	0.44 J	0.36 J	***70***	12	58	14	***1.3***	0.51 J	76	0.45 J	0.13 J	0.11 J	*50*	84
WTA-31-0-0.5-T3A	WTA-31	0.0 - 0.5	MG/KG	0.27 J	7.9	120	0.48 J	0.33 J	***87***	14	45	15	NA	0.6 J	100	*0.65 J*	0.15 J	0.1 J	*52*	83
WTA-31-0-0.5-T3B	WTA-31	0.0 - 0.5	MG/KG	0.23 J	7.1	120	0.43 J	0.36 J	***73***	13	41	18	NA	0.43 J	79	0.45 J	0.13 J	0.098 J	*50*	79
WTA-31-0-0.5-T3C	WTA-31	0.0 - 0.5	MG/KG	0.25 J	7.2	120	0.44 J	0.35 J	***76***	13	46	15	NA	0.43 J	83	*0.82 J*	0.12 J	0.099 J	*54*	82
WTA-31-1.5-2-T1	WTA-31	1.5 - 2.0	MG/KG	0.28 J	6.8	230	0.66 J	0.38 J	***97***	21	56	15	***1.5***	0.48 J	120	0.46 J	0.73 U	0.13 J	*57*	78
WTA-31-1.5-2-T2	WTA-31	1.5 - 2.0	MG/KG	0.4 J	15	270	0.95	0.51 J	***120***	35	***83***	29	***2.7***	1.3	150	*1.3 J*	0.16 J	0.17 J	*87*	**140**
WTA-31-1.5-2-T3A	WTA-31	1.5 - 2.0	MG/KG	0.27 J	7.9	180	0.56 J	0.32 J	***110***	16	57	15	NA	0.52 J	130	0.45 J	0.14 J	0.11 J	*62*	110
WTA-31-1.5-2-T3B	WTA-31	1.5 - 2.0	MG/KG	0.27 J	7.1	210	0.61 J	0.29 J	***93***	17	56	14	NA	0.41 J	100	0.33 J	0.11 J	0.13 J	*55*	80
WTA-31-1.5-2-T3C	WTA-31	1.5 - 2.0	MG/KG	0.2 J	7.4	190	0.67 J	0.27 J	***100***	13	51	13	NA	0.42 J	80	0.29 J	0.7 U	0.35 U	*52*	84
WTA-32-0-0.5	WTA-32	0.0 - 0.5	MG/KG	0.45 J	7.7	200	0.55 J	0.53 J	***60***	19	***90***	32	***4***	0.33 J	59	0.42 J	0.16 J	0.14 J	*59*	120
WTA-32_1.5-2.0	WTA-32	1.5 - 2.0	MG/KG	0.41	10	234	0.47 J	0.77	***70.6***	18	46.1	18.6	***0.4***	0.79	97.8	*1.2*	0.23	0.13	*37.5*	***263***
WTA-33-0-0.5-T1	WTA-33	0.0 - 0.5	MG/KG	0.28 J	8.9	240	0.56 J	0.57 J	***95***	25	41	14	***0.49***	0.55 J	120	0.37 J	0.61 U	0.13 J	*50*	**150**
WTA-33-0-0.5-T2	WTA-33	0.0 - 0.5	MG/KG	0.47 J	12	280	0.59 J	0.55 J	***76***	16	67	26	***1.5***	0.57 J	85	*0.55 J*	0.21 J	0.15 J	*50*	110
WTA-33-0-0.5-T3A	WTA-33	0.0 - 0.5	MG/KG	0.58 J	15	**390**	0.59 J	0.78	***62***	16	69	27	***1.5***	1.4	110	*0.8 J*	0.22 J	0.24 J	*51*	120
WTA-33-0-0.5-T3B	WTA-33	0.0 - 0.5	MG/KG	0.48 J	13	**370**	0.52 J	0.68 J	***71***	23	57	24	***1.3***	1	88	*0.57 J*	0.18 J	0.13 J	*50*	**160**
WTA-33-0-0.5-T3C	WTA-33	0.0 - 0.5	MG/KG	0.39 J	11	210	0.58 J	0.46 J	***65***	16	*75*	23	***1.4***	0.49 J	69	*0.61 J*	0.17 J	0.13 J	*54*	120
WTA-33-1.5-2-T1	WTA-33	1.5 - 2.0	MG/KG	0.45 J	13	**370**	0.65 J	2.5	***94***	21	***88***	37	***3.7***	1.4	160	*0.57 J*	0.24 J	0.18 J	*49*	***180***
WTA-33-1.5-2-T2	WTA-33	1.5 - 2.0	MG/KG	0.58 J	13	300	0.62 J	3.1	***95***	21	***88***	32	***2.2***	*4.2*	120	0.43 J	0.31 J	0.18 J	*53*	**160**
WTA-33-1.5-2-T3A	WTA-33	1.5 - 2.0	MG/KG	0.47 J	12	310	0.78	1.7	***110***	23	*77*	33	***2.6***	1	200	*0.62 J*	0.23 J	0.18 J	*54*	**150**
WTA-33-1.5-2-T3B	WTA-33	1.5 - 2.0	MG/KG	1.1 J	10	330	0.61 J	1.3	***120***	36	57	55	***3.2***	0.88	200	0.5 J	0.18 J	0.15 J	*50*	**130**
WTA-33-1.5-2-T3C	WTA-33	1.5 - 2.0	MG/KG	0.31 J	12	260	0.6 J	1.4	***80***	22	66	34	***3.2***	1.4	***550***	*0.54 J*	0.22 J	0.17 J	*44*	**130**
WTA-34-0-0.5	WTA-34	0.0 - 0.5	MG/KG	0.55 J-	8.1	210	0.61 J	0.6 J	***59 J+***	14	***99 J+***	31	***2.4***	0.65 J	58	*0.72 J*	0.27 J	0.15 J	*38 J+*	**130**
WTA-34_1.5-2.0	WTA-34	1.5 - 2.0	MG/KG	0.2 U	2.3	144	0.46 J	0.036 J	***34.4***	3.1	14.1	5.5	**0.14**	0.12 J	25.8	*1.1*	0.14	0.051 J	*17*	20.2
WTA-34_3.5-4.0	WTA-34	3.5 - 4.0	MG/KG	0.69	8.4	250	0.49 J	0.35	***51.2***	18.3	49.9	*130*	***0.43***	0.59	57.8	*1.7*	0.22	0.1	*39.5*	98.9
WTA-34_5.5-6.0	WTA-34	5.5 - 6.0	MG/KG	0.59	7.7	184	0.39 J	1	***41.1***	13.2	***106***	61	***18.2***	*3.8*	45.1	*1.4*	0.43	0.11	*29.5*	***257***
WTA-35-0-0.5	WTA-35	0.0 - 0.5	MG/KG	0.24 J	8.7	230	0.69	0.45 J	***77***	14	47	14	***0.54***	0.33 J	86	0.38 J	0.68 U	0.12 J	*52*	91
WTA-35-1.5-2	WTA-35	1.5 - 2.0	MG/KG	0.2 J	6.8	220	0.66 J	0.26 J	***64***	13	34	12	***0.74***	0.24 J	79	0.27 J	0.17 J	0.37 U	*44*	61
WTA-35_5.5-6.0	WTA-35	5.5 - 6.0	MG/KG	0.68	9.2	267	0.5 J	0.57	***58.5***	18.6	***215***	34.3	***0.73***	1	51.1	*1.2*	0.43	0.19	*43.2*	***227***
WTA-36-0-0.5	WTA-36	0.0 - 0.5	MG/KG	0.63 J	*19*	140	0.47 J	1.2	***57***	12	***210***	38	***12***	*2.2*	66	*0.98 J*	0.56 J	0.28 J	*46*	***250***
WTA-36_1.5-2.0	WTA-36	1.5 - 2.0	MG/KG	*5.6*	16.2	117	0.25 J	0.8	***36.6***	8.4	***179***	35.3	***10.4***	1.3	40.5	*1*	0.53	0.19	*30.2*	***180***
WTA-37-0-0.5	WTA-37	0.0 - 0.5	MG/KG	0.51 J	15	270	0.7	0.89	***72***	18	***92***	59	***3.5***	0.82	76	*0.75 J*	2	0.14 J	*53*	***210***
WTA-37_1.5-2.0	WTA-37	1.5 - 2.0	MG/KG	0.53	12	227	0.44 J	0.34	***46.2***	11.7	50.7	22.5	***2.8***	0.6	52.1	*1.2*	0.35	0.15	*42.9*	102
WTA-38-0-0.5-T1	WTA-38	0.0 - 0.5	MG/KG	0.38 J	*19*	270	0.7	0.94	***66***	20	***100***	29	***5.4***	0.68	67	*0.82 J*	0.29 J	0.18 J	*59*	***180***

Table 4: Soil Detected Metals Compared to Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC
Plant Ecological Screening Criteria				5	18	500	10	32	1	13	70	120	0.3	2	38	0.52	560	1	2	160
Invertebrate Ecological Screening Criteria				78	60	330	40	140	0.4	-	80	1,700	0.1	-	280	4.1	-	-	-	120
Bird Ecological Screening Criteria				-	43	-	-	0.77	-	120	28	11	3	-	210	1.2	4.2	-	7.8	46
Mammal Ecological Screening Criteria				0.27	46	2,000	21	0.36	130	230	49	56	4.95	-	130	0.63	14	-	280	79
Background Level					16					73					280					
WTA-38-0-0.5-T2	WTA-38	0.0 - 0.5	MG/KG	0.37 J	18	250	0.66	0.96	***59***	18	***100***	33	***6.4***	0.74	65	*0.91 J*	0.29 J	0.16 J	*54*	***170***
WTA-38-0-0.5-T3A	WTA-38	0.0 - 0.5	MG/KG	0.47 J	*34*	**340**	0.73	0.95	***56***	19	***110***	33	***4.8***	1	65	*1.1 J*	0.36 J	0.2 J	*59*	***190***
WTA-38-0-0.5-T3B	WTA-38	0.0 - 0.5	MG/KG	0.41 J	*25*	280	0.72	0.87	***63***	19	***220***	49	***6***	0.73	66	*0.96 J*	0.35 J	0.18 J	*58*	***180***
WTA-38-0-0.5-T3C	WTA-38	0.0 - 0.5	MG/KG	0.47 J	*23*	290	0.73	1.7	***62***	18	***110***	37	***5***	1.5	66	*1.1 J*	0.52 J	0.18 J	*58*	***220***
WTA-38-1.5-2-T1	WTA-38	1.5 - 2.0	MG/KG	0.33 J	13	260	0.72	2	*77*	17	*71*	28	***1.7***	*8.2*	110	*0.66 J*	0.23 J	0.13 J	*47*	110
WTA-38-1.5-2-T2	WTA-38	1.5 - 2.0	MG/KG	0.29 J	9.9	230	0.55 J	2.3	***87***	20	*78*	62	***1.8***	*5.3*	120	0.48 J	0.19 J	0.12 J	*47*	**150**
WTA-38-1.5-2-T3A	WTA-38	1.5 - 2.0	MG/KG	0.24 J	10	300	0.61 J	0.51 J	***170***	23	58	25	***0.64***	*11*	170	0.5 J	0.15 J	0.11 J	*51*	120
WTA-38-1.5-2-T3B	WTA-38	1.5 - 2.0	MG/KG	0.23 J	9	310	0.63 J	0.38 J	***96***	22	50	21	***0.79***	*8.4*	150	*0.61 J*	0.16 J	0.1 J	*53*	110
WTA-38-1.5-2-T3C	WTA-38	1.5 - 2.0	MG/KG	0.26 J	10	270	0.63	0.52 J	***96***	22	54	26	***0.7***	*11*	130	*0.55 J*	0.18 J	0.11 J	*53*	110

Notes:
Ecological screening criteria based on the Final Phase IV Sampling Results Technical Memorandum, dated May 16, 2016.
Chemicals that were not detected in any samples were excluded from this table. See Appendix A for full analytical results.

51	Italics indicate the result exceeds the plant criteria.
51	Bold italics indicate the result exceeds the invertebrate criteria.
51	Outlined boxes indicate the result exceeds the the bird criteria.
51	Gray highlights indicate the result exceeds mammal criteria.
	Arsenic, cobalt, lead, or nickel sample are not screened against concentrations below their background levels.
-	Not applicable
MG/KG	Milligrams per kilogram
J	Estimated value
U	Nondetect

Table 5: Soil Detected PAH Compared to Human Health and Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	CHRYSENE	DIBENZ(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	BAP EQ (EPA)
Category I Criteria				6,050	6,050	30,200	0.88	0.145	0.88	3,020	0.88	8.8	0.145	4,030	4,030	0.88	3.57	4,030	3,020	0.4
Category II On-Site Management Criteria				60,500	60,500	100,000	8.8	1.45	8.8	30,200	8.8	88	1.45	40,300	40,300	8.8	35.7	40,300	30,200	1.45
Maintenance Worker Screening Criteria				100,000	100,000	100,000	5.87	0.963	5.87	75,600	5.87	58.7	0.963	100,000	100,000	5.87	450	100,000	75,600	0.96
Off-Site Receptors Screening Criteria							11,500	1,150	11,500		11,500	115,000	2,670			11,500	3.57			1,150
Plant Ecological Screening Criteria				20	20	20	-	-	-	-	-	-	-	-	-	20	-	-	20	-
Invertebrate Ecological Screening Criteria				-	-	-	-	-	-	-	-	-	-	-	-	30	-	-		-
WTA-01-0-0.5	WTA-01	0.0 - 0.5	MG/KG	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.024 J	0.11 U	0.11 U	0.11 U	0.11 U	0.031 J	0.11 U	0.11 U	0.11 U	0.11 U	0.033 J	0.0024
WTA-01-1.5-2	WTA-01	1.5 - 2.0	MG/KG	0.056 U	0.056 U	0.056 U	0.032 J	0.048 J	0.041 J	0.037 J	0.017 J	0.029 J	0.056 U	0.051 J	0.056 U	0.026 J	0.056 U	0.022 J	0.066	0.058
WTA-02-0-0.5	WTA-02	0.0 - 0.5	MG/KG	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.021 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.021 J	0.0021
WTA-03-0-0.5	WTA-03	0.0 - 0.5	MG/KG	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0 U
WTA-03-1.5-2	WTA-03	1.5 - 2.0	MG/KG	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0 U
WTA-04-0-0.5	WTA-04	0.0 - 0.5	MG/KG	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0 U
WTA-05-0-0.5	WTA-05	0.0 - 0.5	MG/KG	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0 U
WTA-05-1.5-2	WTA-05	1.5 - 2.0	MG/KG	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0 U
WTA-06-0-0.5	WTA-06	0.0 - 0.5	MG/KG	0.026 U	0.026 U	0.026 U	0.026 U	0.026 U	0.0069 J	0.026 U	0.026 U	0.026 U	0.026 U	0.0055 J	0.026 U	0.026 U	0.026 U	0.026 U	0.0076 J	0.00069
WTA-07-0-0.5	WTA-07	0.0 - 0.5	MG/KG	0.056 U	0.056 U	0.056 U	0.024 J	0.025 J	0.037 J	0.015 J	0.056 U	0.025 J	0.056 U	0.045 J	0.056 U	0.012 J	0.056 U	0.028 J	0.056 J	0.032
WTA-07-1.5-2	WTA-07	1.5 - 2.0	MG/KG	0.028 U	0.028 U	0.028 U	0.016 J	0.016 J	0.025 J	0.0095 J	0.0079 J	0.017 J	0.028 U	0.024 J	0.028 U	0.0077 J	0.028 U	0.011 J	0.028 J	0.021
WTA-08-0-0.5	WTA-08	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.035 J	0.031 J	0.047 J	0.015 J	0.014 J	0.034 J	0.055 U	0.061	0.055 U	0.012 J	0.055 U	0.03 J	0.066	0.041
WTA-09-0-0.5	WTA-09	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.014 J	0.015 J	0.028 J	0.055 U	0.055 U	0.021 J	0.055 U	0.022 J	0.055 U	0.055 U	0.055 U	0.013 J	0.028 J	0.019
WTA-09-1.5-2	WTA-09	1.5 - 2.0	MG/KG	0.053 U	0.053 U	0.053 U	0.013 J	0.014 J	0.026 J	0.053 U	0.053 U	0.02 J	0.053 U	0.031 J	0.053 U	0.053 U	0.053 U	0.016 J	0.036 J	0.018
WTA-10-0-0.5	WTA-10	0.0 - 0.5	MG/KG	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.029 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.037 J	0.0029
WTA-11-0-0.5	WTA-11	0.0 - 0.5	MG/KG	0.14 U	0.14 U	0.038 J	0.033 J	0.036 J	0.065 J	0.14 U	0.14 U	0.079 J	0.14 U	0.1 J	0.14 U	0.14 U	0.14 U	0.085 J	0.1 J	0.046
WTA-11-1.5-2	WTA-11	1.5 - 2.0	MG/KG	0.055 U	0.055 U	0.055 U	0.013 J	0.013 J	0.022 J	0.055 U	0.055 U	0.016 J	0.055 U	0.019 J	0.055 U	0.055 U	0.055 U	0.055 U	0.023 J	0.017
WTA-12-0-0.5	WTA-12	0.0 - 0.5	MG/KG	0.056 U	0.056 U	0.056 U	0.022 J	0.023 J	0.032 J	0.019 J	0.056 U	0.029 J	0.056 U	0.046 J	0.056 U	0.013 J	0.056 U	0.027 J	0.054 J	0.03
WTA-13-0-0.5	WTA-13	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.018 J	0.019 J	0.055 U	0.016 J	0.055 U	0.013 J	0.055 U	0.055 U	0.018 J	0.011 J	0.016 J	0.0018
WTA-13-1.5-2	WTA-13	1.5 - 2.0	MG/KG	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.012 J	0.02 J	0.054 U	0.019 J	0.054 U	0.054 U	0.054 U	0.054 U	0.034 J	0.022 J	0.015 J	0.0012
WTA-14-0-0.5	WTA-14	0.0 - 0.5	MG/KG	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0 U
WTA-15-0-0.5	WTA-15	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.013 J	0.014 J	0.022 J	0.055 U	0.055 U	0.016 J	0.055 U	0.024 J	0.055 U	0.055 U	0.011 J	0.014 J	0.026 J	0.018
WTA-15-1.5-2	WTA-15	1.5 - 2.0	MG/KG	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.012 J	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.014 J	0.0012
WTA-16-0-0.5	WTA-16	0.0 - 0.5	MG/KG	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0 U
WTA-17-0-0.5	WTA-17	0.0 - 0.5	MG/KG	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.014 J	0.012 J	0.053 U	0.012 J	0.053 U	0.014 J	0.053 U	0.053 U	0.053 U	0.053 U	0.019 J	0.0014
WTA-17-1.5-2	WTA-17	1.5 - 2.0	MG/KG	0.057 U	0.057 U	0.057 U	0.057 U	0.017 J	0.021 J	0.025 J	0.057 U	0.019 J	0.057 U	0.017 J	0.057 U	0.057 U	0.057 U	0.012 J	0.025 J	0.019
WTA-17-7-P	WTA-17	7.0 - 7.0	MG/KG	0.33 U	0.33 U	0.33 U	0.2 J	0.23 J	0.29 J	0.19 J	0.083 J	0.15 J	0.33 U	0.21 J	0.33 U	0.13 J	0.33 U	0.15 J	0.83	0.29
WTA-18-0-0.5	WTA-18	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.013 J	0.013 J	0.019 J	0.015 J	0.055 U	0.014 J	0.055 U	0.021 J	0.055 U	0.055 U	0.055 U	0.014 J	0.024 J	0.016
WTA-19-0-0.5-T1	WTA-19	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.012 J	0.011 J	0.015 J	0.012 J	0.054 U	0.013 J	0.054 U	0.016 J	0.054 U	0.054 U	0.054 U	0.054 U	0.022 J	0.014

Table 5: Soil Detected PAH Compared to Human Health and Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	CHRYSENE	DIBENZ(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	BAP EQ (EPA)
Category I Criteria				6,050	6,050	30,200	0.88	0.145	0.88	3,020	0.88	8.8	0.145	4,030	4,030	0.88	3.57	4,030	3,020	0.4
Category II On-Site Management Criteria				60,500	60,500	100,000	8.8	1.45	8.8	30,200	8.8	88	1.45	40,300	40,300	8.8	35.7	40,300	30,200	1.45
Maintenance Worker Screening Criteria				100,000	100,000	100,000	5.87	0.963	5.87	75,600	5.87	58.7	0.963	100,000	100,000	5.87	450	100,000	75,600	0.96
Off-Site Receptors Screening Criteria							11,500	1,150	11,500		11,500	115,000	2,670			11,500	3.57			1,150
Plant Ecological Screening Criteria				20	20	20	-	-	-	-	-	-	-	-	-	20	-	-	20	-
Invertebrate Ecological Screening Criteria				-	-	-	-	-	-	-	-	-	-	-	-	30	-	-		-
WTA-19-0-0.5-T2	WTA-19	0.0 - 0.5	MG/KG	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.015 J	0.053 U	0.053 U	0.011 J	0.053 U	0.014 J	0.053 U	0.053 U	0.053 U	0.053 U	0.018 J	0.0015
WTA-19-0-0.5-T3A	WTA-19	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.054 U	0.012 J	0.017 J	0.014 J	0.054 U	0.012 J	0.054 U	0.015 J	0.054 U	0.054 U	0.054 U	0.054 U	0.017 J	0.014
WTA-19-0-0.5-T3B	WTA-19	0.0 - 0.5	MG/KG	0.053 U	0.053 U	0.053 U	0.053 U	0.015 J	0.021 J	0.023 J	0.053 U	0.015 J	0.053 U	0.016 J	0.053 U	0.053 U	0.053 U	0.053 U	0.021 J	0.017
WTA-19-1.5-2-T1	WTA-19	1.5 - 2.0	MG/KG	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	0 U
WTA-19-1.5-2-T2	WTA-19	1.5 - 2.0	MG/KG	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	0 U
WTA-19-1.5-2-T3A	WTA-19	1.5 - 2.0	MG/KG	0.017 U	0.017 U	0.017 U	0.0033 J	0.017 U	0.0046 J	0.017 U	0.017 U	0.0034 J	0.017 U	0.0034 J	0.017 U	0.017 U	0.017 U	0.017 U	0.0045 J	0.00079
WTA-19-1.5-2-T3B	WTA-19	1.5 - 2.0	MG/KG	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0 U
WTA-19-1.5-2-T3C	WTA-19	1.5 - 2.0	MG/KG	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	0 U
WTA-19-6.5-P	WTA-19	6.5 - 6.5	MG/KG	0.39 U	0.39 U	0.39 U	0.17 J	0.18 J	0.2 J	0.13 J	0.39 U	0.18 J	0.39 U	0.21 J	0.39 U	0.092 J	0.39 U	0.15 J	0.63	0.23
WTA-20-0-0.5	WTA-20	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.016 J	0.054 U	0.054 U	0.054 U	0.054 U	0.013 J	0.054 U	0.054 U	0.054 U	0.054 U	0.017 J	0.0016
WTA-20-6.5-P	WTA-20	6.5 - 6.5	MG/KG	0.093 UJ	0.038 J-	0.082 J-	0.25 J-	0.41 J-	0.47 J-	0.33 J-	0.13 J-	0.25 J-	0.047 J-	0.49 J-	0.023 J-	0.24 J-	0.025 J-	0.19 J-	0.95 J-	0.55
WTA-21-0-0.5	WTA-21	0.0 - 0.5	MG/KG	0.051 U	0.051 U	0.051 U	0.013 J	0.012 J	0.021 J	0.011 J	0.051 U	0.015 J	0.051 U	0.017 J	0.051 U	0.051 U	0.051 U	0.013 J	0.022 J	0.015
WTA-21-1.5-2	WTA-21	1.5 - 2.0	MG/KG	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0 U
WTA-22-0-0.5	WTA-22	0.0 - 0.5	MG/KG	0.52 U	0.52 U	0.52 U	0.14 J	0.52 U	0.22 J	0.52 U	0.52 U	0.33 J	0.52 U	0.74	0.52 U	0.52 U	0.52 U	0.14 J	0.57	0.036
WTA-23-0-0.5	WTA-23	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.012 J	0.13	0.13	0.15	0.06	0.051 J	0.11	0.017 J	0.13	0.055 U	0.052 J	0.055 U	0.027 J	0.17	0.18
WTA-23-1.5-2	WTA-23	1.5 - 2.0	MG/KG	0.11 UJ	0.11 UJ	0.11 UJ	0.049 J-	0.067 J-	0.096 J-	0.1 J-	0.026 J-	0.046 J-	0.11 UJ	0.031 J-	0.11 UJ	0.064 J-	0.11 UJ	0.05 J-	0.084 J-	0.088
WTA-24-0-0.5	WTA-24	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.014 J	0.012 J	0.023 J	0.054 U	0.054 U	0.019 J	0.054 U	0.023 J	0.054 U	0.054 U	0.054 U	0.016 J	0.028 J	0.016
WTA-25-0-0.5	WTA-25	0.0 - 0.5	MG/KG	0.054 U	0.023 J	0.054 U	0.026 J	0.066	0.17	0.053 J	0.049 J	0.11	0.016 J	0.29	0.054 U	0.051 J	0.053 J	0.32	0.23	0.11
WTA-25-1.5-2	WTA-25	1.5 - 2.0	MG/KG	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0 U
WTA-26-0-0.5	WTA-26	0.0 - 0.5	MG/KG	0.052 U	0.052 U	0.052 U	0.98	0.68	0.78	0.33	0.075	1.4	0.37	0.066	0.052 U	0.23	0.052 U	0.036 J	0.28	1.3
WTA-27-0-0.5	WTA-27	0.0 - 0.5	MG/KG	0.052 U	0.052 U	0.013 J	1	0.62	0.74	0.28	0.077	1.4	0.3	0.13	0.052 U	0.2	0.017 J	0.14	0.31	1.1
WTA-27-1.5-2	WTA-27	1.5 - 2.0	MG/KG	0.054 U	0.051 J	0.016 J	0.1	0.14	0.28	0.12	0.1	0.2	0.024 J	0.52	0.026 J	0.1	0.062	0.59	0.43	0.21
WTA-28-0-0.5	WTA-28	0.0 - 0.5	MG/KG	0.028 U	0.028 U	0.0067 J	0.043	0.062	0.1	0.035	0.026 J	0.058	0.015 J	0.032	0.028 U	0.023 J	0.028 U	0.017 J	0.045	0.094
WTA-29-0-0.5	WTA-29	0.0 - 0.5	MG/KG	0.048 J	0.055 J	0.2	0.4	0.53	1.7	0.31	0.44	1.3	0.11	0.36	0.049 J	0.32	0.067	0.14	0.44	0.89
WTA-29-1.5-2	WTA-29	1.5 - 2.0	MG/KG	0.031 U	0.031 U	0.031 U	0.01 J	0.014 J	0.025 J	0.012 J	0.031 U	0.017 J	0.031 U	0.018 J	0.031 U	0.0069 J	0.031 U	0.011 J	0.024 J	0.018
WTA-30-0-0.5	WTA-30	0.0 - 0.5	MG/KG	0.027 U	0.027 U	0.027 U	0.011 J	0.014 J	0.024 J	0.011 J	0.0066 J	0.015 J	0.027 U	0.022 J	0.027 U	0.0059 J	0.0099 J	0.019 J	0.022 J	0.018
WTA-30-7-P	WTA-30	7.0 - 7.0	MG/KG	7.2 U	7.2 U	7.2 U	1.7 J	7.2 U	1.6 J	7.2 U	7.2 U	2.7 J	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	7.2 U	0.33
WTA-31-0-0.5-T1	WTA-31	0.0 - 0.5	MG/KG	0.016 U	0.016 U	0.016 U	0.01 J	0.013 J	0.02 J	0.015 J	0.053 U	0.015 J	0.053 U	0.02	0.016 U	0.053 U	0.0048 J	0.015 J	0.029	0.016
WTA-31-0-0.5-T2	WTA-31	0.0 - 0.5	MG/KG	0.027 U	0.027 U	0.027 U	0.012 J	0.014 J	0.021 J	0.015 J	0.053 U	0.017 J	0.053 U	0.021 J	0.027 U	0.053 U	0.006 J	0.015 J	0.031	0.017
WTA-31-1.5-2-T1	WTA-31	1.5 - 2.0	MG/KG	0.017 U	0.017 U	0.017 U	0.0062 J	0.0063 J	0.011 J	0.0077 J	0.029 U	0.011 J	0.029 U	0.011 J	0.017 U	0.029 U	0.017 U	0.016 J	0.014 J	0.008

Table 5: Soil Detected PAH Compared to Human Health and Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	CHRYSENE	DIBENZ(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	BAP EQ (EPA)
Category I Criteria				6,050	6,050	30,200	0.88	0.145	0.88	3,020	0.88	8.8	0.145	4,030	4,030	0.88	3.57	4,030	3,020	0.4
Category II On-Site Management Criteria				60,500	60,500	100,000	8.8	1.45	8.8	30,200	8.8	88	1.45	40,300	40,300	8.8	35.7	40,300	30,200	1.45
Maintenance Worker Screening Criteria				100,000	100,000	100,000	5.87	0.963	5.87	75,600	5.87	58.7	0.963	100,000	100,000	5.87	450	100,000	75,600	0.96
Off-Site Receptors Screening Criteria							11,500	1,150	11,500		11,500	115,000	2,670			11,500	3.57			1,150
Plant Ecological Screening Criteria				20	20	20	-	-	-	-	-	-	-	-	-	20	-	-	20	-
Invertebrate Ecological Screening Criteria				-	-	-	-	-	-	-	-	-	-	-	-	30	-	-		-
WTA-31-1.5-2-T2	WTA-31	1.5 - 2.0	MG/KG	0.021 U	0.021 U	0.021 U	0.012 J	0.07 U	0.02 J	0.015 J	0.07 U	0.018 J	0.07 U	0.024	0.021 U	0.07 U	0.0042 J	0.031	0.037	0.0032
WTA-32-0-0.5	WTA-32	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.082	0.069 J	0.088 J	0.05 J	0.18 U	0.12	0.18 U	0.029 J	0.054 U	0.18 U	0.054 U	0.023 J	0.056	0.086
WTA-33-0-0.5-T1	WTA-33	0.0 - 0.5	MG/KG	0.026 U	0.026 U	0.0078 J	0.021 J	0.1 U	0.03 J	0.1 U	0.1 U	0.031	0.1 U	0.027	0.015 J	0.1 U	0.021 J	0.078	0.052	0.0051
WTA-33-0-0.5-T2	WTA-33	0.0 - 0.5	MG/KG	0.053 U	0.053 U	0.053 U	0.019 J	0.18 U	0.18 U	0.18 U	0.18 U	0.028 J	0.18 U	0.037 J	0.053 U	0.18 U	0.053 U	0.045 J	0.051 J	0.0019
WTA-33-0-0.5-T3A	WTA-33	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.013 J	0.014 J	0.029 J	0.014 J	0.054 U	0.021 J	0.054 U	0.025 J	0.054 U	0.054 U	0.054 U	0.033 J	0.031 J	0.018
WTA-33-0-0.5-T3B	WTA-33	0.0 - 0.5	MG/KG	0.026 U	0.026 U	0.026 U	0.018 J	0.018 J	0.034	0.02 J	0.0072 J	0.025 J	0.026 U	0.028	0.0072 J	0.011 J	0.012 J	0.048	0.044	0.024
WTA-33-0-0.5-T3C	WTA-33	0.0 - 0.5	MG/KG	0.053 U	0.053 U	0.053 U	0.016 J	0.018 J	0.033 J	0.022 J	0.053 U	0.025 J	0.053 U	0.033 J	0.053 U	0.011 J	0.053 U	0.043 J	0.037 J	0.024
WTA-33-1.5-2-T1	WTA-33	1.5 - 2.0	MG/KG	0.0046 J	0.015 J	0.012 J	0.04 J	0.051 J	0.1 J	0.048 J	0.03 J	0.08 J	0.11 U	0.14	0.024	0.034 J	0.03	0.22	0.15	0.069
WTA-33-1.5-2-T2	WTA-33	1.5 - 2.0	MG/KG	0.017 J	0.042 J	0.033 J	0.14	0.21	0.28	0.15	0.096	0.21	0.033 J	0.4	0.047 J	0.11	0.042 J	0.59	0.64	0.3
WTA-33-1.5-2-T3A	WTA-33	1.5 - 2.0	MG/KG	0.053 U	0.053 U	0.012 J	0.039 J	0.043 J	0.087	0.05 J	0.022 J	0.069	0.011 J	0.11	0.022 J	0.029 J	0.029 J	0.18	0.13	0.07
WTA-33-1.5-2-T3B	WTA-33	1.5 - 2.0	MG/KG	0.0059 J	0.023	0.02	0.061 J	0.07 J	0.14	0.065 J	0.037 J	0.11	0.1 U	0.18	0.032	0.046 J	0.053	0.32	0.21	0.095
WTA-33-1.5-2-T3C	WTA-33	1.5 - 2.0	MG/KG	0.052	0.4	0.34	1.2	1.2	2	0.66	0.68	1.5	0.2	4.7	0.46	0.66	1	5.8	3.6	1.8
WTA-34-0-0.5	WTA-34	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.033 J	0.042 J	0.058	0.036 J	0.022 J	0.042 J	0.055 U	0.054 J	0.055 U	0.02 J	0.055 U	0.041 J	0.095	0.053
WTA-35-0-0.5	WTA-35	0.0 - 0.5	MG/KG	0.029 U	0.029 U	0.029 U	0.029 U	0.029 U	0.0068 J	0.029 U	0.029 U	0.029 U	0.029 U	0.0067 J	0.029 U	0.029 U	0.029 U	0.029 U	0.0071 J	0.00068
WTA-35-1.5-2	WTA-35	1.5 - 2.0	MG/KG	0.017 U	0.017 U	0.017 U	0.015 J	0.018 J	0.025 J	0.013 J	0.057 U	0.025	0.057 U	0.011 J	0.017 U	0.057 U	0.0047 J	0.019	0.021	0.022
WTA-36-0-0.5	WTA-36	0.0 - 0.5	MG/KG	0.11 U	0.11 U	0.11 U	0.028 J	0.036 J	0.051 J	0.038 J	0.11 U	0.031 J	0.11 U	0.046 J	0.11 U	0.11 U	0.11 U	0.024 J	0.069 J	0.044
WTA-37-0-0.5	WTA-37	0.0 - 0.5	MG/KG	0.057 U	0.15	0.033 J	0.18	0.39	0.86	0.3	0.3	0.55	0.07	1.6	0.054 J	0.29	0.24	1.9	1.4	0.6
WTA-38-0-0.5-T1	WTA-38	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.02 J	0.023 J	0.029 J	0.018 J	0.054 U	0.025 J	0.054 U	0.046 J	0.054 U	0.013 J	0.054 U	0.035 J	0.055	0.029
WTA-38-0-0.5-T2	WTA-38	0.0 - 0.5	MG/KG	0.056 U	0.056 U	0.056 U	0.03 J	0.039 J	0.054 J	0.034 J	0.022 J	0.041 J	0.056 U	0.071	0.056 U	0.025 J	0.056 U	0.072	0.079	0.05
WTA-38-0-0.5-T3A	WTA-38	0.0 - 0.5	MG/KG	0.055 U	0.055 U	0.055 U	0.018 J	0.028 J	0.043 J	0.029 J	0.014 J	0.026 J	0.055 U	0.032 J	0.055 U	0.016 J	0.055 U	0.025 J	0.043 J	0.036
WTA-38-0-0.5-T3B	WTA-38	0.0 - 0.5	MG/KG	0.054 U	0.054 U	0.054 U	0.014 J	0.018 J	0.029 J	0.019 J	0.054 U	0.021 J	0.054 U	0.031 J	0.054 U	0.012 J	0.054 U	0.026 J	0.036 J	0.024
WTA-38-0-0.5-T3C	WTA-38	0.0 - 0.5	MG/KG	0.028 U	0.028 U	0.028 U	0.015 J	0.019 J	0.03	0.021 J	0.0083 J	0.021 J	0.028 U	0.031	0.028 U	0.011 J	0.028 U	0.027 J	0.045	0.025
WTA-38-1.5-2-T1	WTA-38	1.5 - 2.0	MG/KG	0.11 U	0.11 U	0.033 J	0.08 J	0.072 J	0.093 J	0.063 J	0.023 J	0.074 J	0.11 U	0.14	0.11 U	0.036 J	0.022 J	0.2	0.23	0.093
WTA-38-1.5-2-T2	WTA-38	1.5 - 2.0	MG/KG	0.11 U	0.11 U	0.11 U	0.029 J	0.03 J	0.054 J	0.034 J	0.11 U	0.037 J	0.11 U	0.05 J	0.11 U	0.11 U	0.11 U	0.098 J	0.076 J	0.038
WTA-38-1.5-2-T3A	WTA-38	1.5 - 2.0	MG/KG	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.039 J	0.038 J	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.068 J	0.041 J	0.0039
WTA-38-1.5-2-T3B	WTA-38	1.5 - 2.0	MG/KG	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.069 J	0.27 U	0 U
WTA-38-1.5-2-T3C	WTA-38	1.5 - 2.0	MG/KG	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.048 J	0.043 J	0 U

Table 5: Soil Detected PAH Compared to Human Health and Ecological Screening Criteria
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	ACENAPHTHENE	ACENAPHTHYLENE	ANTHRACENE	BENZO(A)ANTHRACENE	BENZO(A)PYRENE	BENZO(B)FLUORANTHENE	BENZO(G,H,I)PERYLENE	BENZO(K)FLUORANTHENE	CHRYSENE	DIBENZ(A,H)ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO(1,2,3-CD)PYRENE	NAPHTHALENE	PHENANTHRENE	PYRENE	BAP EQ (EPA)
Category I Criteria				6,050	6,050	30,200	0.88	0.145	0.88	3,020	0.88	8.8	0.145	4,030	4,030	0.88	3.57	4,030	3,020	0.4
Category II On-Site Management Criteria				60,500	60,500	100,000	8.8	1.45	8.8	30,200	8.8	88	1.45	40,300	40,300	8.8	35.7	40,300	30,200	1.45
Maintenance Worker Screening Criteria				100,000	100,000	100,000	5.87	0.963	5.87	75,600	5.87	58.7	0.963	100,000	100,000	5.87	450	100,000	75,600	0.96
Off-Site Receptors Screening Criteria							11,500	1,150	11,500		11,500	115,000	2,670			11,500	3.57			1,150
Plant Ecological Screening Criteria				20	20	20	-	-	-	-	-	-	-	-	-	20	-	-	20	-
Invertebrate Ecological Screening Criteria				-	-	-	-	-	-	-	-	-	-	-	-	30	-	-		-

Notes:
Human health screening criteria based on the Final Soil Management Plan, Revision 1, dated April 12, 2017
Ecological screening criteria based on the Final Phase IV Sampling Results Technical Memorandum, dated May 16, 2016.

No screening criteria are available for birds or mammals. None of the results exceed the plant or invertebrate screening criteria.
Chemicals that were not detected in any samples were excluded from this table. See Appendix A for full analytical results.

51	Gray highlights indicate the result exceeds either the Maintenance Worker Screening Criteria or Off-Site Receptors (Inhalation) Screening Criteria
51	Outlined boxes indicate the result exceeds the Category I Screening Criteria

-	Not applicable
BAP (EQ)	Benzo(a)pyrene equivalency quotient
MG/KG	Milligrams per kilogram
J	Estimated value
PAH	Polycyclic aromatic hydrocarbon
SCR	Site Characterization Report
U	Nondetect

Tetra Tech. 2013. Site Characterization Report. Research, Education, and Support Area and Groundwater within the Richmond Field Station Site. May 28.

Table 6: Soil Detected PCB Analytical Results

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL AROCLORS
WTA-01-0-0.5	WTA-01	0.0 - 0.5	MG/KG	0.24 J	0.53 U	0.53 U	0.24
WTA-01-1.5-2	WTA-01	1.5 - 2.0	MG/KG	0.49 J	0.19 J	0.55 U	0.68
WTA-02-0-0.5	WTA-02	0.0 - 0.5	MG/KG	0.17 J	0.09 J	0.52 U	0.26
WTA-02_1.5-2.0	WTA-02	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-03-0-0.5	WTA-03	0.0 - 0.5	MG/KG	0.52 U	0.52 U	0.52 U	0 U
WTA-03-1.5-2	WTA-03	1.5 - 2.0	MG/KG	0.13 J	0.55 U	0.55 U	0.13
WTA-04-0-0.5	WTA-04	0.0 - 0.5	MG/KG	0.28 J	0.34 J	0.55 U	0.62
WTA-04_1.5-2.0	WTA-04	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-05-0-0.5	WTA-05	0.0 - 0.5	MG/KG	0.43 J	0.33 J	0.54 U	0.76
WTA-05-1.5-2	WTA-05	1.5 - 2.0	MG/KG	0.56 U	0.56 U	0.56 U	0 U
WTA-06-0-0.5	WTA-06	0.0 - 0.5	MG/KG	0.26 U	0.26 U	0.26 U	0 U
WTA-06_1.5-2.0	WTA-06	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-07-0-0.5	WTA-07	0.0 - 0.5	MG/KG	0.56 U	0.56 U	0.56 U	0 U
WTA-07-1.5-2	WTA-07	1.5 - 2.0	MG/KG	0.55 U	0.55 U	0.55 U	0 U
WTA-08-0-0.5	WTA-08	0.0 - 0.5	MG/KG	1	0.34 J	0.54 U	1.34
WTA-08_1.5-2.0	WTA-08	1.5 - 2.0	MG/KG	1.7	0.05 U	0.05 U	1.7
WTA-09-0-0.5	WTA-09	0.0 - 0.5	MG/KG	0.22 J	0.12 J	0.54 U	0.34
WTA-09-1.5-2	WTA-09	1.5 - 2.0	MG/KG	0.32 J	0.53 U	0.53 U	0.32
WTA-10-0-0.5	WTA-10	0.0 - 0.5	MG/KG	2.1	0.61 J	1.1 U	2.71
WTA-10_1.5-2.0	WTA-10	1.5 - 2.0	MG/KG	0.88	0.05 U	0.05 U	0.88
WTA-11-0-0.5	WTA-11	0.0 - 0.5	MG/KG	0.56 J	0.48 J	1.1 U	1.04
WTA-11-1.5-2	WTA-11	1.5 - 2.0	MG/KG	1.1 U	1.1 U	1.1 U	0 U
WTA-12-0-0.5	WTA-12	0.0 - 0.5	MG/KG	3.4	1.9	0.54 J	5.84
WTA-12_1.5-2.0	WTA-12	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-13-0-0.5	WTA-13	0.0 - 0.5	MG/KG	1.1 U	1.1 U	1.1 U	0 U
WTA-13-1.5-2	WTA-13	1.5 - 2.0	MG/KG	1.1 U	1.1 U	1.1 U	0 U
WTA-14-0-0.5	WTA-14	0.0 - 0.5	MG/KG	0.55 U	0.55 U	0.55 U	0 U
WTA-14_1.5-2.0	WTA-14	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-15-0-0.5	WTA-15	0.0 - 0.5	MG/KG	0.35 J	0.31 J	0.54 U	0.66
WTA-15-1.5-2	WTA-15	1.5 - 2.0	MG/KG	0.2 J	0.54 U	0.54 U	0.2
WTA-16-0-0.5	WTA-16	0.0 - 0.5	MG/KG	0.25 J	0.28 J	0.41 J	0.94
WTA-16_1.5-2.0	WTA-16	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-17-0-0.5	WTA-17	0.0 - 0.5	MG/KG	0.4 J	0.26 J	0.54 U	0.66
WTA-17-1.5-2	WTA-17	1.5 - 2.0	MG/KG	2.8	1.4	0.31 J	4.51
WTA-17-7-P	WTA-17	7.0 - 7.0	MG/KG	1.4 U	1.4 U	1.4 U	0 U

Table 6: Soil Detected PCB Analytical Results

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL AROCLORS
WTA-18-0-0.5	WTA-18	0.0 - 0.5	MG/KG	1.1 U	1.1 U	1.1 U	0 U
WTA-18_1.5-2.0	WTA-18	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-19-0-0.5-T1	WTA-19	0.0 - 0.5	MG/KG	1.7	0.94 J	1.1 U	2.64
WTA-19-0-0.5-T2	WTA-19	0.0 - 0.5	MG/KG	0.24 J	0.19 J	1.1 U	0.43
WTA-19-0-0.5-T3A	WTA-19	0.0 - 0.5	MG/KG	0.42 J	0.26 J	1.1 U	0.68
WTA-19-0-0.5-T3B	WTA-19	0.0 - 0.5	MG/KG	0.41 J	0.35 J	1.1 U	0.76
WTA-19-0-0.5-T3C	WTA-19	0.0 - 0.5	MG/KG	0.38 J	0.34 J	0.53 U	0.72
WTA-19-1.5-2-T1	WTA-19	1.5 - 2.0	MG/KG	0.55 U	0.55 U	0.55 U	0 U
WTA-19-1.5-2-T2	WTA-19	1.5 - 2.0	MG/KG	0.56 U	0.56 U	0.56 U	0 U
WTA-19-1.5-2-T3A	WTA-19	1.5 - 2.0	MG/KG	0.55 U	0.55 U	0.55 U	0 U
WTA-19-1.5-2-T3B	WTA-19	1.5 - 2.0	MG/KG	0.56 U	0.56 U	0.56 U	0 U
WTA-19-1.5-2-T3C	WTA-19	1.5 - 2.0	MG/KG	0.19 J	0.55 U	0.55 U	0.19
WTA-19-6.5-P	WTA-19	6.5 - 6.5	MG/KG	0.78 U	0.78 U	0.78 U	0 U
WTA-20-0-0.5	WTA-20	0.0 - 0.5	MG/KG	12	3.1	0.73	15.83
WTA-20-6.5-P	WTA-20	6.5 - 6.5	MG/KG	0.93 U	0.93 U	0.93 U	0 U
WTA-20_1.5-2.0	WTA-20	1.5 - 2.0	MG/KG	250	50 U	50 U	250
WTA-21-0-0.5	WTA-21	0.0 - 0.5	MG/KG	37	12	2.1	51.1
WTA-21-1.5-2	WTA-21	1.5 - 2.0	MG/KG	8.8	2.3	0.51 J	11.61
WTA-22-0-0.5	WTA-22	0.0 - 0.5	MG/KG	8.3	3.2	0.9	12.4
WTA-22_1.5-2.0	WTA-22	1.5 - 2.0	MG/KG	0.5	0.05 U	0.05 U	0.5
WTA-23-0-0.5	WTA-23	0.0 - 0.5	MG/KG	27	10	1.9	38.9
WTA-23-1.5-2	WTA-23	1.5 - 2.0	MG/KG	90	16	2.3	108.3
WTA-24-0-0.5	WTA-24	0.0 - 0.5	MG/KG	0.43 J	0.38 J	0.53 U	0.81
WTA-24_1.5-2.0	WTA-24	1.5 - 2.0	MG/KG	0.45	0.05 U	0.05 U	0.45
WTA-25-0-0.5	WTA-25	0.0 - 0.5	MG/KG	1.2	0.79	0.23 J	2.22
WTA-25-1.5-2	WTA-25	1.5 - 2.0	MG/KG	0.55 U	0.55 U	0.55 U	0 U
WTA-26-0-0.5	WTA-26	0.0 - 0.5	MG/KG	0.17 J	0.11 J	0.53 U	0.28
WTA-26_1.5-2.0	WTA-26	1.5 - 2.0	MG/KG	0.14	0.05 U	0.05 U	0.14
WTA-27-0-0.5	WTA-27	0.0 - 0.5	MG/KG	0.54	0.19 J	0.53 U	0.73
WTA-27-1.5-2	WTA-27	1.5 - 2.0	MG/KG	0.85	0.33 J	0.54 U	1.18
WTA-28-0-0.5	WTA-28	0.0 - 0.5	MG/KG	0.23 J	0.12 J	0.54 U	0.35
WTA-28_1.5-2.0	WTA-28	1.5 - 2.0	MG/KG	0.11	0.05 U	0.05 U	0.11
WTA-29-0-0.5	WTA-29	0.0 - 0.5	MG/KG	0.24 J	0.13 J	0.56 U	0.37
WTA-29-1.5-2	WTA-29	1.5 - 2.0	MG/KG	0.63 U	0.63 U	0.63 U	0 U
WTA-30-0-0.5	WTA-30	0.0 - 0.5	MG/KG	0.075 J	0.036 UJ	0.036 UJ	0.075

Table 6: Soil Detected PCB Analytical Results

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL AROCLORS
WTA-30-7-P	WTA-30	7.0 - 7.0	MG/KG	0.048 UJ	0.048 UJ	0.048 UJ	0 U
WTA-30_1.5-2.0	WTA-30	1.5 - 2.0	MG/KG	0.05 U	0.05 U	0.05 U	0 U
WTA-31-0-0.5-T1	WTA-31	0.0 - 0.5	MG/KG	0.36 J	0.035 UJ	0.035 UJ	0.36
WTA-31-0-0.5-T2	WTA-31	0.0 - 0.5	MG/KG	0.28 J	0.035 UJ	0.035 UJ	0.28
WTA-31-0-0.5-T3A	WTA-31	0.0 - 0.5	MG/KG	0.53 J	0.036 UJ	0.036 UJ	0.53
WTA-31-0-0.5-T3B	WTA-31	0.0 - 0.5	MG/KG	0.57 J	0.036 UJ	0.036 UJ	0.57
WTA-31-0-0.5-T3C	WTA-31	0.0 - 0.5	MG/KG	0.56 J	0.044 UJ	0.044 UJ	0.56
WTA-31-1.5-2-T1	WTA-31	1.5 - 2.0	MG/KG	0.19 J	0.038 UJ	0.038 UJ	0.19
WTA-31-1.5-2-T2	WTA-31	1.5 - 2.0	MG/KG	0.42 J	0.046 UJ	0.046 UJ	0.42
WTA-31-1.5-2-T3A	WTA-31	1.5 - 2.0	MG/KG	0.13 J	0.28 J+	1.1 J	1.51
WTA-31-1.5-2-T3B	WTA-31	1.5 - 2.0	MG/KG	0.18 J	0.39 J+	1.3 J	1.87
WTA-31-1.5-2-T3C	WTA-31	1.5 - 2.0	MG/KG	0.14 U	0.14 U	2.5	2.5
WTA-32-0-0.5	WTA-32	0.0 - 0.5	MG/KG	3.1	1.7	0.036 U	4.8
WTA-32_1.5-2.0	WTA-32	1.5 - 2.0	MG/KG	1.1	0.05 U	0.05 U	1.1
WTA-33-0-0.5-T1	WTA-33	0.0 - 0.5	MG/KG	0.32 J-	0.22	0.035 U	0.54
WTA-33-0-0.5-T2	WTA-33	0.0 - 0.5	MG/KG	0.36	0.27	0.035 U	0.63
WTA-33-0-0.5-T3A	WTA-33	0.0 - 0.5	MG/KG	0.28 J-	0.28	0.27	0.83
WTA-33-0-0.5-T3B	WTA-33	0.0 - 0.5	MG/KG	0.19 J-	0.27	0.16 J+	0.62
WTA-33-0-0.5-T3C	WTA-33	0.0 - 0.5	MG/KG	0.24 J-	0.23	0.24	0.71
WTA-33-1.5-2-T1	WTA-33	1.5 - 2.0	MG/KG	0.76	1	0.2	1.96
WTA-33-1.5-2-T2	WTA-33	1.5 - 2.0	MG/KG	1.2	1.8	0.5	3.5
WTA-33-1.5-2-T3A	WTA-33	1.5 - 2.0	MG/KG	0.036 UJ	5.4 J	0.65	6.05
WTA-33-1.5-2-T3B	WTA-33	1.5 - 2.0	MG/KG	0.84	1.7	0.37	2.91
WTA-33-1.5-2-T3C	WTA-33	1.5 - 2.0	MG/KG	0.74	1.3	0.33 J+	2.37
WTA-34-0-0.5	WTA-34	0.0 - 0.5	MG/KG	3	1.5	0.29	4.79
WTA-34_1.5-2.0	WTA-34	1.5 - 2.0	MG/KG	0.14	0.05 U	0.05 U	0.14
WTA-35-0-0.5	WTA-35	0.0 - 0.5	MG/KG	0.037 U	0.037 U	0.037 U	0 U
WTA-35-1.5-2	WTA-35	1.5 - 2.0	MG/KG	1.2	0.5	0.038 U	1.7
WTA-36-0-0.5	WTA-36	0.0 - 0.5	MG/KG	0.46	0.27	0.036 U	0.73
WTA-36_1.5-2.0	WTA-36	1.5 - 2.0	MG/KG	1.2	0.05 U	0.05 U	1.2
WTA-37-0-0.5	WTA-37	0.0 - 0.5	MG/KG	0.83	0.71	0.16	1.7
WTA-37_1.5-2.0	WTA-37	1.5 - 2.0	MG/KG	0.46	0.05 U	0.05 U	0.46
WTA-38-0-0.5-T1	WTA-38	0.0 - 0.5	MG/KG	0.22	0.3	0.061 J+	0.581
WTA-38-0-0.5-T2	WTA-38	0.0 - 0.5	MG/KG	0.76	0.86	0.1	1.72
WTA-38-0-0.5-T3A	WTA-38	0.0 - 0.5	MG/KG	1.2 J	1.1 J	0.3 J	2.6
WTA-38-0-0.5-T3B	WTA-38	0.0 - 0.5	MG/KG	1 J	1.5 J	0.27 J	2.77
WTA-38-0-0.5-T3C	WTA-38	0.0 - 0.5	MG/KG	0.99 J	1.2 J	0.24 J	2.43
WTA-38-1.5-2-T1	WTA-38	1.5 - 2.0	MG/KG	2.2 J	0.035 UJ	0.035 UJ	2.2
WTA-38-1.5-2-T2	WTA-38	1.5 - 2.0	MG/KG	1.8 J	0.98 J	0.24 J	3.02
WTA-38-1.5-2-T3A	WTA-38	1.5 - 2.0	MG/KG	2.6 J	0.9 J	0.1 J	3.6
WTA-38-1.5-2-T3B	WTA-38	1.5 - 2.0	MG/KG	2.3 J	0.91 J	0.099 J	3.309
WTA-38-1.5-2-T3C	WTA-38	1.5 - 2.0	MG/KG	2.2 J	0.93 J	0.14 J	3.27

Table 6: Soil Detected PCB Analytical Results

Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	AROCLOR-1248	AROCLOR-1254	AROCLOR-1260	TOTAL AROCLORS

Notes:

	Results are greater than 1 and less than or equal to 5.0
	Results are greate than 5 and less than or equal to 10
	Resutls are greater than 10 and less than or equal to 15
	Resutls are greater than 15

MG/KG	Milligrams per kilogram
J	Estimated value
PCB	Polychlorinated biphenyl
U	Nondetect

Table 7: Soil TPH Analytical Results
Phase V WTA Sampling
University of California, Berkeley, Richmond Field Station Site

Sample ID	Sample Location	Depth (feet bgs)	Units	DIESEL RANGE ORGANICS	GASOLINE RANGE ORGANICS	MOTOR OIL RANGE ORGANICS
		Screening Criteria	MG/KG	880	2,800	32,000
WTA-17-7-P	WTA-17	7.0 - 7.0	MG/KG	460 Y	1.4 U	850
WTA-19-6.5-P	WTA-19	6.5 - 6.5	MG/KG	830 Y	1.4 U	1,500
WTA-20-6.5-P	WTA-20	6.5 - 6.5	MG/KG	440 Y	0.2 J	770
WTA-30-7-P	WTA-30	7.0 - 7.0	MG/KG	240 Y	0.23 J	1,500

Notes
Human health screening criteria based on the Final Soil Management Plan, Revision 1, dated April 12, 2017

J	Estimated value
MG/KG	Milligrams per kilogram
TPH	Total petroleum hydrocarbons
U	Nondetect
Y	Chromatographic pattern resembles hydrocarbon fuel pattern and was quantitated using the standard it resembled most

PHOTOGRAPH LOG

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	800	**WTA-01**	**0-0.5, 1.5-2,** 3.5-4, IS	5		Observed metal pipe with rust 12 inches bgs and bricks/construction debris. Reached bay mud at approx. 5 ft bgs.
11/6/2019	900	**WTA-02**	**0-0.5,** 1.5-2, IS	3.5		Minimal to no debris observed. Reached bay mud at appox. 3.5 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	922	**WTA-03**	**0-0.5, 1.5-2,** 3.5-4, IS	4		Minimal to no debris observed. Reached bay mud at appox. 4 ft bgs.
11/6/2019	940	**WTA-04**	**0-0.5,** 1.5-2, IS	3		Observed concrete and small amounts of copper wire. Bay mud encountered at approx. 3 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	1020	**WTA-05**	**0-0.5, 1.5-2,** 3.5-4, IS	5.5		Observed dark soil near surface and construction debris (wood, concrete, etc.).
						Copper tubes suspected to be blasting caps encountered at approx. 4.5 ft bgs.
						Light brown sandy clay encountered at approx. 5 ft bgs- suspected to be native soil landward side of historic sea wall. Historic sea wall encountered at approx. 5.5 ft bgs. Cinders observed at bottom foot of pothole.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	1049	**WTA-06**	**0-0.5,** 1.5-2, 3.5-4, IS	5.5		No construction debris or other anomalies observed. Light brown sandy soil encountered at 0-3 ft bgs. Dark layer of soil encountered at 3-4 ft bgs. Reached bay mud at approx. 5.5 ft bgs.
11/6/2019	1222	**WTA-07**	**0-0.5, 1.5-2,** IS	2.8		Two pieces of concrete observed near the surface. No other anomalies observed. Dark grey-brown soil with white flecks observed above bay mud. Reached bay mud at approx. 2.8 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	1245	**WTA-08**	**0-0.5,** 1.5-2, IS	2		Medium to light brown soil near surface. Minimal debris observed (beer can, small pieces of concrete). Reached bay mud at approx. 2 ft bgs.
						Layer of soil with white flecks observed at approx. 1-1.5 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	1332	**WTA-09**	**0-0.5, 1.5-2,** IS	3.5	 	White material observed in soil at approx. 2.5 ft bgs - collected sample WTA-09-2.5. Fine grey white powder different in apperance from material at approx 2.5 ft bgs was observed in soil at approx 3 ft bgs- collected sample WTA-09-3. Reached bay mud at approx. 3.5 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/6/2019	1355	**WTA-10**	**0-0.5,** 1.5-2, IS	3		White grey powdery material similar to WTA-09-3 encountered at 2 ft bgs. No construction debris or other anomalies observed. Reached bay mud at approx. 3 ft bgs.
11/7/2019	745	**WTA-11**	**0-0.5, 1.5-2,** IS	3		Concrete and brick observed within first foot. Large pieces of concrete at approx 1.5-2 ft bgs. Some pyrite cinders observed on sidewall at 1.5 ft bgs. Refusal at approx. 3 ft bgs due to concrete boulders.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/7/2019	920	**WTA-12**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS	8.25		Metal cable observed within top two ft. Brown clay-like soil, bricks, wood, and concrete observed at approx. 4.5 ft bgs. Darker brown and looser soil observed at 5.5 ft bgs. Pyrite cinders and staining observed at 68 ft bgs. Bay mud encountered at approx 8 ft bgs.
						Wood, glass, and bricks observed.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/7/2019	1015	**WTA-13**	**0-0.5, 1.5-2,** 3.5-4, 5.5-6, IS	10		Dark, hard soil observed at 0-3 ft bgs. Light white, grey hard soil that apprears to clump together in a granular fashion observed at 3.5-4 ft bgs. Tan clay-like soil observed at approx 6-10 ft bgs. Minimal debris observed in tan clay-like soil. Max depth reached.
						Concrete pieces, wire, and ceramic pieces observed.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/7/2019	1035	**WTA-14**	**0-0.5,** 1.5-2, 3.5-4, IS	4		Dark, hard soil observed (appears native). Lighter colored later at 3.5 ft bgs (appears to be native alluvial layer). Stopped excavation at 4 ft bgs due to absence of fill materials.
11/7/2019	1130	**WTA-15**	**0-0.5, 1.5-2,** 3.5-4, 5.5-6, IS	10		Small amounts of concrete and wood pieces in top 3-4 ft bgs (appears to be fill material). Lighter tan soil layer observed at approx 610 ft bgs. Some wood and glass observed. Pyrite cinders observed at approx. 10 ft bgs. Max depth reached.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/7/2019	1305	**WTA-16**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS	7	 	Dark soil and small pieces of concrete observed at surface. Large piece of wood observed at 6.5-7 ft bgs. Cinders observed at bottom of excavation. No other significant anomalies or debris observed.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/7/2019	1420	**WTA-17**	**0-0.5, 1.5-2,** 3.5-4, 5.5-6, IS, **7-P**	7		Bricks and concrete fragments observed within 1-2 ft bgs. Bricks observed throughout pothole. Soil seems consistent in color and texture.
						Strong petroleum odor from bay mud at base of excavation (7 ft bgs). Cinders observed on bay mud. Additional sample WTA-17-7-P collected for TPH & PCB analysis.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	735	**WTA-18**	**0-0.5,** 1.5-2, 3.5-4, IS	5		A lot of large pieces of concrete and brick observed. Dark brown soil color. Refusal at 5 ft bgs due to concrete.
11/8/2019	815	**WTA-19**	**0-0.5, 0-0.5 Triplicate, 1.5-2, 1.5-2 Triplicate,** 3.5-4, 5.5-6, IS, **6.5-P**	6.5		Dark soil at surface and small concrete pieces observed. Soil color and texture changes to tan clay-like at 1.5-2 ft bgs. Reached bay mud at approx. 6.5 ft bgs with very dark black color and cinders. Some petroleum odor. Additional sample WTA-19-6.5-P collected for TPH & PCB analysis. PID peak reading at top of excavation=0.065. PID peak reading at excavation bucket= 0.115.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	915	**WTA-20**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS, **6.5-P**	7	 	Small amounts of concrete observed in first 2-3 ft bgs. Medium brown soil color up to 3 ft bgs and dark color below. Reached bay mud at approx. 6.5 ft bgs. Same black color and petrolem odor as WTA-17 and WTA-19 observed. Additional sample WTA-20-6.5-P collected for TPH & PCB analysis.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	940	**WTA-21**	**0-0.5, 1.5-2,** 3.5-4, IS	4		Concrete chunks observed 0-4 ft bgs. Reached bay mud at approx. 4 ft bgs.Water seeped into base of excavation. No black color, petroleum odor, or sheen observed.
11/8/2019	1000	**WTA-22**	**0-0.5,** 1.5-2, IS	3		Soil very heterogeneous in first 2 ft. Large pieces of concrete on top of bay mud. Water seeped into base of excavation.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	1000	**WTA-22**	**0-0.5,** 1.5-2, IS	3		Suspect buried lab supplies (glass fragments with measurements, glass jars, batteries).
11/8/2019	1020	**WTA-23**	**0-0.5, 1.5-2,** IS	3.5		Dark soil and small amount of metal, glass, bricks, and concrete debris observed. Reached bay mud at approx. 3 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	1020	**WTA-23**	**0-0.5, 1.5-2,** IS	3.5		Linoleum observed above bay mud at approx. 3 ft bgs.
11/8/2019	1045	**WTA-24**	**0-0.5,** 1.5-2, IS	3		Large concrete pipe and construction debris observed. Reached bay mud at approx. 3 ft bgs.Water found at bottom of excavation.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	1115	**WTA-25**	**0-0.5, 1.5-2,** 3.5-4, 5.5-6, IS	6.5		Thin layer of dark soil at 8-12 in bgs with tan soil below. Concrete and other building/construction debris observed.Grey, dry and dusty layer containing concrete observed. Tan clay layer on top of bay mud. Reached bay mud at approx. 6-6.5 ft bgs.
11/8/2019	1309	**WTA-26**	**0-0.5,** 1.5-2, IS	3.5		Dark layer of soil observed within the top foot. Some construction debris (metal, concrete, wood) observed 2-3 ft bgs. Reached bay mud containing construction debris at approx. 3.5 ft bgs.Water with a strong sulfur smell encountered at base of excavation. Sheen and bubbles observed on the water. Additional archive sample taken at bay mud interface.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/8/2019	1326	**WTA-27**	**0-0.5, 1.5-2,** 3.5-4, IS	4		A lot of construction debris observed in top 3 ft of pothole. Large pieces of concrete and metal pipe near surface. Refusal at 4 ft bgs due to concrete.
11/8/2019	1340	**WTA-28**	**0-0.5,** 1.5-2, IS	4		Dark organic soil observed. Plastic layer and rust colored soil at approx. 2.5 ft bgs. Large amber bottle observed 3 ft bgs. Groundwater encountered at approx. 3.5-4 ft bgs. Wood and other debris found at bottom of excavation.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/18/2019	1355	**WTA-29**	**0-0.5, 1.5-2,** IS	3		A lot of wood debris and some plastic observed. Varried soil color and texture at base of excavation.
						Yellow, red, brown patches at 3 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	915	**WTA-30**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS, **7-P**	7		Cinders observed at 2 ft bgs. Dark soil with increased amounts of debris starting at 4-4.5 ft bgs. Ceramic, glass shards, wood, brick and metal observed. Groundwater with a slight sulfur odor seeped in at 6 ft bgs.
						Additional debris (shingles, metal shavings, wires, wood) found at 7 ft bgs. Slight petroleum odor and sheen visible on tiles/shingles. No hits on PID.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	955	**WTA-31**	**0-0.5, 0-0.5 Triplicate, 1.5-2, 1.5-2 Triplicate,** 3.5-4, 5.5-6, IS	6		Tan dry soil observed from 0-1.5 ft bgs. Dark, hard, clay like soil at approx 2 ft bgs. Minimal debris observed (wood and concrete). Large pieces of concrete observed at 4 ft bgs. Large concrete pieces observed at 4-6 ft bgs. Small amount of groundwater seeped in at bottom of excavation.
11/13/2019	1020	**WTA-32**	**0-0.5,** 1.5-2, 3.5-4, IS	5		Large concrete pieces, metal, and other construction debris observed.Large concrete pieces at approx. 5 ft bgs. Refusal at approx. 5 ft bgs due to concrete.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1020	**WTA-32**	**0-0.5,** 1.5-2, 3.5-4, IS	5		Large concrete pieces and potentially stucco siding observed within top 2 ft bgs.
11/13/2019	1044	**WTA-33**	**0-0.5, 0-0.5 Triplicate, 1.5-2, 1.5-2 Triplicate,** 3.5-4, IS	5.5		Concrete/stucco and metal debris observed within top 2 ft bgs. Reached bay mud at approx. 5 ft bgs. Groundwater with a very slight sheen seeped into base of excavation.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1115	**WTA-34**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS	7		Wood and metal filings observed within top 1-1.5 ft bgs. Soil changes from dark brown to tan at approx. 2 ft bgs. Construction debris encountered at approx. 4 ft bgs. Bricks, roofing, glass, etc. observed at 4-6 ft bgs. Lab supplies observed at 7 ft bgs (jars, broken test tube, tubing).
						A lot of burried debris observed (metal, glass, soda bottles, plastic)

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1140	**WTA-35**	**0-0.5, 1.5-2,** 3.5-4, 5.5-6, IS	6.5		Tan dry soil observed within top 2 ft bgs, and dark clay-like layer below. Layer of suspected bay mud encountered at approx. 3-3.5 ft bgs. Suspected to be placed there from excavation of nearby concrete pit. Minimal debris, some wood, and rubber tubing observed above 6 ft bgs. Groundwater flooded excavation beyound 6 ft bgs.
						Construction debris (wood, linoleum, etc.) found at 6 ft bgs. Soil around debris was very black, but had no petroleum-like odor.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1310	**WTA-36**	**0-0.5,** 1.5-2, 3.5-4, 5.5-6, IS	8		Large pieces of plastic pipe in top 2 ft bgs. Minimal other debris found (small pieces of glass and concrete). Pocket of pyrite cinders observed from 4-8 ft bgs. Reached bay mud at approx. 8 ft bgs.
11/13/2019	1325	**WTA-37**	**0-0.5,** 1.5-2, 3.5-4, IS	4.5		Groundwater with a sulfur-like odor seeped into excavation at approx 4.5 ft bgs.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1325	**WTA-37**	**0-0.5,** 1.5-2, 3.5-4, IS	4.5		Debris observed near the surface (concrete, metal, wood, crushed galvanized bucket). Rust brown colored soil observed at approx. 4 ft bgs.
11/13/2019	1355	**WTA-38**	**0-0.5, 0-0.5 Triplicate, 1.5-2, 1.5-2 Triplicate,** 3.5-4, IS	8		Debris and metal observed near surface. Sheet metal oriented vertically observed in top 1-2 ft bgs. A lot of brick, glass, and wood debris at 4 ft bgs. Strong sulfur smell.

RFS Phase V Potholing
November 2019

Date	Time	Location	Samples Collected (ft)	Final Depth (ft)	Photo	Notes
11/13/2019	1355	WTA-38.2	None	3		Additional pothole located approx. 15 ft east of WTA-38. Small amounts of brick and sheet metal observed. Several large pieces of concrete encountered at 3 ft bgs. Refusal at approx. 3 ft bgs due to concrete.
11/13/2019	1355	WTA-38.3	None	11.5		Additional pothole located 15 ft east of WTA-38.2. Concrete chunks encountered at approx. 3 ft bgs. Larger pieces of concrete encountered at 4-5 ft bgs. Reached bay mud at approx 4.5 ft bgs. Cinder present on top of bay mud. Golden and tan layers observed below bay mud. Groundwater seeped in at approx. 9-10 ft bgs,

Notes:
Samples submitted for initial analysis are in **bold**

bgs	below ground surface
ft	feet
in	inches
IS	incremental sample