



R0 414

May 27, 2003

Alameda County
JUN 04 2003
Environmental Health

Dale Klettke
Port of Oakland
530 Water Street
Oakland, CA 94607

RE: United Maintenance Hangar Area,
Metropolitan Oakland International Airport
Weiss Project No. 259-1639-2-2

Dear Mr. Klettke:

Weiss Associates (Weiss) is pleased to present the findings from the Phase II Site Investigation at the United Airlines Hangar Area, Metropolitan Oakland International Airport (the Site) (Figure 1). This letter report provides a summary of the Phase I findings used to design the Phase II investigation, a description of Phase II fieldwork performed, and a summary of the analytical results from sampling conducted by Weiss on behalf of the Port of Oakland (Port) and by Environmental Resource Management (ERM) on behalf of UAL.

SITE BACKGROUND

In 1957, approximately 700 acres of the Site were filled with sand dredged from the San Francisco Bay¹. The other 700 acres were filled with fine-grained sediments. By October 1971, the UAL hangar area had been filled in and was being graded¹. The maintenance hangar and surrounding aircraft parking were constructed by August of 1972. The first occupant of the maintenance hangar was World Air Center (later World Airways, Inc.). World Air Center signed a lease agreement for the site on February 6, 1967. However, a handwritten note on the lease agreement indicates that their lease term may have commenced on May 1, 1973². UAL entered into a lease agreement with the Port on September 5, 1989 and has occupied the Site since that time.

INVESTIGATION AREAS

Based on the Phase I Site Assessment findings, the Phase II Investigation Work Plan³ identified eight investigation areas surrounding the United Airlines (UAL) Maintenance Hangar. For ease of comparability with data collected by ERM, the investigation areas have been subdivided into

¹ Clayton Environmental Consultants, 1995, *Phase I Environmental Site Assessment of the Airport Development Program, Metropolitan Oakland International Airport for Port of Oakland*, March.

² Brandt, Gregory C., 2003, Memorandum RE: World Airways and United Air Lines lease agreements, March 17.

³ Weiss Associates, 2003, *Draft Phase II Site Investigation Work Plan for United Maintenance Hangar Area*, April.

18 areas to include all of the data collected by Weiss and ERM. The 18 investigation areas are shown on Figure 2. A description of and rationale for selecting the investigation areas is provided below.

- *Small Parts Wash Rack/Former World Airways Cleaning Room (Area 1):* A room located adjacent to the small parts wash rack was used as a cleaning room. A large floor drain was located in the cleaning room. The small parts wash rack consisted of an underground wash water storage vault. Samples were collected from this area to investigate whether contamination had occurred via surface infiltration or from the underground vaults.
- *Aircraft Wash Rack (Area 2):* Significant staining was observed on aerial photos of this area and during the site walk. Wash rack water could have potentially overflowed to bare soil in areas surrounding the wash rack. Dennis Moulton, former UAL environmental manager, stated that East Bay Municipal Utility District (EBMUD) detected elevated levels of cadmium in the water discharged from aircraft wash rack areas⁴. Also, waste solvent (probably methylene chloride) has occasionally been disposed by dumping onto nearby pavement or the quarry area along the northwest boundary of the UAL hangar facility¹. Samples were collected in this area to investigate these potential sources.
- *Industrial Wastewater Sump (Area 3):* This area is located adjacent to the aircraft wash rack area. The wash water vaults discharged to the ditch in this area during storm events or at any time when potable water lines were not in use⁴. Area 3 was investigated to determine if potentially contaminated wash water had been discharged to this ditch and had impacted soil.
- *New Fueling Station with 12,000-gallon Above Ground Storage Tank (Area 4):* This tank was installed by UAL during their tenure at the Site. This area was investigated to determine if any contamination had occurred as a result of their use.
- *Vehicle Maintenance Center/ Former Vehicle Fueling Underground Storage Tanks (Area 5):* MF-35 and MF-36 were removed in 1999. Approximately 758 cubic yards of contaminated soil were also removed during excavation activities. Following soil removal confirmation samples were collected. A sample collected from the southeast corner of the excavation, SW-1-6', had residual contamination (total petroleum hydrocarbons as diesel [TPH-D] = 16,000 milligrams per kilogram [mg/kg], total petroleum hydrocarbons as gasoline [TPH-G] = 530 mg/kg, benzene = 1.9 mg/kg and xylenes = 1.9 mg/kg). Excavation in this direction was halted due to the proximity to the UAL Hangar. UAL operated a vehicle maintenance center in a room adjacent to this area. Area 5 was sampled to determine the extent of the residual contamination associated with the release that occurred from tanks MF-35 and MF-36 and to investigate whether the vehicle maintenance center operations had contaminated the underlying soil and groundwater.
- *Former Hazardous Waste Accumulation Area (Area 7), Current Hazardous Materials Waste Accumulation Area (Area 8):* Although no known releases occurred in these areas, soil and groundwater samples were collected to investigate this.

⁴ Moulton, Dennis, 2003, Former United Airlines Environmental Manager, Record of Telephone Conversation with Jessie Hurd and Chris Lawless of Weiss Associates, March 26.

- *Current Hazardous Materials Storage (Area 9)*: UAL currently stores hazardous materials at three outdoor storage facilities on-site. Samples were collected in front of these facilities to investigate whether contamination had occurred as a result of surface spills in these areas.
- *Chemical Storage (Chem Crib) (Area 10)*: Small quantities of chemicals are stored in this room for daily use in the maintenance hangar. The soil beneath this room was sampled to investigate whether a release had occurred through the eyewash floor drain.
- *Aircraft Fueling/De-fueling Equipment Areas (Area 11)*: Aircraft housed in the hangar bays were fueled or de-fueled by trucks stationed approximately 50 feet outside of the bays. Samples were collected from these areas to investigate whether releases had occurred as a result of these activities.
- *Fire System Motors and Associated Fuel Tanks (Area 12)*: This area was sampled to investigate whether a release had occurred from the fire system motors or fuel tanks.
- *Paint Spray Booth (Area 13)*: A paint spray booth was used by UAL during their tenure. UAL facilities personnel, Jennifer Doty, stated that the booth was taken out of operation after water began to leak from the lower portion of the booth. This area was sampled to investigate whether the underlying soil had been contaminated due to this leak.
- *Storm Drains (Area 14), Pavement Perimeter (Area 17)*: Storm water from the eastern side of the property flows into storm drains and a concrete drainage channel along the eastern side of the property. Samples were collected from just beyond the downslope edge of the concrete pad to determine if sheet flow during storm events carried surface contaminants from the paved areas. Area 17 was also investigated to assess whether UAL improperly disposed of hazardous chemicals in this area. Significant damage to the concrete in the drainage channel was observed during the site walk at boring locations W-B38 and W-B39. Therefore, samples were collected from this area to assess whether contamination occurred due to surface infiltration at these locations.
- *Taxiway Fuel Spill (Area 16)*: On July 2, 2001, an approximately 15-gallon jet fuel spill occurred on taxiway B-15. The Oakland Fire Department washed the fuel off the taxiway. This resulted in run-off of the fuel and wash water onto adjacent soil. The majority of the runoff occurred on the western edge of the taxiway. Approximately 13.2 tons of jet fuel impacted soil was removed from the eastern and western edges of the taxiway. The western edge of the taxiway was investigated to determine if all of the contaminated soil was removed during the response action.
- *Offsite Solvent Plume (Area 18)*: Groundwater monitoring well UAL-MW-8 (Figure 2), which is likely down gradient of Area 18, had consistently high concentrations of 1,1-dichloroethane (1,1 DCA) (180 to 500 micrograms per liter [$\mu\text{g/l}$]) and 1,1-dichloroethene (1,1 DCE) (180 to 700 $\mu\text{g/l}$). This well is "inferred" to be approximately 100-ft upgradient of waste oil and solvent tanks MF25 and MF26. Of the eight wells surrounding tanks MF-25 and MF-26,

⁵ ENSR International, 2001, *Taxiway Fuel Spill and Response*, August.

1,2-dichloroethane (1,2 DCA) and vinyl chloride were detected only in well MW-86. Area 18 was sampled to try to evaluate whether the solvent plume was emanating from an onsite source area.

SCOPE OF WORK

As part of this Phase II Site Investigation at the United Hangar Area, the following activities were performed by Weiss at the Site on April 14 through April 18, 2003:

- Collection of 116 soil samples (including six field duplicates) and 44 groundwater samples (including five field duplicates) from 39 boring locations. Of these, 96 soil and 18 water samples were analyzed for TPH-G, total petroleum hydrocarbons as jet fuel (TPH-JF), TPH-D, and total petroleum hydrocarbons as motor oil (TPH-MO) by United States Environmental Protection Agency (USEPA) method 8015M; 93 soil and 16 water samples were analyzed for volatile organic compounds (VOCs) by USEPA method 8260 and CAM 17 metals by USEPA methods 6010C, 7010 and 7471B; and,
- Collection of ground water samples from five permanent Site monitoring wells for analysis of the same constituents listed in the bullet above.

FIELD PROCEDURES

All procedures performed at the Site were completed in accordance with the approved Work Plan except as noted in this section. All soil and groundwater samples were transported to McCambell Analytical of Pacheco, California in iced coolers under a signed Chain of Custody. Field documentation such as borehole logs and water sampling sheets are included in Attachment A. The analytic reports, chain-of-custody forms, and tables summarizing the quality assurance and quality control (QA/QC) parameters for this fieldwork are included in Attachment B.

All investigation-derived wastes (IDW), including soil cuttings from borehole advancement and decontamination fluid, were placed in labeled 55-gallon drums, stored temporarily in the UAL drum storage area and removed for offsite storage by the Port on April 18, 2003, pending receipt of the analytical results.

Soil Sampling Procedures

Thirty-seven direct push borings were installed by Weiss to depths of 8 to 15 feet below grade surface (ft bgs) using a direct push drill rig. Two additional boring locations were hand augered by Weiss because they were located in below grade ditches. ERM, on behalf of UAL, installed 27 additional borings at the Site (Figure 2). Weiss collected soil samples at the surface, at

⁶ ENSR International, 2001, *Third Quarter Groundwater Monitoring Report and Request for "No Further Action", Oakland Int'l Airport, United Airlines Bldg. M-110, 1100 Airport Drive, Oakland, California, February.*

approximately 3 ft bgs and in the saturated zone. Surface samples were not collected from the four borings in investigation area 18 (Figure 2) because a two-foot (ft) thick layer of gravel was present beneath the asphalt. A 3 ft bgs sample and saturated zone sample were not collected from borings W-B15 and W-B31, respectively. The Work Plan stated that soil would be collected in and sampled from acetate sleeves filled during the drilling process, however, at certain locations samples were collected in brass tubes with a hand-auger device.

Prior to drilling, a geophysical survey was conducted by NorCal Geophysical, Inc. to identify any underground utilities. Additionally, drilling permits were obtained from the Alameda County Public Works Agency (ACPWA). Following drilling, all boring locations were surveyed for x-y coordinates by a Port-contracted surveyor.

Groundwater Sampling Procedures

The Work Plan stated that groundwater would be collected using a peristaltic pump for all 39 direct push borings according to stated guidelines that included minimization of water level drawdown, and stabilization of pH, specific conductivity, turbidity, and temperature (within +/- 10% for three consecutive readings) before sampling. Due to extremely slow ground water recharge in many of the borings, it was decided in the field to forego the aforementioned guidelines in order to recover the required sample volume. Additionally, the overly turbid state of groundwater recovered from all borings precluded turbidity measurements. Groundwater samples were also collected from five permanent ground water wells at the site (Figure 2). The parameters listed above stabilized within 10% for three consecutive readings prior to collecting groundwater samples from the wells.

INVESTIGATION FINDINGS

Groundwater Levels

On April 15, 2003, depth to water measurements were collected from monitoring wells MW-1, MW-2, MW-3, and MW-4. The measurements were recorded to the nearest 0.01-ft from the top-of-casing. Two sets of measurements (one at high tide and the other at low tide) were taken to evaluate the effect of tidal influence on ground water elevations at the Site. At high tide, depth to water measurements ranged from 11.35 ft in MW-1 to 15.71 ft in MW-4. These measurements were slightly deeper than those taken at low tide, which ranged from 11.31 ft in MW-1 to 15.78 ft in MW-4. These measurements are significantly deeper than the most recent previous measurements of 6.52 to 8.14 ft in October 2000. The April 15, 2003 depth-to-water measurements taken from these monitoring wells infer a westerly ground water flow direction. Previous water level measurements indicate that the ground water gradient is generally fairly flat and the flow direction is variable at the Site.

Depth to water measurements were also taken in borings drilled from April 14 to 18, 2003. Measurements ranged from 2.1 ft bgs in boring W-B8 located in the aircraft wash rack area, to 10 ft bgs in boring W-B2 located next to the hangar.

Analytical Findings

The following sections summarize the sampling results and compare them with the appropriate California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) risk based screening levels (RBSLs). The appropriate soil RBSLs are those developed for surface (i.e., 3 meters bgs or less) soil in areas zoned for commercial/industrial activities and where potentially impacted groundwater is not a current or potential drinking water resource⁷. Because the background levels of several metals in local soil exceed their RBSLs, results for metals are also compared with background levels⁸. In addition, California and federal waste disposal criteria are included for comparison.

Groundwater beneath the Site is considered neither a current nor potential source of drinking water⁹. Therefore, the appropriate groundwater RBSLs are those for water that is not a current or potential drinking water resource¹⁰.

Soil boring locations and concentrations are shown on Figure 2 and Tables 1 (TPH), 2 (VOCs), and 3 (metals). Groundwater concentrations are presented in Tables 4 (TPH), 5 (VOCs), and 6 (metals).

Total Petroleum Hydrocarbons

The TPH concentrations for soil and groundwater are presented in Tables 1 and 4 respectively. A total of 142 soil and 67 groundwater samples were analyzed for TPH. ERM analyzed for total purgeable hydrocarbons by DHS LUFT, diesel hydrocarbons by DHS LUFT, and gasoline by EPA Method 8260B. Weiss analyzed for TPH-D, TPH-G, TPH-MO TPH-JF using EPA Method 8015. Silica gel cleanup was used for the diesel hydrocarbon analyses requested by ERM and on the groundwater sample analyses requested by Weiss. TPH was detected in soil at the small parts wash rack area and adjacent to the former location of underground fuel tanks MF 35 and MF 36. However, TPH concentrations in soil at these areas did not exceed the RBSLs. TPH concentrations in groundwater below the RBSLs were observed in one of more boring in Areas 1, 4, 5, 6, 7, 9, 11, 12, 14, 15 and 16 (Figure 2).

All of the TPH concentrations detected in soil and groundwater above their respective RBSLs are shown on Figure 3. The majority of the TPH concentrations in soil and groundwater above the RBSLs were in samples collected from within the aircraft wash rack area and drainage ditch north of the wash rack.

⁷ RWQCB, 2001, *Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*, Interim Final, Table B-2. Risk-Based Screening Level Components for Surface Soil, December.

⁸ Ambient (local background) values are from soil studies at Fleet and Industrial Supply Center Oakland (FISCO) and Lawrence Berkeley National Laboratory.

⁹ RWQCB, 1999, *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, CA*, June.

¹⁰ RWQCB, 2001, *Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*, Interim Final, Table F-2. Components for Groundwater Screening Levels, December.

The maximum groundwater total extractable petroleum hydrocarbon (TEPH) concentration with silica gel cleanup, 5,100 µg/L, was detected in a grab groundwater sample collected from boring W-B12 (Figure 3). This boring was drilled in a drainage ditch located north of the aircraft wash rack. Samples collected from this boring also had elevated metals concentrations (see below). The maximum total purgeable petroleum hydrocarbon concentration (TPPH), 1,700 µg/L, was detected in a groundwater sample collected from boring ERM-B6, adjacent to the effluent line of the aircraft wash rack water drain. Two other groundwater samples (from ERM-B4 and ERM-B5) collected within 100 feet of this sample had TEPH groundwater concentrations above the RBSL.

Boring W-B7 was installed within one foot of a crack in the cement that was caked with black material at the aircraft wash rack area. A surface soil sample collected at this location had concentrations of TPH-G, TPH-D, and TPH-JF above their respective RBSLs (Table 1, Figure 3). TPH-MO at 2,100 mg/kg was observed in the soil sample collected at three ft bgs from boring W-B23, adjacent to hazardous material storage area (Figure 3). Staining was evident on the asphalt at this location. TPH-MO at 2,100 mg/kg was observed in the surface sample from boring W-B33, at the downslope edge of the concrete (Figure 3).

Volatile Organic Compounds

A total of 124 soil samples were collected by ERM and Weiss and analyzed for VOCs by EPA Method 8260. Fourteen additional samples were analyzed for various VOCs by the DHS LUFT method. VOCs were detected at low concentrations in soil at the small parts wash rack and aircraft wash rack areas. None of the VOC concentrations in soil exceeded the RBSLs.

Groundwater samples were collected from 42 locations and were analyzed for VOCs by EPA Method 8260. Thirteen additional samples were analyzed for benzene, toluene, ethyl benzene and xylenes. VOCs detected above their respective detection limits are shown on Table 5. VOCs were primarily detected in Areas 2, 5 and 7 (Figure 2). ✓

Groundwater samples collected at the aircraft wash rack area, from borings ERM-5 and ERM-6, had xylenes and naphthalene concentrations that exceed their respective RBSLs (Figure 3). Boring W-B17 had 1,1-DCA and 1,1-DCE concentrations in groundwater that exceeded their RBSLs (Figure 3).

CAM 17 Metals

One hundred and twenty-three soil samples were collected between ground surface and eight ft bgs and analyzed for CAM 17 metals by USEPA methods 6010C, 7010 and 7471B. The following metals in soil exceeded their background⁸ and/or RBSLs (Table 3):

- Antimony was detected above background in two samples;
- Arsenic was detected above background in 21 samples and above its RBSL in 62 samples;

- Cadmium was detected above background in nine samples and above its RBSL in three samples;
- Chromium was detected above background in three samples and above its RBSL in 121 samples;
- Copper was detected above background in five samples and above its RBSL in three sample;
- Lead was detected above background in 14 samples;
- Molybdenum was detected above background in four samples and above its RBSL in one sample;
- Nickel was detected above background in one sample and above its RBSL in one sample;
- Silver was detected above background in one sample;
- Thallium was detected above background and its RBSL in 31 samples; and,
- Zinc was detected above background in seven samples.

The background soil concentrations for chromium, arsenic and thallium exceed their respective RBSLs (Table 3). The majority of the arsenic and thallium concentrations that exceed background and the RBSLs were collected by ERM analyzed using EPA Method 6010 which is less reliable than EPA Method 7010, the method used to analyze the Weiss samples. ^{SCAP}

Graphite Furnace

All of the soil samples with cadmium, copper, molybdenum and/or nickel concentrations above their respective RBSLs were collected from boring W-B12 (Figure 4). Boring W-B12 was drilled in the drainage ditch north of the aircraft wash rack. The metals concentrations in this boring are highest at 0.5 ft bgs, and attenuate with depth below that. Elevated cadmium concentrations were reportedly detected in the effluent from aircraft wash rack area by EBMUD⁴. This suggests that the aircraft wash rack may have been the source of metals contamination observed in the drainage ditch. Approximately three years ago, EBMUD required the installation of a wastewater treatment system for metals prior to discharge to the sanitary sewer⁴.

Table 3 also includes California and RCRA soil disposal criteria. Soil with metals exceeding the total threshold limit concentration (TTL) is considered hazardous. Based on the ten-fold dilution involved in the Waste Extraction Test (WET) method and the twenty-fold dilution involved in the Toxicity Characteristic Leaching Procedure (TCLP) used to determine soluble metals, any total metal concentration above ten times the soluble threshold limit concentration (STLC) or twenty times the TC limit indicates a potentially hazardous concentration if the metal is highly soluble. The surface and 3 ft bgs samples from boring W-B8 had lead concentrations above ten times the STLC. The surface and 3 ft bgs samples from boring W-B12 had cadmium and copper concentrations above ten times their respective STLCs. Sample W-TB-1(0.5), collected by ERM at 0.5 ft bgs at boring W-B12 also had molybdenum and nickel concentrations above ten times their respective STLCs.

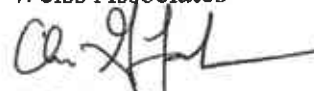
This sample also contained copper at 4,200 mg/kg above the TTLC of 2,500 mg/kg. Chromium was detected above ten times its STLC limit in 10 ten samples collected by Weiss and ERM. Arsenic and thallium were detected above ten times their respective STLC limits in soil samples collected by ERM. However, ERM analyzed the samples for arsenic and thallium using EPA Method 6010 which is less reliable than EPA Method 7010, the method used to analyze the Weiss samples. None of the arsenic or thallium concentrations detected in the samples collected by Weiss exceeded ten times the STLC.

Samples collected by Weiss with metals concentrations above ten times the STLC limit were analyzed for the appropriate metal using the California WET method. The surface sample collected from boring W-B12 had WET results of 46 mg/l and 1.1 mg/l for copper and cadmium respectively. These concentrations exceed their STLCs of 25 mg/l and 1 mg/l for copper and cadmium, respectively. All of the other WET results indicated that the metals concentrations were below their respective STLCs (Table 7).

Metals concentrations in groundwater are presented in Table 6. Well-defined background concentrations of metals in groundwater were not available for this Site; therefore, this discussion is limited to metals concentrations in groundwater above the RBSLs. Metals concentrations in groundwater above the RBSLs and significantly above the detection limit (greater than five times the detection limit) are shown on Figure 4. Nickel was detected above its RBSL at 15 locations. The majority of these locations were at the small parts wash rack and aircraft wash rack areas (Figure 4). Lead, cadmium, molybdenum, selenium, thallium and zinc concentrations were also detected in groundwater above the RBSLs in samples collected beneath the aircraft wash rack area. Nickel, cadmium, copper and zinc were detected above their respective RBSLs in the groundwater sample collected from boring W-B12, in the drainage ditch. This suggests that the elevated metals concentrations observed in the drainage ditch near-surface soil might be the source of metals contamination in underlying groundwater. Barium was detected in groundwater above its RBSL at thirty-two locations. However, the barium concentrations are within the range observed at other nearby sites and are considered representative of background.

Weiss appreciates the opportunity to provide environmental consulting services to The Port of Oakland. Please feel welcome to call Chris at (510) 450-6194 should you have any questions or comments about the information or recommendations contained within this report.

Sincerely,
Weiss Associates



Chris Lawless
Senior Staff Geologist



Mary Stallard
Senior Project Manager

Enclosures: Figures 1-4
Tables 1-7
Attachments A and B

cc: Chris Noma, Gregory Brandt
CGL:jdr

Table 1. Total Petroleum Hydrocarbon Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	TPPH	TPH-G	TEPH	TEPH SGCU	TPH-D	TPH-JF	TPH-MO
Area of Concern 1 - Small Parts Wash Rack/Former World Airways Cleaning Room									
ERM-B-1	3.5	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
ERM-B-2	3.5	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-4	0	04/14/2003	NA	1.7	g NA	NA	57	o <50	560
W-B-4	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-4 (S)	3-4	04/14/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-5	0	04/14/2003	NA	3.1	g NA	NA	71	o <50	810
W-B-5	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-5 (S)	3-4	04/14/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-6	0	04/14/2003	NA	<1	NA	NA	4.1	o 1.8	31
W-B-6	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-6 (S)	3-4	04/14/2003	<1.0	NA	<5.0	NA	NA	NA	NA
Area of Concern 2 - Aircraft Wash Rack									
ERM-B-3	2.5	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
ERM-B-4	2.5	04/15/2003	4.7	NA	18	NJ 9.2	NJ NA	NA	NA
ERM-B-5	2.5	04/15/2003	1.4	NA	43	NJ <20	NA	NA	NA
ERM-B-6	2.5	04/15/2003	170	NA	1,300	J 410	NA	NA	NA
W-B-7	0	04/17/2003	NA	1000	g NA	NA	1800	d 1800	<500
W-B-7 (S)	1-2	04/17/2003	7.9	NA	27	NJ 13	NJ NA	NA	NA
W-B-7	3	04/17/2003	NA	2.6	g NA	NA	3.3	b,f 2.3	<5
W-B-8	0	04/14/2003	NA	1.1	a NA	NA	<50	<50	390
W-B-8 (S)	1.5-2.5	04/14/2003	<1.0	NA	<100	NA	NA	NA	NA
W-B-8	3	04/14/2003	NA	1.7	g NA	NA	81	o <50	700
Area of Concern 3 - Industrial Wastewater Vault									
W-B-10	0	04/15/2003	NA	<1	NA	NA	1.1	b <1	<5
W-B-10	3	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-10 (S)	3-4	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-10	6	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-11	0	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-11 (S)	1-2	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-11	3	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-11	7.5	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-12	0	04/15/2003	NA	3.3	g NA	NA	34	b,o 9.9	100
W-B-12 (S)	0.5	04/15/2003	<1.0	NA	18	NJ 15	NJ NA	NA	NA
W-B-12	3	04/15/2003	NA	1.7	g NA	NA	140	b,o 77	600
W-B-12	5.5	04/15/2003	NA	<1	NA	NA	7.4	b,o 3.9	22
Area of Concern 4 - Aboveground Fuel Storage Tank									
ERM-B-8	4	04/16/2003	<0.10	NA	<5.0	NA	NA	NA	NA
ERM-B-9	4.5	04/16/2003	<0.10	NA	200	NJ <20	NA	NA	NA
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks									
ERM-B-10	2.5	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
ERM-B-11	2.5	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
ERM-B-11	6.5	04/17/2003	NA	NA	<5.0	NA	NA	NA	NA
W-B-1	0	04/14/2003	NA	<1	NA	NA	13	o <5	140
W-B-1	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-1	10	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-2	0	04/14/2003	NA	<1	NA	NA	6.3	o <5	81
W-B-2	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-2 (S)	3.5-4.5	04/14/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-2	10	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-3	0	04/14/2003	NA	<1	NA	NA	10	o <5	93
W-B-3	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-3 (S)	3-4	04/14/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-3	7	04/14/2003	NA	<1	NA	NA	<1	<1	<5
Area of Concern 6 - Boiler and Aboveground Diesel Storage Tank									
ERM-B-27	2	04/17/2003	NA	NA	<5.0	NA	NA	NA	NA

Table 1. Total Petroleum Hydrocarbon Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	TPPH	TPH-G	TEPH	TEPH SGCU	TPH-D	TPH-JF	TPH-MO
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area									
W-B-16	0	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-16 (S)	1-2	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-17 (S)	1-2	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area (continued)									
W-B-16	3	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-17	0	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-17	3	04/17/2003	NA	<1	NA	NA	<1	<1	<5
Area of Concern 8 - Current 90-Day Hazardous Waste Accumulation Area									
ERM-B-12	2	04/17/2003	<1.0		<5.0	NA	NA	NA	NA
Area of Concern 9 - Hazardous Material Storage Areas									
ERM-B-13	3.5	04/16/2003	<1.0	NA	<5.0	NA	NA	NA	NA
ERM-B-14	4.5	04/17/2003	<1.0	NA	<20	NA	NA	NA	NA
W-B-21	0	04/17/2003	NA	<1	NA	NA	1.9	1.2	6.2
W-B-21	3	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-22	0	04/18/2003	NA	<1	NA	NA	<5	<5	57
W-B-22 (S)	2-3	04/18/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-22	3	04/18/2003	NA	<1	NA	NA	<1	<1	<5
W-B-23	0	04/18/2003	NA	<1	NA	NA	<1	<1	<5
W-B-23	3	04/18/2003	NA	<1	NA	NA	<200	<200	2100
Area of Concern 10 - Chemical Storage Area									
ERM-B-15	1	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
Area of Concern 11 - Aircraft Fueling/Defueling Equipment Areas									
ERM-B-16	4.5	04/16/2003	NA	NA	<5.0	NA	NA	NA	NA
ERM-B-17	3.5	04/16/2003	NA	NA	5.1	NJ	<5.0	NA	NA
ERM-B-18	4	04/16/2003	NA	NA	<5.0	NA	NA	NA	NA
ERM-B-19	4.5	04/16/2003	NA	NA	<5.0	NA	NA	NA	NA
Area of Concern 12 - Fire System Motors and Associated Fuel Tanks									
ERM-B-20	3	04/16/2003	NA	NA	<5.0	NA	NA	NA	NA
ERM-B-21	2	04/17/2003	NA	NA	<5.0	NA	NA	NA	NA
Area of Concern 13 - Paint Spray Booth									
ERM-B-22	1.5	04/17/2003	<1.0	NA	<5.0	NA	NA	NA	NA
Area of Concern 14 - Storm Drains									
ERM-B-23	4.5	04/17/2003	<1.0	NA	<20	NA	NA	NA	NA
W-B-32	0	04/16/2003	NA	<1	NA	NA	3	b,o	<1
W-B-32 (S)	1-2	04/16/2003	<1.0	NA	23	NJ	22	NJ	NA
W-B-32	3	04/16/2003	NA	<1	NA	NA	<1		<1
W-B-32	8	04/16/2003	NA	<1	NA	NA	7.6	b,o	10
W-B-38	0	04/15/2003	NA	<1	NA	NA	<1		<1
W-B-38 (S)	2-3	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-38	3	04/14/2003	NA	<1	NA	NA	<1		<1
W-B-38	7.5	04/14/2003	NA	<1	NA	NA	<1		<1
W-B-39	0	04/14/2003	NA	<1	NA	NA	<1		<1
W-B-39	3	04/14/2003	NA	<1	NA	NA	<1		<1
W-B-39	7.5	04/14/2003	NA	<1	NA	NA	<1		<1
Area of Concern 15 - Aircraft Parking and Run Up Area									
ERM-B-24	2.5	04/15/2003	NA	NA	<5.0	NA	NA	NA	NA
ERM-B-25	3.5	04/15/2003	NA	NA	<5.0	NA	NA	NA	NA
ERM-B-26	2	04/16/2003	NA	NA	<5.0	NA	NA	NA	NA
Area of Concern 16 - Reported Fuel Spill Area on Taxiway									
W-B-14 (S)	2-3	04/15/2003	NA	NA	<5.0	NA	NA	NA	NA
W-B-13	0	04/15/2003	NA	<1	NA	NA	<1		<1
W-B-13	3	04/15/2003	NA	<1	NA	NA	<1		<1
W-B-13	7.5	04/15/2003	NA	<1	NA	NA	<1		<1
W-B-14	0	04/15/2003	NA	<1	NA	NA	<1		<1
W-B-14	3	04/15/2003	NA	<1	NA	NA	1.2		<1
W-B-14	7.5	04/15/2003	NA	<1	NA	NA	<1		<1

Table 1. Total Petroleum Hydrocarbon Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	TPPH	TPH-G	TEPH	TEPH SGCU	TPH-D	TPH-JF	TPH-MO
Area of Concern 16 - Reported Fuel Spill Area on Taxiway (continued)									
W-B-15	0	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-15	7.5	04/15/2003	NA	<1	NA	NA	<1	<1	<5
Area of Concern 17 - Pavement Perimeter									
W-B-5	3	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-24	0	04/14/2003	NA	<1	NA	NA	<1	<1	<5
W-B-24	3	04/14/2003	NA	<1	NA	NA	1.4	b	<5
W-B-24	7.5	04/14/2003	NA	<1	NA	NA	3.2	o	17
W-B-25	0	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-25 (S)	1-2	04/15/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-25	3	04/15/2003	NA	<1	NA	NA	<1	<1	<5
W-B-25	8	04/15/2003	NA	<1	NA	NA	2	b,o	7.9
W-B-26	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-26	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-26	11.5	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-27	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-27	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-27	8	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-28	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-28	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-28	7.5	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-29	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-29 (S)	1-2	04/16/2003	<1.0	NA	<5.0	NA	NA	NA	NA
W-B-29	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-29	8	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-30	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-30	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-30	7.5	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-31	0	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-31	3	04/16/2003	NA	<1	NA	NA	7.1	o	27
W-B-31	3.5	04/16/2003	NA	<1	NA	NA	11	o	42
W-B-33	0	04/16/2003	NA	2.7	g	NA	220	o	<200
W-B-33	2.5	04/16/2003	NA	<1	NA	NA	1.5	o	<1
W-B-33	3	04/16/2003	NA	<1	NA	NA	<1	<1	<5
W-B-33	8	04/16/2003	NA	<1	NA	NA	12	b,o	10
W-B-34	0	04/17/2003	NA	<1	NA	NA	<10	<10	100
W-B-34	3	04/17/2003	NA	<1	NA	NA	2.1	b,o	<1
W-B-35	0	04/17/2003	NA	<1	NA	NA	1.1	o	<1
W-B-35	3	04/17/2003	NA	<1	NA	NA	6.8	c,m	1.1
W-B-36	0	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-36	3	04/17/2003	NA	<1	NA	NA	<1	<1	<5
W-B-37	0	04/17/2003	NA	<1	NA	NA	5.5	o	<1
W-B-37	3.5	04/17/2003	NA	<1	NA	NA	15	b,o	4.6
Area of Concern 18 - Migration of Offsite Solvent Plume Onto OMC Property									
W-B-9	4	04/18/2003	NA	<1	NA	NA	<1	<1	<5
W-B-18	4.5	04/18/2003	NA	<1	NA	NA	2	b,o	1.4
W-B-18	7.5	04/18/2003	NA	<1	NA	NA	<1	<1	<5
W-B-19	4	04/18/2003	NA	<1	NA	NA	<1	<1	<5
W-B-20	3	04/18/2003	NA	<1	NA	NA	<1	<1	<5
Commercial RBSL ¹			400 ²	400 ²	1000 ³	1000 ³	500 ⁴	500 ⁴	1000 ³

Notes:

Sample concentrations reported in milligrams per kilogram (mg/kg)

* Location ERM-B-11 was analyzed for PCB-1016, -1221, -1232, -1242, -1248, -1254, and -1260; no PCB concentrations were detected

Bold values indicate concentrations detected above the laboratory method detection limit

< 0.5 Compound not detected at or above the laboratory method detection limit

NA Not Analyzed

(S) ERM Split Sample from Weiss Boring

¹ Risk-Based screening level where groundwater is not a potential source of drinking water (RWQCB, 2001)

² Risk-based screening level for total petroleum hydrocarbons as gasoline

³ Risk-based screening level for total petroleum hydrocarbons (residual fuels)

⁴ Risk-based screening level for total petroleum hydrocarbons (middle distillates)

Abbreviations:

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPPH = Total Purgeable Petroleum Hydrocarbons

TEPH = Total Extractable Petroleum Hydrocarbons

SGCU = Silica Gel Clean Up

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-MO = Total Petroleum Hydrocarbons as Motor Oil

Sequoia Analytical/ERM Qualifiers:

J = Estimated Value

NJ = Tentative Identification Estimated

McC Campbell Analytical/Weiss Notes:

a = unmodified or weakly modified gasoline is significant

b = diesel range compounds are significant; no recognizable pattern

c = aged diesel is significant

d = gasoline range compounds are significant

f = one to a few isolated peaks present

g = strongly aged gasoline or diesel range compounds are significant

m = fuel oil

o = oil range compounds are significant

Table 2. Volatile Organic Compound Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	VOCs														
			N-BB	SEC-BB	DCM	IPB	P-IPT	MTBE	NAP	PCE	1,1,1-TCA	1,2,4-TMB	1,3,5-TMB	BZ	EB	TOL	XYL
Area of Concern 1 - Small Parts Wash Rack/Former World Airways Cleaning Room																	
ERM-B-1	3.5	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
ERM-B-2	3.5	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-4	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-4	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-4 (S)	3-4	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
W-B-5	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.074	0.11	<0.0050	<0.0050	<0.0050	<0.0050	0.026	
W-B-5	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-5 (S)	3-4	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
W-B-6	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-6	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-6 (S)	3-4	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
Area of Concern 2 - Aircraft Wash Rack																	
ERM-B-3	2.5	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
ERM-B-4	2.5	04/15/2003	0.0098	0.0073	<0.025	<0.0050	0.012	<0.0050	0.013	<0.0050	<0.0050	0.05	0.024	<0.0050	<0.0050	<0.010	
ERM-B-5	2.5	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	0.014	0.0078	<0.0050	<0.0050	<0.010	
ERM-B-6	2.5	04/15/2003	0.092 J	0.094 J	<0.025	0.048 J	0.19 J	<0.0050	0.047 J	<0.0050	<0.0050	1.2 J	1.1 J	<0.0050	0.027 J	0.005 J	
W-B-7	0	04/17/2003	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.28	<0.1	<0.1	2.1 J	1.3 J	<0.1	<0.1	<0.1	
W-B-7 (S)	1-2	04/17/2003	<0.0050	<0.0050	<0.025	0.0085	0.017	<0.0050	0.047	<0.0050	<0.0050	0.09	0.045	<0.0050	<0.0050	<0.010	
W-B-7	3	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.006	<0.0050	<0.0050	0.0059	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-8	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.03	
W-B-8 (S)	1.5-2.5	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
W-B-8	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Area of Concern 3 - Industrial Wastewater Vault																	
W-B-1	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-1	3	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-1	6	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-10	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.039	
W-B-10	3	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-10 (S)	3-4	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
W-B-10	6	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-11	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-11 (S)	1-2	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	
W-B-11	3	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-11	7.5	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
W-B-12 (S)	0.5	04/15/2003	<0.0050	<0.0050	<0.054	UJb	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	

Table 2. Volatile Organic Compound Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	VOCs														
			N-BB	SEC-BB	DCM	IPB	P-IPT	MTBE	NAP	PCE	1,1,1-TCA	1,2,4-TMB	1,3,5-TMB	BZ	EB	TOL	XYL
Area of Concern 4 - Aboveground Fuel Storage Tank																	
ERM-B-8	4	04/16/2003	NA	NA	NA	NA	NA	<0.0050	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-9	4.5	04/16/2003	NA	NA	NA	NA	NA	<0.0050	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks																	
ERM-B-10	2.5	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
ERM-B-11	2.5	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
ERM-B-11	6.5	04/17/2003	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA
W-B-1	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-1	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-2	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-2	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-2 (S)	3.5-4.5	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-3	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-3	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-3 (S)	3-4	04/14/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
Area of Concern 6 - Boiler and Aboveground Diesel Storage Tank																	
ERM-B-27	2	04/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area																	
W-B-16	0	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-16 (S)	1-2	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-16	3	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-17	0	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-17 (S)	1-2	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-17	3	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 8 - Current 90-Day Hazardous Waste Accumulation Area																	
ERM-B-12	2	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
Area of Concern 9 - Hazardous Material Storage Areas																	
ERM-B-13	3.5	04/16/2003	<0.0050	<0.0050	<0.047	UJb	<0.0050	<0.0050	<0.0050	0.0063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
ERM-B-14	4.5	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-21	0	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-21	3	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-22	0	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-22 (S)	2-3	04/18/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-22	3	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-23	0	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-23	3	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Table 2. Volatile Organic Compound Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	VOCs														
			N-BB	SEC-BB	DCM	IPB	P-IPT	MTBE	NAP	PCE	1,1,1-TCA	1,2,4-TMB	1,3,5-TMB	BZ	EB	TOL	XYL
Area of Concern 10 - Chemical Storage Area																	
ERM-B-15	1	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
Area of Concern 11 - Aircraft Fueling/Defueling Equipment Areas																	
ERM-B-16	4.5	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-17	3.5	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-18	4	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-19	4.5	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 12 - Fire System Motors and Associated Fuel Tanks																	
ERM-B-20	3	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-21	2	04/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 13 - Paint Spray Booth																	
ERM-B-22	1.5	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
Area of Concern 14 - Storm Drains																	
ERM-B-23	4.5	04/17/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-32	0	04/16/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-32 (S)	1-2	04/16/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-32	3	04/16/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-32	8	04/16/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-38	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-38 (S)	2-3	04/15/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-38	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-38	7.5	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-39	0	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-39	3	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-39	8	04/14/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 15 - Aircraft Parking and Run Up Area																	
ERM-B-24	2.5	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-25	3.5	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
ERM-B-26	2	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 16 - Reported Fuel Spill Area on Taxiway																	
W-B-13	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-13	3	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-13	7.5	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-14	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-14 (S)	2-3	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050
W-B-14	3	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-14	7.5	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-15	0	04/15/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Table 2. Volatile Organic Compound Concentrations in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	VOCs														
			N-BB	SEC-BB	DCM	IPB	P-IPT	MTBE	NAP	PCE	1,1,1-TCA	1,2,4-TMB	1,3,5-TMB	BZ	EB	TOL	XYL
Area of Concern 17 - Pavement Perimeter (continued)																	
W-B-36	0	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-36	3	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-37	0	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-37	3.5	04/17/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Area of Concern 18 - Migration of Offsite Solvent Plume Onto OMC Property																	
W-B-9 (S)	3-3.5	04/18/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-9	4	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-18	4.5	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-18	7.5	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-19 (S)	3-3.5	04/18/2003	<0.0050	<0.0050	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
W-B-19	4	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
W-B-20	3	04/18/2003	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Commercial RBSL ¹			NE	NE	NE	NE	NE	I	4.9	0.53	8	NE	NE	0.39	24	8.4	1

Notes:

Sample concentrations reported in milligrams per kilogram (mg/kg)

* Location ERM-B-11 was analyzed for PCB-1016, -1221, -1232, -1242, -1248, -1254, and -1260; no PCB concentrations were detected.

Bold values indicate concentrations detected above the laboratory method detection limit.

- < 0.5 Compound not detected at or above the laboratory method detection limit
- NA Not Analyzed
- NE Not Established
- (S) ERM split sample from Weiss boring

¹ Risk-based screening level where ground water is not a current or potential source of drinking water (RWQCB, 2001)

Abbreviations:

- VOC = Volatile Organic Compounds
- TPH = Total Petroleum Hydrocarbons
- SVOC = Semi-Volatile Organic Compounds
- PCB = Polychlorinated Biphenyls
- N-BB = n-Butylbenzene
- SEC-BB = sec-Butylbenzene
- DCM = Dichloromethane
- IPB = Isopropylbenzene
- P-IPT = p-Isopropyltoluene
- MTBE = Methyl tert-butyl ether
- NAP = Naphthalene
- 1,2,4-TMB = 1,2,4-Trimethylbenzene
- 1,3,5-TMB = 1,3,5-Trimethylbenzene
- BZ = Benzene
- EB = Ethylbenzene
- TOL = Toluene
- XYL = Xylenes

ERM Qualifiers:

- J = Estimated Value
- UJb = Estimated Non-Detected Value Due to Common Laboratory Contaminant
- NJ = Tentative Identification Estimated

Table 3 Metals Concentration in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	Hg	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn		
Area of Concern 1 - Small Parts Wash Rack/Former World Airways Cleaning Room																					
ERM-B-1	3.5	04/15/2003	<0.020	<10	18	22	<1.0	<1.0	18	12	38	<10	<4.0	21	<10	<1.0	70	J	12	40	J
ERM-B-2	3.5	04/15/2003	<0.020	<10	20	22	<1.0	<1.0	15	<4.0	4.9	<10	<4.0	18	<10	<1.0	63	J	11	19	J
W-B-4	0	4/14/03	<0.06	<2.5	3.8	120	<0.5	<0.5	40	6.8	19	4.6	<2	51	<2.5	<1	<2.5		21	34	
W-B-4	3	4/14/03	<0.06	<2.5	3	82	<0.5	<0.5	21	3.7	4.3	<3	<2	21	<2.5	<1	<2.5		13	14	
W-B-4 (S)	3-4	04/14/2003	<0.020	<10	16	14	<1.0	<1.0	17	<4.0	3.2	<10	<4.0	17	<10	<1.0	63	J	12	14	
W-B-5	0	4/14/03	<0.06	<2.5	4.6	110	<0.5	0.86	70	8.4	23	3.5	<2	68	<2.5	<1	<2.5		26	42	
W-B-5	3	4/14/03	<0.06	<2.5	2.7	27	<0.5	<0.5	22	3.9	4.9	<3	<2	24	<2.5	<1	<2.5		15	16	
W-B-5 (S)	3-4	04/14/2003	<0.020	<10	17	13	<1.0	<1.0	15	<4.0	3.0	<10	<4.0	18	<10	<1.0	59	J	11	13	
W-B-6	0	4/14/03	<0.06	<2.5	4.2	98	<0.5	0.66	43	6.2	19	5.1	<2	47	<2.5	<1	<2.5		22	33	
W-B-6	3	4/14/03	<0.06	<2.5	2.8	31	<0.5	<0.5	16	3.3	2.9	<3	<2	19	<2.5	<1	<2.5		13	12	
W-B-6 (S)	3-4	04/14/2003	0.032	<10	30	65	<1.0	<1.0	20	5.9	14	<10	<4.0	35	<10	<1.0	140	J	13	26	
Area of Concern 2 - Aircraft Wash Rack																					
ERM-B-3	2.5	04/15/2003	<0.020	<10	19	21	<1.0	<1.0	17	<4.0	6.0	<10	<4.0	19	<10	<1.0	72	J	12	<14	UJ
ERM-B-4	2.5	04/15/2003	<0.020	<10	19	27	<1.0	<1.0	13	<4.0	6.4	<10	<4.0	17	<10	<1.0	55	J	10	<14	UJ
ERM-B-5	2.5	04/15/2003	<0.020	<10	21	26	<1.0	<1.0	22	<4.0	7.0	<10	<4.0	21	<10	<1.0	67	J	12	<21	UJ
ERM-B-6	2.5	04/15/2003	<0.020	<10	19	23	<1.0	<1.0	16	<4.0	9.0	<10	<4.0	17	<10	<1.0	62	J	11	<14	UJ
W-B-7	0	4/17/03	<0.06	<2.5	<2.5	35	<0.5	6.4	24	8.8	63	3.1	2.8	24	<2.5	<1	<2.5		16	18	
W-B-7 (S)	1-2	04/17/2003	<0.017	<10	21	31	<1.0	<1.0	18	<4.0	5.5	<10	<4.0	22	<10	<1.0	75	J	13	15	J
W-B-7	3	4/17/03	<0.06	<2.5	3	38	<0.5	<0.5	20	3.5	4.6	4.6	<2	20	<2.5	<1	<2.5		14	12	
W-B-8	0	4/14/03	0.087	3.5	11	140	<0.5	3.5	39	7.5	160	92	7.7	51	<2.5	<1	<2.5		30	110	
W-B-8 (S)	1.5-2.5	04/14/2003	0.16	<10	46	110	<1.0	<1.0	19	6.5	25	79	<4.0	32	<10	<1.0	200	J	23	94	
W-B-8	3	4/14/03	0.12	<2.5	12	110	<0.5	<0.5	20	6.9	18	90	<2	25	<2.5	<1	<2.5		23	100	
Area of Concern 3 - Industrial Wastewater Vault																					
W-B-10 (S)	3-4	04/15/2003	<0.020	<10	19	20	<1.0	<1.0	18	<4.0	3.6	<10	<4.0	19	<10	<1.0	60	J	12	15	
W-B-11 (S)	1-2	04/15/2003	0.022	<10	29	50	<1.0	<1.0	20	4.3	6.6	<10	<4.0	26	<10	<1.0	93	J	15	20	
W-B-12 (S)	0.5	04/16/2003	<0.020	25	33	150	<1.0	44	90	6.2	4,200	35	260	340	<10	2.7	160	J	19	190	
W-B-10	0	4/15/03	<0.06	<2.5	<2.5	53	<0.5	0.64	22	3.9	9.1	4.2	<2	24	<2.5	<1	<2.5		13	22	
W-B-10	3	4/15/03	<0.06	<2.5	<2.5	25	<0.5	<0.5	14	2.8	3.5	<3	<2	19	<2.5	<1	<2.5		10	13	
W-B-10	6	4/15/03	<0.06	<2.5	<2.5	35	<0.5	<0.5	16	2.7	3.8	<3	<2	17	<2.5	<1	<2.5		9.8	11	
W-B-11	0	4/15/03	<0.06	<2.5	<2.5	33	<0.5	<0.5	22	4.3	7.6	3.6	<2	25	<2.5	<1	<2.5		15	19	
W-B-11	3	4/15/03	<0.06	<2.5	<2.5	79	<0.5	<0.5	27	5.5	8.8	3	<2	34	<2.5	<1	<2.5		18	24	
W-B-11	8	4/15/03	<0.06	<2.5	<2.5	23	<0.5	<0.5	16	2.6	3.2	<3	<2	14	<2.5	<1	<2.5		9.8	9.7	
W-B-12	0	4/15/03	<0.06	11	<2.5	45	<0.5	15	30	2.9	690	7.8	19	51	<2.5	<1	<2.5		11	51	
W-B-12	3	4/15/03	<0.06	3.3	12	51	<0.5	14	28	3.7	580	7.9	16	50	<2.5	<1	<2.5		11	51	
W-B-12	6	4/15/03	<0.06	<2.5	<2.5	21	<0.5	<0.5	18	3.2	12	<3	<2	20	<2.5	<1	<2.5		12	14	
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks																					
ERM-B-10	2.5	04/17/2003	<0.018	<10	23	28	<1.0	<1.0	19	4.0	4.7	<10	<4.0	21	<10	<1.0	77	J	13	15	J
ERM-B-11	2.5	04/17/2003	<0.018	<10	24	39	<1.0	<1.0	18	<4.0	4.1	<10	<4.0	20	<10	<1.0	75	J	13	16	J
W-B-1	0	4/14/03	<0.06	<2.5	2.6	100	<0.5	<0.5	190	5.9	16	4.7	<2	120	<2.5	<1	<2.5		20	33	
W-B-1	3	4/14/03	<0.06	<2.5	<2.5	91	<0.5	<0.5	20	5.9	13	4.1	<2	37	<2.5	<1	<2.5		14	27	
W-B-2 (S)	3.5-4.5	04/14/2003	<0.020	<10	15	66	<1.0	<1.0	12	<4.0	2.6	<10	<4.0	15	<10	<1.0	50	J	8.9	11	
W-B-3 (S)	3-4	04/14/2003	<0.020	<10	15	20	<1.0	<1.0	19	<4.0	4.6	<10	<4.0	21	<10	<1.0	74	J	12	18	
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks (continued)																					
W-B-2	0	4/14/03	<0.06	<2.5	2.6	90	<0.5	<0.5	60	6.7	17	5.4	<2	51	<2.5	<1	<2.5		18	43	
W-B-2	3	4/14/03	<0.06	<2.5	<2.5	59	<0.5	<0.5	47	4.8	10	3.1	<2	42	<2.5	<1	<2.5		14	24	
W-B-3	0	4/14/03	<0.06	<2.5	2.8	88	<0.5	<0.5	180	7.5	17	4.1	<2	120	<2.5	<1	<2.5		19	32	
W-B-3	3	4/14/03	<0.06	<2.5	<2.5	85	<0.5	<0.5	41	5.9	12	3.6	<2	43	<2.5	<1	<2.5		17	26	
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area																					
W-B-16	0	4/17/03	0.071	<2.5	<2.5	31	<0.5	<0.5	23	4.3	4.5	<3	<2	23	<2.5	<1	<2.5		15	13	
W-B-16 (S)	1-2	04/17/2003	<0.019	<10	24	32	<1.0	<1.0	19	<4.0	4.9	<10	<4.0	22	<10	<1.0	80	J	14	18	J
W-B-16	3	4/17/03	<0.06	<2.5	<2.5	12	<0.5	<0.5	17	3.2	3.6	<3	<2	19	<2.5	<1	<2.5		14	9.9	
W-B-17	0	4/17/03	0.19	<2.5	<2.5	34	<0.5	<0.5	20	3.7	4.6	<3	<2	23	<2.5	<1	<2.5		15	13	
W-B-17 (S)	1-2	04/17/2003	<0.017	<10	28	31	<1.0	<1.0	22	6.7	6.6	<10	<4.0	25	<10	<1.0	93	J	15	18	J
W-B-17	3	4/17/03	0.13	<2.5	<2.5	29	<0.5	<0.5	26	7.3	5.8	<3	<2	25	<2.5	<1	<2.5		15	15	
Area of Concern 8 - Current 90-Day Hazardous Waste Accumulation Area																					
ERM-B-12	2	04/17/2003	<0.018	<10	27	32	<1.0	<1.0	21	4.2	5.5	<10	<4.0	24	<10	<1.0	91	J	15	19	J

Table 3. Metals Concentration in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	Hg	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn	
Area of Concern 9 - Hazardous Material Storage Areas																				
ERM-B-13	3.5	04/16/2003	<0.020	<10	14	19	<1.0	<1.0	11	<4.0	4.0	<10	<4.0	15	<10	<1.0	59	J	7.6	13
ERM-B-14	4.5	04/17/2003	0.028	<10	36	37	<1.0	<1.0	23	6.0	8.0	<10	<4.0	30	<10	<1.0	150	J	16	28
W-B-21	0	4/17/03	0.075	<2.5	<2.5	47	<0.5	<0.5	32	4.9	7.2	4.5	<2	32	<2.5	<1	<2.5		16	18
W-B-21	3	4/17/03	0.071	<2.5	<2.5	29	<0.5	<0.5	20	4	4.3	<3	<2	24	<2.5	<1	<2.5		13	12
W-B-22	0	4/18/03	<0.06	<2.5	2.6	55	<0.5	<0.5	25	4.1	5.2	<3	<2	25	<2.5	<1	<2.5		15	18
W-B-22 (S)	2-3	04/18/2003	<0.017	<10	22	29	<1.0	<1.0	16	<4.0	3.8	<10	<4.0	18	<10	<1.0	76	J	12	20
W-B-22	3	4/18/03	<0.06	<2.5	<2.5	28	<0.5	<0.5	22	3.6	4.9	<3	<2	24	<2.5	<1	<2.5		14	16
W-B-23	0	4/18/03	0.09	<2.5	<2.5	30	<0.5	<0.5	24	3.8	4.6	<3	<2	25	<2.5	<1	<2.5		16	16
W-B-23	3	4/18/03	<0.06	<2.5	2.6	86	<0.5	<0.5	110	6.4	16	7.2	<2	80	<2.5	<1	<2.5		21	35
Area of Concern 10 - Chemical Storage Area																				
ERM-B-15	1	04/17/2003	<0.019	<10	22	21	<1.0	<1.0	17	<4.0	3.9	<10	<4.0	21	<10	<1.0	83	J	13	18
Area of Concern 13 - Paint Spray Booth																				
ERM-B-22	1.5	04/17/2003	<0.019	<10	25	21	<1.0	<1.0	18	<4.0	4	<10	<4.0	20	<10	<1.0	85	J	13	15
Area of Concern 14 - Storm Drains																				
ERM-B-23	4.5	04/17/2003	0.024	<10	26	35	<1.0	<1.0	17	4.2	7.9	<10	<4.0	21	<10	<1.0	96	J	15	31
W-B-32	0	4/16/03	<0.06	<2.5	3.1	33	<0.5	3.3	30	4.4	20	21	<2	26	<2.5	<1	<2.5		18	120
W-B-32 (S)	1-2	04/16/2003	0.029	<10	22	23	<1.0	4.2	26	<4.0	23	20	<4.0	17	<10	<1.0	78	J	11	140
W-B-32	3	4/16/03	<0.06	<2.5	<2.5	22	<0.5	0.5	19	3.2	5.7	<3	<2	20	<2.5	<1	<2.5		13	29
W-B-32	8	4/16/03	<0.06	<2.5	4.1	42	<0.5	1.2	41	6.4	13	10	<2	40	<2.5	<1	<2.5		25	42
W-B-38	0	4/15/03	<0.06	<2.5	<2.5	38	<0.5	<0.5	27	5.2	7	<3	<2	32	<2.5	<1	<2.5		17	22
W-B-38 (S)	2-3	04/15/2003	<0.020	<10	21	11	<1.0	<1.0	16	<4.0	3.4	<10	<4.0	20	<10	<1.0	67	J	12	14
W-B-38	3	4/14/03	<0.06	<2.5	<2.5	14	<0.5	<0.5	17	3.5	3.9	<3	<2	21	<2.5	<1	<2.5		13	13
W-B-38	8	4/14/03	<0.06	<2.5	<2.5	12	<0.5	<0.5	14	2.8	3.4	<3	<2	18	<2.5	<1	<2.5		9.3	12
W-B-39	0	4/14/03	<0.06	<2.5	<2.5	41	<0.5	<0.5	21	4.8	6.1	4.2	<2	27	<2.5	<1	<2.5		14	21
W-B-39	3	4/14/03	<0.06	<2.5	<2.5	10	<0.5	<0.5	15	3.2	3.9	<3	<2	20	<2.5	<1	<2.5		10	12
W-B-39	8	4/14/03	<0.06	<2.5	<2.5	31	<0.5	<0.5	24	4.2	5.6	<3	<2	28	<2.5	<1	<2.5		15	18
Area of Concern 16 - Reported Fuel Spill Area on Taxiway																				
W-B-13	0	4/15/03	<0.06	<2.5	2.8	58	<0.5	<0.5	29	5.5	9.4	<3	<2	34	<2.5	<1	<2.5		20	27
W-B-13	3	4/15/03	<0.06	<2.5	<2.5	26	<0.5	<0.5	17	2.9	3.5	<3	<2	18	<2.5	<1	<2.5		10	12
W-B-13	8	4/15/03	<0.06	<2.5	<2.5	36	<0.5	<0.5	17	2.5	3	<3	<2	15	<2.5	<1	<2.5		11	9.6
W-B-14	0	4/15/03	<0.06	<2.5	<2.5	26	<0.5	<0.5	19	3.7	4.6	<3	<2	23	<2.5	<1	<2.5		13	16
W-B-14	3	4/15/03	<0.06	<2.5	<2.5	51	<0.5	<0.5	25	4.4	17	<3	<2	28	<2.5	<1	<2.5		16	21
W-B-14	8	4/15/03	<0.06	<2.5	<2.5	26	<0.5	<0.5	16	3.1	3.7	<3	<2	18	<2.5	<1	<2.5		11	12
W-B-15	0	4/15/03	<0.06	<2.5	<2.5	53	<0.5	<0.5	32	5.6	8.6	<3	<2	39	<2.5	<1	<2.5		22	26
W-B-15	8	4/15/03	<0.06	<2.5	<2.5	39	<0.5	<0.5	16	3	3.7	<3	<2	18	<2.5	<1	<2.5		10	13
Area of Concern 17 - Pavement Perimeter																				
W-B-24	0	4/14/03	<0.06	<2.5	<2.5	41	<0.5	<0.5	20	2.7	18	25	<2	19	<2.5	<1	<2.5		10	38
W-B-24	3	4/14/03	<0.06	<2.5	<2.5	45	<0.5	0.55	30	5.3	9.3	4.3	<2	34	<2.5	<1	<2.5		18	33
W-B-24	8	4/14/03	<0.06	<2.5	<2.5	56	<0.5	<0.5	22	3.9	4.6	<3	<2	26	<2.5	<1	<2.5		16	19
W-B-25	0	4/15/03	<0.06	<2.5	<2.5	19	<0.5	<0.5	17	3.2	4.5	7.9	<2	18	<2.5	<1	<2.5		10	15
W-B-25 (S)	1-2	04/15/2003	<0.020	<10	82	120	<1.0	<1.0	55	11	29	<10	<4.0	22	<10	<1.0	380/<0.42*	J	54	61
W-B-25	3	4/15/03	<0.06	<2.5	3.3	88	<0.5	<0.5	89	7.8	12	5.7	<2	71	<2.5	<1	<2.5		27	38
W-B-25	8	4/15/03	<0.06	<2.5	<2.5	23	<0.5	<0.5	22	4.1	6.2	3.3	<2	27	<2.5	<1	<2.5		15	20
W-B-26	0	4/16/03	<0.06	<2.5	<2.5	43	<0.5	<0.5	28	4.2	5.4	3.1	<2	29	<2.5	<1	<2.5		16	17
W-B-26	3	4/16/03	<0.06	<2.5	<2.5	18	<0.5	<0.5	18	3.4	3.6	<3	<2	21	<2.5	<1	<2.5		14	13
W-B-26	12	4/16/03	<0.06	<2.5	2.9	38	<0.5	<0.5	28	4.3	5.4	<3	<2	29	<2.5	<1	<2.5		19	19
W-B-27	0	4/16/03	<0.06	<2.5	<2.5	26	<0.5	<0.5	18	3.4	4.4	<3	<2	21	<2.5	<1	<2.5		13	13
W-B-27	3	4/16/03	<0.06	<2.5		42	<0.5	<0.5	15	2.7	2.7	<3	<2	16	<2.5	<1	<2.5		10	9.5
W-B-27	8	4/16/03	<0.06	<2.5	<2.5	34	<0.5	<0.5	19	3.4	3.9	<3	<2	22	<2.5	<1	<2.5		14	14
W-B-28	0	4/16/03	<0.06	<2.5	3.2	38	<0.5	7.5	31	6.2	150	16	3.4	39	<2.5	<1	<2.5		16	41
W-B-28	3	4/16/03	<0.06	<2.5	3.8	18	<0.5	<0.5	14	2.9	2.3	<3	<2	14	<2.5	<1	<2.5		9.4	8.6
W-B-28	8	4/16/03	<0.06	<2.5	<2.5	27	<0.5	<0.5	23	3.7	4.3	<3	<2	24	<2.5	<1	<2.5		14	14
W-B-29	0	4/16/03	<0.06	<2.5	3.1	41	<0.5	<0.5	29	4.6	8.2	4.9	<2	31	<2.5	<1	<2.5		19	24
W-B-29 (S)	1-2	04/16/2003	0.039	<10	77	61	<1.0	<1.0	56	11	20	<10	<4.0	72	<10	<1.0	280	J	33	52
W-B-29	3	4/16/03	<0.06	<2.5	<2.5	24	<0.5	<0.5	21	3.8	3.9	<3	<2	23	<2.5	<1	<2.5		14	15
W-B-29	8	4/16/03	<0.06	<2.5	2.9	21	<0.5	<0.5	17	2.8	2.8	<3	<2	17	<2.5	<1	<2.5		11	11
W-B-30	0	4/16/03	0.21	<2.5	3.7	48	<0.5	1	31	5.7	9.8	9.1	<2	32	<2.5	<1	<2.5		21	32

Table 3 Metals Concentration in Soil, United Airlines Maintenance Hangar Area

Sample Location	Sample Depth (feet bgs)	Date Sampled	Hg	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn
Area of Concern 17 - Pavement Perimeter (continued)																			
W-B-30	3	4/16/03	<0.06	<2.5	<2.5	20	<0.5	<0.5	21	3.8	3.9	<3	<2	24	<2.5	<1	<2.5	14	14
W-B-30	8	4/16/03	<0.06	<2.5	2.8	15	<0.5	<0.5	20	3.5	3.3	<3	<2	20	<2.5	<1	<2.5	13	12
W-B-31	0	4/16/03	<0.06	<2.5	2.8	30	<0.5	2.1	24	4.2	15	6	<2	25	<2.5	<1	<2.5	16	71
W-B-31	3	4/16/03	0.19	<2.5	9.4	34	<0.5	1.3	56	11	28	24	<2	56	<2.5	<1	<2.5	41	81
W-B-31-DUP	3.5	4/16/03	0.49	<2.5	6	34	<0.5	6.8	74	10	33	34	<2	53	<2.5	<1	<2.5	40	110
W-B-33	0	4/16/03	0.17	<2.5	3.9	74	<0.5	6.4	38	7.4	37	44	<2	43	<2.5	<1	<2.5	32	69
W-B-33-DUP	2.5	4/16/03	0.12	<2.5	4.3	29	<0.5	1.1	31	5.8	9.9	7.4	<2	34	<2.5	<1	<2.5	21	33
W-B-33	3	4/16/03	<0.06	<2.5	2.9	43	<0.5	0.82	34	5.7	8.3	3.8	<2	36	<2.5	<1	<2.5	22	25
W-B-33	8	4/16/03	0.068	<2.5	3.8	32	<0.5	1.7	47	7.6	18	16	<2	44	<2.5	<1	<2.5	30	60
W-B-34	0	4/17/03	0.42	<2.5	32	100	<0.5	<0.5	22	9.1	24	37	<2	17	<2.5	<1	<2.5	34	110
W-B-34	3	4/17/03	0.28	<2.5	6.1	46	<0.5	2	50	8.8	23	19	<2	52	<2.5	<1	<2.5	31	67
W-B-35	0	4/17/03	0.52	<2.5	5.9	110	<0.5	1.2	48	6.5	20	17	<2	43	<2.5	<1	<2.5	28	63
W-B-35	3	4/17/03	0.094	<2.5	2.5	39	<0.5	0.75	25	5.4	12	10	<2	24	<2.5	<1	<2.5	21	27
W-B-36	0	4/17/03	<0.06	<2.5	<2.5	47	<0.5	<0.5	24	4.1	6.1	3.5	<2	25	<2.5	<1	<2.5	15	18
W-B-36	3	4/17/03	<0.06	<2.5	<2.5	28	<0.5	<0.5	19	3	4.3	<3	<2	20	<2.5	<1	<2.5	13	12
W-B-37	0	4/17/03	0.1	<2.5	<2.5	76	<0.5	4.8	33	3.1	55	28	<2	21	<2.5	1	<2.5	14	180
W-B-37	3.5	4/17/03	0.088	<2.5	<2.5	16	<0.5	<0.5	23	3.8	4.9	<3	<2	23	<2.5	<1	<2.5	15	14
Area of Concern 18 - Offsite Solvent USTs																			
W-B-9	4	4/18/03	0.064	<2.5	<2.5	27	<0.5	<0.5	23	3.3	4.5	<3	<2	21	<2.5	<1	<2.5	14	15
W-B-18	4.5	4/18/03	<0.06	<2.5	<2.5	48	<0.5	<0.5	25	4.4	6.2	<3	<2	26	<2.5	<1	<2.5	15	18
W-B-18	7.5	4/18/03	0.093	<2.5	<2.5	14	<0.5	<0.5	22	3.4	4	<3	<2	18	<2.5	<1	<2.5	13	11
W-B-19	4	4/18/03	<0.06	<2.5	<2.5	20	<0.5	<0.5	20	3.4	4.5	<3	<2	22	<2.5	<1	<2.5	13	15
W-B-20	3	4/18/03	<0.06	<2.5	<2.5	39	<0.5	<0.5	24	3.6	6.7	<3	<2	24	<2.5	<1	<2.5	14	21
Commercial RBSL ¹			10	40	2.7	1500	8	12	13	80	225	750	40	150	10	40	29	200	600
Background ²			0.4 to 0.7	1 to 5.5	4 to 20	61 to 324	0.7 to 1	1.5 to 3.3	81 to 100	10 to 22	24 to 69	8 to 16	3 to 7	32 to 120	0.1 to 6	1 to 2	9 to 43	31 to 74	35 to 106
TTL ³			20.0	500.0	500.0	10,000.0	75.0	100.0	2,500.0	8,000.0	2,500.0	1,000.0	3,500.0	2,000.0	100.0	500.0	700.0	2,400.0	5,000.0
10x STLC ⁴			2	150	50	1000	7.5	10	50	800	250	50	3500	200	10	50	70	240	250
20x TC Limit ⁵			4	NE	100	2000	NE	20	100	NE	NE	100	NE	NE	20	100	NE	NE	NE

Notes:
 Sample concentrations reported in milligrams per kilogram (mg/kg)
 Bold values indicate concentrations detected above the laboratory method detection limit.
 < 0.5 Compound not detected at or above the laboratory method detection limit
 NA Not Analyzed
 NE Not Established
 feet bgs feet below ground surface
 * First number indicates the initial result by inductively coupled plasma; second number indicates the result after reanalysis by graphite furnace

¹ Risk-based screening level where groundwater is not a current or potential source of drinking water (RWQCB, 2001)
² Background concentrations are from soil studies at Fleet and Industrial Supply Center Oakland (FISCO) and Lawrence Berkeley National Laboratory
³ California total threshold limit concentration
⁴ Ten times the California soluble threshold limit concentration
⁵ Twenty times the toxicity characteristic leaching procedure concentration limit

Abbreviations:
 Hg = Mercury
 Sb = Antimony
 As = Arsenic
 Ba = Barium
 Be = Beryllium
 Cd = Cadmium
 Cr = Chromium
 Co = Cobalt
 Cu = Copper

Pb = Lead
 Mo = Molybdenum
 Ni = Nickel
 Se = Selenium
 Ag = Silver
 Tl = Thallium
 V = Vanadium
 Zn = Zinc

ERM Qualifiers:
 J = Estimated Value
 UJ = Estimated Non-detected Value

Table 4. Total Petroleum Hydrocarbon Concentrations in Groundwater, United Airlines Maintenance Hangar Area

Sample Location	Date Sampled	TPPH	TPH-G	TEPH	TEPH SGCU	TPH-D SGCU	TPH-JF SGCU	TPH-MO SGCU
Area of Concern 1 - Small Parts Wash Rack/Former World Airways Cleaning Room								
ERM-B-1	04/15/2003	110	NA	2,300 NJ	340 NJ	NA	NA	NA
ERM-B-2	04/15/2003	71	NA	5,500 NJ	<560	NA	NA	NA
UAL-MW5	04/22/2003	NA	< 50	NA	NA	< 50	< 50	<250
UAL-MW5 (S)	04/18/2003	<50	NA	<50	NA	NA	NA	NA
W-B-4 ¹	04/15/2003	<50	NA	140 NJ	97 NJ	NA	NA	NA
W-B-5 ¹	04/15/2003	<50	NA	<500	NA	NA	NA	NA
W-B-6 ¹	04/15/2003	<50	NA	520 NJ	260 NJ	NA	NA	NA
Area of Concern 2 - Aircraft Wash Rack								
ERM-B-3	04/15/2003	<50	NA	930 NJ	200 NJ	NA	NA	NA
ERM-B-4	04/15/2003	<50	NA	4,500 NJ	840 NJ	NA	NA	NA
ERM-B-5	04/15/2003	<500	NA	12,000 NJ	4,700 NJ	NA	NA	NA
ERM-B-6	04/15/2003	1,700	NA	7,700 NJ	990 NJ	NA	NA	NA
ERM-B-7	04/15/2003	<50	NA	1,900 NJ	150 NJ	NA	NA	NA
W-B-7 ¹	04/17/2003	<50	NA	83 NJ	79 NJ	NA	NA	NA
W-B-8	04/14/2003	NA	NA	NA	NA	210	210	1100
W-B-8 (S)	04/14/2003	<50	NA	91 NJ	100 NJ	NA	NA	NA
Area of Concern 3 - Industrial Wastewater Vault								
W-B-10 ¹	04/15/2003	<50	NA	160 NJ	93 NJ	NA	NA	NA
W-B-11 ¹	04/15/2003	<50	NA	140 NJ	120 NJ	NA	NA	NA
W-B-12 ¹	04/15/2003	<50	NA	4,100 NJ	3,100 NJ	NA	NA	NA
Area of Concern 4 - Aboveground Fuel Storage Tank								
ERM-B-8	04/16/2003	<50	NA	52 NJ	72 NJ	NA	NA	NA
ERM-B-9	04/16/2003	<50	NA	120 NJ	150 NJ	NA	NA	NA
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks								
ERM-B-10	04/17/2003	59	NA	96 NJ	63 NJ	NA	NA	NA
ERM-B-11	04/17/2003	<50	NA	110 NJ	66 NJ	NA	NA	NA
UAL-MW-4 (S)	04/18/2003	<50	NA	82 NJ	100 NJ	NA	NA	NA
UAL-MW-1	04/15/2003	NA	< 50	NA	NA	< 50	< 50	< 250
UAL-MW-1 (S)	04/18/2003	<50	NA	<50	NA	NA	NA	NA
UAL-MW-2	04/15/2003	NA	< 50	NA	NA	< 50	< 50	< 250
UAL-MW-2 (S)	04/18/2003	<50	NA	280 NJ	120 NJ	NA	NA	NA
UAL-MW-3	04/15/2003	NA	< 50	NA	NA	< 50	< 50	< 250
UAL-MW-3 (S)	04/18/2003	<50	NA	86 NJ	78 NJ	NA	NA	NA
UAL-MW-4	04/22/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-1	04/15/2003	NA	< 50	NA	NA	110	< 50	540
W-B-2	04/15/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-2 (S)	04/15/2003	90	NA	200 NJ	89 NJ	NA	NA	NA
W-B-3	04/15/2003	NA	< 50	NA	NA	98	< 50	650
W-B-3 (S)	04/15/2003	85	NA	120 NJ	77 NJ	NA	NA	NA
Area of Concern 6 - Boiler and Aboveground Diesel Storage Tank								
ERM-B-27	04/17/2003	NA	NA	550 NJ	180 NJ	NA	NA	NA
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area								
W-B-16	04/17/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-16 (S)	04/17/2003	<50	NA	57 NJ	69 NJ	NA	NA	NA
W-B-16-D (S)	04/17/2003	NA	NA	NA	NA	NA	NA	NA
W-B-17	04/17/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-17 (S)	04/17/2003	<50	NA	660 NJ	220 NJ	NA	NA	NA
Area of Concern 8 - Current 90-Day Hazardous Waste Accumulation Area								
ERM-B-12	04/17/2003	<50	NA	<50	NA	NA	NA	NA
Area of Concern 9 - Hazardous Material Storage Areas								
ERM-B-13	04/16/2003	<50	NA	86 NJ	77 NJ	NA	NA	NA
ERM-B-14	04/17/2003	<50	NA	110 NJ	170 NJ	NA	NA	NA
ERM-B-14-D	04/17/2003	NA	NA	NA	NA	NA	NA	NA
W-B-22 ¹	04/18/2003	<50	NA	<50	NA	NA	NA	NA
W-B-22-D ¹	04/18/2003	NA	NA	NA	NA	NA	NA	NA
Area of Concern 11 - Aircraft Fueling/Defueling Equipment Areas								
ERM-B-16	04/16/2003	NA	NA	59 NJ	82 NJ	NA	NA	NA
ERM-B-17	04/16/2003	NA	NA	51 NJ	80 NJ	NA	NA	NA
ERM-B-18	04/16/2003	NA	NA	96 NJ	100 NJ	NA	NA	NA
ERM-B-19	04/16/2003	NA	NA	80 NJ	100 NJ	NA	NA	NA

Table 4. Total Petroleum Hydrocarbon Concentrations in Groundwater, United Airlines Maintenance Hangar Area

Sample Location	Date Sampled	TPPH	TPH-G	TEPH	TEPH SGCU	TPH-D SGCU	TPH-JF SGCU	TPH-MO SGCU
Area of Concern 12 - Fire System Motors and Associated Fuel Tanks								
ERM-B-20	04/17/2003	NA	NA	61 NJ	83 NJ	NA	NA	NA
ERM-B-21	04/17/2003	NA	NA	130 NJ	130 NJ	NA	NA	NA
Area of Concern 14 - Storm Drains								
ERM-B-23	04/17/2003	<50	NA	<50	NA	NA	NA	NA
W-B-32 ¹	04/16/2003	<50	NA	250 NJ	160 NJ	NA	NA	NA
W-B-38 ¹	04/15/2003	<50	NA	230 NJ	120 NJ	NA	NA	NA
Area of Concern 15 - Aircraft Parking and Run Up Area								
ERM-B-24	04/15/2003	NA	NA	620 NJ	160 NJ	NA	NA	NA
ERM-B-25	04/15/2003	NA	NA	370 NJ	140 NJ	NA	NA	NA
ERM-B-26	04/16/2003	NA	NA	360 NJ	140 NJ	NA	NA	NA
Area of Concern 16 - Reported Fuel Spill Area on Taxiway								
W-B-14 ¹	04/15/2003	NA	NA	67 NJ	69 NJ	NA	NA	NA
Area of Concern 17 - Pavement Perimeter								
W-B-25 ¹	04/16/2003	<50	NA	<50	NA	NA	NA	NA
W-B-29 ¹	04/16/2003	<50	NA	<50	NA	NA	NA	NA
Area of Concern 18 - Migration of Offsite Solvent Plume Onto OMC Property								
W-B-18	04/18/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-19	04/18/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-20	04/18/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-20-DUP	04/18/2003	NA	< 50	NA	NA	< 50	< 50	< 250
W-B-9	04/18/2003	NA	< 50	NA	NA	< 50	< 50	< 250
Commercial RBSL* (µg/L)		500 ²	500 ²	640 ³	640 ³	640 ³	640 ³	640 ³

Notes:

Sample concentrations reported in micrograms per liter (µg/L)

Bold values indicate concentrations detected above the laboratory method detection limit.

- < 0.5 Compound not detected at or above the laboratory method detection limit
- NA Not Analyzed
- (S) ERM split sample from Weiss boring

¹ Sample collected by ERM from Weiss boring

² Risk-based screening level where groundwater is not a current or potential source of drinking water

³ Risk-based screening level for total petroleum hydrocarbons as gasoline (RWQCB, 2001)

⁴ Risk-based screening level for total petroleum hydrocarbon as middle distillates and residual fuels (RWQCB, 2001)

Abbreviations:

- TPH-G = Total Petroleum Hydrocarbons as Gasoline
- TPPH = Total Purgeable Petroleum Hydrocarbons
- TEPH = Total Extractable Petroleum Hydrocarbons
- SGCU = Silica Gel Clean Up
- TPH-D = Total Petroleum Hydrocarbons as Diesel
- TPH-MO = Total Petroleum Hydrocarbons as Motor Oil

Sequoia Analytical/ERM Qualifiers:

- J = Estimated Value
- UJ = Estimated Non-Detected Value
- UJb = Estimated Non-Detected Value Due to Common Laboratory Contaminant
- NJ = Tentative Identification Estimated

McCampbell Analytical/Weiss Notes:

- o = oil range compounds are significant

Table 5. Volatile Organic Compound Concentrations in Groundwater, United Airlines Maintenance Hangar Area

Sample Location	Date Sampled	Methods	VOCs																			
			CE	CM	1,1-DCA	1,1-DCE	c-1,2-DCE	DCM	IPB	4-IPT	MTBE	NAP	STY	1,1,1-TCA	TCE	1,2,4-TMB	1,3,5-TMB	BZ	EB	TOL	XYL	
Area of Concern 14 - Storm Drains																						
ERM-B-23	04/17/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
W-B-32 ¹	04/16/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
W-B-38 ¹	04/15/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
W-B-38 DUP ¹	04/15/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Area of Concern 15 - Aircraft Parking and Run Up Area																						
ERM-B-24	04/15/2003	DHS LUFT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.50	<0.50	<0.50
ERM-B-25	04/15/2003	DHS LUFT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.50	<0.50	1.5
ERM-B-26	04/16/2003	DHS LUFT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.50	<0.50	<0.50
Area of Concern 16 - Reported Fuel Spill Area on Taxiway																						
W-B-14 ¹	04/15/2003	DHS LUFT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.50	<0.50	<0.50
Area of Concern 17 - Former Vehicle Fueling USTs																						
W-B-25 ¹	04/16/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
W-B-29 ¹	04/16/2003	8260	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Area of Concern 18 - Migration of Offsite Solvent Plume Onto OMC Property																						
W-B-9	04/18/2003	8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-B-9 (S)	04/18/2003	8260	<0.50	0.51 J	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
W-B-18	04/18/2003	8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-B-19	04/18/2003	8260	<0.5	<0.5	<0.5	<0.5	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-B-19 (S)	04/18/2003	8260	<0.50	0.52 J	0.59 J	<0.50	6.4 J	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	56 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
W-B-20	04/18/2003	8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-B-20	04/18/2003	8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Commercial RBSL ²			12	5.6	47	9.6	590	2200	NE	NE	1800	24	100	62	360	NE	NE	46	290	130	13	

Notes:

Sample concentrations reported in micrograms per liter (ug/L)

Bold values indicate concentrations detected above the laboratory method detection limit.

< 0.5 Compound not detected at or above the laboratory method detection limit

NA Not Analyzed

NE Not Established

(S) ERM split sample from Weiss boring

¹ Sample collected by ERM from Weiss boring

² Risk-based screening level where ground water is not a current or potential source of drinking water (RWQCB, 2001)

Abbreviations:

VOC = Volatile Organic Compounds

DCM = Dichloromethane

MTBE = Methyl tert-butyl ether

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

c-1,2-DCE = c-1,2-Dichloroethene

TCE = Trichloroethene

NAP = Naphthalene

1,2,4-TMB = 1,2,4-Trimethylbenzene

1,3,5-TMB = 1,3,5-Trimethylbenzene

P-IPT = p-Isopropyltoluene

IPB = Isopropylbenzene

CM = Chloromethane

CE = Chloroethane

STY = Styrene

BZ = Benzene

TOL = Toluene

EB = Ethylbenzene

XYL = Xylenes

ERM Qualifiers:

J = Estimated Value

UJ = Estimated Non-Detected Value

UJb = Estimated Non-Detected Value Due to Common Laboratory Contaminant

NJ = Tentative Identification Estimated

Table 6. Metals Concentration in Groundwater, United Airlines Maintenance Hangar Area

Sample Location	Date Sampled	Hg	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn	TDS	
Area of Concern 1 - Small Parts Wash Rack/Former World Airways Cleaning Room																				
ERM-B-1	04/15/2003	<0.0002	<0.050	<0.050	0.18	<0.0050	<0.0050	<0.0050	0.02	<0.0050	<0.050	<0.020	0.19	<0.050	<0.0050	<0.050	<0.020	0.0065	NA	
ERM-B-2	04/15/2003	<0.0002	<0.050	<0.050	0.6	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	0.13	<0.050	<0.0050	0.21/<0.005*	J	<0.020	<0.0050	NA
UAL-MW-5	04/22/2003	<0.0008	<0.06	<0.5	0.053	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.01	<0.05	<0.05	<0.05	NA	
W-B-4 ¹	04/15/2003	<0.0002	<0.050	<0.050	0.064	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	0.082	J	<0.020	<0.020	NA
W-B-5 ¹	04/15/2003	<0.0002	<0.050	<0.050	0.21	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	0.064	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-6 ¹	04/15/2003	<0.0002	<0.050	<0.050	0.19	<0.0055	UJ	<0.0050	<0.0050	<0.020	<0.050	<0.020	0.031	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
Area of Concern 2 - Aircraft Wash Rack																				
ERM-B-3	04/15/2003	<0.0002	<0.050	<0.050	0.29	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	0.12	<0.050	<0.0050	<0.050	<0.020	<0.0050	NA	
ERM-B-4	04/15/2003	<0.0002	<0.050	<0.050	0.3	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	0.16	<0.050	<0.0050	<0.050	<0.020	<0.0050	NA	
ERM-B-5	04/15/2003	<0.0002	<0.050	<0.050	0.16	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	0.051	0.23	<0.050	<0.0050	0.074	J	<0.020	0.0066	NA
ERM-B-6	04/15/2003	<0.0002	<0.050	<0.050	0.33	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	0.028	0.26	<0.050	<0.0050	0.081	J	<0.020	<0.0050	NA
ERM-B-7	04/15/2003	<0.0002	UJ	<0.050	0.13	<0.0050	0.0056	0.0075	<0.020	0.0054	<0.050	0.12	0.092	<0.050	<0.0050	<0.050	<0.020	0.014	NA	
W-B-7 ¹	04/17/2003	<0.0002	<0.050	<0.050	0.28	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-8	04/14/2003	<0.0008	<0.06	<0.5	0.44	<0.004	<0.005	0.052	<0.05	0.094	0.96	<0.05	0.1	<0.5	<0.01	<0.05	<0.05	0.14	NA	
W-B-8 (S)	04/14/2003	<0.0002	<0.050	<0.050	0.37	<0.0050	<0.0050	0.047	<0.020	0.048	1.9	<0.020	0.052	<0.050	<0.0050	0.15	J	<0.020	0.79	NA
Area of Concern 3 - Industrial Wastewater Vault																				
W-B-10 ¹	04/15/2003	<0.0002	<0.050	<0.050	0.068	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-11 ¹	04/15/2003	<0.0002	<0.050	<0.050	0.086	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-12 ¹	04/15/2003	<0.0002	<0.050	<0.050	<0.050	<0.0050	0.038	<0.0050	<0.020	0.22	<0.050	0.085	0.063	<0.050	<0.0050	<0.050	<0.020	0.036	NA	
Area of Concern 5 - Vehicle Maintenance Center/Former Vehicle Fueling Underground Storage Tanks																				
W-B-1	04/15/2003	<0.0008	<0.06	<0.005	0.07	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
W-B-2	04/15/2003	<0.0008	<0.06	<0.005	<0.05	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
W-B-2 (S)	04/15/2003	<0.0002	<0.050	<0.050	0.054	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-3	04/15/2003	<0.0008	<0.06	<0.005	0.083	<0.004	<0.005	0.04	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
W-B-3 (S)	04/15/2003	<0.0002	0.055	<0.050	0.12	<0.0061	UJ	<0.0050	<0.0050	<0.020	<0.0050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	0.0063	NA	
ERM-B-10	04/17/2003	<0.0002	UJ	0.074	0.1	0.0086	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
ERM-B-11	04/17/2003	<0.0002	UJ	<0.050	0.076	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	0.064	J	<0.020	<0.020	NA
UAL-MW-1	04/15/2003	<0.0008	<0.06	0.008	0.15	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
UAL-MW-2	04/15/2003	<0.0008	<0.06	<0.005	0.1	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
UAL-MW-3	04/15/2003	<0.0008	<0.06	<0.005	<0.05	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.01	<0.05	<0.05	<0.05	NA	
UAL-MW-4	04/22/2003	<0.0008	<0.06	0.847	0.18	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.01	<0.05	<0.05	<0.05	NA	
Area of Concern 7 - Former 90-Day Hazardous Waste Accumulation Area																				
W-B-16	04/17/2003	<0.0008	<0.006	0.0055	<0.05	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	0.13	0.054	<0.05	<0.01	<0.005	<0.05	<0.05	NA	
W-B-16 (S)	04/17/2003	<0.0002	UJ	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	0.022	0.054	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-17	04/17/2003	<0.0008	<0.006	0.012	<0.05	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.005	<0.05	<0.05	NA	
W-B-17 (S)	04/17/2003	<0.0002	UJ	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	1,300	
Area of Concern 8 - Current 90-Day Hazardous Waste Accumulation Area																				
ERM-B-12	04/17/2003	<0.0002	<0.050	<0.050	0.24	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	0.031	0.063	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
Area of Concern 9 - Hazardous Material Storage Areas																				
ERM-B-13	04/16/2003	<0.0002	<0.050	<0.050	0.058	0.0059	<0.0050	<0.0050	<0.020	<0.0050	0.057	0.028	<0.020	<0.050	0.0058	<0.050	<0.020	0.017	NA	
ERM-B-14	04/17/2003	<0.0002	<0.050	<0.050	0.058	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	0.065	J	<0.020	<0.020	3,300
W-B-22 ¹	04/18/2003	<0.0002	<0.050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	0.0099	NA	
Area of Concern 11 - Aircraft Fueling/Defueling Equipment Areas																				
ERM-B-16	04/16/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15,000	
Area of Concern 12 - Fire System Motors and Associated Fuel Tanks																				
ERM-B-20	04/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,200	
Area of Concern 14 - Storm Drains																				
ERM-B-23	04/17/2003	<0.0002	UJ	<0.050	0.077	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
W-B-32 ¹	04/16/2003	<0.0002	<0.050	<0.050	0.12	0.0058	<0.0050	<0.0050	<0.020	0.0056	0.05	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	0.021	1,900	
W-B-38 ¹	04/15/2003	<0.0002	<0.050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	<0.020	NA	
Area of Concern 15 - Aircraft Parking and Run Up Area																				
ERM-B-24	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,300	

Table 6. Metals Concentration in Groundwater, United Airlines Maintenance Hangar Area

Sample Location	Date Sampled	Hg	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mo	Ni	Se	Ag	Tl	V	Zn	TDS
Area of Concern 17 - Pavement Perimeter																			
W-B-25 ¹	04/16/2003	<0.0002	<0.050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	0.0081	NA
W-B-29 ¹	04/16/2003	<0.0002	<0.050	<0.050	0.12	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.050	<0.020	<0.020	<0.050	<0.0050	<0.050	<0.020	0.005	NA
Area of Concern 18 - Offsite Solvent USTs																			
W-B-18	04/18/2003	<0.0008	<0.06	<0.05	0.57	<0.004	<0.005	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	NA
W-B-19	04/18/2003	<0.0008	<0.06	<0.05	<0.005	<0.0004	<0.0005	<0.002	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.001	<0.05	<0.005	<0.005	NA
W-B-20	04/18/2003	<0.0008	<0.06	<0.05	0.099	<0.0004	<0.0005	<0.002	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.001	<0.05	<0.005	<0.005	NA
Area of Concern 18 - Offsite Solvent USTs (continued)																			
W-B-20-A	04/18/2003	<0.0008	<0.6	<0.5	0.13	<0.0004	<0.0005	<0.002	<0.005	<0.005	<0.005	<0.05	<0.005	<0.5	<0.001	<0.5	<0.005	<0.005	NA
W-B-9	04/18/2003	<0.0008	<0.06	<0.05	0.12	<0.0004	<0.0005	<0.002	<0.005	<0.005	<0.05	<0.005	<0.005	<0.05	<0.001	<0.05	<0.005	<0.005	NA
Commercial RBSL ² (mg/L)		0.000012	0.03	0.036	0.0039	0.0051	0.0011	0.18	0.003	0.0031	0.0032	0.24	0.0082	0.005	0.00012	0.04	0.019	0.023	

Notes:

Sample concentrations reported in milligrams per liter (mg/L).

Bold values indicate concentrations detected above the laboratory method detection limit.

< 0.5 Compound not detected at or above the laboratory method detection limit

NA Not Analyzed

* First number indicates the initial result by inductively coupled plasma; second number indicates the result after reanalysis by graphite furnace

(S) = ERM Split sample collected from Weiss boring.

¹Sample collected by ERM from Weiss boring.

²Risk-based screening level where groundwater is not a current or potential source of drinking water (RWQCB, 2001).

Abbreviations:

Hg = Mercury
 Sb = Antimony
 As = Arsenic
 Ba = Barium
 Be = Beryllium
 Cd = Cadmium
 Cr = Chromium
 Co = Cobalt
 Cu = Copper

ERM Qualifiers:

J = Estimated Value
 UJ = Estimated Non-Detected Value

TDS = Total Dissolved Solids

Table 7. Soluble Threshold Limit Concentrations of Metals in Soil, United Airlines Maintenance Hangar Area

Sample Location	Depth (ft bgs)	Date Sampled	Constituent	Concentration ¹ (mg/L)	STLC ² (mg/L)
W-B-1	0	04/14/2003	Chromium	0.13	5
W-B-3	0	04/14/2003	Chromium	0.19	5
W-B-5	0	04/14/2003	Chromium	0.23	5
W-B-8	0	04/14/2003	Lead	2.7	5
W-B-8	3	04/14/2003	Lead	2.9	5
W-B-12	0	04/15/2003	Cadmium	1.1	1
W-B-12	0	04/15/2003	Copper	46	25
W-B-12	3	04/15/2003	Cadmium	0.89	1
W-B-12	3	04/15/2003	Copper	16	25
W-B-23	3	04/18/2003	Chromium	0.11	5
W-B-25	3	04/15/2003	Chromium	0.21	5
W-B-31	3	04/16/2003	Chromium	0.37	5
W-B-31	3.5	04/16/2003	Chromium	0.53	5

Notes:

¹Concentration determined using the California Waste Extraction Test.

²Samples with concentrations above this limit are considered hazardous waste.

Abbreviations:

Bold text indicates that the sample concentration exceeded the STLC.

ft bgs = feet below ground surface

mg/L = milligrams per liter

STLC = soluble threshold limit concentration

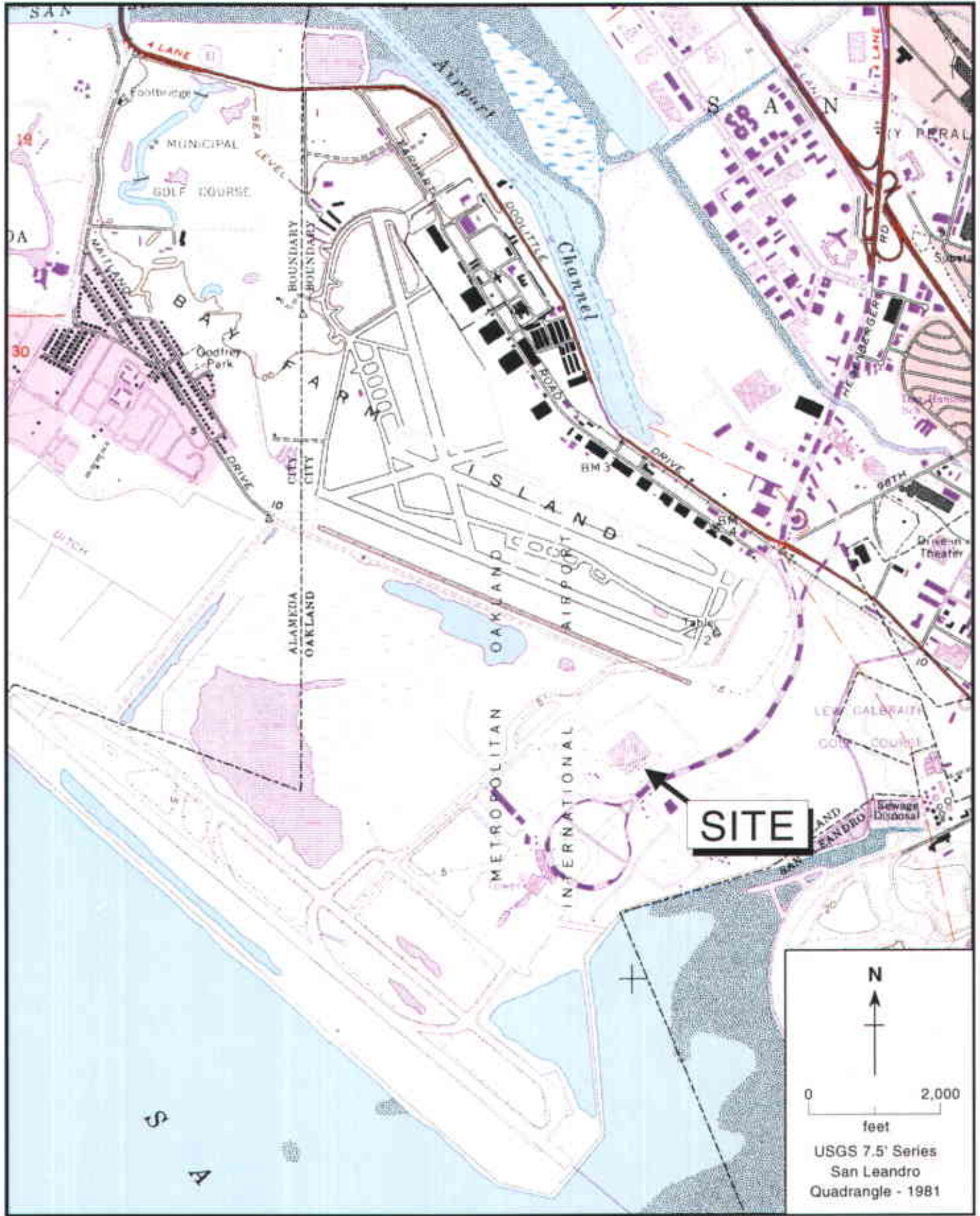


Figure 1. Site Vicinity Map, United Airlines Maintenance Hangar, Metropolitan Oakland International Airport

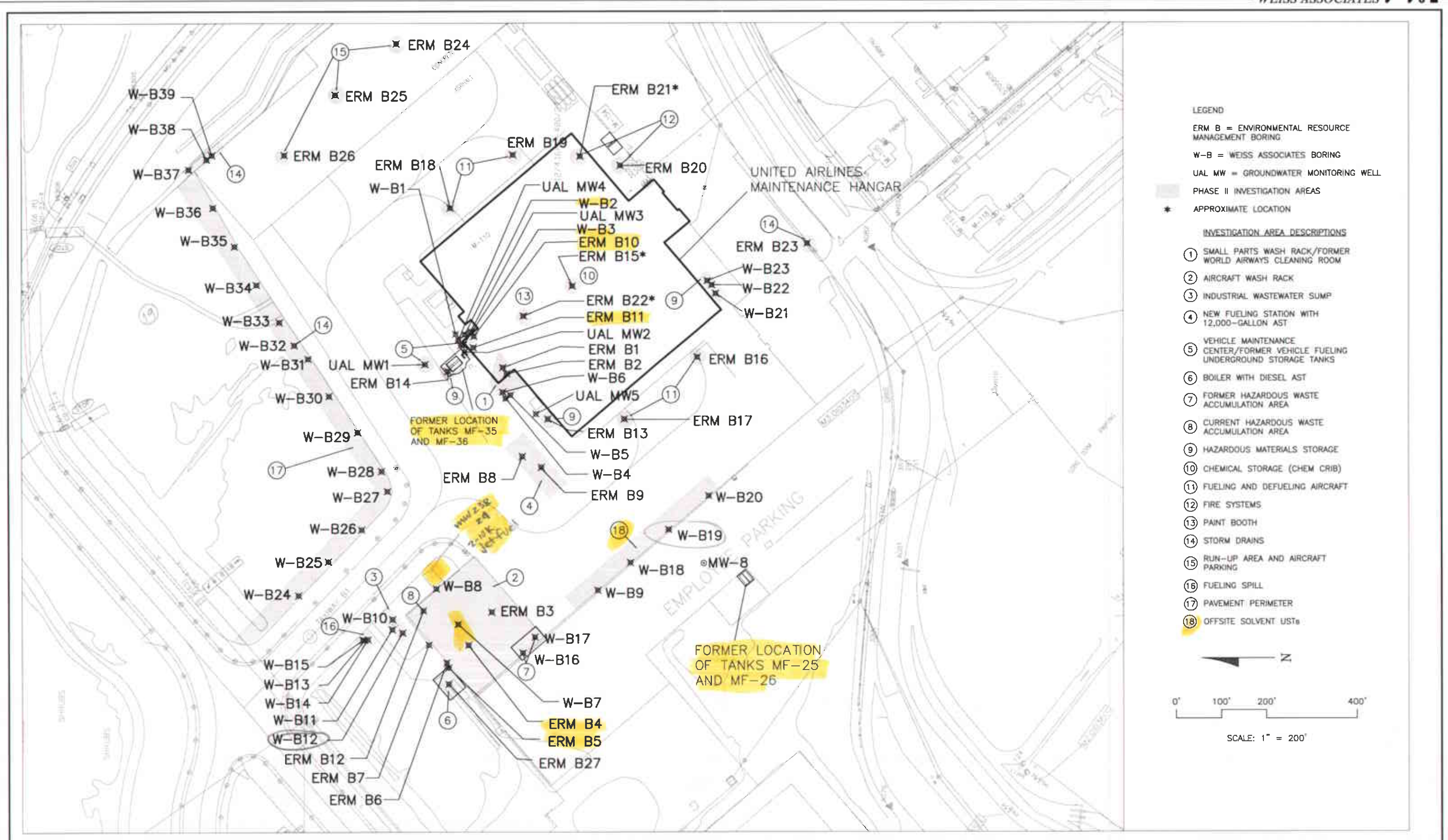


Figure 2. Phase II Boring Locations and Investigation Areas, United Airlines Maintenance Hangar, Metropolitan Oakland International Airport

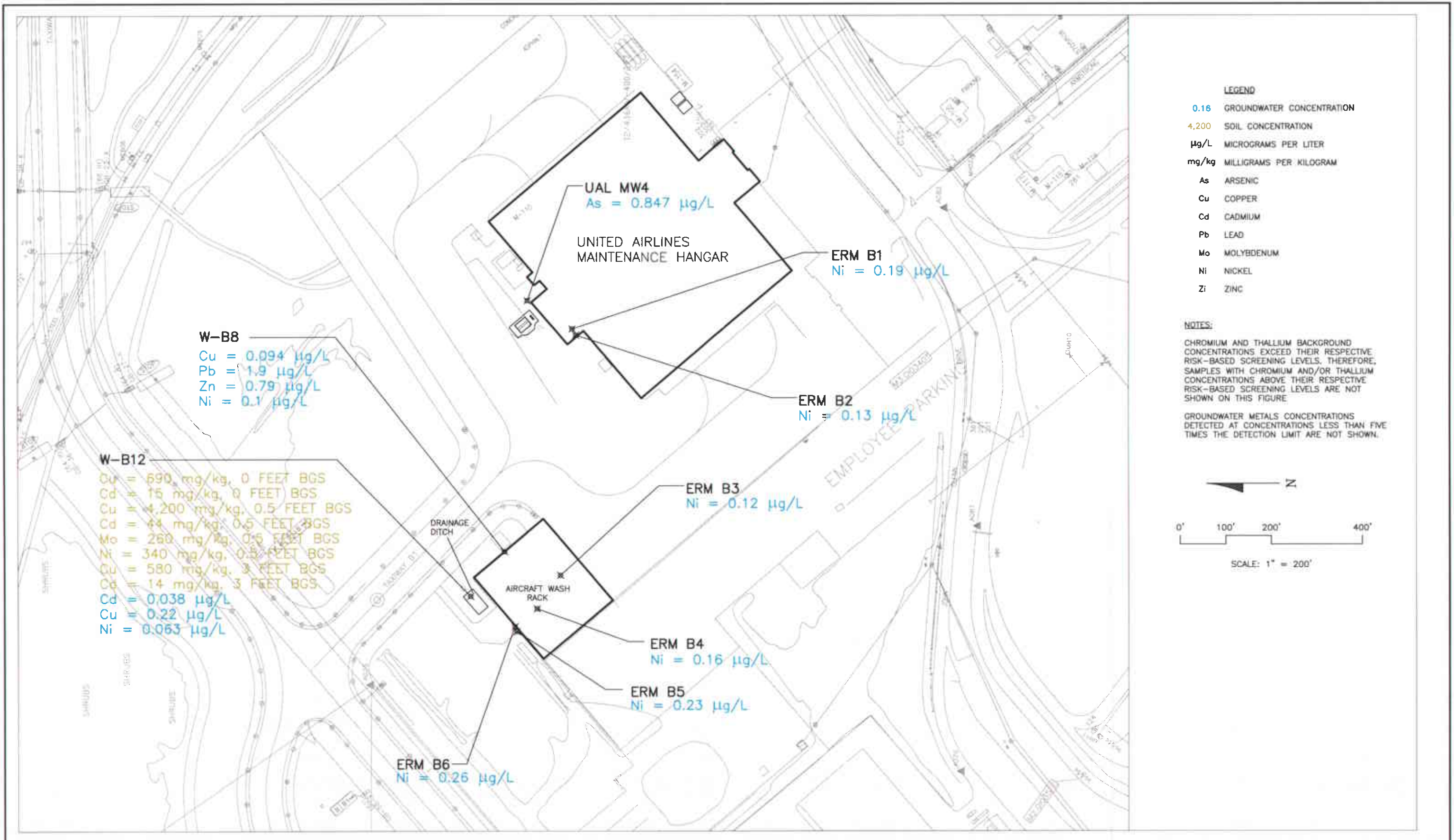
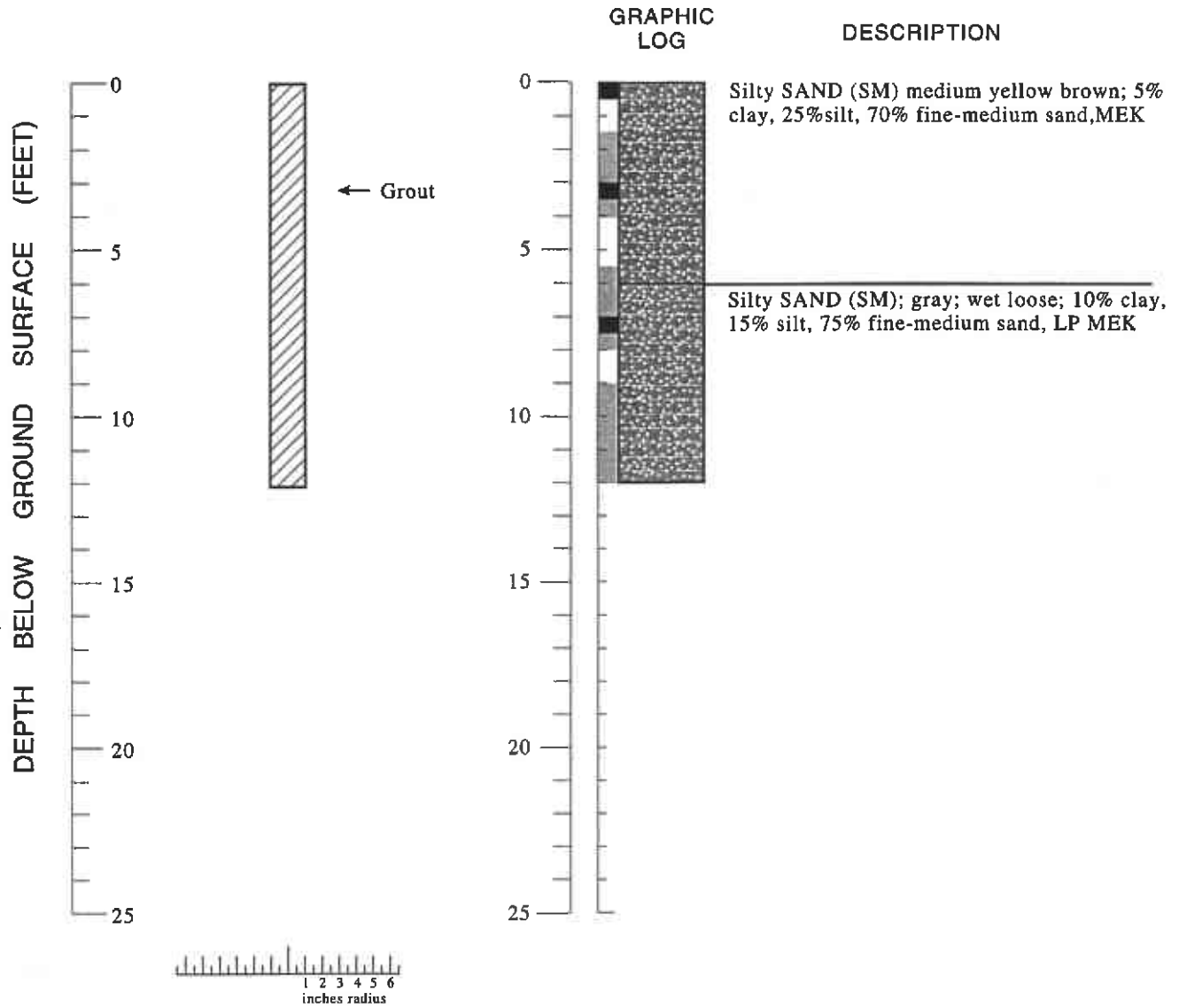


Figure 4. Metal Concentrations in Soil and Groundwater Above Background and Risk-Based Screening Levels, United Airlines Maintenance Hangar, Metropolitan Oakland International Airport



ATTACHMENT A

REPRESENTATIVE BORING LOGS

BORING W-B36

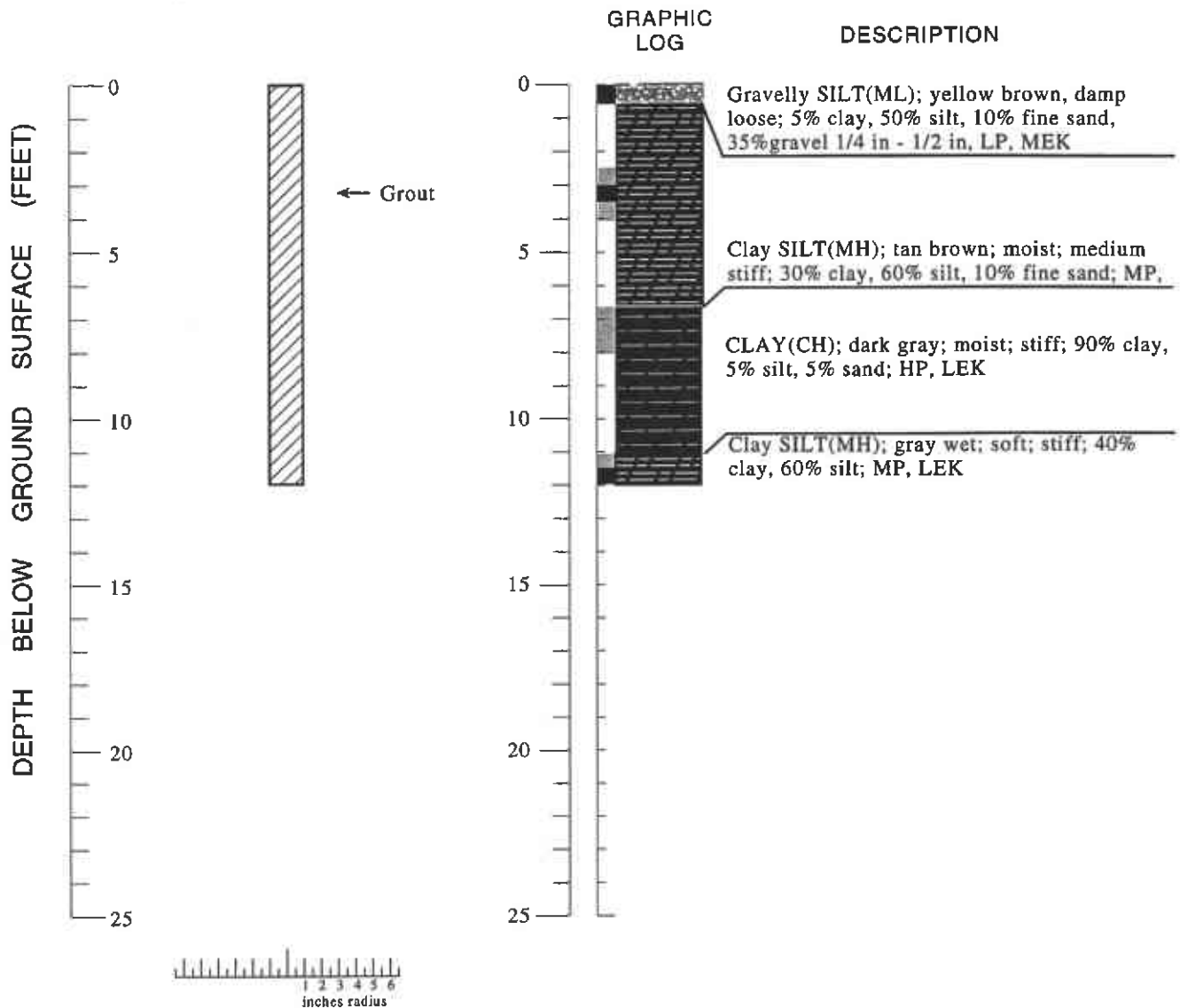


EXPLANATION

- Contact (dotted where approximate)
- ? ? Uncertain contact
- Gradational contact
-  Location of recovered core
-  Location of core sample sealed for chemical analysis
- MEK = Moderate estimated hydraulic conductivity
- LP = Low Plasticity

Logged By: Maureen Wan
 Supervisor: C. Lawless\ M. Stallard
 Drilling Company: Gregg Drilling and Testing Inc.
 License Number: C-57485165
 Driller: V. Pokrywka
 Drilling Method: Direct Push
 Date Drilled: 4/17/03
 Well Head Completion: N/A
 Type of Sampler: Direct Push
 Ground Surface Elevation: Not available

BORING W-B34

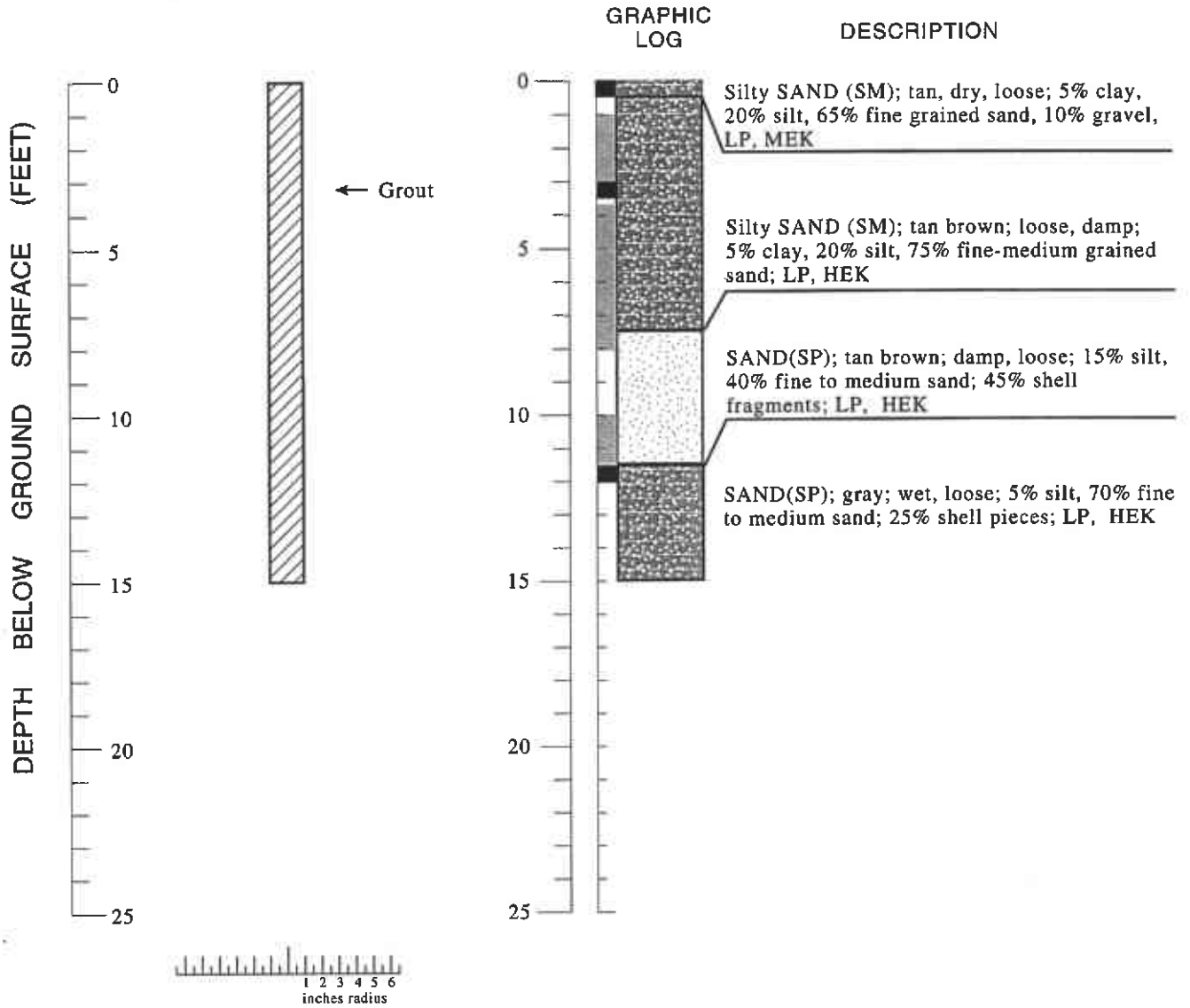


EXPLANATION

- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- ▨ Location of recovered core
- Location of core sample sealed for chemical analysis
- MEK = Moderate estimated hydraulic conductivity
- LEK = Low estimated hydraulic conductivity
- LP = Low Plasticity
- MP = Medium Plasticity

Logged By: Maureen Wan
 Supervisor: C. Lawless\ Mary Stallard
 Drilling Company: Gregg Drilling and Testing Inc.
 License Number: C-57485165
 Driller: V. Pokrywka
 Drilling Method: Direct Push
 Date Drilled: 04/17/03
 Well Head Completion: N/A
 Type of Sampler: Direct Push
 Ground Surface Elevation: Not available

BORING W-B6



EXPLANATION

- Contact (dotted where approximate)
- ? ? Uncertain contact
- Gradational contact
- [Pattern] Location of recovered core
- [Pattern] Location of core sample sealed for chemical analysis
- MEK = Moderate estimated hydraulic conductivity
- HEK = High estimated hydraulic conductivity
- LP = Low Plasticity

Logged By: Maureen Wan
 Supervisor: C. Lawless\ Mary Stallard
 Drilling Company: Gregg Drilling and Testing Inc.
 License Number: C-57485165
 Driller: V. Pokrywka
 Drilling Method: Direct push
 Date Drilled: 04/14/03
 Well Head Completion: N/A
 Type of Sampler: Direct push
 Ground Surface Elevation: Not available

Appendix A- 3 Boring Log—Boring W-B6, United Hanger - Representative Boring Log for W-B1 to W-B6, W-B9 to W-B11, W-B13, W-B15 to W-B23, W-B33 and W-B39

ATTACHMENT B

**QA/QC SUMMARY TABLES
APRIL 14 THROUGH APRIL 22, 2003**

Table B-1. Summary of Sampling QA/QC for April 14 through April 22, 2003, United Airlines Hangar Area, Metropolitan Oakland International Airport, Oakland, California

Who performed sampling (Firm name/address/contact/phone):	Weiss Associates 5801 Christie Avenue, Suite 600, Emeryville, CA 94608 Joyce Adams (510) 450-6162
Chain-of-Custody forms completed for all samples?	NO*
Field parameters stabilized prior to taking sample?	NO*
Zero head space in sample containers (applicable to VOCs only)?	YES
Samples preserved according to analytical method?	YES
Required field QA/QC samples taken?	YES

*Explain any "NO" answers:

Soil samples SSB9D4, SSB18D4.5, SSB19D4, SSB20D3 and water sample WSB20D8-A submitted to McCampbell Analytical in Pacheco, California on 4/18/03 were inadvertently not listed on a chain-of-custody form.

Field parameters were generally not stabilized before sampling due to unavailability of sufficient sample volumes.

Table B-2. Summary of Analytical QA/QC for April 14 through April 22, 2003, United Airlines Hangar Area, Metropolitan Oakland International Airport, Oakland, California

Who performed analysis (lab name/address/contact/phone):	McCampbell Analytical, Inc. 110 Second Avenue South, #D7 Pacheco, CA, 94553 Angela Rydelius (925) 798-1620
Analytical methods (method number and chemical category):	93 soil and 16 water samples analyzed by USEPA 8260B- Volatile Organic Compounds 96 soil and 18 water samples analyzed by USEPA 8015M - TPH-D, TPH-MO, TPH-JF and TPH-G 93 soil and 16 water samples analyzed by USEPA 6010C, 7010 and 7471B - CAM 17 Metals
Is the lab state-certified for the above analytical methods?	YES
Analyses performed according to standard methods?	YES
Sample holding times met?	YES
Analytical results reported for all values above MDL?	YES
QA/QC analyses run consistent with analytical methods?	YES
QA/QC results meet all acceptance criteria?	YES
QA/QC results and acceptance criteria on file?	YES

*Explain any "NO" answers: