August 2014 | Preliminary Environmental Assessment Report

Proposed Irvine Unified School District K8 – Great Park

for Irvine Unified School District

Prepared for:

Irvine Unified School District
Dana Grudem
100 Nightmist
Irvine, California 92618
949.936.5327

Project Number:
ISD-29.0

Prepared by:

PlaceWorks
Denise Clendening, Ph.D., Associate Principal
2850 Inland Empire Blvd, Suite B
Ontario, California 91764
909.989.4449

PLACEWORKS

info@placeworks.com
www.placeworks.com

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Executive Summary

This Preliminary Environmental Assessment (PEA) Report for the Proposed Irvine Unified School District K8 – Great Park (site), was prepared by PlaceWorks formerly known as The Planning Center|DC&E on behalf of Irvine Unified School District (District) pursuant to the California Education Code which requires that all new school sites or existing school sites with new construction obtain a "No Further Action" (NFA) determination from the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) prior to proceeding with acquisition and/or construction of a school. Irvine Unified School District proposes to construct a new kindergarten-8th grade school on the site.

A Phase I Environmental Site Assessment (Phase I) was prepared and submitted for the site to the Department of Toxic Substances Control's (DTSC) School Property Evaluation and Cleanup Division in December 2012 (The Planning Center|DC&E 2012). In January 2013, the DTSC in an email stated that they concurred with the recommendations and conclusions of the Phase I. A previous draft PEA workplan had been prepared in September 2012 and recalled at the request of the developer, Five Point Communities, in order to provide additional background information to the DTSC on the proposed school site and base closure activities.

The approximately 13-acre proposed school site is located to the west of the runways near the intersection of D Street and N 8th Street on the former Marine Corps Air Station (MCAS) El Toro. The site historically was used by MCAS El Toro for administrative purposes and included buildings that were used for the base auditorium, library, chapel and three additional buildings that were demolished prior to the closure of the base. Adjacent land uses included the chapel administrative office, barracks, and gymnasium. The buildings have been demolished as part of the decommissioning activities at the former base. During the time of the site visit for the Phase I, the concrete foundations remained for the former structures within the proposed school site boundaries. We were notified by Five Point Communities that the concrete foundations were being removed in January and February 2013. Grading and imported fill material was brought to the school site in March and early April 2014. Approximately 35,000 cubic yards of import soil was brought to the proposed school site. The western half of the proposed school site was over excavated to approximately 7 feet below ground surface (bgs) and the eastern half was over excavated to approximately 4 feet bgs.

The proposed K-8 School Site is within the Great Park Neighborhoods project, part of the Heritage Fields El Toro District 1. The K-8 school is included in the Great Park Neighborhoods Revision to the Heritage Fields Project, which was subject to a Supplemental Environmental Impact Report, which the City of Irvine certified in 2011. The school site is within proposed Vesting Tentative Tract Map 17283. Based on information provided on the City of Irvine's online GIS system the proposed school site is located within APN 58008258. Planned land uses around the proposed school site include residential and a park to the north of the site.

The overall objectives of this PEA are to:

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- Evaluate historical information for indications of the past use, storage, disposal, or release of hazardous wastes/substances at the site;

- Establish through a field sampling and analysis program the nature of hazardous wastes/substances that may be present in soil at the site, their concentration and general extent; and

- Estimate the potential threat to public health and/or the environment posed by hazardous constituents at the site using a residential land-use scenario.

Based on information developed during the PEA using the DTSC's PEA Guidance Manual, the DTSC will then make an informed decision regarding potential risks posed by the site.

The field sampling program implemented for the investigation is summarized below:

- Soil and soil gas sampling activities were conducted at the site on April 15-17, 2014 and soil gas sampling activities conducted at the site on April 16-18, May 20-23, June 17-18 and July 8, 2014 for the PEA.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were collected and analyzed for organochlorine pesticides (OCPs) by EPA Method 8081A to assess for potential residual OCPs from historic agricultural operations, former buildings and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082 to assess for potential PCBs from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for CAM-17 Metals by EPA Method 6010B/7471A to assess for potential metals from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 8015M to assess for potential TPH from historic operations and fill material.

- Twenty-six (26) soil samples plus two duplicates were analyzed for semivolatile organic compounds (SVOCs) by EPA Method 8270C to assess for potential SVOCs from historic operation and fill material.

- One hundred and twelve (112) soil samples and 12 duplicates were analyzed for polyaromatic hydrocarbons (PAHs) by EPA Method 8270 SIM.

- One hundred and twenty-seven (127) and 11 duplicate soil gas samples were collected at the site and analyzed on site for VOCs using mobile laboratories by EPA Method 8260B.

- Thirteen soil gas samples were collected in Summa Canisters and analyzed at a fixed laboratory by EPA TO-15 for VOCs.

The results of the field program is summarized below:

- The following six pesticides were detected in soil at the site in low concentrations below screening levels: 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, chlordane, dieldrin and heptachlor. 4,4'-DDD was detected in one out of 138 samples at a concentration of 3.6 micrograms per kilogram (μg/kg, significantly below the EPA Region 9 Regional Screening Level (RSL) for 4,4'-DDD of 2,200 μg/kg. 4,4'-DDE was detected in 40 soil samples (including four duplicates) with a maximum concentration of 26 μg/kg, below the RSL of 1,600 μg/kg. 4,4-DDT was detected in 39 soil samples (including two duplicates) with a maximum concentration of 66 μg/kg, below the RSL of 1,900 μg/kg. Chlordane was detected in 14 soil samples including one duplicate with a maximum concentration of 97 μg/kg, below the RSL of 1,800 μg/kg. Dieldrin was detected in four soil samples with a maximum concentration of 7.2 μg/kg, below the RSL of 33 μg/kg. Heptachlor was detected in two soil samples with a maximum concentration of 5.7 μg/kg, below the RSL of 120 μg/kg .

- The following metals were nondetect in the 138 soil samples analyzed: antimony, beryllium, mercury, selenium, silver, and thallium. The maximum reported concentrations of all metals were below their RSLs or DTSC risk management levels (arsenic). The maximum lead concentrations was 11 mg/kg.

- TPH was reported in 14 of the 138 soil samples analyzed. The maximum concentration reported was 2,100 mg/kg in sample SG-5 collected at 0.5 feet bgs. The sample collected from the same location at 3 feet bgs was nondetect for TPH.

- The following eleven PAHs were reported in one or more soil samples: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,l)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno (1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene. The maximum reported concentrations of each PAH was below the RSL.

- SVOCs were not reported in the soil samples analyzed by EPA Method 8270C.

- PCBs were nondetect in the 138 soil samples analyzed by EPA Method 8082.

- Soil gas sampling activities were conducted at the site on four different events: April 16-18, May 20-23, June 17-18 and July 8, 2014. During the April 16th through April 18th soil gas sampling event benzene was reported in 18 out of the 33 soil gas samples collected during the first sampling event. Benzene concentrations ranged from 0.27 μg/l to the detection limit of 0.03 μg/l. During the second soil gas sampling event additional soil gas probes were installed and sampled along with probes that were viable from the first event. During the second soil gas sampling event (May 20-23), 65 soil gas samples were collected. Benzene was reported in 23 out of the 65 soil gas samples with concentrations ranging from the detection limit to 0.1 μg/l. During the third soil gas sampling event,54 soil gas samples were collected and benzene was reported in eight out of the 54 samples

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with the concentrations ranging from the detection limit to .053 µg/l. During the July confirmation sampling event three soil gas samples were collected and benzene was not reported in the samples.

- The preliminary human health risk screening showed that chemical concentrations would not be a risk to human health or the environment under an unrestricted, residential land use scenario.

- Laboratory data obtained were validated to assure that Data Quality Objectives (DQOs) were met and the data were suitable for use in a human health and ecological screening evaluation.

Recommendations

The results of the PEA support the following conclusions and recommendations:

Based on the PEA objectives, the environmental quality goals of the District, and the results of the PEA investigation, PlaceWorks has determined that no further assessment is required for the site. Therefore, PlaceWorks recommends that the PEA be finalized. Per California Education Code Section 17213.1, Section 3, PlaceWorks concludes that further assessment of the site is not necessary and is requesting an approval of the PEA.

1. Introduction

This document presents a Preliminary Environmental Assessment (PEA) Report for the Proposed Irvine Unified School District K8 – Great Park (site) (Figure 1). Irvine Unified School District (District) proposes to construct a 1,000-student school for grades K through 8 with a full complement of buildings and recreational amenities, including classrooms, administrative building, performing arts center, hard courts, ball fields, playgrounds and a separate section for kindergarten.

The approximately 13-acre proposed school site is located to the west of the runways near the intersection of D Street and N 8th Street on the former Marine Corps Air Station El Toro. The site historically had been used by the military for an auditorium, library, chapel and chapel administrative office. The buildings have been demolished as part of the decommissioning activities at the former base and the foundations are currently being removed. The proposed K-8 School Site is within the Great Park Neighborhoods project, part of the Heritage Fields El Toro District 1. The school site is within proposed Vesting Tentative Tract Map 17283. Based on information provided on the City of Irvine's online GIS system the proposed school site is located within APN 58008258. Planned land uses around the proposed school site include residential and a park to the north of the site.

The site is surrounded by the former military base in an area that was primarily used for housing and administrative base services. The area to the north of the site had a veterinary clinic, kennel, dog run, obstacle course and an automobile hobby shop. To the east of the site were the gymnasium and a self-service carwash. To the south was the chapel administrative office and buildings used as storage. To the west were enlisted quarters.

A Phase I Environmental Site Assessment (Phase I) was prepared and submitted for the site to the Department of Toxic Substances Control's (DTSC) School Property Evaluation and Cleanup Division in December 2012 (The Planning Center|DC&E 2012). In January 2013, the DTSC in an email stated that they concurred with the recommendations and conclusions of the Phase I. A previous draft PEA workplan had been prepared in September 2012 and recalled at the request of the developer, Five Point Communities, in order to provide additional background information to the DTSC on the proposed school site and base closure activities. Based on a review of base closure documents, and a review of historical aerial photographs and topographic maps, the site was vacant undeveloped land in the 1930s. Buildings were located on the majority of the site by the mid-1940s and the western portion of the site was developed with a parking lot in the 1960s followed by enlisted quarters in the early 1980s. Three buildings were identified in closure reports on the site (library, chapel and auditorium) and historically there were four additional buildings that had been located on the site that were removed before 1990 including the original chapel that was destroyed by a plane crash during an air show.

The Phase I identified the agricultural activities as a recognized environmental condition. The site was used for agricultural purposes prior to the acquisition of the land for the base in 1942 and agriculture continued on the western portion of the proposed school site until the 1960s. Lead testing in soil near the base of two former buildings reported concentration above the California Human Health Screening Level (CHHSL) for lead.

The Phase I identified the following as historical recognized environmental conditions or suspect environmental conditions:

- 11 former underground storage tanks (USTs) were located on the proposed school site.
- 1 former Oil/Water Separator.
- Buildings were located on the site that require testing for organochlorine pesticides for potential residual termiticides and additional testing to assess for potential lead-based paint in soil.
- Imported fill material was used to backfill the tank excavations.
- Three groundwater plumes from historic base operations were identified as having been located within approximately a 1.2 mile radius of the proposed school site.

This PEA was prepared in accordance with the guidelines of the California Environmental Protection Agency Department of Toxic Substances Control (DTSC), as detailed in the PEA Guidance Manual.

1.1 PEA OBJECTIVES

The District has prepared this PEA pursuant to the California Education Code that requires the completion of a Phase I Environmental Site Assessment (Phase I) or PEA, for all new school sites that will receive state funding prior to proceeding with construction of a school.

The overall objectives of this PEA are to:

- Evaluate historical information for indications of the past use, storage, disposal, or release of hazardous waste/substances at the site;
- Establish through a field sampling and analysis program the nature of hazardous wastes/substances that may be present in soil at the site, their concentration and general extent; and
- Estimate the potential threat to public health and/or the environment posed by hazardous constituents, if any, at the site using a residential land-use scenario.

Based on information developed during the PEA and the conservative human and ecological risk evaluation set forth in the DTSC's Preliminary Endangerment Assessment Guidance Manual, the DTSC will then make an informed decision regarding potential risks posed by the site.

Possible outcomes of the PEA decision include, but are not limited to, the requirement for further investigation through the Supplemental Site Investigation process if the site is found to be significantly impacted by hazardous substances release(s); the need to perform a Removal Action if localized impacts by hazardous substances release(s) are found; implementation of mitigation actions to address any potential risks; and an issuance of a "No Further Action" (NFA) finding if the site is found not to be significantly impacted and risks to human health and the environment are found to be within acceptable levels based on the conservative screening-level risk assessment.

1.2 SCOPE OF WORK

The scope of work implemented to prepare this PEA included:

- Researching available site background information regarding former and current land use;
- Implementing field and laboratory data collection and evaluation to further assess environmental conditions at the site; and
- Preparing this PEA report.

Several information sources were reviewed as part of the background research for development of this PEA report. These sources were reviewed to develop an understanding of current and past land uses and practices that may have involved the handling, use, storage, and/or disposal of hazardous substances or wastes. Information was obtained and used to develop a general site history in an attempt to identify potential sources of chemical impact, if any.

The approach utilized to perform the background research is very similar to that used in completing a Phase I under the American Society for Testing and Materials (ASTM) Practice for Environmental Site Assessments (ESAs): Phase I Assessments Process (ASTM Standard E 1527-13). Specific sources of information reviewed and activities performed by PlaceWorks in conducting the background research included:

- Site inspections and observations of the site and surrounding area within ¼-mile (site photographs are included in Appendix A);
- Review of available aerial photographs (included in Appendix B);
- Review of current U.S. Geological Survey (USGS) 7.5-minute topographic maps (included in Appendix B);
- Evaluation of environmental database list searches (included in Appendix C);

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- Review of agency files at federal, state and local regulatory agencies and offices for the site;
- Review of agency files for listed facilities within ¼-mile of the site that were identified as having a potential to have impacted the site (included in Appendix C);
- Interviews with persons knowledgeable of site history and operations; and
- Collection and review of available applicable information from the District's files.

The scope for the field and laboratory investigation is discussed in Section 6. The field sampling program implemented for the investigation is summarized below:

- Soil and soil gas sampling activities were conducted at the site on April 15-17, 2014 and soil gas sampling activities conducted at the site on April 16-18, May 20-23, June 17-18 and July 8, 2014 for the PEA.
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- SVOCs were not reported in the soil samples analyzed by EPA Method 8270C.

- PCBs were nondetect in the 138 soil samples analyzed by EPA Method 8082.

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- The preliminary human health risk screening showed that chemical concentrations would not be a risk to human health or the environment under an unrestricted, residential land use scenario.
- Laboratory data obtained were validated to assure that Data Quality Objectives (DQOs) were met and the data were suitable for use in a human health and ecological screening evaluation.

1.3 PEA REPORT FORMAT

This PEA Report is organized in general accordance with the format presented in Chapter 3 of the DTSC's PEA Guidance Manual. This PEA Report contains the following sections:

- Section 1 presents an Introduction and Summary of PEA Objectives and PEA Report Format;
- Section 2 presents a Site Description of the proposed site;
- Section 3 includes Site History and Background Information;
- Section 4 defines the Apparent Problem;
- Section 5 contains a description of the Site Environmental Setting;
- Section 6 presents a discussion of Sampling Activities and Results;
- Section 7 includes the Human Health Screening Evaluation Statement;
- Section 8 presents the Ecological Screening Evaluation Statement;
- Section 9 includes a summary of Quality Assurance Project Plan (QAPP) measures;
- Section 10 describes Health and Safety Plan (HASP) implementation;
- Section 11 summarizes variances from the proposed sampling plan;
- Section 12 presents a discussion of Applicable or Relevant Laws and Regulation Pertaining to School Sites;
- Section 13 presents Conclusions and Recommendations of the PEA; and
- Section 14 lists References cited in the document.

The appendices to this PEA Report include:

Appendix A – Site Photographs;

Appendix B – Research Documentation;

Appendix C – Environmental Database Search Report;

Appendix D – Health and Safety Plan;

Appendix E – Laboratory Reports;

Appendix F – Boring Logs;

Appendix G – Risk Model Results; and

Appendix H – QAPP

1.4 PUBLIC PARTICIPATION

Per Assembly Bill (AB) 972, prior to the commencement of the proposed PEA sampling, the public that was within the line of site was notified of the planned investigation activities. The PEA will be made available for public review and comment when the PEA was submitted to the DTSC for review. A public hearing will be conducted for the PEA (Option A under AB 972) that will be advertised in the local newspaper. Upon completion of the 30-day public review and public hearing, a letter will be sent to the DTSC from Irvine Unified School District outlining the public notification process including the date of the public hearing and the dates of the 30-day public review.

1. Introduction

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2. Site Description

This section describes the location and ownership of the site as well as other pertinent details required by DTSC regarding the specifics of the site description. The proposed Irvine Unified School District K8 – Great Park is located on the former Marine Corps Air Station (MCAS) El Toro, in the City of Irvine, County of Orange, California. The site is located at 33.6878° north latitude and 117.7352° west longitude. The site is approximately 0.3 mile southeast of State Route 133 (SR-133), and 1.4 miles northeast of Interstate 5 (I-5).

The project area is located on near the intersection of D Street and N 8th Street on the former Marine Corps Air Station El Toro in Orange County, California (Figures 1 and 2). New streets will be developed and the proposed school site plan overlays different parcels and roadways of the old base. Figure 3 shows the former building location and identification number during the time of base closure.

The proposed project area occupies approximately 13 acres of land that was used for agriculture prior to the use of a base. The former auditorium, chapel, library, and additional buildings were constructed on the site during the 1940s. The original chapel was destroyed in a plane crash and a new was built on the school site in 1988. The District plans a 1,000-student school for grades K through 8 with a full complement of buildings and recreational amenities, including classrooms, administrative building, performing arts center, hard courts, ball fields, playgrounds and a separate section for kindergarten. Figure 4 shows the site plan for the K-8 school site.

2.1 DESCRIPTION AND LOCATION

2.1.1 Site Name

The site has been identified by the District as the Proposed Irvine Unified School District K8 – Great Park project.

2.1.2 Site Address

The site has not been assigned a site address, but is located on the former Marine Corps Air Station (MCAS) El Toro in Irvine, Orange County, California (Figure 1). New streets will be developed and the proposed school site plan overlays different parcels and roadways of the old base.

2.1.3 Designated Contact Person

Ms. Dana Grudem is the Contact Person designated by Irvine Unified School District.

2.1.4 Mailing Address

The mailing address for the project designated by the District is:

2. Site Description

Irvine Unified School District
100 Nightmist
Irvine, CA 92618

2.1.5 Telephone Number

The telephone number for Ms. Dana Grudem is (949) 936-5327.

2.1.6 Other Site Names

No other site names were identified for the Proposed Irvine Unified School District K8 – Great Park.

2.1.7 U.S. Environmental Protection Agency (USEPA) Identification Number

MCAS El Toro was placed on the National Priorities List (NPL) in 1990 (United States Environmental Protection Agency [U.S. EPA] ID:CA6170023208 due to contaminated groundwater which is not associated with the proposed school site.

2.1.8 Envirostor Database Number

The Envirostor database number assigned by the DTSC to the site is 60001783.

2.1.9 Assessor's Parcel Number(s)

The school site is within proposed Vesting Tentative Tract Map 17283. Based on information provided on the City of Irvine's online GIS system the proposed school site is located within APN 58008258.

2.1.10 Site Maps and Photographs

A vicinity map depicting the site and surrounding area is included as Figures 1 and 2, respectively. Project boundaries are shown on Figure 2. Site photographs are included in Appendix A.

3. Site History and Background Information

3.1 CURRENT AND HISTORICAL LAND USES

3.1.1 Facility Ownership/Operators

Construction of a USMC pilots' fleet operational training facility began in July 1942 on 2,319 acres of land in Orange County, California. The facility was commissioned as MCAS El Toro in March 1943. The Marine Corps acquired the land from James Irvine, a farmer. In 1950, the station was selected for development as a master jet air station and permanent center for Marine aviation on the West Coast to support the operations and combat readiness of Fleet Marine Forces, Pacific. Between 1944 and 1986, additional land was acquired to bring the on-station portion of the installation to 4,710 acres.

Construction started in 1944 on the proposed school site with the construction of the base auditorium. A chapel, library, and additional buildings were constructed on the site during the 1940s. The original chapel was destroyed in a plane crash and a new was built on the school site in 1988. Figure 3 shows the former building location and identification numbers at the time of base closure.

The following buildings were identified as having been located within the proposed school site:

Building	***Use***	***Notes***
271	Auditorium	26,733 square foot building constructed in 1944. Two 1,500 and two 650 gallon fuel oil underground storage tanks (USTs) were removed in October 1993. The USTs were closed by Orange County Health Care Agency on 12/2/1996. The auditorium has been demolished and the foundation was recently removed. Hazardous Materials Survey for lead-based paint and asbestos was done in December 29, 2006 report by TRC.
280	Library	6,480 square foot building constructed in 1945. One 2,000 gallon diesel fuel oil UST removed under the oversight of the Regional Water Quality Control Board, closed in a letter dated 10/3/1996. An oil water separator was located near the southwest corner of the library building. Hazardous Materials Survey for lead-based paint and asbestos done in December 29, 2006 report by TRC.
833	Chapel	7,228 square foot building constructed in 1988. Lead based paint and ACM were not detected in survey for the building (Tait Environmental 2006). Two 1,500 gallon former USTs located at the building site for prior building that were removed under RWQCB oversight and received closure in 2002.

3. Site History And Background Information

Three additional buildings	Former chapel and two unknown	Three former buildings were located on the site prior to base closure including former chapel building 337, and two additional buildings that may have been used for administrative purposes (buildings 282 and 283). Four USTS (282. 283, 337A and 337B located in project area) received closure and were associated with the buildings that were demolished prior to base closure.

The following buildings were partially located within the proposed school site boundaries:

Building	***Use***	***Notes***
83	Chapel Administration Office	The northwest corner of the building is located within the proposed school site. The building was constructed in 1943 and was 12,180 square feet. The Hazardous Materials Survey for lead-based paint and asbestos was included in the December 29, 2006 report by TRC. Two 1,500 gallons fuel oil tanks were removed on October 7, 1993. Removal completed on February 28, 1994. The USTs were closed by OCHCA in a letter dated December 2, 1996.
278	Unknown	Former approximately 13,000 square feet building was constructed around 1945 and was demolished prior to 1990. The northern portion of the building was located in the southwest corner of the proposed school site. Building was identified in the Environmental Baseline Study as having former UST 278B. The 1,400 gallon UST was reportedly removed in 1997 and closed by OCHCA in a letter dated July 11, 1997.
731	Bachelor Enlisted Quarters	A small area of the former bachelor enlisted quarters is located in the proposed school site. The building was constructed in 1980 and was 41,157 square feet. The Hazardous Materials Survey for lead-based paint and asbestos done in April 12, 2007 report by TRC identified lead-based paint on metal pipes, metal stair frames, fire hydrant, glazed metal sink in laundry rooms and metal posts in parking lot (TRC 2007). ACM was detected in some mastic, caulking and HVAC pipe insulation. Lead abatement regulations were reportedly followed during demolition and OSHA requirements were followed for ACM demolition/removal.
741	Bachelor Enlisted Quarters	The southeast corner of the former bachelor enlisted quarters building 741 was located within the proposed school site. The building was constructed in 1982 and was approximately 45,435 square feet The Hazardous Materials Survey for lead-based paint and asbestos done in April 12, 2007 report by TRC identified lead-based paint on ceramic wall tiles, ceramic cove tiles, metal pipes and flanges, metal stair frames and glazed metal sinks in laundry rooms. ACM was detected in some mastic, caulking and HVAC pipe insulation (TRC 2007). Lead abatement regulations were reportedly followed during demolition and OSHA requirements were followed for ACM demolition/removal.

In the vicinity of the proposed school site the following buildings were identified:

Building	***Use***	***Notes***
94	Physical Fitness Training Center	Located adjacent to the proposed school site on the eastern site boundary. The 23,123 square foot gym was constructed in 1943. The Hazardous Materials Survey for lead-based paint and asbestos done in December 29, 2006 report by TRC. One 1,500 fuel oil UST was removed in 1993. Removal completed on February 28, 1994. The UST was closed by RWQCB in a letter dated December 11, 1995.
625	Hobby Shop	The former automobile hobby shop was located approximately 150 feet to the north northeast of the proposed school site. The shop was built in 1967 and was approximately; 6,153 square feet with hydraulic lifts, parts dip tanks, service bays, trench drain, drainage ditch and catch basin near a vehicle wash area. A 1,000-gallon waste oil above ground storage tank (AST) was located on the south side of the building. The auto shop was identified as a Potential Release Location (PRL) and the vehicle wash area was identified as a RCRA Facility Assessment site in the Environmental Baseline Survey (Earth Tech 2003a). Sampling investigation of the facility was conducted in 2003. Contaminant concentrations identified were below action levels. No further action was granted by the DTSC in a letter dated April 11, 2003, and EPA letters dated April 11, 2003 and April 24, 2003. One 1,500 gallon waste oil UST was removed and closed and documented in a report titled Closure Report, Removal and Remediation of UST 625 June 28, 1996. UST Site 625 was closed by RWQCB in a letter dated August 13, 1996.

Figure 5 is a site map that shows the proposed K-8 school site and the proximity to IRP sites and groundwater plumes at the time of the baseline environmental investigation in 2003. Figure 6 is an aerial photographs showing the school site boundaries and the proximity to two groundwater plumes as mapped in 2013.

3.1.2 Business Type

During the time of base closure there were three buildings located within the proposed school site boundaries:

- Building 271 – Auditorium
- Building 280 – Library
- Building 833 - Chapel

During the operation of the base, five additional buildings were identified in the historic aerial photographs as having been located within the planned school site boundaries. Two buildings were identified to the west of the auditorium that were present in a 1946 aerial photograph and were seen on the aerials in 1977 but not

3. Site History And Background Information

the subsequent aerials. The building that was located to the south of the library was partially located within the site boundaries and was first seen in the aerial photos during the same time period of 1946 to 1997. In the area that building 833 the chapel was located; a building had been located in the same area in 1946 until 1977. In addition another building had been located east of building 833 and west of building 83 which was identified as the former chapel that was destroyed in a plane crash during an air show in 1988.

A small portion of two buildings used as enlisted quarters (buildings 731 and 741) is located on the northwest side of the proposed school site and a portion of the chapel administrative office (building 83) is located on the southeast corner of the site. The western edge of two former buildings were located near the southeast corner of the proposed school site north of the chapel administrative office Prior to the acquisition of the land in the early 1940s for the base, the site was used for agricultural purposes and was owned by the Irvine family.

Eleven USTs associated with the former buildings were identified as having been located within the proposed school site boundaries. The location of an additional UST (UST 278) associated with the building south of the library and located partially within the proposed school site boundaries could not be determined. The following is a list of the former USTs that have all received regulatory agency closure under the oversight of either the RWQCB or Orange County Health Care Agency:

Tank ID	Building #	Use	Notes
271A-	271	Auditorium	1,500-gallon fuel oil UST removed on October 21, 1993. Removal completed on February 28, 1994. Tanks closed by Orange County Health Care Agency in a letter dated December 2, 1996. No information on depth of bottom sample. One sample per tank bottom. Analyzed by EPA 8015m for fuel oil and 8020 for BTEX. 85 mg/kg fuel oil in tank bottom confirmation sample and 14,600 mg/kg and 4,300 mg/kg fuel oil in stock piles from soil removed. No information of sample depth, sample collection method, duplicates, etc.
271B	271	Auditorium	1,500-gallon fuel oil UST removed on October 21, 1993. 5,000 mg/kg and 300 mg/kg Fuel Oil in stockpile soil removed. Removal completed on February 28, 1994. Tanks closed by Orange County Health Care Agency in a letter dated December 2, 1996.
271C	271	Auditorium	650-gallon fuel oil UST removed on October 21, 1993. Removal completed on February 28, 1994. Tanks closed by Orange County Health Care Agency in a letter dated December 2, 1996. 31 mg/kg fuel oil in tank bottom confirmation sample. Closure report indicates 500 gallon UST.
271D	271	Auditorium	650-gallon fuel oil UST removed on October 21, 1993. Removal completed on February 28, 1994. 5,000 mg/kg and 300 mg/kg in stockpiles for soil removed. Tanks closed by Orange County Health Care Agency in a letter dated December 2, 1996. 3,400 mg/kg of fuel oil by 8015m in tank bottom confirmation sample.
280	280	Library	2,000-gallon diesel USTs removed in 1991. Site closed by RWQCB in a letter dated October 3, 1996. An oil water separator was located at the southwest side of Building 280 and was removed under OCHCA oversight. Two confirmation samples were collected tank bottom at 10 feet bgs in 1991and analyzed for BTEX and TPH-D. TPH-D was 900 and 1,600 mg/kg. Benzene was ND, toluene (1,100 ug/kg), ethylbenzene (6,500 ug/kg), and xylenes(5,300 ug/kg). 417 cubic yards of soil were removed. Imported soil was tested for lead and PAHs. Five tank bottom excavation samples were collected from 15 feet bgs and were all nondetect for TPH-D by EPA Method 8015M. (No other analysis for tank bottom confirmation conducted but TPH-D).
84A	833	Chapel	1,500-gallon diesel UST removed in 1998. Site closed by RWQCB in a letter dated

			February 1, 2000. Tank associated with prior building. 84A was diesel fuel. Case summary reports indicated BTEX, MTBE were ND in pipe trench and 679 mg/kg TPH (no method listed) and 102 mg/kg TPH by 418.1.
84B	833	Chapel	1,500-gallon fuel oil UST removed in 1998. Site closed by RWQCB in a letter dated February 1, 2000. Tank associated with prior building.
337A		Former Chapel	2,600-gallon fuel oil UST. Removal completed on July 3, 1997. Site closed by RWQCB in a letter dated April 14, 1999.
337B		Former Chapel	2,600-gallon fuel oil UST. Removal completed on July 3, 1997. Site closed by RWQCB in a letter dated April 14, 1999.
282		Former building west of auditorium	1,400-gallon fuel oil UST removed in May 1997. Site closed by OCHCA in a letter dated October 24, 1997. Concrete UST with 200 feet of piping. UST excavation was 18 feet by 20 feet by 10 feet deep. Samples collected from backhoe bucket. Sample from bottom analyzed for TPH as diesel, TRPH by 418.1, and BTEX by 8020. Diesel and TRPH at 133 mg/kg and 143 mg/kg respectively. .
283		Former building west of auditorium	1,400-gallon fuel oil UST removed in May 1997. Site closed by OCHCA in a letter dated October 24, 1997.

3.1.3 Years of Operation

Based on a review of historical aerial photographs and base closure documents, the site may have been farmed in the 1930s. The land was acquired by the military in 1942. The base was decommissioned in 1999 and the buildings were recently demolished and the site was graded in March and April 2014. Three additional buildings had been located on the site from about 1945 to the 1980s. Based on a review of historical documents, no manufacturing activities are known to have occurred on the site.

3.1.4 Business/Manufacturing Activities

Based on a review of historical documents, no manufacturing activities have occurred on the site.

3.2 SURROUNDING PROPERTY LAND USES

The surrounding property is part of the decommissioned military base. The buildings that were adjacent to the proposed school site have been demolished. Historically the adjoining land uses are as follows:

North: Military barracks, veterinary office, and dog kennels are located to the north. On the north side of 9th Street the former Auto Hobby Shop had been located.

East: The former gymnasium and self-service car wash were located to the east.

South: The chapel administrative office was located to the southeast and a building that was identified as being used for storage.

West: Military barracks and parking lot were located to the west.

Section 17213 of the California Education Code and Section 21151.8 of the California Public Resources Code prohibit construction of a school upon a current or former hazardous waste disposal site or solid waste

disposal site. Based on information reviewed for preparation of this PEA Workplan, the proposed K-8 Great Park School is not located on a current or former disposal site.

3.3 PAST USAGE OF THE SITE

Past usage of the site was assessed through a review of aerial photographs and base closure documents. Copies of historical aerial photographs reviewed are included in Appendix B.

Based on the documents reviewed the site appears to have been farmed, possibly dry land farmed, in the 1930s prior to acquisition by the military in 1942. Buildings on the proposed school site were for base administration including the auditorium, chapel and library. The western edge of the proposed school site was used for agricultural purposes after the establishment of the base until the 1960s when the barracks were built. Buildings were recently demolished and the concrete foundations removed. The site currently consists of vacant land that was graded in March and April 2014. Approximately 35,000 cubic yards of import soil was brought to the site to bring the elevation to grade.

3.3.1 Aerial Photographs

Aerial photographs, obtained from EDR, dated 1938, 1946, 1952, 1968, 1977, 1990, 1994 and 2005 were reviewed for the site.

- 1938 – The site appears to be farmed, possibly dry land farmed. No structures are apparent on the proposed school site.
- 1946 – The auditorium, library, and chapel structures are apparent. Four buildings that have not been identified regarding their use are seen on the proposed school site. The western portion of the school site appears to be farmed and a windrow of trees is seen.
- 1952 – The site appears relatively unchanged in comparison to the 1946 aerial photograph.
- 1968 – The western edge of the site now appears to have a parking lot. The remaining portions of the site appear relatively unchanged in comparison to the 1952 aerial photograph.
- 1977 – The site appears relatively unchanged in comparison to the 1968 aerial photograph.
- 1990 – The buildings located to the west of the auditorium and the building south of the library are no longer present. The former chapel, located to the west of the chapel administrative office building 83, is no longer seen. The remaining portions of the site appear relatively unchanged in comparison to the 1977 aerial photograph.
- 1994 – The site appears relatively unchanged in comparison to the 1990 aerial photograph.
- 2005 – The site appears relatively unchanged in comparison to the 1994 aerial photograph. There is a seam in the aerial photograph that cuts off the southeast corner of the proposed school site.

3.3.2 Historical Topographic Maps

- Historical topographic maps, obtained from EDR dated 1901, 1902, 1942, 1950, 1968, 1978, 1981, 1982, and 1997 were reviewed for the site.
- 1901 – No structures are depicted on the site.
- 1902 –The site appears unchanged in comparison to the 1901 topographic map.
- 1942 – The site appears unchanged in comparison to the 1902 topographic map.
- 1950 – El Toro Air Station is now depicted and the auditorium, library, original chapel and other buildings located on the site are apparent.
- 1968 – One building located along the northern edge is no longer depicted. The remaining areas of the site appear unchanged in comparison to the 1950 topographic map.
- 1978 – The site appears unchanged in comparison to the 1968 topographic map
- 1981 – The site appears unchanged in comparison to the 1978 topographic map.
- 1982 – The site appears unchanged in comparison to the 1981 topographic map.
- 1997 – The site appears unchanged in comparison to the 1982 topographic map.

3.4 PAST USAGE OF ADJOINING PROPERTIES

Past usage of the adjoining properties was assessed through a review of aerial photographs and historical topographic maps. Copies of historical references reviewed are included in Appendix B.

Based on historical aerial photographs and topographic maps, the adjoining land use was agriculture until the base was developed in the early 1940s. The adjoining land use on the west side of the proposed school site remained in agricultural use until the 1960s when it was developed for military housing. Land use to the north included the auto hobby shop, veterinary clinic, and dog kennels, to the west the land use was military housing and parking, to the south was office buildings and storage, to the east was the gymnasium, chapel administrative office and self-service car wash.

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3.5 HAZARDOUS SUBSTANCE/WASTE MANAGEMENT INFORMATION

3.5.1 Records Review

3.5.1.1 AGENCY FILES

Underground Service Alert was contacted on October 4, 2011 to obtain a list of utility companies in the vicinity of the subject site that may operate transmission lines. No petroleum pipelines were identified.

3.5.1.2 SITE OWNER/OPERATOR RECORDS

The site owner is Heritage Fields El Toro, LLC. They provided base closure documents for review.

3.5.1.3 OIL AND GAS MAP REVIEW

A review of California Division of Oil and Gas Field Map, Wildcat Map W1-4, Orange, Riverside, San Bernardino Counties (California Department of Conservation 2004) indicates that there are no active or abandoned oil or gas fields on the subject property. In addition, the environmental databases reviewed include the Former Manufactured Gas Sites database (Coal Gas). The subject property and adjoining sites were not identified on the Coal Gas database, thereby, providing additional information on the absence of gas fields in the immediate area of the subject property.

3.5.2 Site Inspection Results

A site visit to observe site conditions was conducted by PlaceWorks on November 15, 2012 and then following removal of foundations and grading in March 2014. No weather-related conditions or other conditions that would limit our ability to observe the site occurred during our site reconnaissance.

Summarized below are observations relative to specific physical features identified in the PEA Guidance Manual and site photographs are included as Appendix A.

Physical Feature	Observations
Site boundaries:	The project site consists of approximately 13 acres of land formerly utilized for base administrative purposes including the base library, auditorium and chapel. A small portion of two buildings used as enlisted quarters (buildings 731 and 741) is located on the northwest side of the proposed school site and a portion of the chapel administrative office (building 83) is located on the southeast corner of the site.
Locations and boundaries of all onsite operations (present and past):	Based on a review of aerial photographs the project site was used for agricultural purposes prior to .use as a military base. The site was used for base administrative purposes including the base library, auditorium and chapel.
Foundations of former structures:	Foundations were noted in 2012 and were removed by 2014.
Storage tanks and storage areas:	None noted by PlaceWorks.
Odors:	None noted by PlaceWorks.
Pools of liquid:	None noted by PlaceWorks.
Electrical or hydraulic equipment known or likely to contain PCBs:	None noted by PlaceWorks.

Unidentified substance containers (including empty drum storage):	None noted by PlaceWorks
Stained soil and pavement, corrosion, and degradation of floors and walls:	None noted by PlaceWorks.
Drains and Sumps:	None noted by PlaceWorks.
Pits, ponds, and lagoons:	None noted by PlaceWorks.
Surface drainage pathways:	None noted by PlaceWorks.
Stressed vegetation (from other than insufficient water):	None noted by PlaceWorks.
Solid waste and waste water:	None noted by PlaceWorks.
Wells (including dry wells, irrigation wells, injection wells):	None noted by PlaceWorks.
Septic systems:	None noted by PlaceWorks.
Overhead electrical lines:	There are no overhead electrical lines on the site.
High-pressure gas or fuel transmission lines:	No high pressure gas pipelines were identified as being located on the site.
Railroad tracks:	No railroad tracks were identified within 1,500 feet of the site.

3.5.3 Interviews

A Transaction Screen Questionnaire was completed by the property owner, Five Point Communities. Mr. Jim Werkmeister, Director of Land Development at Five Point Communities completed the questionnaire on behalf of Five Point Communities for the Phase I ESA. Mr. Werkmeister indicated that the site and adjoining property had been used for industrial purposes in the past. Mr. Werkmeister indicated that the former base automobile hobby shop and fuel oil storage were located on the site and the former base gas station was adjoining to the site. Mr. Werkmeister indicated that he was aware of the former fuel oil USTs that had been located on the site. .

3.5.4 Prior Assessments/Remediation

Prior investigations occurred at the site as part of base closure activities. Several documents were reviewed in preparation of this report:

Earth Tech Inc. September 2003. *Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California.*

Geofon, Inc. 1997. Underground Storage Tank Removal Report Tank Number 282 Marine Corps Air Station (MCAS) El Toro, California. September 15.

OHM Remediation Services Corp. 1997. Tank Removal and Site Closure Report Oil Water Separator 280A Marine Corps Air Station El Toro, California. June 20.

Tait Environmental Management, 2006. Hazardous Materials Survey Report Building #833 (Chapel) Submitted to Lennar Communities, Heritage Fields. June 19.

TRC, 2006. Hazardous Materials Survey at Buildings 83, 94, 271, 276, 280, 347, 523, 625, 656, 684, 692, 729, 793, 823, 839, 876, 898, 899, 929, 957 and 1702. Lifelong Learning District, Irvine, CA (Former MCAS El Toro). Submitted to Heritage Fields. December 29.

TRC, 2007. *Lead in Soil Sampling Results at Buildings: 3, 4, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 46, 47, 48, 50, 51, 52, 53, 54, 83, 94, 146, 271, 276, 280, 285, 288, 328, 347, 376, 449, 450, 451, 452, 523, 578, 624, 625/626, 684, 736, 793, 794, 823, 844, 876, 898, 899, and 929. Lifelong Learning District, Irvine, CA (Former MCAS El Toro). Submitted to Heritage Fields.* December 26.

U.S. Department of the Navy 2004. *Final Finding of Suitability to Lease for Carve-outs Within Parcels I, II, and III, Former Marine Corps Air Station, El Toro, California.*

_____. 2004. *Final Finding of Suitability to Transfer (Parcel IV and Portions of Parcels I, II, and III), Former Marine Corps Air Station, El Toro, California.*

_____. 2005. *Final Finding of Suitability to Transfer #2 (Portions of Parcels II and III), Former Marine Corps Air Station, El Toro, California.*

3.6 REGULATORY STATUS

PlaceWorks utilized the electronic database service EDR to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced Agency records, located within the American Society for Testing and materials (ASTM)-specified search radii indicated below:

- NPL sites: 1 mile
- CERCLIS sites: 0.5 mile
- CERCLIS NFRAP sites Site and Adjoining
- Federal ERNS: Site only
- RCRA non-CORRACTS TSD facilities: 0.5 mile
- RCRA CORRACTS TSD facilities: 1 mile
- RCRA Generators: Site & Adjoining
- State Hazardous Waste Sites: 1 mile
- Registered Underground Storage Tanks: Site & Adjoining
- State Landfills and Solid Waste Disposal Sites: 0.5 mile
- State Leaking Underground Storage Tanks: 0.5 mile
- CHMIRS: 0.5 mile

- HAZNET: 0.25 mile

A review of selected regulatory agency databases for documented environmental concerns on the site, or in close proximity to the site, was conducted by EDR. A copy of the radius report, dated August 9, 2012 is included in Appendix C.

3.6.1 NPL Sites

The National Priorities List (NPL) is a list of contaminated sites that are considered the highest priority for clean-up by the EPA.

- The base is listed on the NPL List. MCAS El Toro was placed on the National Priorities List (NPL) in 1990 (United States Environmental Protection Agency [U.S. EPA] ID: CA6170023208) due to volatile organic compound (VOC) groundwater contamination at the Base boundary and in agricultural wells west of the Base. Of the approximate 4,700 acres of the base, approximately 1000 acres were or will be transferred to other federal and state agencies. The remaining 3,700 +/- acres (only 410 +/- acres remain to be transferred as of March 2012) are transferring to a private developer for the development of the City of Irvine's "The Great Park" which is a combination of residential, industrial R&D, commercial, educational, and public recreational and open-space uses. The Navy provides funding for site cleanups at former MCAS El Toro on behalf of the Marine Corps. In October 1990, the Marine Corps/DON signed a Federal Facility Agreement (FFA) with the U.S. EPA Region 9, the California Department of Health Services (DHS) (part of which is currently the Department of Toxic Substances Control [DTSC]), and the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) (U.S. EPA, California, DON 1990). The source of the VOCs in groundwater is located over one mile to the south of the proposed K8 school site. The school site was delisted from Superfund on January 27, 2014 when EPA removed 2,000 acres of El Toro from the Superfund list.

  The Groundwater Feasibility Study concluded that cleanup is required for perchlorate-impacted groundwater associated with IRP Site 1 and volatile organic compound (VOC)-impacted groundwater associated with IRP Site 2. A total of 25 IRP sites have been investigated at former MCAS El Toro. One site (IRP Site 23) was eliminated as an environmental concern; the remaining 24 sites were grouped into 6 operable units (OUs) including OU-1, OU-2A, OU-2B, OU-2C, OU-3A, and OU-3B. In October 1990, the Marine Corps/DON signed a Federal Facility Agreement (FFA) with the U.S. EPA Region 9, the California Department of Health Services (DHS) (part of which is currently the Department of Toxic Substances Control [DTSC]), and the California Regional Water Quality Control Board, Santa Ana Region (RWQCB) (U.S. EPA, California, DON 1990).

- The database search did not identify any additional NPL sites within a one-mile radius of the subject site.

3.6.2 CERCLIS Sites

The Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list identifies sites which are suspected to have contamination and require additional investigation to assess if they should be considered for inclusion on the NPL.

- MCAS is listed on the CERCLIS List with Site ID 0902770 as a federal facility.
- The database search did not identify any additional CERCLIS sites within a ½-mile radius of the subject property.

3.6.3 CERCLIS-NFRAP Sites

CERCLIS-NFRAP status indicates that a site was once on the CERCLIS List but has No Further Response Actions Planned (NFRAP). Sites on the CERCLIS-NFRAP List were removed from the CERCLIS List in February 1995 because, after an initial investigation was performed, no contamination was found, contamination was removed quickly, or the contamination was not significant enough to warrant NPL status.

- The subject site is not listed on the CERCLIS-NFRAP List.
- The database search did not identify any CERCLIS-NFRAP sites adjacent to the subject property.

3.6.4 Federal ERNS List

The Federal Emergency Response Notification System (ERNS) list tracks information on reported releases of oil and hazardous materials.

- The subject site is not identified on the Federal ERNS list.
- The database search did not identify any Federal ERNS sites adjacent to the subject property.

3.6.5 RCRA CORRACTS Facilities

The Resource and Conservation Recovery Act (RCRA) CORRACTS Facilities list catalogues facilities that treat, store, or dispose of hazardous waste and have been associated with corrective action activity.

- MCAS is listed as a RCRA CORRACTS TSD facility.
- The database search did not identify any RCRA CORRACTS TSD facilities within a one-mile radius of the subject property.

RCRA sites were not identified on or adjacent to the proposed school sites. A RCRA Facility Assessment ("RFA") was conducted for the former MCAS El Toro between 1990 and 1993. The purpose of the RFA was to identify SWMUs and TAAs where there was an actual, or potential for, release of hazardous waste into the environment, and whether further actions might be required. The RFA was finalized on May 31, 1996. It presents results, recommendations and closure strategies for SWMUs and TAAs. Some of these sites are

incorporated in the IRP; others are handled under alternative regulatory procedures. The RCRA sites must meet current environmental compliance requirements. The State of California considers any site from which hazardous constituents may migrate to be a SWMU, but corrective action can be addressed through the Federal Facilities Agreement for the former MCAS El Toro or through responses to petroleum releases with oversight provided by the RWQCB. DTSC has determined that all corrective action obligations required under RCRA for the property subject to FOSTs 1, 2, 3 and 4 (a total of 2854.8 acres) are complete. Final RCRA Corrective Action Complete Determination Packages are documented in FOSTs 1 through 4. Because of continuing groundwater monitoring at FOST 5 and 6 sites, RCRA corrective actions have not been determined to be complete for those sites.

3.6.6 RCRA non-CORRACTS TSD Facilities

The RCRA non-CORRACTS TSD Facilities List tracks facilities which treat, store, or dispose of hazardous waste and are not associated with corrective action activity.

- MCAS is listed as a RCRA non-CORRACTS TSD facility.
- The database search did not identify any RCRA non-CORRACTS TSD facilities within a ½-mile radius of the subject property.

3.6.7 RCRA Generators

The RCRA Generator list is maintained by the USEPA to track facilities that generate hazardous waste.

- MCAS is listed as a RCRA Hazardous Waste Generator.
- The database search did not identify any RCRA sites near the subject property.

3.6.8 EnviroStor Database

The EnviroStor database, maintained by the DTSC, contains both known and potential hazardous substance sites. The database includes Federal Superfund sites, state response sites including military facilities, voluntary cleanup program and school sites.

- The subject site is listed on the EnviroStor database with an identification number of 3097003.
- The database search did not identify any EnviroStor sites within a one-mile radius of the subject property. Since the database search was ordered the K-8 site was added and as an EnviroStor number of 600001783 and IUSD High School 5 was added with an EnviroStor number of 60001784.

3.6.9 State Landfills and Solid Waste Disposal Sites

The database search did not identify any State Landfills or Solid Waste Disposal sites within a ½-mile radius of the subject property. The former base landfill is located over 1.2 miles to the east of the proposed school site.

Section 17213 of the California Education Code and Section 21151.8 of the California Public Resources Code prohibit construction of a school upon a current or former hazardous waste disposal site or solid waste disposal site. Based on site inspections and information reviewed for preparation of this report, the school site is not located on a current or former disposal site.

3.6.10 State Leaking Underground Storage Tanks (LUSTs)

The State Water Resources Control Board's Leaking Underground Storage Tank Information System contains an inventory of LUST Incident Reports.

- The subject site is not listed on the LUST list.
- The database search identified one LUST facility within a ½-mile radius of the subject property.
    - Former UST Group 651, former base gas station, is located in the northwestern section of the MCAS facility between North 4th Street and North 1st Street adjacent to Building 651, over 1,200 feet to the southwest of the proposed school site. Former UST Group 651 consists of four 12,000 USTs (i.e., 651-1, 651-2, 651-3 and 651-4) that were used for storage of gasoline from 1971 until 1999, at which time the USTs and associated piping were removed. Impacted soil was identified from approximately 10 feet below ground surface (bgs) to the depth of groundwater, approximately 160 feet bgs. Following soil vapor extraction and treatment and extraction of petroleum impacted groundwater the RWQCB in November 4, 2008, issued a determination of no further action for unsaturated soils. On December 1, 2008, the RWQCB concurred with a long-term monitoring or natural attenuation remedy for groundwater. In October 2011, the RWQCB concurred that groundwater concentrations are decreasing and biodegradation is occurring. The groundwater plume does not extend beyond 4th Street. Benzene was not detected in the groundwater monitoring wells in 2011. Based on distance from the site, regulatory status and hydraulic flow direction, this facility is not expected to impact the subject property.

3.6.11 Registered Underground Storage Tank

The State Water Resources Control Board's Underground Storage Tank Database maintains a list of USTS.

- The subject site is not listed on the UST list.
- The database search did not identify any registered USTs within a 0.25 mile radius.

3.6.12 Historical Cal-Sites Database

The Historical Cal-Sites database, maintained by the DTSC, contains both known and potential hazardous substance sites.

- The subject site is not listed on the Cal-Sites database.
- The database search did not identify any sites on the Cal-Sites database within a one-mile radius of the subject property.

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4. Apparent Problem

There is no physical or historic evidence of any site activity that might have caused any environmental impact to the site. However, there are potential environmental issues evaluated in this PEA. The Phase I identified the following potential issues at the site:

- The site was used for agricultural purposes prior to the acquisition of the land for the base in 1942 and agriculture continued on the western portion of the proposed school site until the 1960s.
- 11 former underground storage tanks (USTs) were located on the proposed school site.
- 1 former Oil/Water Separator.
- Buildings were located on the site that require testing for organochlorine pesticides for potential residual termiticides and additional testing to assess for potential lead-based paint in soil.
- Imported fill material was used to backfill the tank excavations.
- Three groundwater plumes from historic base operations were identified as having been located within approximately a 1.2 mile radius of the proposed school site.

Because the site is a school, there is a potential for children who attend the school and adult employees of the school to be exposed to chemicals that may be present in soil. Potential exposure may occur from soil ingestion, dermal exposure to soil, and inhalation of particles. The sampling that was conducted as part of this PEA was directed at addressing these potential chemicals of concern and these potential exposure pathways.

Because of the presence of the above-mentioned concerns, a PEA was initiated for the site.

4. Apparent Problem

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5. Environmental Setting

This section describes potential exposure pathways and the site geology and hydrogeology.

5.1 FACTORS RELATED TO SOIL EXPOSURE PATHWAYS

5.1.1 Site Topography

Based on a review of the USGS 7½-Minute Topographic Series, El Toro, California Quadrangle Map (USGS 1997), the surface elevation of the subject property ranges between approximately 330 feet and 315 feet above mean sea level (msl). Based on USGS topographic contours, the subject property and surrounding areas slope gently toward the west.

5.1.2 Site Geology and Soil Types

Former MCAS El Toro is situated on the southeast edge of the Tustin Plain, a gently sloping surface of alluvial fan deposits derived primarily from the Santa Ana Mountains. Bounded to the north and east by the Santa Ana Mountains and to the south by the San Joaquin Hills, the Tustin Plain is at the southeast end of the Los Angeles Basin, a large sedimentary basin in the Peninsular Ranges Geologic Province. The Tustin Plain also lies in the "Central Block" of the Basin, which is bounded on the north by the Whittier Fault Zone and on the south by the Newport-Inglewood Fault Zone.

The Holocene alluvial fan materials are comprised of isolated, coarse-grained stream channel deposits contained within a matrix of fine-grained overbank deposits that range up to a maximum of 300 feet in thickness. The Holocene alluvial materials conformably overlie Pleistocene Age sediments predominantly comprised of interlayered, fine-grained lagoonal and near-shore marine deposits. These materials become increasingly mixed with beach sand, terrace, and stream-channel deposits in the east portion of the Tustin Plain and along the plain margins. The Quaternary deposits form a heterogeneous mixture of silts and clays with interbedded sand and fine-grained gravels that range up to 500 feet in thickness in the west portion of the Tustin Plain. The deeper Quaternary sediments may be equivalent to the lower Pleistocene San Pedro Formation, which is comprised of semi-consolidated silts, clays, and sands with interbedded limestone. These lagoonal and shallow marine deposits are considered to be a major water-bearing unit in the region.

The former MCAS El Toro boundaries extend across the Tustin Plain into the Santa Ana Mountains. The Santa Ana Mountains rise steeply north and east of the station; the highest peak is 6,698 feet, and is approximately 10 miles east of the station. The San Joaquin Hills slope gradually to the south; their highest point is 1,170 feet, and is approximately 10 miles south of the station. The land to the northwest of the station is relatively flat.

According to the United States Department of Agriculture, Soil Conservation Service (USDA 1971; California Soil Resource Lab 2007), the soils of the site belong to San Emigdio association. San Emigdio soils are fine loamy sands to 7 inches, underlain by stratified gravelly loamy coarse sand to very fine sandy loam that extends to a depth of 61 inches or more. San Emigdio soils have moderate infiltration rates that are well drained.

5.1.3 Naturally Occurring Asbestos

Based on a review of A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos (Department of Conservation, Division of Mines and Geology 2000) and Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California (Van Gosen and Clinkenbeard 2011), the site is not located within a ten-mile radius from an area thought to contain naturally occurring asbestos (NOA).

5.1.4 Site Accessibility

The site is accessible from Trabuco Road on the south side of the project area via Ridge Valley and other roads under construction.

5.1.5 Proximity to Nearby Receptors

Currently there are no nearby receptors. Residential and recreational development of the surrounding area is starting to occur.

5.2 FACTORS RELATED TO WATER PATHWAYS

The following sections describe factors related to potential water pathways.

5.2.1 Groundwater Pathway

Investigations by the Orange County Water District (OCWD) northwest of the station have revealed the presence of three distinct hydrochemical layers in groundwater related to depth in the aquifer. The first layer, characteristic of shallow groundwater lying within approximately 200 feet of the ground surface, contains relatively high levels of total dissolved solids (TDS) and nitrate, and is dominated by calcium and sulfate ions. The second layer, characteristic of groundwater lying between approximately 200 and 450 feet bgs, contains lower levels of TDS and nitrate, and is dominated by sodium, calcium, and bicarbonate ions. The third layer lies with the lower hydrogeologic system at depths greater than 450 feet, contains relatively high levels of TDS and relatively low levels of nitrate, and is dominated by sodium and sulfate ions. Shallow groundwater depths ranged from 154 to 162 feet bgs at the former base gas station located approximately 3,600 feet to the southwest of the proposed school site. Hydrogeologic investigations were not performed on the site for this investigation; therefore, it is unknown to what extent localized variations in groundwater conditions occur beneath the site.

5.2.2 Site Hydrogeologic Setting

Former MCAS El Toro is situated over the Irvine Subbasin in the Main Orange County Groundwater Basin. Although the aquifers beneath the Tustin Plain are in hydraulic contact with the Main Orange County Groundwater Basin, it is difficult to make correlations among specific aquifer zones. In the Irvine area, aquifers are much thinner and separated by thicker sequences of fine-grained materials. Aquifers tend to be comprised of lenticular clayey and silty sands and fine-grained gravels contained within a complex assemblage of sandy clays and sandy silts. Thus, instead of identifiable aquifers that may be correlated from place to place, the groundwater may be considered to flow in a single, large-scale, heterogeneous system.

Based on June 2012 Groundwater Elevation Contours for the Principal Aquifer by OCWD, groundwater in the vicinity of the site generally flows toward the southwest. Groundwater south of the site generally has a flow direction toward the west.

5.2.3 Impacted Aquifers from Site Releases

There are no known site releases.

5.3 FACTORS RELATED TO AIR PATHWAYS

The site vicinity is an area with typical Mediterranean climate, characterized by warm dry summers and mild winters. The Western Regional Climate Center collected climatic data from Tustin Irvine Ranch from 1902 to 2003. The mean temperature in the area ranges from a low of 40.2° Fahrenheit (°F) in the winter to a high of 85.2°F in the summer. The average annual precipitation is 12.86 inches per year.

5. Environmental Setting

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6. Sampling Activities and Results

This section describes methods and results of the soil sampling activities conducted at the site on April 15-17, 2014 and soil gas sampling activities conducted at the site on April 16-18, May 20-23, June 17-18 and July 8, 2014 for the PEA. Figure 7 shows the sampling locations for the project area. Table 1 provides a summary of the sampling and analysis program for the PEA. The Health and Safety Plan used for the site is included in Appendix D.

- Soil sampling activities were conducted at the site on April 15-17, 2014 and soil gas sampling activities were conducted at the site on April 16-18, May 20-23, June 17-18 and July 8, 2014 for the PEA.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were collected and analyzed for organochlorine pesticides (OCPs) by EPA Method 8081A to assess for potential residual OCPs from historic agricultural operations, former buildings and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082 to assess for potential PCBs from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for CAM-17 Metals by EPA Method 6010B/7471A to assess for potential metals from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 8015M to assess for potential TPH from historic operations and fill material.

- Twenty-six (26) soil samples plus two duplicates were analyzed for semivolatile organic compounds (SVOCs) by EPA Method 8270C to assess for potential SVOCs from historic operation and fill material.

- One hundred and twelve (112) soil samples and 12 duplicates were analyzed for polyaromatic hydrocarbons (PAHs) by EPA Method 8270 SIM.

- One hundred and twenty-seven (127) and 11 duplicate soil gas samples were collected at the site and analyzed on site for VOCs using mobile laboratories by EPA Method 8260B.

6. Sampling Activities and Results

- Thirteen soil gas samples were collected in Summa Canisters and analyzed at a fixed laboratory by EPA TO-15 for VOCs..

6.1 UTILITY CLEARANCE

Prior to commencement of field activities, USA was notified of our intent to conduct subsurface investigations at least 48 hours prior to initiation of intrusive field tasks. USA contacted all utility owners of record within the site vicinity and notified them of our intention to conduct subsurface investigations in proximity to buried utilities. All utility owners of record, or their designated agents, were expected to clearly mark the position of their utilities on the ground surface throughout the area designated for investigation.

6.2 SAMPLING PROCEDURES

Soil and soil gas samples were collected following protocols described in DTSC's PEA Guidance Manual (DTSC 1999), Advisory Active Soil Gas Investigations (DTSC 2012) and DTSC's Interim Guidance for Sampling Agricultural Properties (Third Revision) (DTSC 2008). The DTSC approved sampling program that was implemented is included in Table 1 and all sampling locations are shown on Figure 7, PEA Sampling Locations. A Professional Geologist was on-site to direct and observe field activities.

Soil samples were collected in the fill material and in the native material beneath the fill native interface. Table 2 is a summary of the depths of fill material encountered at the site.

6.2.1 Soil Sampling Methods and Procedures

Soil sampling was conducted using a truck-mounted direct push drill rig (Geoprobe™). The Geoprobe™ rig advanced acetate lined sample core barrels sleeves to desired depths using a hydraulic ram or pneumatic hammer system. The inside diameter of the core barrel was 1.5 to 2.0 inches. The sample barrel was retrieved and the sample interval was observed, logged and preserved. Soil samples were preserved by placing Teflon™ sheeting and polyethylene caps leaving no headspace, and wrapping the samples with Parafilm™ tape or placing them in sealable plastic bags.

Observations pertaining to the soil type were described by the field geologist. Each soil sample was labeled with the sample number, sample depth, and the date and time the sample was collected. Samples were immediately placed in an ice-filled cooler and listed on a chain-of-custody form. Any observation pertaining to potential soil contamination or soil source was recorded. The chain-of-custody form is included in Appendix E. Boring logs are included in Appendix F. Soil samples were collected in the fill material and in the native material beneath the interface with fill.

6.2.2 Soil Gas Sampling Methods and Procedures

Soil gas sampling was preceded by the installation of temporary soil gas probes at 5 feet and 15 feet bgs at all soil gas locations and down to 40' feet bgs at six sampling locations, and after an appropriate equilibration period, the probes were purged then sampled. The soil gas sampling sought to identify VOC contaminants potentially present in the vapor phase through the use of a mobile laboratory operated by American Analytics

of Chatsworth, California for the April and May sampling events and H&P Mobile Geochemistry of Carlsbad, California for the June sampling events. The laboratory was equipped with a GC/MS capable of analyzing VOCs via USEPA Method 8260B. Soil gas samples were collected in glass, gas-tight syringes equipped with Teflon® plungers. A sampling rate of approximately 200 mL/min. was maintained and based on the purge test that was performed at the beginning of the field day, a target of three purge volumes was employed. Samples were analyzed within one-half-hour of collection. Sampling for VOCs by EPA Method TO-15 was conducted after the samples for VOCs by EPA Method 8260B were collected by attaching the Summa canister directly to the 3-way valve on the probe.

6.3 QUALITY CONTROL SAMPLING PROCEDURES

Field quality control samples associated with the sampling program included duplicate soil samples, equipment blanks, and soil matrix spike/matrix spike duplicate (MS/MSD) samples, in accordance with the DTSC PEA Guidance Manual (DTSC 2013). Duplicate soil samples were collected and analyzed and are listed on Table 1.

6.4 DECONTAMINATION PROCEDURES

All equipment that came into contact with the soil was decontaminated consistently to assure the quality of samples collected. Decontamination was conducted prior to and after each use of a piece of equipment. All sampling devices used were decontaminated using the following procedures:

- Non-phosphate detergent and distilled water wash, using a brush; and
- A double deionized/distilled water rinse.

6.5 INVESTIGATIVE-DERIVED WASTE MANAGEMENT

The borings were backfilled to the surface with bentonite. All investigative-derived waste decontamination water was placed in 5-gallon buckets and transported offsite for proper disposal. Used personal protection equipment (PPE) were double bagged and placed in a municipal refuse dumpster.

6.6 ANALYTICAL RESULTS

Volatile organic compounds in soil gas are summarized on Table 3 for all sampling events. Organochlorine pesticide results in soil are summarized in Table 4. Table 5 is a summary of CAM-17 metal results. TPH results are summarized in Table 6. Polyaromatic hydrocarbons are summarized on Table 7 and semivolatile organic compounds are summarized on Table 8. PCB results are summarized in Table 9. Laboratory summary reports for all analytes are included in Appendix E.

6.7 DISCUSSION OF RESULTS

6.7.1 Soil Description

The soils encountered and collected during the investigation consisted of medium stiff brown to dark yellowish brown to yellowish brown to light greenish gray silt with or without sand, medium dense dark yellowish brown silty sand and medium dense yellowish brown poorly graded sand with gravel.

Compacted fill soils were observed across the site from a minimum depth of 4 feet below ground surface (bgs) to a maximum depth of 14 feet bgs. The disturbed soils consisted of medium stiff dark to very dark grayish brown silt with or without sand and gravel, medium dense reddish brown to yellowish brown silty sand. No odors or staining were observed by the field geologist. Groundwater was not encountered. Table 2 summarizes the observed depth to the fill native interface.

6.7.2 Soil Gas Results

Soil gas sampling activities were conducted at the site on four different events: April 16-18, May 20-23, June 17-18 and July 8, 2014. Table 3 is a summary table of the soil gas results for both the samples analyzed in the field with the mobile laboratory and the samples collected in Summa Canisters and analyzed by TO-15 in the fixed laboratory. Figure 8 is a summary of soil gas results for the April investigation. Figure 9 summarizes the May 2014 soil gas investigation and Figure 10 summarizes the June 2014 soil gas results.

During the April 16th through April 18th soil gas sampling event benzene was reported in 18 out of the 33 soil gas samples collected during the first sampling event. Benzene concentrations ranged from 0.27 μg/l to the detection limit of 0.03 μg/l. During the second soil gas sampling event additional soil gas probes were installed and sampled along with probes that were viable from the first event. During the second soil gas sampling event (May 20-23), 65 soil gas samples were collected. Benzene was reported in 23 out of the 65 soil gas samples with concentrations ranging from the detection limit to 0.1 μg/l. During the third soil gas sampling event, 54 soil gas samples were collected and benzene was reported in eight out of the 54 samples with the concentrations ranging from the detection limit to 0.053 μg/l. During the July confirmation sampling event three soil gas samples were collected and benzene was not reported in the samples. Benzene concentrations and frequency of detection decreased during each subsequent sampling event.

Toluene was reported in 40 out of the 127 soil gas samples ranging in concentration from a maximum concentration of 1.2 μg/l to the detection limit of 0.1 μg/l and showed a similar pattern as benzene, decreasing in frequency and concentration during each subsequent sampling event.

The following is a summary of the detections of VOCs in the 127 plus 11 duplicates analyzed for soil gas::

- The following compounds were detected one time during the investigation: n-butylbenzene, carbon disulfide, carbon tetrachloride, 1,1-dichloreothane, naphthalene, n-propylbenzene, propylene, 1,1,1,2-tetrafluoroethane, 1,1,1-trichloroethane, 1,1,2-trichlorotrifluoroehtane, 2,2,4-trimethyloentane.

- 4-ethyltoluene was detected in two of the soil gas samples analyzed.

- 1,1,-difluroroethane, heptane, hexane, methylene chloride were reported in three soil gas samples.
- 1,3,5-trimethlybenzene was reported in four soil gas samples.
- Chloroform, tetrachloroethylene, and trichlorofluoromethane were reported in five soil gas samples
- Ethylbenzene and o-xylene were reported in seven soil gas samples.
- 1,2,4-trimethylbenzene was reported in 12 soil gas samples
- m-,p- xylenes were reported in 22 soil gas samples.

6.7.3 Soil Results

6.7.3.1 ORGANOCHLORINE PESTICIDES

The following six pesticides were detected in soil at the site in low concentrations below screening levels: 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, chlordane, dieldrin and heptachlor.

- 4,4'-DDD was detected in one out of 138 samples at a concentration of 3.6 micrograms per kilogram (µg/kg), significantly below the EPA Region 9 Regional Screening Level (RSL) for 4,4'-DDD of 2,200 µg/kg.
- 4,4'-DDE was detected in 40 soil samples (including four duplicates) with a maximum concentration of 26 µg/kg, below the RSL of 1,600 µg/kg.
- 4,4-DDT was detected in 39 soil samples (including two duplicates) with a maximum concentration of 66 µg/kg, below the RSL of 1,900 µg/kg.
- Chlordane was detected in 14 soil samples including one duplicate with a maximum concentration of 97 µg/kg, below the RSL of 1,800 µg/kg.
- Dieldrin was detected in four soil samples with a maximum concentration of 7.2 µg/kg, below the RSL of 33 µg/kg.
- Heptachlor was detected in two soil samples with a maximum concentration of 5.7 µg/kg, below the RSL of 120 µg/kg .

Table 4 is a summary table of the OCPs and RSLs. Appendix E includes the laboratory reports for OCP analysis.

6.7.3.2 CAM-17 METALS

The following metals were nondetect in the 138 soil samples analyzed: antimony, beryllium, mercury, selenium, silver, and thallium.

6. Sampling Activities and Results

The maximum reported concentrations of all metals were below their RSLs or DTSC risk management levels (arsenic). The maximum lead concentrations was 11 mg/kg. The reported concentrations of arsenic are below the DTSC risk management level of 12 mg/kg. CAM-17 metal results are summarized on Table 5. Laboratory reports for CAM-17 metal analysis are included in Appendix E.

6.7.3.3 TPH

TPH was reported in 14 of the 138 soil samples analyzed. The maximum concentration reported was 2,100 mg/kg in sample SG-5 collected at 0.5 feet bgs. The sample collected from the same location at 3 feet bgs was nondetect for TPH. SG-5 at 0.5' bgs was nondetect for PAHs. In the other soil samples that had reportable concentrations of TPH, the sample that was collected beneath the sample with reportable concentrations was non detect for TPH. TPH results in soil are summarized on Table 6 and laboratory reports are included in Appendix E.

6.7.3.4 PAHS

The following eleven PAHs were reported in one or more soil samples: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,l)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno (1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene. The maximum reported concentrations of each PAH was below the corresponding RSL. PAH results in soil are summarized on Table 7 and laboratory reports are included in Appendix E

6.7.3.5 SVOCS

SVOCs were not reported in the soil samples analyzed by EPA Method 8270C. Detection limits for some of the SVOCs are included in Table 8 for all samples analyzed by the method and laboratory reports are included in Appendix E.

6.7.3.6 PCBS

PCBs were nondetect in the 138 soil samples analyzed by EPA Method 8082. Summary table showing PCB detections limit are included in Table 9 and laboratory reports are included in Appendix E.

7. Human Health Screening Evaluation

A human health screening assessment was conducted to evaluate the potential threat to human health at the proposed school site. The established PEA screening process was used to determine if there are levels of contamination at the site that may cause a concern about effects on human health. The purpose of the human health risk screening evaluation was to assess whether levels of contaminants in soil at the site could pose a threat to human health under conservative (health-protective) exposure assumptions. The PEA requires a residential land use scenario regardless of current use and zoning.

7.1 CONCEPTUAL SITE MODEL

The potentially complete soil exposure pathways include soil ingestion, dermal exposure to soil, and inhalation of particulates and volatile organics detected in soil. Potentially exposed populations for the site include on-site school age children and employees based on future land use plans. In order to estimate what the potential exposures may be under current and future land use plans, risk calculations were conducted using the data that were collected for the PEA. Figure 11 is the conceptual site model for the site.

7.2 CHEMICALS OF CONCERN SELECTION

The chemicals of concern (COCs) for the site that were evaluated in the PEA screening risk assessment have been identified based on site history, sampling results, DTSC guidance and protocol. All VOCs detected in soil gas and pesticides that were detected within site boundaries were considered to be a COC. Metals were not included as COCs because all detected concentrations were either below RSLs or below DTSC's risk management level for schools (Table 5). PAHs were screened using Toxicity Equivalency Factor calculation and RSLs.

7.3 INDOOR AIR RISK ASSESSMENT

To evaluate potential indoor air inhalation risk from the VOCs reported in soil gas, the DTSC modified screening level Johnson and Ettinger indoor air vapor intrusion model was used to assess potential indoor air concentrations of VOCs and their associated risk. The model version used was EPA Version 2.0 April 2003 and last modified by the DTSC in March 2014 and was obtained from the DTSC's website. The Human and Ecological Risk Division (HERD) of DTSC has taken the model and incorporated human health criteria specific to California, as developed by the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA). The DTSC states in their guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air October 2011 that the intrusion of subsurface vapors into buildings is one of many exposure pathways that must be considered in assessing the risk posed by releases of hazardous chemicals into the environment.

7. Human Health Screening Evaluation

The model was used to estimate potential risk using the VOCs reported in soil gas. Default toxicity values and exposure values from the DTSC modified models were used in the assessment.

7.3.1 Soil Gas Results

The maximum concentrations for the nine VOCs reported in soil gas were used in the J&E Model. Modeling data is provided in Appendix G. The following table summarizes the estimated carcinogenic risk and hazard index for each chemical of concern reported in soil gas assuming a residential exposure scenario using a 24 hour exposure time and using the maximum detected concentrations.

Chemical	*Frequency of Detection*	*Maximum Concentration (µg/l)*	*Sampling Depth feet*	*Hazard Index*	*Cancer Risk*
Benzene	49/127	0.27	5'	0.02	7.5E-07
Carbon Tetrachloride	1/127	0.106	5'	0.00039	2.8E-07
Chloroform	5/127	1.08	5'	0.0022	2.1E-06
Tetrachloroethylene	5/127	0.39	10	0.0015	1.3E-07
Toluene	40/127	1.2	5'	0.00079	NA
1,2,4-Trimethylbenzene	12/127	0.59	5'	0.013	NA
1,3,5-Trimethylbenzene	4/127	0.04	10'	0.00018	NA
Xylenes, m-,p-	22/127	1.3	5'	0.0023	NA
Xylenes, o-	7/122	0.29	5'	0.00051	NA
Total				**0.041**	**3.2-06**

The estimated carcinogenic risk 3.2E-06 using the maximum detected concentrations was within the EPA risk management range of 1E-04 and 1E-06. The hazard index was 0.046, below the level of concern of 1.0. This risk estimate is based on the assumption that an individual would be at the site for 24 hours per day, 350 days per year for 30 years. The chemical that was the primary contributor to the carcinogenic risk was chloroform which was infrequently detected in only about 4% of the soil gas samples analyzed.

The risk results were also calculated using the 95% UCL concentrations.

Chemical	*Frequency of Detection*	*95% UCL Concentration (µg/l)*	*Sampling Depth feet*	*Hazard Index*	*Cancer Risk*
Benzene	49/127	0.07	5'	0.0052	2.0E-07
Carbon Tetrachloride	1/127	0.106	5'	0.00039	2.8E-07
Chloroform	5/127	0.06	5'	0.00012	1.2E-07
Tetrachloroethylene	5/127	0.04	5'	0.00015	1.3E-08
Toluene	40/127	0.12	5'	0.000079	NA
1,2,4-Trimethylbenzene	12/127	0.04	5'	0.0009	NA
1,3,5-Trimethylbenzene	4/127	0.04	5'	0.00018	NA
Xylenes, m-,p-	22/127	0.11	5'	0.00019	NA
Xylenes, o-	7/122	0.06	5'	0.0001	NA
Total				**0.007**	**6.1-07**

7. Human Health Screening Evaluation

The estimated carcinogenic risk was 6.1-07 using the 95% UCL concentrations, below the level of concern of 1E-05. The hazard index was 0.007, below the level of concern of 1.0. The estimated risk from the VOCs detected in soil gas is below levels of concern based on conservative health protective assumptions.

7.4 SOIL EVALUATION

7.4.1 Pesticides

The concentrations of the six pesticides detected do not exceed the EPA Region IX Regional Screening Level (RSL) for residential land use. A summary table is provided below showing the highest reported pesticide concentration at the site and the corresponding RSL.

Chemical	*Maximum Concentration µg/kg*	*CHHSL µg/kg*	*Conc./CHHSL*
4,4'-DDD	3.6	2200	0.0016
4,4'-DDE	26	1600	0.016
4,4'-DDT	66	1900	0.0347
Chlordane	97	1800	0.054
Dieldrin	7.2	33	0.218
Heptachlor	5.7	120	0.0475
Total Risk			3.7E-07

The estimated cancer risk for the site using the maximum detected concentration assuming a residential land use exposure scenario is 3.7E-07, below the level of concern of one in a million increased cancer risk.

The concentrations of the pesticides at the site do not pose a significant health risk to future users of the site under the most conservative assumptions using a residential land use exposure scenario and maximum reported concentrations reported.

7.4.2 PAHs

PAHs were screened against background concentrations using the total equivalency concentrations as outlined by Environ (1998) as shown below.

Chemical	*Frequency of Detection*	*Maximum Site Concentration [mg/kg]*	*Equivalency Factor*	*Benzo(a)Pyrene Equivalent*
Benzo (a) anthracene	0%	0	0.1	0
Chrysene	0%	0	0.01	0
Benzo (b) fluoranthene	50%	4.5	0.1	0.45
Benzo (k) fluoranthene	50%	46	0.1	4.6
Benzo (a) pyrene	50%	19	1	19
Indeno (1,2,3-c,d) pyrene	50%	4.4	0.1	0.44
Dibenz (a,h) anthracene	0%	0	0.3	0
Total Equivalency Concentration				24.5
Background PAH Equivalency Factor Concentration'				900

The total equivalency concentration for PAHs at the site are below the background concentration established. Additionally the PAHs were screened against EPA Region IX RSLs and the maximum detected concentrations were below their corresponding RSL value as shown on Table 7.

7.5 UNCERTAINTY ANALYSIS

The data collected are subject to uncertainty associated with sampling and analysis. These data are presented in other parts of the PEA. In the risk analysis it was assumed that samples collected were representative of conditions to which various populations may be exposed. However, the collected samples may not be completely representative due to biases in sampling and to random variability of samples. In general, sampling was biased toward areas of known and suspected elevated chemical concentrations, which will lead to an overestimation of risk when these results are assumed to represent a larger area. The placement of soil borings was in part, purposely biased to detect and characterize potential hot spots of soil based on historical site use. This type of sampling approach is likely to overestimate the chemical concentrations to which a receptor would be exposed and the potential health impact to the receptors evaluated.

Samples were analyzed using California State Certified Laboratory procedures and were subjected to limited review, to obtain data suitable for decision-making. However, it should be understood that sample analysis is subject to uncertainties associated with precision, accuracy and detection of chemicals at low concentrations.

8. Ecological Screening Evaluation

8.1 SITE CHARACTERIZATION

Based on visual observations during the site visit and information provided by the District, the site is currently undeveloped land that has been recently graded that is part of a former military base. The area is highly disturbed.

8.2 BIOLOGICAL CHARACTERIZATION

The site is a disturbed area that does not support wildlife habitat. Prior to the grading of the site, the site was developed with structures associated with the MCAS El Toro.

8.3 ECOLOGICAL PATHWAY ASSESSMENT

No assessment of potential exposures to sensitive ecological receptors is necessary based on the low concentrations reported and disturbed environment.

8.4 ECOLOGICAL SCREENING EVALUATION SUMMARY

An ecological screening evaluation was not conducted for the site because chemicals of concern were not identified at the proposed school site.

8. Ecological Screening Evaluation

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9. Quality Assurance/Quality Control (QA/QC) Implementation

The QA/QC Program was implemented in accordance with the DTSC PEA Guidance Manual (DTSC 2013). The primary quality control features of the QA/QC program include the collection and analysis of field quality control samples and the data validation. The Quality Assurance Project Plan is included as Appendix H.

Quality control samples collected in the field included duplicate samples (fifteen soil duplicates and eleven soil gas duplicates collected and fourteen soil duplicates and eleven soil gas duplicates analyzed) and equipment rinseate blanks as described in Section 6. The data for these quality control samples were reviewed as part of the data validation process, along with results from laboratory quality control analyses. Data validation was performed in compliance with DTSC's PEA Guidance Manual, using protocols consistent with the USEPA National Functional Guidelines (DTSC 2013). Each sample was analyzed for the specified suite of analyses presented in Section 6. Data from each of the analyses were evaluated with respect to the quality control criteria listed below. Data for the project as a whole were evaluated in terms of completeness.

- Holding times;
- Field blanks;
- Laboratory method and calibration blanks;
- Initial and continuing calibrations;
- System monitoring compounds (surrogates - organic analyses only);
- Laboratory control samples (LCS) and LCS duplicate samples (LCSD) - as applicable;
- Matrix spikes (MS)/Matrix spike duplicates (MSD);
- Field replicates/confirmatory samples; and
- Compound identification and quantitation.

Data quality for the project is very good, and the data collected are of acceptable quality for use in the screening evaluation. The following issues were identified during the course of the validation review.

9. Quality Assurance/Quality Control (QA/QC) Implementation

Results from the field duplicate samples indicate appropriate sample collection and handling procedures were implemented, and that laboratory analytical precision was also acceptable.

Data validation qualifier flags have been added to those data that did not meet acceptance criteria as defined in School Quality Assurance Project Plans. Results of the validation indicate that all samples collected and analyzed are useful in characterizing the site and assessing the human health and ecological risks for the site. No detectable concentrations were qualified as rejected (R) or were considered to be unusable based on the validation evaluation. Data qualified as estimated (J/UJ) exhibited some bias during analysis and should be considered as an approximate measure of the respective analyte concentration. Qualified data are presented along with the data results in the analytical summary tables provided in this report.

Field activities were observed to be conducted in a manner consistent with the QA/QC procedures presented in the DTSC PEA Guidance Manual (DTSC 2013). No findings were identified that significantly affect the quality of the samples collected or the resulting data evaluation.

9.1 DATA VALIDATION

Data validation was performed for all samples submitted as part of PlaceWorks' evaluation of soil. Advanced Technology Laboratories, Inc. was the lead laboratory for the PEA and performed the required soil analyses. American Analytics, Inc. was the mobile laboratory for the April and May sampling events, and H&P Mobile Geochemistry was the mobile laboratory for the June sampling events. In addition, Associated Laboratories was the lead laboratory for TO-15 analysis for the April 18th sampling event, American Analytics, Inc. was the lead laboratory for TO-15 analysis for the May 23rd sampling event, and H&P Mobile Geochemistry was the lead laboratory for TO-15 analysis for the June 18th and July 8th sampling events.

Validation was performed in accordance with the general guidance provided in the USEPA Functional Guidelines for Evaluating Inorganic Analyses (USEPA 1994) and in accordance with the professional judgment of the validation team. Validation was performed to assess analytical performance in terms of the DQOs accuracy, precision, sensitivity, and completeness. Comparability and representativeness DQOs for the samples collected are addressed by the correct implementation of the procedures defined in the sampling and analysis plan.

American Analytics used Isopropanol (IPA) as a tracer gas. PlaceWorks used Isopropanol (IPA) for TO-15 analysis that was submitted to Associated Laboratories. H&P Mobile Geochemistry used 1,1-Difluoroethane and/or 1,1,1,2-Tetrafluoroethane for tracer gas. Tracer gas was only detected on the June 18th and July 8th sampling events in samples SG-18-5, SG-18-15, SG-22-15 for 1,1-Difluoroethane and SG-18-5 for 1,1,1,2-Tetrafluoroethane.

A summary of the validation program, in terms of the DQOs listed above, is provided in the following sections. Data qualifiers assigned to results, if required, were as follows:

A. Result is estimated due to failure to meet one of the DQO criteria associated with the sample result or associated sample batch. Results reported at concentrations below standard laboratory reporting limits, but above method detection limits, were flagged "J" by the laboratory, or "B" in

the case of metals. These data are validated as J/estimated because they are below the reliable quantitation limits determined by the laboratory.

U. Result is qualified as not-detected at the reported value. This qualifier is used when results from blank analyses indicate that detections in associated samples may be biased high due to potential contaminant conditions in the field or laboratory.

UJ. Result is qualified as not-detected at the reported value, and the value is determined to be estimated. This qualifier commonly results when quality control failures are associated with analytes that are not detected, or when detections are qualified "U" due to blank contamination combined with a "J" qualifier resulting from another QC problem.

R. Result is rejected due to severe QC failure, or due to multiple lessor QC problems that are determined to be additive.

9.2 ACCURACY

Accuracy was evaluated by assessing the results of holding times, field and laboratory blanks, initial and continuing calibrations, surrogate spike recoveries (organic analyses), LCS recoveries, MS analyses, and interference check samples (metals by inductively coupled plasma).

Holding times were met for all analyses. Frequency and control criteria for initial and continuing calibration verifications were met. The method blank data showed non-detectable levels for all constituents, except for benzene and toluene in duplicate samples B4E2305-DUP1, B4E2818-DUP1 and B4E2316DUP1, benzene, 1,2,4-trimethylbenzene and toluene in duplicate samples B4D2107-DUP1 and B4D2802-DUP1. MS and MSD were performed at the required frequencies.

All recoveries were within acceptable limits, except for diesel range organics in matrix spike samples B4D0405-MS1 and B4D0446-MS1 and matrix spike duplicate sample B4D0405-MSD1, 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, 2,4-dinitrotoluene, 2-chlorophenol, 4-chloro-3-methylphenol, 4-nitrophenol, acenaphthlene, N-nitroso-di-n-propylamine, pentachlorophenol, phenol and pyrene in matrix spike sample B4D0427-MS1, acenaphthlene in matrix spike samples B4D0452-MS1, B4D0423-MS1 and B4D0325-MS1 and matrix spike duplicate samples B4D0452-MSD1 and B4D0324-MSD1, 4-nitrophenol in matrix spike sample B4D0417-MS1, phenanthrene in matrix spike sample B4D0378-MS1, pyrene in matrix spike duplicate sample B4D0378-MSD1, arsenic, barium, beryllium, cadmium, chromium, cobalt, lead, nickel and vanadium in matrix spike sample B4D0338-MS1, lead in matrix spike sample B4D0338-MSD1, arsenic, copper and zinc in matrix spike sample B4D0439-MS1, arsenic in matrix spike duplicate sample B4D0439-MSD1, 4,4'-DDT in matrix spike sample B4D0395-MS3 and aldrin, endrin and heptachlor in matrix spike duplicate sample B4D0395-MSD1, possibly due to matrix interference.

The analytical batches were validated by the respective laboratory control sample. LCS analysis was performed at required frequencies and all recoveries were within acceptable limits, except for Pyrene in laboratory control sample B4D0406-BS1, acetone, benzene, bromochloromethane, bromodichloromethane, 2-butanone (MEK), carbon disulfide, carbon tetrachloride, chloroethane, chloroform, dibromomethane, 1,1-

9. Quality Assurance/Quality Control (QA/QC) Implementation

dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 2,2-dichloropropane, 1,2-dichloropropane, cis-1,3-dichloropropylene, 1,1-dichloropropylene, MTBE, methylene chloride, 4-methyl-2-pentanone, 1,1,1-trichloroethane, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane and tetrachloroethylene in laboratory control samples B4D2104-BS1 and B4D2107-BS1 and laboratory control duplicate sample B4D2107BSD1, acetone, bromochloromethane, bromodichloromethane, MEK, carbon tetrachloride, chloromethane, 1,2-dibromo-3-chloropropane, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 2-hexanone (MBK), MTBE, methylene chloride, 4-methyl-2-pentanone, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, and hexachlorobutadiene in laboratory control duplicate sample B4D2104-BSD1, MEK, 1,2-dibromo-3-chloropropane, MBK, MTBE, 4-methyl-2-pentanone, naphthalene, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane in laboratory control sample B4E2321-BS1, acetone, bromomethane, chloromethane, 2,2-dichloropropane, MEK, MBK, MTBE, 4-methyl-2-pentanone, naphthalene, 1,1,2,2-tetrachloroethane and 1,2,3-trichloropropane in laboratory control duplicate sample B4E2321-BSD1, acetone, MEK, 1,2-dibromo-3-chloropropane, MBK, 4-methyl-2-pentanone and bromomethane in laboratory control sample B4E2802-BS1, acetone, bromomethane, MEK and MBK in laboratory duplicate sample B4E2802-BSD1, and 1,1-dichloroethene and 1,1,2-trichlorotrifluoroethane in laboratory control samples EF41703-BS1 and EF41803-BS1 which were outside in-house established limits and may be biased high or low.

Surrogate recoveries for all samples were within acceptable control limits, except for dibromofluoromethane for American Analytics project numbers MB91208 and MB91209, 1,2-dichlorobenzene-d4, 2,4,6-tribromophenol, 2-chlorophenol-d4, 2-fluorobiphenyl, 2-fluorophenol, 4-terphenyl-d14, nitrobenzene-d5 and phenol-d5 in matrix spike sample B4D0427-MS1 and matrix spike duplicate sample B4D0427-MSD1, nitrobenzene-d5 in matrix spike samples B4D0325-MS1 and B4D0378-MS1 and matrix spike duplicate sample B4D0378-MSD1, decachlorobiphenyl and tetrachloro-m-xylene in matrix spike sample B4D0395-MS3 and matrix spike duplicate sample B4D0395-MSD3. The analytical batches were validated by the laboratory control samples.

9.3 PRECISION

Precision was evaluated by assessing the results between MS and MSD analyses, LCS and LCSD analyses, between laboratory duplicate analyses. The precision DQO was generally satisfied for the samples collected during the project. Precision was evaluated as the relative percent difference (RPD) between control sample results. RPD criteria reported by the laboratory were used to assess precision. RPDs were within the appropriate control limits and precision is considered acceptable, except for 4-chloro-3-methylphenol in matrix spike duplicate sample B4D0337-MSD1, phenanthrene in matrix spike duplicate sample B4D0378-MSD1, and arsenic, copper, lead and zinc in matrix spike duplicate B4D0439-MSD1. However, the analytical batches were validated by the LCS.

9.4 SENSITIVITY

Sensitivity was addressed by ensuring that the reporting limits provided by the laboratories met those as requested in the workplans and task orders provided to the laboratory. Data were qualified in cases where results were reported at concentrations below standard laboratory reporting limits, but above the method

detection limits that may have been required to meet the sensitivity requirements for the project. Such results were flagged by the laboratory as either J or B qualified data. These data retain a J/estimated qualifier due to potential decreased reliability at low concentration levels.

9.5 COMPLETENESS

Completeness is an evaluation of the overall sampling program with respect to data generated that is usable versus data that may have been rejected. No data was rejected during the data validation process for this project. The completeness objectives (minimum 90 percent) for this project are therefore considered to be satisfied for all analyses.

9.6 DATA VALIDATION CHART

The following table is a summary of pertinent quality indicators that were verified during the data validation process.

ACCEPTABILITY

QUALITY INDICATOR	SOIL EPA Method 6010B Target Analyte: Arsenic	SOIL EPA Method 8081A Target Analyte: 4,4'-DDT
Completeness of Laboratory Reports (e.g., laboratory, client, and sample identifications; ELAP certification number, project name, sample matrix, sample collection, preservation, preparation, extraction, analysis dates; analytical methods; analytes; reporting units and limits; dilution factors; report page numbering system; designated title and signatures)	Y See discussion Section 4	Y See discussion Section 4
Reporting Limit (RL)	Y 1 mg/kg for ATL	Y 2 µg/kg for ATL
Chain of Custody	Y	Y
Sample Containers and Conditions	Y	Y
Holding Time (<28 days)	Y	Y
Sample Preservation	Y	Y
Equipment Rinsate Blanks	Y	Y
Field Duplicates	Y	Y
Field QC Samples – Others	NA	NA
Surrogate Recoveries	NA	NA
Method Blanks	Y	Y
LCS % Recovery	Y	Y
MS/MSD % Recovery	See discussion Section 4	See discussion Section 4
MS/MSD % RPD	See discussion Section 4	See discussion Section 4
Laboratory Duplicates	See discussion Section 4	See discussion Section 4
Laboratory QC Samples – Others	NA	NA
Compound Identification	Y	Y
Compound Quantitation	Y	Y
Dilution Factors	Y	Y

9. Quality Assurance/Quality Control (QA/QC) Implementation

Data Qualifiers	Y	Y
Confirmation of Positive Samples	NA	NA
Observations of Significance	NA	NA
Case Narrative	Y	Y
Instrument Tuning	NA	NA
Initial Calibration	Lab	Lab
Calibration Verification	Lab	Lab
Interference Check Standard	NA	NA
Others	NA	NA

NOTES:
Y = acceptable or in compliance
NA = not applicable
See Discussion = see discussions in the section of Review of Data Reports
Lab = responsible by the Laboratory

10. HASP Implementation

PlaceWorks prepared a site-specific HASP pursuant to Health and Safety Code 1910.120. The plan addressed the following:

- Identification and description of potentially hazardous substances that may be encountered during field operations;
- PPE and clothing for site activities; and
- Measures that need to be implemented in the event of an emergency.

PlaceWorks field personnel reviewed the HASP prior to commencing fieldwork. Prior to initiation of field activities each day, a site safety briefing was conducted to identify potential physical and chemical hazards and measures to be taken in event of an emergency. All on-site personnel were required to sign the site safety briefing form.

During field activities, all personnel within the exclusion zone wore appropriate level D PPE. A copy of the HASP is contained in Appendix D.

10. HASP Implementation

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11. Field Variances

Soil sampling was conducted on the project area in general accordance with the PEA Guidance Manual (DTSC 2013), Interim Guidance for Sampling Agricultural Properties (Third Revision) (DTSC 2008) and DTSC's and Los Angeles Regional Water Quality Control Board's (LARWQCB) *Advisory – Active Soil Gas Investigations* (DTSC and LARWQCB 2012).

Table 10 outlines the omissions in sampling that occurred primarily during soil gas sampling at the site. Either a vacuum greater than 100 inches of water was encountered or water was in the probes that prevented soil gas samples to be collected during the sampling as outlined in the table. If a vacuum was encountered an effort was made later in the day to collect the sample.

11. Field Variances

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12. Evaluations of Applicable or Relevant Laws and Regulations Pertaining to School Sites

State of California Department of Education Code Section 17213 and Public Resources Code 21151.8 prohibit the approval of a project involving the purchase of a school site or the construction of a new elementary or secondary school by a school district unless the district first determines whether the site is:

The site of a current or former hazardous waste disposal site or solid waste disposal site and, if so, whether the wastes have been removed.

A hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to Section 25356 for removal or remedial action pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.

A site which contains one or more pipelines, situated underground or aboveground, which carries hazardous substance, acutely hazardous materials or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood.

In addition, the school district must contact the local air pollution control district to identify any facilities located within ¼-mile of the proposed school site that might reasonably be anticipated to emit hazardous emissions or handle hazardous materials, substances or waste. If any facilities exist within the ¼-mile the district must be able to make a written finding that:

a) The health risks from the facilities do not and will not constitute an actual or potential endangerment of public health to persons who attend or are employed at the proposed school; or

If potential hazards exist and have been identified, corrective measures can be implemented that mitigate air emissions to levels that do not constitute an actual potential endangerment of public health to persons who would attend or be employed at the proposed school.

For this proposed school site, a records search of any hazardous waste/substance storage, treatment, or disposal activities at the site and within a ¼-mile of the site was conducted. No evidence of the site being used as a solid waste or hazardous waste disposal site was found. There was no indication that aboveground or underground pipelines are located on the school site. A summary of agencies contacted and records reviewed is provided in Section 3.

12. Evaluations of Applicable or Relevant Laws and Regulations Pertaining to School Sites

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13. Conclusions and Recommendations

After reviewing and analyzing the analytical and human health screening evaluation results of this PEA, PlaceWorks concludes the following with respect to the site:

- Soil and soil gas sampling activities were conducted at the site on April 15-17, 2014 and soil gas sampling activities conducted at the site on April 16-18, May 20-23, June 17-18 and July 8, 2014 for the PEA.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were collected and analyzed for organochlorine pesticides (OCPs) by EPA Method 8081A to assess for potential residual OCPs from historic agricultural operations, former buildings and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082 to assess for potential PCBs from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for CAM-17 Metals by EPA Method 6010B/7471A to assess for potential metals from historic operations and fill material.

- One hundred and thirty eight (138) soil samples plus 14 duplicates were analyzed for total petroleum hydrocarbons (TPH) by EPA Method 8015M to assess for potential TPH from historic operations and fill material.

- Twenty-six (26) soil samples plus two duplicates were analyzed for semivolatile organic compounds (SVOCs) by EPA Method 8270C to assess for potential SVOCs from historic operation and fill material.

- One hundred and twelve (112) soil samples and 12 duplicates were analyzed for polyaromatic hydrocarbons (PAHs) by EPA Method 8270 SIM.

- One hundred and twenty-seven (127) and 11 duplicate soil gas samples were collected at the site and analyzed on site for VOCs using mobile laboratories by EPA Method 8260B.

- Thirteen soil gas samples were collected in Summa Canisters and analyzed at a fixed laboratory by EPA TO-15 for VOCs.

The results of the field program are summarized below:

13. Conclusions and Recommendations

- The following six pesticides were detected in soil at the site in low concentrations below screening levels: 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, chlordane, dieldrin and heptachlor. 4,4'-DDD was detected in one out of 138 samples at a concentration of 3.6 micrograms per kilogram (µg/kg, significantly below the EPA Region 9 Regional Screening Level (RSL) for 4,4'-DDD of 2,200 µg/kg. 4,4'-DDE was detected in 40 soil samples (including four duplicates) with a maximum concentration of 26 µg/kg, below the RSL of 1,600 µg/kg. 4,4-DDT was detected in 39 soil samples (including two duplicates) with a maximum concentration of 66 µg/kg, below the RSL of 1,900 µg/kg. Chlordane was detected in 14 soil samples including one duplicate with a maximum concentration of 97 µg/kg, below the RSL of 1,800 µg/kg. Dieldrin was detected in four soil samples with a maximum concentration of 7.2 µg/kg, below the RSL of 33 µg/kg. Heptachlor was detected in two soil samples with a maximum concentration of 5.7 µg/kg, below the RSL of 120 µg/kg .

- The following metals were nondetect in the 138 soil samples analyzed: antimony, beryllium, mercury, selenium, silver, and thallium. The maximum reported concentrations of all metals were below their RSLs or DTSC risk management levels (arsenic). The maximum lead concentrations was 11 mg/kg.

- TPH was reported in 14 of the 138 soil samples analyzed. The maximum concentration reported was 2,100 mg/kg in sample SG-5 collected at 0.5 feet bgs. The sample collected from the same location at 3 feet bgs was nondetect for TPH.

- The following eleven PAHs were reported in one or more soil samples: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,l)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno (1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene. The maximum reported concentrations of each PAH was below the RSL.

- SVOCs were not reported in the soil samples analyzed by EPA Method 8270C.

- PCBs were nondetect in the 138 soil samples analyzed by EPA Method 8082.

- Soil gas sampling activities were conducted at the site on four different events: April 16-18, May 20-23, June 17-18 and July 8, 2014. During the April 16th through April 18th soil gas sampling event benzene was reported in 18 out of the 33 soil gas samples collected during the first sampling event. Benzene concentrations ranged from 0.27 µg/l to the detection limit of 0.03 µg/l. During the second soil gas sampling event additional soil gas probes were installed and sampled along with probes that were viable from the first event. During the second soil gas sampling event (May 20-23), 65 soil gas samples were collected. Benzene was reported in 23 out of the 65 soil gas samples with concentrations ranging from the detection limit to 0.1 µg/l. During the third soil gas sampling event,54 soil gas samples were collected and benzene was reported in eight out of the 54 samples with the concentrations ranging from the detection limit to .053 µg/l. During the July confirmation sampling event three soil gas samples were collected and benzene was not reported in the samples.

- The preliminary human health risk screening showed that chemical concentrations would not be a risk to human health or the environment under an unrestricted, residential land use scenario.

- Laboratory data obtained were validated to assure that Data Quality Objectives (DQOs) were met and the data were suitable for use in a human health and ecological screening evaluation.

13.1 RECOMMENDATIONS

The results of the PEA support the following conclusions and recommendations:

Based on the PEA objectives, the environmental quality goals of the District, and the results of the PEA investigation, PlaceWorks has determined no further assessment is required for the site. Per California Education Code Section 17213.1, Section 3, PlaceWorks concludes that no further assessment of the site is necessary and is requesting an approval of the PEA.

13. Conclusions and Recommendations

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Tables

Tables

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TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SOIL										
B1	0' - 0.5'	Grid Sampling 8.5' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	8.5' - 9.0'	Native	D	D	D	D		D		
B2	0' - 0.5'	Grid Sampling 8' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	8.0' - 8.5'	Native	D	D	D	D		D		
B3	0' - 0.5'	Grid Sampling 7' fill	D	D	D	D	D			
	3.0' - 3.5'		D	D	D	D	D			
	5.0' - 5.5'		D	D	D	D		D		
	7.0' - 7.5'	Native	D	D	D	D		D		
B4	0' - 0.5'	Grid Sampling 7' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	7.0' - 7.5'	Native	D	D	D	D		D		
B5	0' - 0.5'	Grid Sampling 5.5' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	5.5' - 6.0'	Native	D	D	D	D		D		
B6	0' - 0.5'	Grid Sampling 7.5' fill	D	D	D	D	D			
	3.0' - 3.5'		D	D	D	D	D			
	5.0' - 5.5'		D	D	D	D		D		
	7.5' - 8.0'	Native	D	D	D	D		D		
B7	0' - 0.5'	Grid Sampling 7' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	7.0' - 7.5'	Native	D	D	D	D		D		
B8	0' - 0.5'	Grid Sampling 4.5' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	4.5' - 5.0'	Native	D	D	D	D		D		
B9	0' - 0.5'	Grid Sampling 12' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	12.0' - 12.5'	Native	D	D	D	D		D		
B10	0' - 0.5'	Grid Sampling 8.5' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	8.5' - 9.0'	Native	D	D	D	D		D		

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
B11	0' - 0.5'	Grid Sampling 10.5' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	10.5' - 11.0'	Native	D	D	D	D		D		
B12	0' - 0.5'	Grid Sampling 9.5' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	9.5' - 10.0'	Native	D	D	D	D		D		
B13	0' - 0.5'	Grid Sampling 8.5' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	8.5' - 9.0'	Native	D	D	D	D		D		
B14	0' - 0.5'	Grid Sampling 8.5' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	8.5' - 9.0'	Native	D	D	D	D		D		
B15	0' - 0.5'	Grid Sampling 7' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	7.0' - 7.5'	Native	D	D	D	D		D		
B16	0' - 0.5'	Grid Sampling 6' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	6.0' - 6.5'	Native	D	D	D	D		D		
B17	0' - 0.5'	Grid Sampling 7' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	7.0' - 7.5'	Native	D	D	D	D		D		
B18	0' - 0.5'	Grid Sampling 11' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	11.0' - 11.5'	Native	D	D	D	D		D		
B19	0' - 0.5'	Grid Sampling 14' fill	D	D	D	D		D		
	3.0' - 3.5'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	14.0' - 14.5'	Native	D	D	D	D		D		
B20	0' - 0.5'	Grid Sampling 6' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	6.0' - 6.5'	Native	D	D	D	D		D		
B21	0' - 0.5'	Grid Sampling 6' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	6.0' - 6.5'	Native	D	D	D	D		D		

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
B22	0' - 0.5'	Grid Sampling 4.5' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	4.5' - 5.0'	Native	D	D	D	D		D		
B23	0' - 0.5'	Grid Sampling 4' fill	D	D	D	D	D			
	2.5' - 3.0'		D	D	D	D	D			
	4.0' - 4.5'	Native	D	D	D	D		D		
B23 DUP	0' - 0.5'	Duplicate	D DUP	D DUP	D DUP	D DUP	D DUP			
	2.5' - 3.0'		D DUP	D DUP	D DUP	D DUP	D DUP			
	4.0' - 4.5'		D DUP	D DUP	D DUP	D DUP		D DUP		
B24	0' - 0.5'	Grid Sampling 13.5' fill	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	5.0' - 5.5'		D	D	D	D		D		
	7.5' - 8.0'		D	D	D	D		D		
	10.0' - 10.5'				D			D		
	13.5' - 14.0'	Native	D	D	D	D		D		
B24 DUP	0' - 0.5'	Duplicate	D DUP	D DUP	D DUP	D DUP		D DUP		
	2.5' - 3.0'		D DUP	D DUP	D DUP	D DUP		D DUP		
	5.0' - 5.5'		D DUP	D DUP	D DUP	D DUP		D DUP		
	7.5' - 8.0'		D DUP	D DUP	D DUP	D DUP		D DUP		
	10.0' - 10.5'									
	13.5' - 14.0'		D DUP	D DUP	D DUP	D DUP		D DUP		
B25	0' - 0.5'	Grid Sampling 13' fill	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	5.0' -5.5'		D	D	D	D		D		
	7.5' - 8.0'		D	D	D	D		D		
	13.0' - 13.5'	Native	D	D	D	D		D		
SG-1	0' - 0.5'	Former UST, 6' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-1 DUP	0' - 0.5'	Duplicate	D DUP	D DUP	D DUP	D DUP		D DUP		
	2.5' - 3.0'		D DUP	D DUP	D DUP	D DUP		D DUP		
SG-2	0' - 0.5'	Former UST, 6' Fill Material	D	D	D	D		D		
	1.5' - 2.0'		D							
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SG-3	0' - 0.5'	Former UST, 6' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-4	0' - 0.5'	Former UST, 8' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-4 DUP	0' - 0.5'	Duplicate	D DUP	D DUP	D DUP	D DUP		D DUP		
	2.5' - 3.0'		D DUP	D DUP	D DUP	D DUP		D DUP		
SG-5	0' - 0.5'	Former UST, 8' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-6	0' - 0.5'	Former UST, 14' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-7	0' - 0.5'	Former UST, 12' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-8	0' - 0.5'	Former UST, 6' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-9	0' - 0.5'	Former UST, 6' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
	14.5' - 15.0'		D	D	D	D		D		
SG-10	0' - 0.5'	Former UST, 4' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-10 DUP	0' - 0.5'	Duplicate	D DUP	D DUP	D DUP	D DUP		D DUP		
	2.5' - 3.0'		D DUP	D DUP	D DUP	D DUP		D DUP		

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SG-11	0' - 0.5'	Former UST, 4' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SG-12	0' - 0.5'	Former Oil/Water Separator, 14' Fill Material	D	D	D	D		D		
	2.5' - 3.0'		D	D	D	D		D		
	4.5' - 5.0'		D	D	D	D		D		
	9.5' - 10.0'		D	D	D	D		D		
SOIL GAS										
SG-1	5'	Former UST							D	
	15'								3D (Purge Volume Test)	
SG-2	5'	Former UST							D	
	15'								D	
	25'	Step-down Native							D	
SG-3	5'	Former UST							D	
	15'								D	
SG-3	15'	Duplicate							D DUP	
SG-4	5'	Former UST							3D	
	15'								3D	
SG-5	5'	Former UST							3D	2D
	15'								3D	D
	25'	Step-down Native							3D	
SG-6	10'	Former UST							2D	D
	15'								3D	
SG-6 DUP	15'	Duplicate							D DUP	
SG-7	5'	Former UST							3D	3D
	15'								3D	
	25'	Step-down Native							3D	
SG-7 DUP	15'	Duplicate							D DUP	
	25'								2D DUP	
SG-8	5'	Former UST								
	15'								D	
SG-9	5'	Former UST							D	
	15'								D	
SG-10	5'	Former UST							D	
	15'								D	

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SG-11	5'	Former UST							D	
	15'								D	
SG-12	10'	Former Oil Water Separator							D	
	15'								3D	
SG-12	10'	Duplicate							D DUP	
SG-13	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-14	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-14 DUP	5'	Duplicate							D DUP	
SG-15	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-16	5'	Step-out Disturbed Native							D	
	15'	Step-out Native							2D	
SG-16 DUP	5'	Duplicate							D DUP	
SG-17	5'	Step-out Disturbed Native							D	
	15'	Step-out Native							2D	
SG-18	5'	Step-out Disturbed Native							2D	D
	15'	Step-out Native							2D	D
SG-19	5'	Step-out Imported Fill							2D	D
	15'	Step-out Native							2D	
SG-20	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-21	5'	Step-out Imported Fill							D	
	15'	Step-out Native							2D	
SG-21 DUP	5'	Duplicate							D DUP	
SG-22	5'	Step-out Disturbed Native							D	
	15'	Step-out Imported Fill							2D	D

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SG-23	5'	Step-out Disturbed Native							2D	
	15'	Step-out Native							2D	
SG-23 DUP	15'	Duplicate							D DUP	
SG-24	5'	Step-out Disturbed Native							D	D
	15'	Step-out Native							2D	
SG-25	5'	Step-out Disturbed Native							2D	
	15'	Step-out Native							2D	
SG-26	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-27	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-28	5'	Step-out Disturbed Native							2D	
	15'	Step-out Native							2D	
SG-29	5'	Step-out Disturbed Native							2D	
	15'	Step-out Native							2D	
SG-30	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	
SG-30 DUP	5'	Duplicate							D DUP	
SG-31	5'	Step-out Native							2D	
	15'	Step-out Native							2D	
SG-32	5'	Step-out Disturbed Native							2D	
SG-33	5'	Step-out Imported Fill							2D	
	15'	Step-out Native							2D	

TABLE 1
SUMMARY OF SAMPLING PROGRAM
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)	Rationale	EPA 8081A OCPs	EPA 8082 PCBs	EPA 6010B/7471A CAM-17 Metals	EPA 8015M TPH	EPA 8270 C SVOCs	EPA 8270 SIM PAHs	EPA 8260B VOCs	EPA TO-15 VOCs
SG-34	5'	Step-out Disturbed Native							D	D
1 EB	NA	Quality Control	D	D	D	D		D		
TOTAL			**138 D PS, 14 D DUPS, 3 EB**	**138 D PS, 14 D DUPS, 3 EB**	**138 D PS, 14 D DUPS, 3 EB**	**138 D PS, 14 D DUPS, 3 EB**	**26 D PS, 2 D DUPs, 3 EB**	**112 D PS, 12 D DUPS, 3 EB**	**127 D PS Soil Gas, 11 D DUP Soil Gas**	**13 D PS Soil Gas**

Notes:
D = Discrete Sample; C = Composite Sample
DUP = duplicate; EB = equipment blank
Field duplicates will be collected at a frequency of approximately 10 percent of the primary samples collected.
Equipment blanks will be collected at a frequency of one per day of field activities.
For soil samples that assess fill material, PAHs will be analyzed for each sample where TPH concentration is at or greater than 1,000 mg/kg.

TABLE 2
SUMMARY TABLE OF THE DEPTH OF THE FILL/NATIVE INTERFACE
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)
B1	8.5
B2	8
B3	7
B4	7
B5	5.5
B6	7.5
B7	7
B8	4.5
B9	12
B10	8.5
B11	10.5
B12	9.5
B13	8.5
B14	8.5
B15	7
B16	6
B17	7
B18	11
B19	14
B20	6
B21	6
B22	4.5
B23	4
B24	13.5
B25	13
SG-1	6
SG-2	6
SG-3	6
SG-4	8
SG-5	8
SG-6	14
SG-7	12
SG-8	6
SG-9	6
SG-10	4
SG-11	4
SG-12	14
SG-13	6
SG-14	6
SG-15	4
SG-16	13
SG-17	7
SG-18	8
SG-19	6.5
SG-20	6
SG-21	4

TABLE 2
SUMMARY TABLE OF THE DEPTH OF THE FILL/NATIVE INTERFACE
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Sample Number	Depth (feet bgs)
SG-22	8.5
SG-23	7
SG-24	10.5
SG-25	11
SG-26	5
SG-27	4.5
SG-28	7
SG-29	10
SG-30	6
SG-31	4
SG-32	>5
SG-33	4
SG-34	>5

Notes:
Feet bgs - Feet below ground surface
Fill combination of overexcavated native and import
Based on field observation

TABLE 3
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS (VOCs) IN SOIL GAS
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Concentration (micrograms per liter (µg/L))

Sample Number	Sample Date	Acetone	Benzene	n-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	1,1-Dichloroethane	1,1-Difluoroethane	Ethylbenzene	4-Ethyltoluene	Heptane	Hexane	Methylene Chloride	Napthalene	n-Propylbenzene	Propylene	Tetrachloroethylene	1,1,1,2-Tetrafluoroethane	Toluene	1,1,1-Trichloroethane	Trichlorofluoromethane	1,1,2-Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,2,4-Trimethylpentane	Xylenes, m-,p-	Xylene, o-
SG-1@5'	4/16/2014	ND<1.0	**0.12**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.25**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.10**	ND<0.10
SG-1@15' (PV1)	4/16/2014	ND<1.0	**0.033**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.16**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.15**	ND<0.10
SG-1@15' (PV3)	4/16/2014	ND<1.0	**0.030**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.17**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.18**	ND<0.10
SG-1@15' (PV10)	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.16**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.17**	ND<0.10
SG-2@5'	4/16/2014	**2.3**	**0.14**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.29**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-2@15'	4/16/2014	ND<1.0	**0.040**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.10**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-2@25'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-3@5'	4/16/2014	ND<1.0	**0.14**	ND<0.10	**0.11**	ND<0.020	ND<0.10	ND<0.10	NA	**0.11**	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.47**	ND<0.10	ND<0.10	ND<0.50	**0.30**	ND<0.10	NA	**0.58**	**0.14**
SG-3@15'	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.17**	ND<0.10
SG-3@15' DUP	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.14**	ND<0.10
SG-4@5'	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-4@5'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-4@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-4@15'	4/16/2014	ND<1.0	**0.030**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.10**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-4@15'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-4@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-5@5'	4/16/2014	ND<1.0	**0.23**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	**0.12**	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.71**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.53**	**0.13**
SG-5@5' *	4/18/2014	**0.104**	**0.046**	NA	ND<0.0127	**0.106**	**0.247**	**0.0701**	NA	**0.0751**	**0.0712**	**0.0446**	**0.0693**	**0.0559**	NA	NA	NA	ND<0.0274	NA	**0.245**	ND<0.0220	ND<0.0230	ND<0.0309	**0.0454**	**0.0296**	**NA**	**0.320**	**0.122**
SG-5@5'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-5@5' *	5/23/2014	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
SG-5@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	**1.08**	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-5@15'	4/16/2014	ND<1.0	**0.062**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.30**	ND<0.10	ND<0.10	ND<0.50	**0.11**	ND<0.10	NA	**0.27**	ND<0.10
SG-5@15' *	4/18/2014	**0.169**	**0.0245**	NA	ND<0.0127	ND<0.03	ND<0.02	ND<0.02	NA	**0.0963**	**0.10**	**0.0248**	ND<0.01	ND<0.01	NA	NA	NA	ND<0.0275	NA	**0.296**	ND<0.0221	ND<0.0231	ND<0.0311	**0.0535**	**0.0278**	**NA**	**0.400**	**0.137**
SG-5@15'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-5@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	**0.108**	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-5@25'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-5@25'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-5@25'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-6@10'	4/17/2014	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V
SG-6@10'	5/20/2014	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V
SG-6@10'	5/22/2014	ND<0.5	**0.05**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-6@10'	6/18/2014	NA	**0.026**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-6@10' *	6/18/2014	NA	**0.012**	**0.0062**	NA	ND<0.0064	ND<0.0049	ND<0.0041	**0.0065**	**0.047**	NA	NA	NA	**0.0037**	ND<0.0053	ND<0.0050	NA	**0.390**	NA	**0.062**	**0.016**	**0.0063**	**0.0083**	**0.130**	**0.039**	NA	**0.240**	**0.093**
SG-6@15'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-6@15'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-6@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-6@15' DUP	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-7@5'	4/17/2014	ND<1.0	**0.27**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	**0.29**	NA	NA	NA	ND<0.50	ND<0.030	**0.13**	NA	ND<0.10	NA	**1.2**	ND<0.10	ND<0.10	ND<0.50	**0.59**	ND<0.10	NA	**1.3**	**0.29**
SG-7@5' *	4/18/2014	**0.106**	ND<0.01	NA	ND<0.0126	ND<0.03	ND<0.02	ND<0.02	NA	ND<0.02	ND<0.02	ND<0.02	**0.0141**	ND<0.01	NA	NA	NA	ND<0.0272	NA	**0.0573**	ND<0.0219	ND<0.229	ND<0.0308	ND<0.02	ND<0.02	NA	**0.0573**	ND<0.02
SG-7@5'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-7@5' *	5/23/2014	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
SG-7@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-7@5' *	6/18/2014	NA	**0.014**	ND<0.0056	NA	ND<0.0064	ND<0.0049	ND<0.0041	ND<0.0055	**0.011**	NA	NA	NA	**0.0044**	ND<0.0053	ND<0.0050	NA	**0.210**	NA	**0.019**	ND<0.0056	ND<0.0056	ND<0.0077	**0.040**	**0.011**	NA	**0.060**	**0.023**
SG-7@15'	4/17/2014	ND<1.0	**0.031**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.16**	ND<0.10	ND<0.10	ND<0.50	**0.28**	ND<0.10	NA	**0.25**	ND<0.10
SG-7@15' DUP	4/17/2014	ND<1.0	**0.040**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.19**	ND<0.10	ND<0.10	ND<0.50	**0.32**	ND<0.10	NA	**0.29**	ND<0.10
SG-7@15'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-7@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-7@25'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-7@25' DUP	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-7@25'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-7@25' DUP	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-7@25'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-8@5'	4/17/2014	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NA	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V
SG-8@15'	4/17/2014	ND<1.0	**0.048**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.13**	ND<0.10	ND<0.10	ND<0.50	**0.15**	ND<0.10	NA	**0.18**	ND<0.10
SG-9@5'	4/17/2014	ND<1.0	**0.034**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.12**	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	**0.13**	ND<0.10
SG-9@15'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	**0.12**	ND<0.10	NA	**0.18**	ND<0.10
SG-10@5'	4/17/2014	ND<1.0	**0.051**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	**0.15**	ND<0.10	NA	**0.40**	ND<0.10
SG-10@15'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-11@5'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-11@15'	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-12@10'	4/17/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-12@10'	5/20/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-12@10'	5/22/2014	ND<0.5	**0.07**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.10**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-12@10' DUP	5/22/2014	ND<0.5	**0.07**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.12**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-12@10'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-12@15'	4/17/2014	ND<1.0	**0.045**	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	**0.16**	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	**0.15**	ND<0.10
SG-12@15'	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1

TABLE 3
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS (VOCs) IN SOIL GAS
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per liter (µg/L))																								
Sample Number	**Sample Date**	**Acetone**	**Benzene**	**n-Butylbenzene**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**1,1-Dichloroethane**	**1,1-Difluoroethane**	**Ethylbenzene**	**4-Ethyltoluene**	**Heptane**	**Hexane**	**Methylene Chloride**	**Napthalene**	**n-Propylbenzene**	**Propylene**	**Tetrachloroethylene**	**1,1,1,2-Tetrafluoroethane**	**Toluene**	**1,1,1-Trichloroethane**	**Trichlorofluoromethane**	**1,1,2-Trichlorotrifluoroethane**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**Xylenes, m-,p-**	**Xylene, o-**
SG-12@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-13@5'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-13@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	**0.509**	ND<0.10	**0.472**	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-13@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-13@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	**0.556**	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-14@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-14@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-14@5' DUP	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-14@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-14@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-15@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-15@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-15@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-15@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-16@5'	5/23/2014	NA	**0.09**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.11**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-16@5' DUP	5/23/2014	NA	**0.06**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.09**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-16@5'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-16@15'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	**7.5**	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-16@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	**3.32**	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-17@5'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-17@5'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-17@15'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-17@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-18@5'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-18@5'	6/18/2014	NA	**0.053**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-18@5' *	7/8/2014	NA	ND<0.0032	ND<0.0056	NA	ND<0.0064	ND<0.0049	ND<0.0041	NA	ND<0.0044	NA	NA	NA	ND<0.0035	ND<0.030	ND<0.0050	NA	**0.011**	**0.640**	ND<0.0038	ND<0.0055	ND<0.0056	ND<0.0077	ND<0.0050	ND<0.0050	NA	ND<0.0088	ND<0.0044
SG-18@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-18@15'	6/18/2014	NA	**0.039**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-18@15' *	7/8/2014	NA	ND<0.0032	ND<0.0056	NA	ND<0.0064	ND<0.0049	ND<0.0041	NA	ND<0.0044	NA	NA	NA	ND<0.0035	ND<0.030	ND<0.0050	NA	**0.034**	ND<0.0085	ND<0.0038	ND<0.0055	ND<0.0056	ND<0.0077	ND<0.0050	ND<0.0050	NA	ND<0.0088	ND<0.0044
SG-19@5'	5/22/2014	ND<0.5	**0.08**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.21**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-19@5' *	5/23/2014	ND<0.10	**0.061**	NA	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.10	NA	**0.14**	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
SG-19@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-19@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-19@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-20@5'	5/22/2014	ND<0.5	**0.05**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.20**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-20@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-20@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-20@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-21@5'	5/21/2014	ND<0.5	**0.052**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.19**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-21@5' DUP	5/21/2014	ND<0.5	**0.046**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.17**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-21@5'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-21@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-21@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-22@5'	5/23/2014	NA	**0.06**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.1**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-22@5'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
SG-22@15'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	**0.21**	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-22@15'	6/17/2014	NA	**0.029**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-22@15' *	7/8/2014	NA	ND<0.0032	ND<0.0056	NA	ND<0.0064	ND<0.0049	ND<0.0041	NA	ND<0.0044	NA	NA	NA	ND<0.0035	ND<0.030	ND<0.0050	NA	**0.0085**	ND<0.0085	ND<0.0038	ND<0.0055	**0.017**	ND<0.0077	ND<0.0050	ND<0.0050	NA	ND<0.0088	ND<0.0044
SG-23@5'	5/23/2014	NA	**0.03**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-23@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-23@15'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-23@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-23@15' DUP	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-24@5'	5/22/2014	ND<0.5	**0.08**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.14**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-24@5' *	5/23/2014	ND<0.10	**0.08**	NA	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	**0.32**	**0.67**	ND<0.10	ND<0.030	NA	**4.1**	ND<0.10	NA	**0.12**	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	**0.17**	ND<0.10	ND<0.10
SG-24@5'	6/18/2014	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V
SG-24@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-24@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-25@5'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-25@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-25@15'	5/22/2014	ND<0.5	**0.05**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-25@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-26@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-26@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-26@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-26@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-27@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1

TABLE 3
SUMMARY TABLE OF VOLATILE ORGANIC COMPOUNDS (VOCs) IN SOIL GAS
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per liter (µg/L))																								
Sample Number	**Sample Date**	**Acetone**	**Benzene**	**n-Butylbenzene**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**1,1-Dichloroethane**	**1,1-Difluoroethane**	**Ethylbenzene**	**4-Ethyltoluene**	**Heptane**	**Hexane**	**Methylene Chloride**	**Napthalene**	**n-Propylbenzene**	**Propylene**	**Tetrachloroethylene**	**1,1,1,2-Tetrafluoroethane**	**Toluene**	**1,1,1-Trichloroethane**	**Trichlorofluoromethane**	**1,1,2-Trichlorotrifluoroethane**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**Xylenes, m-,p-**	**Xylene, o-**
SG-27@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-27@15'	5/21/2014	ND<0.5	**0.054**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.13**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-27@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-28@5'	5/23/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-28@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	**0.046**	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-28@15'	5/23/2014	NA	**0.08**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.12**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-28@15'	6/17/2014	NA	**0.020**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-29@5'	5/23/2014	NA	**0.06**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.1**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-29@5'	6/17/2014	NA	**0.021**	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-29@15'	5/23/2014	NA	**0.05**	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.1**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
SG-29@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-30@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-30@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-30@5' DUP	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-30@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-30@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-31@5'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-31@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-31@15'	5/21/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-31@15'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-32@5'	5/22/2014	ND<0.5	**0.07**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.11**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-32@5'	6/17/2014	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V	NS-V
SG-32@5'	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-33@5'	5/21/2014	ND<0.5	**0.054**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.19**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-33@5'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-33@15'	5/22/2014	ND<0.5	ND<0.030	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-33@15'	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
SG-34@5'	5/23/2014	ND<0.5	**0.1**	ND<0.10	ND<0.1	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	**0.16**	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.2	ND<0.1
SG-34@5' *	5/23/2014	ND<0.10	**0.075**	NA	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.030	NA	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
SG-34@5'	6/18/2014	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W	NS-W
Ambient Air	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	4/16/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	4/17/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	5/20/2014	NA	ND<0.03	ND<0.10	NA	ND<0.025	ND<0.1	ND<0.1	NA	ND<0.1	NA	NA	NA	ND<0.5	ND<0.030	NA	NA	ND<0.10	NA	ND<0.1	ND<0.10	ND<0.1	ND<0.50	NA	NA	NA	ND<0.1	ND<0.1
Ambient Air	5/21/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	5/22/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	ND<0.030	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	5/23/2014	ND<1.0	ND<0.030	ND<0.10	ND<0.10	ND<0.020	ND<0.10	ND<0.10	NA	ND<0.10	NA	NA	NA	ND<0.50	**0.57**	ND<0.10	NA	ND<0.10	NA	ND<0.10	ND<0.10	ND<0.10	ND<0.50	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	6/17/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
Ambient Air	6/18/2014	NA	ND<0.02	ND<0.10	NA	ND<0.02	ND<0.02	ND<0.10	ND<0.100	ND<0.10	NA	NA	NA	ND<0.10	ND<0.020	ND<0.10	NA	ND<0.020	NA	ND<0.20	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	NA	ND<0.10	ND<0.10
J&E Site Specific Screening Level Residential			0.036			0.390			0.54											1550				45.50	230.00		585	580

Notes:
Samples analyzed by EPA Method 8260B by American Analytics.
The complete laboratory analytical reports are included as Appendix E.
ND - Non detect at the established method detection limit.
NS - Not sampled; V - Vacuum was over 100 inches of water; W - Water in probe
NA - Not analyzed
* - Analyzed by Method TO-15 by Associated Laboratories.

TABLE 4
SUMMARY TABLE OF ORGANOCHLORINE PESTICIDES IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])					
Sample Number	**Sample Date**	**4,4´-DDD**	**4,4´-DDE**	**4,4´-DDT**	**Chlordane**	**Dieldrin**	**Heptachlor**
B-1@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-1@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-1@5.5'	4/16/2014	<2.0	<2.0	<2.0	**13**	<2.0	<1.0
B-1@9.0'	4/16/2014	<2.0	<2.0	**13**	**9.8**	<2.0	<1.0
B-2@0.5'	4/16/2014	<2.0	**3.8**	**5.2**	**16**	<2.0	<1.0
B-2@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-2@5.5'	4/16/2014	<2.0	**4.9**	**7.6**	**21**	<2.0	<1.0
B-2@8.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-3@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-3@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-3@5.5'	4/16/2014	<2.0	<2.0	<2.0	**17**	<2.0	**1.2**
B-3@7.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-4@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-4@3.0'	4/16/2014	<2.0	**9.5**	**27**	<8.5	<2.0	<1.0
B-4@7.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-5@0.5'	4/16/2014	<2.0	<2.0	**3.4**	<8.5	<2.0	<1.0
B-5@3.0'	4/16/2014	<2.0	**2.7**	**2.7**	<8.5	<2.0	<1.0
B-5@6.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-6@0.5'	4/16/2014	<2.0	**6.8**	<2.0	<8.5	<2.0	<1.0
B-6@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-6@5.5'	4/16/2014	<2.0	**2.7**	**3.0**	<8.5	<2.0	<1.0
B-6@8.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-7@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-7@3.0'	4/16/2014	<2.0	<2.0	**3.3**	<8.5	<2.0	<1.0
B-7@7.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-8@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-8@3.0'	4/16/2014	<2.0	**6.8**	<2.0	<8.5	<2.0	<1.0
B-8@5.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-9@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-9@12.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-9@3.5'	4/16/2014	<2.0	<2.0	**2.4**	<8.5	<2.0	<1.0
B-9@5.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-10@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-10@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-10@5.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-10@9.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-11@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-11@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-11@5.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-11@11.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-12@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-12@3.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-12@5.5'	4/16/2014	<2.0	**19**	**9.6**	<8.5	**7.2**	<1.0
B-12@10.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-13@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-13@3.0'	4/16/2014	<2.0	**21**	**66**	<8.5	**2.1**	<1.0
B-13@9.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-14@0.5'	4/16/2014	<2.0	**2.8**	**3.1**	<8.5	<2.0	<1.0
B-14@3.0'	4/16/2014	<2.0	<2.0	<2.0	**97**	<2.0	**5.7**
B-14@9.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-15@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-15@3.0'	4/16/2014	<2.0	**7.9**	<2.0	<8.5	<2.0	<1.0
B-15@7.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-16@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-16@3.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-16@6.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-17@0.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-17@3.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-17@5.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0

TABLE 4
SUMMARY TABLE OF ORGANOCHLORINE PESTICIDES IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])					
Sample Number	**Sample Date**	**4,4´-DDD**	**4,4´-DDE**	**4,4´-DDT**	**Chlordane**	**Dieldrin**	**Heptachlor**
B-17@7.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-18@0.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-18@3.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-18@5.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-18@11.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-19@0.5'	4/17/2014	<2.0	**15**	**8.3**	<8.5	<2.0	<1.0
B-19@3.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-19@5.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-19@14.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-20@0.5'	4/17/2014	<2.0	**7.7**	**24**	<8.5	**2.3**	<1.0
B-20@3.0'	4/17/2014	<2.0	**2.3**	**2.6**	<8.5	<2.0	<1.0
B-20@6.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-21@0.5'	4/17/2014	<2.0	**2.5**	<2.0	<8.5	<2.0	<1.0
B-21@3.0'	4/17/2014	<2.0	**2.2**	<2.0	<8.5	<2.0	<1.0
B-21@6.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-22@0.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-22@3.0'	4/17/2014	<2.0	**3.6**	<2.0	<8.5	<2.0	<1.0
B-22@5.0'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-23@0.5'	4/17/2014	<2.0	**9.5**	**2.3**	<8.5	<2.0	<1.0
B-23DUP@0.5'	4/17/2014	<2.0	**4.3**	<2.0	<8.5	<2.0	<1.0
B-23@3.0'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-23DUP@3.0'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-23@4.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-23DUP@4.5'	4/17/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24DUP@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24@3.0'	4/16/2014	<2.0	**2.2**	**2.7**	<8.5	<2.0	<1.0
B-24DUP@3.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24@5.5'	4/16/2014	<2.0	**5.9**	**3.1**	**18**	<2.0	<1.0
B-24DUP@5.5'	4/16/2014	<2.0	**6.1**	**16**	**14**	<2.0	<1.0
B-24@8.0'	4/16/2014	<2.0	**2.3**	**5.8**	**10**	<2.0	<1.0
B-24DUP@8.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24@14.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-24DUP@14.0'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-25@0.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-25@13.5'	4/16/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
B-25@3.0'	4/16/2014	<2.0	**5.6**	**6.3**	<8.5	<2.0	<1.0
B-25@5.5'	4/16/2014	<2.0	**2.9**	**3.1**	<8.5	<2.0	<1.0
B-25@8.0'	4/16/2014	**3.6**	**6.8**	**42**	**49**	**3.7**	<1.0
SG-1@0.5'	4/15/2014	<2.0	**4.8**	<2.0	<8.5	<2.0	<1.0
SG-1DUP@0.5'	4/15/2014	<2.0	**4.4**	<2.0	<8.5	<2.0	<1.0
SG-1@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-1DUP@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-1@5.0'	4/15/2014	<2.0	<2.0	**4.5**	<8.5	<2.0	<1.0
SG-1@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-2@0.5'	4/15/2014	<2.0	**26**	<2.0	<8.5	<2.0	<1.0
SG-2@2.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-2@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-2@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-2@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-3@0.5'	4/15/2014	<2.0	**7.2**	**11**	<8.5	<2.0	<1.0
SG-3@3.0'	4/15/2014	<2.0	<2.0	<2.0	**12**	<2.0	<1.0
SG-3@5.0'	4/15/2014	<2.0	**2.3**	**2.5**	<8.5	<2.0	<1.0
SG-3@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-4@0.5'	4/15/2014	<2.0	**7.0**	**4.6**	<8.5	<2.0	<1.0
SG-4DUP@0.5'	4/15/2014	<2.0	**3.5**	**3.8**	<8.5	<2.0	<1.0
SG-4@3.0'	4/15/2014	<2.0	<2.0	<2.0	**16**	<2.0	<1.0
SG-4DUP@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-4@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0

TABLE 4
SUMMARY TABLE OF ORGANOCHLORINE PESTICIDES IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])					
Sample Number	**Sample Date**	**4,4´-DDD**	**4,4´-DDE**	**4,4´-DDT**	**Chlordane**	**Dieldrin**	**Heptachlor**
SG-4@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-5@0.5'	4/15/2014	<2.0	**7.8**	<2.0	<8.5	<2.0	<1.0
SG-5@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-5@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-5@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-6@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-6@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-6@5.0'	4/15/2014	<2.0	<2.0	<2.0	**12**	<2.0	<1.0
SG-6@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-7@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-7@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-7@5.0'	4/15/2014	<2.0	**7.2**	<2.0	**11**	<2.0	<1.0
SG-7@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-8@0.5'	4/15/2014	<2.0	**2.1**	<2.0	<8.5	<2.0	<1.0
SG-8@3.0'	4/15/2014	<2.0	**4.8**	<2.0	<8.5	<2.0	<1.0
SG-8@5.0'	4/15/2014	<2.0	**6.6**	<2.0	<8.5	<2.0	<1.0
SG-8@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-9@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-9@3.0'	4/15/2014	<2.0	**2.3**	<2.0	<8.5	<2.0	<1.0
SG-9@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-9@15.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-10@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-10DUP@0.5'	4/15/2014	<2.0	**2.4**	<2.0	<8.5	<2.0	<1.0
SG-10@3.0'	4/15/2014	<2.0	**2.6**	<2.0	<8.5	<2.0	<1.0
SG-10DUP@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-10@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-10@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-11@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-11@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-11@5.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-11@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-12@0.5'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-12@3.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
SG-12@5.0'	4/15/2014	<2.0	<2.0	**7.5**	<8.5	<2.0	<1.0
SG-12@10.0'	4/15/2014	<2.0	<2.0	<2.0	<8.5	<2.0	<1.0
Maximum		3.6	26	66	97	7.2	5.7
RSL		**2200**	**1600**	**1900**	**1800**	**33**	**120**
EQUIPMENT BLANK							
		Concentration (micrograms per liter [µg/l])					
EB041514	04/15/2014	<0.05	<0.05	<0.05	<0.25	<0.05	<0.02
EB041614	04/16/2014	<0.05	<0.05	<0.05	<0.25	<0.05	<0.02
EB041714	04/17/2014	<0.05	<0.05	<0.05	<0.25	<0.05	<0.02

Notes:
Samples analyzed by EPA Method 8081A.
The complete laboratory analytical reports are included in Appendix E.
< - Non detect at the established method detection limit.
RSL - Regional Screening Level Residential Soil Table May 2014

TABLE 5
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Concentration (milligrams per kilogram [mg/kg])																		
Sample Number	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium (III)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
B-1@0.5'	4/16/2014	<2.0	3.5	98	<1.0	<1.0	8.2	3	6	2.1	<0.10	<1.0	6.4	<1.0	<1.0	<1.0	29	28
B-1@3.5'	4/16/2014	<2.0	3.4	100	<1.0	<1.0	8.8	3.1	5.9	2.1	<0.10	<1.0	6.7	<1.0	<1.0	<1.0	31	28
B-1@5.5'	4/16/2014	<2.0	3	110	<1.0	<1.0	8.7	3.4	5.8	3.2	<0.10	<1.0	5.8	<1.0	<1.0	<1.0	30	31
B-1@9.0'	4/16/2014	<2.0	1.9	84	<1.0	<1.0	6.8	3.7	3.5	1.6	<0.10	<1.0	3.7	<1.0	<1.0	<1.0	23	25
B-2@0.5'	4/16/2014	<2.0	3.2	110	<1.0	<1.0	12	5.4	6.7	11	<0.10	<1.0	7.2	<1.0	<1.0	<1.0	35	45
B-2@3.5'	4/16/2014	<2.0	2.5	110	<1.0	<1.0	11	5.3	5.5	2	<0.10	<1.0	6.6	<1.0	<1.0	<1.0	35	36
B-2@5.5'	4/16/2014	<2.0	3.4	100	<1.0	<1.0	12	5.4	6.3	3.9	<0.10	<1.0	7.2	<1.0	<1.0	<1.0	37	41
B-2@8.5'	4/16/2014	<2.0	3.2	120	<1.0	<1.0	12	5.2	6.1	2.1	<0.10	1	8.4	<1.0	<1.0	<1.0	38	38
B-3@0.5'	4/16/2014	<2.0	5.5	140	<1.0	1.5	18	6.4	9.2	3.2	<0.10	1.5	11	<1.0	<1.0	<1.0	53	49
B-3@3.5'	4/16/2014	<2.0	3.1	120	<1.0	<1.0	13	5.2	6	2.6	<0.10	<1.0	7.8	<1.0	<1.0	<1.0	36	39
B-3@5.5'	4/16/2014	<2.0	3.5	110	<1.0	<1.0	12	5.5	6.1	4.3	<0.10	<1.0	6.8	<1.0	<1.0	<1.0	36	53
B-3@7.5'	4/16/2014	<2.0	5.2	130	<1.0	1.5	16	5.9	8.6	3	<0.10	1.4	11	<1.0	<1.0	<1.0	50	47
B-4@0.5'	4/16/2014	<2.0	4.1	110	<1.0	1.2	13	5.4	6.8	2.4	<0.10	1.2	8.6	<1.0	<1.0	<1.0	42	41
B-4@3.0'	4/16/2014	<2.0	3.4	110	<1.0	<1.0	12	5.1	6.3	4.7	<0.10	<1.0	6.9	<1.0	<1.0	<1.0	35	42
B-4@7.5'	4/16/2014	<2.0	7.2	170	<1.0	2.7	23	7.9	13	4	<0.10	1.9	15	<1.0	<1.0	<1.0	71	63
B-5@0.5'	4/16/2014	<2.0	3.4	110	<1.0	<1.0	12	5.1	6.1	2.5	<0.10	<1.0	7.3	<1.0	<1.0	<1.0	36	38
B-5@3.0'	4/16/2014	<2.0	2.3	88	<1.0	<1.0	7.6	4.3	4.8	3.5	<0.10	<1.0	4.4	<1.0	<1.0	<1.0	27	33
B-5@6.0'	4/16/2014	<2.0	4.6	120	<1.0	1.5	16	6	9	3	<0.10	1.3	10	<1.0	<1.0	<1.0	49	49
B-6@0.5'	4/16/2014	<2.0	3	97	<1.0	<1.0	9.1	4.4	5.1	2.8	<0.10	<1.0	6	<1.0	<1.0	<1.0	30	32
B-6@3.5'	4/16/2014	<2.0	2.9	110	<1.0	<1.0	10	5.2	5.7	3	<0.10	<1.0	5.7	<1.0	<1.0	<1.0	32	38
B-6@5.5'	4/16/2014	<2.0	3.1	120	<1.0	<1.0	11	5.5	6.6	9.4	<0.10	<1.0	6.5	<1.0	<1.0	<1.0	35	46
B-6@8.0'	4/16/2014	<2.0	5	130	<1.0	1.4	16	6.1	8.5	2.9	<0.10	1.4	10	<1.0	<1.0	<1.0	50	47
B-7@0.5'	4/16/2014	<2.0	2.4	99	<1.0	<1.0	8.8	4.6	5	1.8	<0.10	<1.0	5.6	<1.0	<1.0	<1.0	30	32
B-7@3.0'	4/16/2014	<2.0	5.5	140	<1.0	<1.0	13	4.9	9.8	3.3	<0.10	1	11	<1.0	<1.0	<1.0	48	47
B-7@7.5'	4/16/2014	<2.0	3.5	86	<1.0	<1.0	7.4	2.8	5.9	2.4	<0.10	<1.0	5.9	<1.0	<1.0	<1.0	28	26
B-8@0.5'	4/16/2014	<2.0	4.1	120	<1.0	<1.0	9.7	4	7.5	2.7	<0.10	<1.0	7.5	<1.0	<1.0	<1.0	37	36
B-8@3.0'	4/16/2014	<2.0	3	93	<1.0	<1.0	6.9	3.4	6	4.5	<0.10	<1.0	4.8	<1.0	<1.0	<1.0	27	33
B-8@5.0'	4/16/2014	<2.0	6.5	150	<1.0	1.4	15	5.2	11	3.7	<0.10	1.5	13	<1.0	<1.0	<1.0	49	49
B-9@0.5'	4/16/2014	<2.0	4	120	<1.0	<1.0	9.3	3.9	7.2	2.6	<0.10	<1.0	7.1	<1.0	<1.0	<1.0	35	35
B-9@12.5'	4/16/2014	<2.0	5.1	120	<1.0	<1.0	13	4	9.1	2.9	<0.10	1.4	9.7	<1.0	<1.0	<1.0	48	42
B-9@3.5'	4/16/2014	<2.0	3.3	110	<1.0	<1.0	7.3	3.5	6	6.2	<0.10	<1.0	5.2	<1.0	<1.0	<1.0	30	33
B-9@5.5'	4/16/2014	<2.0	1.6	54	<1.0	<1.0	3.7	1.3	2.7	1.2	<0.10	<1.0	1.8	<1.0	<1.0	<1.0	15	12
B10-@0.5'	4/16/2014	<2.0	4.4	130	<1.0	<1.0	9.9	3.4	7.1	2.3	<0.10	1	7.7	<1.0	<1.0	<1.0	37	33
B10-@3.5'	4/16/2014	<2.0	4.3	120	<1.0	<1.0	10	4	7.7	3	<0.10	<1.0	7.9	<1.0	<1.0	<1.0	37	37
B10-@5.5'	4/16/2014	<2.0	2.4	86	<1.0	<1.0	6.5	3.2	5.2	1.8	<0.10	<1.0	4.7	<1.0	<1.0	<1.0	25	28
B10-@9.0'	4/16/2014	<2.0	4.3	100	<1.0	<1.0	10	3.6	6.9	2.4	<0.10	1.1	8.1	<1.0	<1.0	<1.0	35	33
B-11@0.5'	4/16/2014	<2.0	4.9	110	<1.0	<1.0	11	3.5	8.1	2.5	<0.10	1.1	8.4	<1.0	<1.0	<1.0	38	34
B-11@3.5'	4/16/2014	<2.0	4.5	110	<1.0	<1.0	11	4.1	8	2.7	<0.10	<1.0	8.4	<1.0	<1.0	<1.0	39	39
B-11@5.5'	4/16/2014	<2.0	5.1	120	<1.0	<1.0	14	4.7	9.8	3.3	<0.10	1.1	10	<1.0	<1.0	<1.0	48	46
B-11@11.0'	4/16/2014	<2.0	5.4	120	<1.0	1.1	14	4.4	9.7	3.1	<0.10	1.4	11	<1.0	<1.0	<1.0	48	44
B-12@0.5'	4/16/2014	<2.0	6.2	130	<1.0	1.1	14	4.8	10	3.4	<0.10	1.3	12	<1.0	<1.0	<1.0	49	46
B-12@3.5'	4/16/2014	<2.0	4.1	110	<1.0	<1.0	9.6	3.6	6.9	2.6	<0.10	<1.0	7.9	<1.0	<1.0	<1.0	35	33
B-12@5.5'	4/16/2014	<2.0	4	120	<0.99	<0.99	10	4	7.5	2.9	<0.10	<0.99	7.6	<0.99	<0.99	<0.99	38	37
B-12@10.0'	4/16/2014	<2.0	7.1	140	<1.0	1.3	14	4.8	11	3.4	<0.10	1.6	12	<1.0	<1.0	<1.0	51	46
B-13@0.5'	4/16/2014	<2.0	4.6	110	<1.0	<1.0	10	3.6	7.5	2.6	<0.10	<1.0	8.2	<1.0	<1.0	<1.0	39	35
B-13@3.0'	4/16/2014	<2.0	4.9	98	<0.99	<0.99	9.2	3.6	7.8	6.6	<0.10	<0.99	7.2	<0.99	<0.99	<0.99	35	39
B-13@9.0'	4/16/2014	<2.0	5.2	140	<0.99	<0.99	13	4.3	8.8	3.1	<0.10	1.2	9.7	<0.99	<0.99	<0.99	47	42

TABLE 5
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (milligrams per kilogram [mg/kg])																
Sample Number	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium (III)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
B-14@0.5'	4/16/2014	<2.0	3.1	73	<1.0	<1.0	6.9	2.7	5.9	5.5	<0.10	<1.0	5.1	<1.0	<1.0	<1.0	24	32
B-14@3.0'	4/16/2014	<2.0	3.5	96	<1.0	<1.0	8.4	3.5	6.5	3.6	<0.10	<1.0	6.5	<1.0	<1.0	<1.0	32	33
B-14@9.0'	4/16/2014	<2.0	4.3	100	<0.99	<0.99	9.5	3.3	6.8	2.4	<0.10	1.1	7.7	<0.99	<0.99	<0.99	35	31
B-15@0.5'	4/16/2014	<2.0	4.7	130	<1.0	<1.0	11	4.3	8.3	2.9	<0.10	<1.0	8.7	<1.0	<1.0	<1.0	40	39
B-15@3.0'	4/16/2014	<2.0	2.8	94	<1.0	<1.0	6.9	3	5.2	2.4	<0.10	<1.0	4.9	<1.0	<1.0	<1.0	26	28
B-15@7.5'	4/16/2014	<2.0	3.1	76	<1.0	<1.0	5.8	2.3	4.1	1.7	<0.10	<1.0	4.4	<1.0	<1.0	<1.0	23	22
B-16@0.5'	4/16/2014	<2.0	4.1	120	<1.0	<1.0	10	3.9	7.9	2.7	<0.10	<1.0	8.4	<1.0	<1.0	<1.0	38	36
B-16@3.0'	4/16/2014	<2.0	2.9	86	<1.0	<1.0	6.6	2.8	4.8	2.3	<0.10	<1.0	4.8	<1.0	<1.0	<1.0	24	25
B-16@6.5'	4/16/2014	<2.0	5	110	<1.0	<1.0	11	4	8.3	3	<0.10	1.2	9.1	<1.0	<1.0	<1.0	38	37
B-17@0.5'	4/17/2014	<2.0	4.5	120	<1.0	<1.0	10	3.6	7.7	2.6	<0.10	1.1	8.2	<1.0	<1.0	<1.0	36	36
B-17@3.5'	4/17/2014	<2.0	3.5	98	<1.0	<1.0	7.7	3.6	6.7	2.9	<0.10	<1.0	5.8	<1.0	<1.0	<1.0	30	34
B-17@5.5'	4/17/2014	<2.0	5.5	150	<1.0	<1.0	14	5.8	11	3.7	<0.10	<1.0	9.2	<1.0	<1.0	<1.0	43	47
B-17@7.5'	4/17/2014	<2.0	4.9	130	<1.0	<1.0	11	4	8.4	2.9	<0.10	1.2	9	<1.0	<1.0	<1.0	39	39
B-18@0.5'	4/17/2014	<2.0	4	120	<1.0	<1.0	9.6	4	8.3	5.6	<0.10	<1.0	7.4	<1.0	<1.0	<1.0	34	42
B-18@11.5'	4/17/2014	<2.0	4.9	110	<1.0	<1.0	11	4.2	8	2.8	<0.10	1.1	8.5	<1.0	<1.0	<1.0	38	39
B-18@3.5'	4/17/2014	<2.0	4.3	120	<1.0	<1.0	8.8	4	7.4	3.2	<0.10	<1.0	6.7	<1.0	<1.0	<1.0	33	39
B-18@5.5'	4/17/2014	<2.0	5.2	120	<1.0	1	13	4.7	9.3	3.3	<0.10	1.2	10	<1.0	<1.0	<1.0	46	45
B-19@0.5'	4/17/2014	<2.0	4.5	92	<1.0	<1.0	8.9	3.7	7.6	5	<0.10	1	8.2	<1.0	<1.0	<1.0	30	42
B-19@14.5'	4/17/2014	<2.0	4.7	130	<1.0	<1.0	12	3.9	8.5	2.9	<0.10	1.1	8.9	<1.0	<1.0	<1.0	42	39
B-19@3.5'	4/17/2014	<2.0	4	110	<1.0	<1.0	9.9	3.6	6.9	2.4	<0.10	1	8.6	<1.0	<1.0	<1.0	34	32
B-19@5.5'	4/17/2014	<2.0	4.2	100	<0.99	<0.99	9.4	3.4	6.9	2.4	<0.10	<0.99	7.8	<0.99	<0.99	<0.99	35	34
B-20@0.5'	4/17/2014	<2.0	4.4	120	<1.0	<1.0	10	4	7.6	3.1	<0.10	<1.0	7.9	<1.0	<1.0	<1.0	37	39
B-20@3.0'	4/17/2014	<2.0	2.9	80	<1.0	<1.0	6.8	3	5.5	3.2	<0.10	<1.0	5.5	<1.0	<1.0	<1.0	25	32
B-20@6.5'	4/17/2014	<2.0	2.1	47	<1.0	<1.0	4.1	1.5	3.5	1.4	<0.10	<1.0	3.2	<1.0	<1.0	<1.0	14	15
B-21@0.5'	4/17/2014	<2.0	4.5	120	<1.0	<1.0	10	4.1	7.7	2.8	<0.10	<1.0	8.4	<1.0	<1.0	<1.0	39	39
B-21@3.0'	4/17/2014	<2.0	3.5	84	<1.0	<1.0	7.1	3.1	17	4.1	<0.10	<1.0	5.5	<1.0	<1.0	<1.0	27	31
B-21@6.5'	4/17/2014	<2.0	6.6	140	<1.0	<1.0	14	4.8	10	3.5	<0.10	1.5	11	<1.0	<1.0	<1.0	44	47
B-22@0.5'	4/17/2014	<2.0	4	100	<1.0	<1.0	9.7	3.7	7	2.6	<0.10	<1.0	7.6	<1.0	<1.0	<1.0	35	36
B-22@3.0'	4/17/2014	<2.0	3.5	95	<1.0	<1.0	7.4	3.5	5.8	2.3	<0.10	<1.0	5.1	<1.0	<1.0	<1.0	29	31
B-22@5.0'	4/17/2014	<2.0	2.4	58	<1.0	<1.0	4.3	1.5	3.2	1.2	<0.10	<1.0	3.4	<1.0	<1.0	<1.0	16	16
B-23@0.5'	4/17/2014	<2.0	4.5	110	<1.0	<1.0	10	4	7.7	3.9	<0.10	<1.0	8	<1.0	<1.0	<1.0	36	40
B-23DUP@0.5'	4/17/2014	<2.0	4.6	120	<1.0	<1.0	11	4.2	8.2	4.5	<0.10	<1.0	8.6	<1.0	<1.0	<1.0	39	41
B-23@3.0'	4/17/2014	<2.0	2.4	90	<1.0	<1.0	5.6	2.7	4.2	1.8	<0.10	<1.0	3.9	<1.0	<1.0	<1.0	24	25
B-23DUP@3.0'	4/17/2014	<2.0	3.2	110	<1.0	<1.0	7.1	3.4	5.5	2.1	<0.10	<1.0	5.3	<1.0	<1.0	<1.0	30	31
B-23@4.5'	4/17/2014	<2.0	5.1	66	<1.0	<1.0	5.9	2	4.2	1.5	<0.10	<1.0	5	<1.0	<1.0	<1.0	22	21
B-23DUP@4.5'	4/17/2014	<2.0	5	94	<1.0	2.3	8.1	3	6	2	<0.10	1.3	7	<1.0	<1.0	<1.0	31	29
B-24@0.5'	4/16/2014	<2.0	4.6	120	<1.0	<1.0	11	4	8.2	2.9	<0.10	<1.0	8.6	<1.0	<1.0	<1.0	40	38
B-24DUP@0.5'	4/16/2014	<2.0	5.2	120	<1.0	<1.0	13	4.1	8.7	3.1	<0.10	1.1	9.6	<1.0	<1.0	<1.0	43	39
B-24@3.0'	4/16/2014	<2.0	3.3	96	<1.0	<1.0	9.7	3.4	6.7	4.6	<0.10	<1.0	6.8	<1.0	<1.0	<1.0	29	32
B-24DUP@3.0'	4/16/2014	<2.0	3.2	96	<1.0	<1.0	8.3	3.1	5.7	2.6	<0.10	<1.0	6.3	<1.0	<1.0	<1.0	29	29
B-24@5.5'	4/16/2014	<2.0	3.4	100	<1.0	<1.0	8.5	3.3	6.6	6.2	<0.10	<1.0	6	<1.0	<1.0	<1.0	30	33
B-24DUP@5.5'	4/16/2014	<2.0	3.9	96	<1.0	<1.0	8.9	3.5	6.7	5.4	<0.10	<1.0	6.7	<1.0	<1.0	<1.0	32	33
B-24@8.0'	4/16/2014	<2.0	3.8	110	<1.0	<1.0	10	3.6	7.5	2.9	<0.10	<1.0	8.4	<1.0	<1.0	<1.0	36	35
B-24DUP@8.0'	4/16/2014	<2.0	4.3	120	<1.0	<1.0	11	4.1	7.9	4.5	<0.10	<1.0	8	<1.0	<1.0	<1.0	37	40
B-24@10.5'	4/16/2014	<2.0	2.8	74	<1.0	<1.0	6.2	2.4	5.1	3.8	<0.10	<1.0	5	<1.0	<1.0	<1.0	22	23
B-24@14.0'	4/16/2014	<2.0	5.7	130	<1.0	<1.0	14	4.1	9	3	<0.10	1.5	11	<1.0	<1.0	<1.0	47	39
B-24DUP@14.0'	4/16/2014	<2.0	3.2	78	<1.0	<1.0	9	2.9	15	5.3	<0.10	<1.0	7.3	<1.0	<1.0	<1.0	27	31

TABLE 5
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Concentration (milligrams per kilogram [mg/kg])																		
Sample Number	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium (III)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
B-25@0.5'	4/16/2014	<2.0	4.7	110	<1.0	<1.0	11	3.7	8	2.6	<0.10	1.2	9.4	<1.0	<1.0	<1.0	41	37
B-25@3.0'	4/16/2014	<2.0	4.4	110	<1.0	<1.0	9.5	3.7	6.7	3.7	<0.10	<1.0	7.2	<1.0	<1.0	<1.0	35	36
B-25@5.5'	4/16/2014	<2.0	2.8	86	<1.0	<1.0	6.9	2.9	4.9	3.3	<0.10	<1.0	4.6	<1.0	<1.0	<1.0	25	27
B-25@8.0'	4/16/2014	<2.0	4.1	130	<1.0	<1.0	9.2	3.8	7.4	4.6	<0.10	<1.0	6.9	<1.0	<1.0	<1.0	28	32
B-25@10.5'	4/16/2014	<2.0	2.8	60	<1.0	<1.0	6	2.4	5.6	4.4	<0.10	<1.0	7	<1.0	<1.0	<1.0	23	39
B-25@13.5'	4/16/2014	<2.0	6.6	130	<1.0	1.1	14	4.5	10	3.3	<0.10	1.5	11	<1.0	<1.0	<1.0	48	45
SG-1@0.5'	4/15/2014	<2.0	4.1	90	<1.0	<1.0	7.3	3	6.4	3.1	<0.10	<1.0	5.7	<1.0	<1.0	<1.0	24	29
SG-1DUP@0.5'	4/15/2014	<2.0	3.7	96	<1.0	<1.0	7.5	3.1	6.1	3.3	<0.10	<1.0	5.8	<1.0	<1.0	<1.0	26	30
SG-1@3.0'	4/15/2014	<2.0	2.5	86	<1.0	<1.0	6.6	2.9	5.6	2.4	<0.10	<1.0	5.5	<1.0	<1.0	<1.0	23	28
SG-1DUP@3.0'	4/15/2014	<2.0	3.5	92	<1.0	<1.0	7.6	3.6	6.6	5.9	<0.10	<1.0	5.5	<1.0	<1.0	<1.0	26	38
SG-1@5.0'	4/15/2014	<2.0	4.8	120	<1.0	<1.0	9.1	4.4	8.2	5.2	<0.10	<1.0	6.9	<1.0	<1.0	<1.0	32	42
SG-1@10.0'	4/15/2014	<2.0	5.3	110	<1.0	<1.0	10	4	8.3	2.7	<0.10	1.1	8.9	<1.0	<1.0	<1.0	35	37
SG-2@0.5'	4/15/2014	<2.0	4.2	91	<1.0	<1.0	7.7	3.2	6.1	2.9	<0.10	<1.0	5.9	<1.0	<1.0	<1.0	25	29
SG-2@2.0'	4/15/2014	<2.0	3	74	<1.0	<1.0	5.7	2.4	4.7	2	<0.10	<1.0	4.5	<1.0	<1.0	<1.0	21	24
SG-2@3.0'	4/15/2014	<2.0	3.3	130	<1.0	<1.0	8.4	3.7	6.7	2.5	<0.10	<1.0	6.4	<1.0	<1.0	<1.0	29	34
SG-2@5.0'	4/15/2014	<2.0	5	150	<1.0	<1.0	11	5.4	8.3	3.3	<0.10	<1.0	6.7	<1.0	<1.0	<1.0	37	44
SG-2@10.0'	4/15/2014	<2.0	4.8	110	<1.0	<1.0	10	3.9	7.6	2.6	<0.10	1.2	8.7	<1.0	<1.0	<1.0	34	37
SG-3@0.5'	4/15/2014	<2.0	3.5	100	<1.0	<1.0	8.1	3.9	6.9	4.2	<0.10	<1.0	7	<1.0	<1.0	<1.0	28	36
SG-3@3.0'	4/15/2014	<2.0	3.2	100	<1.0	<1.0	8	3.6	6.9	4.4	<0.10	<1.0	6.5	<1.0	<1.0	<1.0	27	35
SG-3@5.0'	4/15/2014	<2.0	5.7	130	<1.0	1.2	13	4.9	11	3.4	<0.10	1.3	12	<1.0	<1.0	<1.0	42	46
SG-3@10.0'	4/15/2014	<2.0	5.6	130	<1.0	1	13	4.6	9.9	3.3	<0.10	1.2	11	<1.0	<1.0	<1.0	42	44
SG-4@0.5'	4/15/2014	<2.0	4.5	94	<1.0	<1.0	7.7	3.5	7	7.5	<0.10	<1.0	6.3	<1.0	<1.0	<1.0	24	38
SG-4DUP@0.5'	4/15/2014	<2.0	6.7	97	<1.0	<1.0	8.3	3.5	7	4.3	<0.10	1	6.3	<1.0	<1.0	<1.0	26	34
SG-4@3.0'	4/15/2014	<2.0	3	99	<1.0	<1.0	7.3	3.2	6.3	3.3	<0.10	<1.0	6.4	<1.0	<1.0	<1.0	24	30
SG-4DUP@3.0'	4/15/2014	<2.0	3.5	95	<1.0	<1.0	8.5	3.4	7.1	2.9	<0.10	<1.0	7.5	<1.0	<1.0	<1.0	27	34
SG-4@5.0'	4/15/2014	<2.0	3.9	110	<1.0	<1.0	7.7	3.4	6.5	2.2	<0.10	<1.0	6.9	<1.0	<1.0	<1.0	26	33
SG-4@10.0'	4/15/2014	<2.0	4.4	110	<1.0	<1.0	8.6	3.5	7.1	2.5	<0.10	<1.0	8	<1.0	<1.0	<1.0	27	33
SG-5@0.5'	4/15/2014	<2.0	2.6	82	<1.0	<1.0	6.9	2.7	4.8	1.9	<0.10	<1.0	4.8	<1.0	<1.0	<1.0	20	25
SG-5@3.0'	4/15/2014	<2.0	3.2	97	<1.0	<1.0	7.1	3.4	5.9	3.7	<0.10	<1.0	5.3	<1.0	<1.0	<1.0	25	32
SG-5@5.0'	4/15/2014	<2.0	2.9	97	<1.0	<1.0	7.2	3.6	6.1	2.1	<0.10	<1.0	6	<1.0	<1.0	<1.0	27	32
SG-5@10.0'	4/15/2014	<2.0	4.7	100	<1.0	<1.0	9.4	3.6	7.7	2.5	<0.10	<1.0	8.4	<1.0	<1.0	<1.0	31	34
SG-6@0.5'	4/15/2014	<2.0	4.2	110	<1.0	<1.0	8.7	3.6	7	4.3	<0.10	<1.0	7.4	<1.0	<1.0	<1.0	28	34
SG-6@3.0'	4/15/2014	<2.0	3.3	81	<1.0	<1.0	6.2	2.5	5	1.7	<0.10	<1.0	5.3	<1.0	<1.0	<1.0	20	23
SG-6@5.0'	4/15/2014	<2.0	3	91	<1.0	<1.0	6.8	3.1	5.4	2.5	<0.10	<1.0	5	<1.0	<1.0	<1.0	24	29
SG-6@10.0'	4/15/2014	<2.0	5.7	120	<1.0	1	12	4.6	9.9	3.2	<0.10	1.1	11	<1.0	<1.0	<1.0	38	44
SG-7@0.5'	4/15/2014	<2.0	4.5	110	<1.0	<1.0	9.2	3.8	7.6	3	<0.10	<1.0	7.8	<1.0	<1.0	<1.0	30	37
SG-7@3.0'	4/15/2014	<2.0	4.6	110	<1.0	<1.0	9.6	3.9	8.1	4	<0.10	<1.0	8.1	<1.0	<1.0	<1.0	30	40
SG-7@5.0'	4/15/2014	<2.0	3.7	110	<1.0	<1.0	7.9	3.5	7	3.4	<0.10	<1.0	6.7	<1.0	<1.0	<1.0	27	35
SG-7@10.0'	4/15/2014	<2.0	4.1	94	<1.0	<1.0	8.1	3.6	6.9	2.3	<0.10	<1.0	7.3	<1.0	<1.0	<1.0	27	30
SG-8@0.5'	4/15/2014	<2.0	3.5	100	<1.0	<1.0	7.2	3.6	6.2	2.4	<0.10	<1.0	5.8	<1.0	<1.0	<1.0	27	32
SG-8@3.0'	4/15/2014	<2.0	2.6	75	<1.0	<1.0	6	2.7	4.7	2.2	<0.10	<1.0	4.2	<1.0	<1.0	<1.0	20	25
SG-8@5.0'	4/15/2014	<2.0	3.4	88	<1.0	<1.0	7	3.1	5.5	2.3	<0.10	<1.0	5.6	<1.0	<1.0	<1.0	24	27
SG-8@10.0'	4/15/2014	<2.0	4.1	140	<1.0	<1.0	9.5	4	7.9	2.6	<0.10	<1.0	8.1	<1.0	<1.0	<1.0	31	37
SG-9@0.5'	4/15/2014	<2.0	3	110	<1.0	<1.0	6.9	3.5	5.8	2.3	<0.10	<1.0	5.8	<1.0	<1.0	<1.0	24	31
SG-9@3.0'	4/15/2014	<2.0	2.5	72	<1.0	<1.0	5.5	3.2	4.5	2.3	<0.10	<1.0	4.3	<1.0	<1.0	<1.0	20	24
SG-9@5.0'	4/15/2014	<2.0	3	76	<1.0	<1.0	5.9	2.2	4.4	1.4	<0.10	1	5.5	<1.0	<1.0	<1.0	20	23
SG-9@10.0'	4/15/2014	<2.0	5.7	160	<1.0	1.3	15	5.1	12	3.5	<0.10	1	13	<1.0	<1.0	<1.0	44	50

TABLE 5
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Concentration (milligrams per kilogram [mg/kg])																		
Sample Number	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium (III)**	**Cobalt**	**Copper**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**Selenium**	**Silver**	**Thallium**	**Vanadium**	**Zinc**
SG-9@15.0'	4/15/2014	<2.0	3.1	110	<1.0	<1.0	7.2	3.3	3.7	2	<0.10	<1.0	7.2	<1.0	<1.0	<1.0	23	31
SG-10@0.5'	4/15/2014	<2.0	3	91	<1.0	<1.0	6.7	3.2	6.1	1.9	<0.10	<1.0	6.1	<1.0	<1.0	<1.0	23	30
SG-10DUP@0.5'	4/15/2014	<2.0	3.7	110	<1.0	<1.0	8.5	3.7	6.9	2.5	<0.10	<1.0	7.5	<1.0	<1.0	<1.0	29	35
SG-10@3.0'	4/15/2014	<2.0	2.9	91	<1.0	<1.0	6.9	3.2	5.7	2.3	<0.10	<1.0	5.2	<1.0	<1.0	<1.0	23	29
SG-10DUP@3.0'	4/15/2014	<2.0	2.9	79	<1.0	<1.0	6.7	2.6	4.9	1.9	<0.10	<1.0	5.2	<1.0	<1.0	<1.0	20	24
SG-10@5.0'	4/15/2014	<2.0	4.5	99	<1.0	<1.0	7	2.9	5	1.8	<0.10	1.2	7.2	<1.0	<1.0	<1.0	24	27
SG-10@10.0'	4/15/2014	<2.0	5.2	120	<1.0	<1.0	12	4.6	9.5	3.1	<0.10	<1.0	10	<1.0	<1.0	<1.0	40	43
SG-11@0.5'	4/15/2014	<2.0	5.4	130	<1.0	1.1	12	4.8	9.4	3.1	<0.10	<1.0	10	<1.0	<1.0	<1.0	38	47
SG-11@3.0'	4/15/2014	<2.0	3.5	100	<1.0	<1.0	7.5	3.4	6	2.6	<0.10	<1.0	5.7	<1.0	<1.0	<1.0	26	32
SG-11@5.0'	4/15/2014	<2.0	3	42	<1.0	<1.0	3.7	<1.0	2.2	<1.0	<0.10	1.1	1.6	<1.0	<1.0	<1.0	14	6.9
SG-11@10.0'	4/15/2014	<2.0	4.6	160	<1.0	<1.0	10	4.3	8.3	2.8	<0.10	<1.0	9.1	<1.0	<1.0	<1.0	36	39
SG-12@0.5'	4/15/2014	<2.0	3.8	97	<1.0	<1.0	12	3.5	6.4	2.3	<0.10	1.8	6.8	<1.0	<1.0	<1.0	26	32
SG-12@3.0'	4/15/2014	<2.0	5.2	110	<1.0	<1.0	10	4	8.4	2.8	<0.10	1.3	9.1	<1.0	<1.0	<1.0	34	38
SG-12@5.0'	4/15/2014	<2.0	3.9	110	<1.0	<1.0	8.9	3.7	7.1	2.6	<0.10	<1.0	7.3	<1.0	<1.0	<1.0	29	35
SG-12@10.0'	4/15/2014	<2.0	4.1	110	<1.0	<1.0	8.5	3.7	7.1	2.7	<0.10	<1.0	7.6	<1.0	<1.0	<1.0	28	35
RSL		30	12*	15000	1600	2100	120,000	420	3,100	80*	23	390	1500	390	390	0.78	390	23000
Chemical of Potential Concern?		No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
EQUIPMENT BLANK																		
Concentration (milligrams per liter [mg/L])																		
EB041514	4/15/2014	<0.0050	<0.010	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0050	<0.0050	<0.00020	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.010
EB041614	4/16/2014	0.0084	<0.010	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0085	<0.0050	<0.00020	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.010
EB041714	4/17/2014	<0.0050	<0.010	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0050	<0.0050	<0.00020	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.010

Notes:
Mercury was analyzed by EPA Method 7471A; all other metals were analyzed by EPA Method 6010B.
RSL - Regional Screening Level Residential Soil Table May 2014 * Screening level from DTSC
The complete laboratory analytical reports are included in Appendix E.
< - Non detect at the established method detection limit. NA - Not Analyzed

TABLE 6
SUMMARY TABLE OF TPH IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (milligram per kilogram [mg/kg])					
Sample Number	**Sample Date**	**C8-C10**	**C10-C18**	**C18-C28**	**C28-C36**	**C36-C40**	**C8-C40 Total**
B-1@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-1@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-1@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-1@9.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-2@0.5'	4/16/2014	<10	<10	**61**	**32**	<10	**93**
B-2@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-2@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-2@8.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-3@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-3@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-3@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-3@7.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-4@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-4@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-4@7.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-5@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-5@3.0'	4/16/2014	<10	**31**	**120**	**84**	<10	**240**
B-5@6.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-6@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-6@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-6@5.5'	4/16/2014	**18**	**25**	**54**	**22**	<10	**120**
B-6@8.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-7@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-7@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-7@7.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-8@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-8@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-8@5.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-9@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-9@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-9@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-9@12.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B10-@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B10-@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B10-@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B10-@9.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-11@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-11@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-11@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-11@11.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-12@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-12@3.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-12@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-12@10.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-13@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-13@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-13@9.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-14@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-14@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10

TABLE 6
SUMMARY TABLE OF TPH IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (milligram per kilogram [mg/kg])					
Sample Number	**Sample Date**	**C8-C10**	**C10-C18**	**C18-C28**	**C28-C36**	**C36-C40**	**C8-C40 Total**
B-14@9.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-15@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-15@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-15@7.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-16@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-16@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-16@6.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-17@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-17@3.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-17@5.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-17@7.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-18@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-18@3.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-18@5.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-18@11.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-19@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-19@3.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-19@5.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-19@14.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-20@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-20@3.0'	4/17/2014	<10	<10	<10	<10	<10	<10
B-20@6.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-21@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-21@3.0'	4/17/2014	**16**	**59**	**120**	**67**	<10	**260**
B-21@6.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-22@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-22@3.0'	4/17/2014	<10	<10	<10	<10	<10	<10
B-22@5.0'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23DUP@0.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23@3.0'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23DUP@3.0'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23@4.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-23DUP@4.5'	4/17/2014	<10	<10	<10	<10	<10	<10
B-24@0.5'	4/16/2014	**19**	<10	<10	<10	<10	**19**
B-24DUP@0.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24DUP@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24@5.5'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24DUP@5.5'	4/16/2014	**10**	**13**	**21**	<10	<10	**44**
B-24@8.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24DUP@8.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24@10.5'	4/16/2014	<10	<10	**17**	<10	<10	**17**
B-24@14.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-24DUP@14.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-25@0.5'	4/16/2014	**27**	<10	<10	<10	<10	**27**
B-25@3.0'	4/16/2014	<10	<10	<10	<10	<10	<10
B-25@5.5'	4/16/2014	<10	<10	**47**	**22**	<10	**69**
B-25@8.0'	4/16/2014	<10	<10	<10	<10	<10	<10

TABLE 6
SUMMARY TABLE OF TPH IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (milligram per kilogram [mg/kg])					
Sample Number	**Sample Date**	**C8-C10**	**C10-C18**	**C18-C28**	**C28-C36**	**C36-C40**	**C8-C40 Total**
B-25@10.5'	4/16/2014	<10	**28**	**120**	**94**	<10	**240**
B-25@13.5'	4/16/2014	<10	<10	<10	<10	<10	<10
SG-1@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-1DUP@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-1@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-1DUP@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-1@5.0'	4/15/2014	<10	**19**	**20**	<10	<10	**40**
SG-1@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-2@0.5'	4/15/2014	<10	**11**	<10	<10	<10	**11**
SG-2@2.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-2@3.0'	4/15/2014	<10	**18**	**20**	<10	<10	**38**
SG-2@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-2@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-3@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-3@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-3@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-3@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-4@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-4DUP@0.5'	4/15/2014	<10	<10	**15**	<10	<10	**15**
SG-4@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-4DUP@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-4@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-4@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-5@0.5'	4/15/2014	**11**	**350**	**1100**	**640**	<10	**2100**
SG-5@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-5@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-5@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-6@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-6@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-6@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-6@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-7@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-7@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-7@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-7@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-8@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-8@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-8@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-8@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-9@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-9@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-9@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-9@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-9@15.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-10@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-10DUP@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-10@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-10DUP@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-10@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10

TABLE 6
SUMMARY TABLE OF TPH IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (milligram per kilogram [mg/kg])					
Sample Number	**Sample Date**	**C8-C10**	**C10-C18**	**C18-C28**	**C28-C36**	**C36-C40**	**C8-C40 Total**
SG-10@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-11@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-11@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-11@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-11@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-12@0.5'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-12@3.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-12@5.0'	4/15/2014	<10	<10	<10	<10	<10	<10
SG-12@10.0'	4/15/2014	<10	<10	<10	<10	<10	<10
EQUIPMENT BLANK							
		Concentration (milligram per liter [mg/L])					
EB041514	04/15/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
EB041614	04/16/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
EB041714	04/17/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Notes:
Samples analyzed by EPA Modified Method 8015.
The complete laboratory analytical reports are included as Appendix E.
Shaded data not within corrected boundaries of project site.
< - Not detected above the established method detection limit.

TABLE 7
SUMMARY TABLE OF PAHs IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])												
Sample Number	**Sample Date**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(g,h,i)perylene**	**Benzo(k)fluoranthene**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(1,2,3-cd)pyrene**	**Naphthalene**	**Phenanthrene**	**Pyrene**
B-1@0.5'	4/16/2014	<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
B-1@3.5'	4/16/2014	<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
B-1@5.5'	4/16/2014	<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
B-1@9.0'	4/16/2014	<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
B-2@0.5'	4/16/2014	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
B-2@3.5'	4/16/2014	<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
B-2@5.5'	4/16/2014	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12	<12
B-2@8.5'	4/16/2014	<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
B-3@5.5'	4/16/2014	<12	**13**	**22**	**14**	<12	**14**	<12	**21**	<12	<12	<12	<12	**19**
B-3@7.5'	4/16/2014	<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
B-4@7.5'	4/16/2014	<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
B-5@6.0'	4/16/2014	<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
B-6@5.5'	4/16/2014	**5.2**	**5.1**	**7.7**	<5.0	<5.0	**5.1**	<5.0	**9.0**	<5.0	<5.0	<5.0	<5.0	**9.0**
B-6@8.0'	4/16/2014	<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
B-7@7.5'	4/16/2014	<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
B-8@5.0'	4/16/2014	<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
B-9@0.5'	4/16/2014	<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
B-9@3.5'	4/16/2014	<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
B-9@5.5'	4/16/2014	<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
B-9@12.5'	4/16/2014	<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
B-10@0.5'	4/16/2014	<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
B-10@3.5'	4/16/2014	<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
B-10@5.5'	4/16/2014	<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
B-10@9.0'	4/16/2014	<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
B-11@0.5'	4/16/2014	<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
B-11@3.5'	4/16/2014	<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
B-11@5.5'	4/16/2014	<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
B-11@11.0'	4/16/2014	<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
B-12@0.5'	4/16/2014	<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
B-12@3.5'	4/16/2014	<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
B-12@5.5'	4/16/2014	<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
B-12@10.0'	4/16/2014	<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
B-13@9.0'	4/16/2014	<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
B-14@9.0'	4/16/2014	<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
B-15@7.5'	4/16/2014	<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
B-16@6.5'	4/16/2014	<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
B-17@0.5'	4/17/2014	<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
B-17@3.5'	4/17/2014	<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
B-17@5.5'	4/17/2014	<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
B-17@7.5'	4/17/2014	<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
B-18@0.5'	4/17/2014	**5.6**	**8.5**	**18**	**5.4**	**7.2**	**20**	<5.0	**11**	<5.0	**5.1**	<5.0	<5.0	**12**
B-18@11.5'	4/17/2014	<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
B-18@3.5'	4/17/2014	<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
B-18@5.5'	4/17/2014	<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
B-19@0.5'	4/17/2014	<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
B-19@14.5'	4/17/2014	<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
B-19@3.5'	4/17/2014	<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
B-19@5.5'	4/17/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.9**	<5.0	<5.0
B-20@6.5'	4/17/2014	<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
B-21@6.5'	4/17/2014	<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
B-22@5.0'	4/17/2014	<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
B-23@4.5'	4/17/2014	<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
B-23DUP@4.5'	4/17/2014	<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
B-24@0.5'	4/16/2014	<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
B-24DUP@0.5'	4/16/2014	<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
B-24@3.0'	4/16/2014	<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
B-24DUP@3.0'	4/16/2014	<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
B-24@5.5'	4/16/2014	<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
B-24DUP@5.5'	4/16/2014	**16**	**11**	**15**	**6.7**	**5.2**	**12**	<5.0	**16**	<5.0	**5.8**	<5.0	<5.0	**21**
B-24@8.0'	4/16/2014	<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
B-24DUP@8.0'	4/16/2014	<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
B-24@10.5'	4/16/2014	<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
B-24@14.0'	4/16/2014	<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
B-24DUP@14.0'	4/16/2014	<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
B-25@0.5'	4/16/2014	<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
B-25@3.0'	4/16/2014	<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
B-25@5.5'	4/16/2014	**30**	<12	**13**	<12	<12	**23**	<12	**86**	<12	<12	<12	**14**	**84**
B-25@8.0'	4/16/2014	<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
B-25@10.5'	4/16/2014	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
B-25@13.5'	4/16/2014	<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
SG-1@0.5'	4/15/2014	<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
SG-1DUP@0.5'	4/15/2014	<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
SG-1@3.0'	4/15/2014	<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
SG-1DUP@3.0'	4/15/2014	<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
SG-1@5.0'	4/15/2014	<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
SG-1@10.0'	4/15/2014	<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
SG-2@0.5'	4/15/2014	<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
SG-2@2.0'	4/15/2014	<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
SG-2@3.0'	4/15/2014	<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

TABLE 7
SUMMARY TABLE OF PAHs IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])												
Sample Number	**Sample Date**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(g,h,i)perylene**	**Benzo(k)fluoranthene**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(1,2,3-cd)pyrene**	**Naphthalene**	**Phenanthrene**	**Pyrene**
SG-2@5.0'	4/15/2014	<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
SG-2@10.0'	4/15/2014	<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
SG-3@0.5'	4/15/2014	<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
SG-3@3.0'	4/15/2014	<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
SG-3@5.0'	4/15/2014	<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
SG-3@10.0'	4/15/2014	<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
SG-4@0.5'	4/15/2014	**13**	<12	**14**	<12	<12	**15**	<12	**27**	<12	<12	<12	**17**	**26**
SG-4DUP@0.5'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.2**	<5.0	<5.0	<5.0	<5.0	<5.0
SG-4@3.0'	4/15/2014	<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
SG-4DUP@3.0'	4/15/2014	<5.0	<5.0	**5.7**	**6.9**	<5.0	<5.0	<5.0	<5.0	<5.0	**5.5**	<5.0	<5.0	<5.0
SG-4@5.0'	4/15/2014	<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
SG-4@10.0'	4/15/2014	<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
SG-5@0.5'	4/15/2014	<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
SG-5@3.0'	4/15/2014	<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
SG-5@5.0'	4/15/2014	<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
SG-5@10.0'	4/15/2014	<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
SG-6@0.5'	4/15/2014	<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
SG-6@3.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.1**	<5.0	<5.0
SG-6@5.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.5**	<5.0	<5.0
SG-6@10.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.1**	<5.0	<5.0
SG-7@0.5'	4/15/2014	<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
SG-7@3.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.4**	<5.0	<5.0
SG-7@5.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.2**	<5.0	<5.0
SG-7@10.0'	4/15/2014	<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
SG-8@0.5'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.3**	<5.0	<5.0
SG-8@3.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**8.0**	<5.0	<5.0
SG-8@5.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.4**	<5.0	<5.0
SG-8@10.0'	4/15/2014	<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
SG-9@0.5'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.8**	<5.0	<5.0
SG-9@3.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.7**	<5.0	<5.0
SG-9@5.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.5**	<5.0	<5.0
SG-9@10.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**9.8**	<5.0	<5.0
SG-9@15.0'	4/15/2014	<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
SG-10@0.5'	4/15/2014	<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
SG-10DUP@0.5'	4/15/2014	<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
SG-10@3.0'	4/15/2014	<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
SG-10DUP@3.0'	4/15/2014	<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
SG-10@5.0'	4/15/2014	<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
SG-10@10.0'	4/15/2014	<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
SG-11@0.5'	4/15/2014	<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
SG-11@3.0'	4/15/2014	<5.0	<5.0	**6.1**	<5.0	<5.0	<5.0	<5.0	**5.2**	<5.0	<5.0	<5.0	<5.0	**5.6**
SG-11@5.0'	4/15/2014	<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
SG-11@10.0'	4/15/2014	<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
SG-12@0.5'	4/15/2014	<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
SG-12@3.0'	4/15/2014	<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
SG-12@5.0'	4/15/2014	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.1**	<5.0	<5.0
SG-12@10.0'	4/15/2014	<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
Maximum Detected		30	13	22	14	7.2	23	0	86	0	5.8	9.8	17	84
RSL		150	15	150	NA	1500	15000	15	2300000	2300000	150	3800	NA	1700000
EQUIPMENT BLANK														
		Concentration (micrograms per liter [µg/l])												
EB041514	4/15/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
EB041614	4/16/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
EB041714	4/17/2014	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Notes:
Samples analyzed by EPA Method 8270/SIM.
RSL - Regional Screening Level Residential Soil Table May 2014 NA Not available
The complete laboratory analytical reports are inlcuded as Appendix E.
<- Non detect at the established method detection limit.

TABLE 8
SUMMARY TABLE OF SVOCs IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

		Concentration (micrograms per kilogram [µg/kg])				Concentration (micrograms per kilogram [µg/kg])											
Sample Number	**Sample Date**	**Anthracene**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Fluorene**	**Indeno(1,2,3-cd)pyrene**	**Naphthalene**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**Pyridine**
B-3@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-3@3.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-4@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-4@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-5@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-5@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-6@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-6@3.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-7@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-7@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-8@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-8@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-13@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-13@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-13@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-13@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-14@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-14@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-15@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-15@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-16@0.5'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-16@3.0'	4/16/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-20@0.5'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-20@3.0'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-21@0.5'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-21@3.0'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-22@0.5'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-22@3.0'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-23@0.5'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-23DUP@0.5'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-23@3.0'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
B-23DUP@3.0'	4/17/2014	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<330	<1600	<330	<330	<330	<1600
RSL		17000000	150	15	150	1500	15000	15	2300000	2300000	150	3800	NA	NA	NA	1700000	NA
EQUIPMENT BLANK						**EQUIPMENT BLANK**											
		Concentration (micrograms per liter [µg/l])				Concentration (micrograms per liter [µg/l])											
EB041614	4/16/2014	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<50
EB041714	4/17/2014	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<50

Notes:
Samples analyzed by EPA Method 8270C.
The complete laboratory analytical reports are inlcuded as Appendix E.
<- Non detect at the established method detection limit.
RSL - Regional Screening Level Residential Soil Table May 2014 NA Not available

TABLE 9
SUMMARY TABLE OF POLYCHLORINATED BIPHENYLS (PCBs) IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

	Concentration (micrograms per kilogram [µg/Kg])									
Sample Number	**Sample Date**	**Aroclor 1016**	**Aroclor 1221**	**Aroclor 1232**	**Aroclor 1242**	**Aroclor 1248**	**Aroclor 1254**	**Aroclor 1260**	**Aroclor 1262**	**Aroclor 1268**
B-1@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-1@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-1@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-1@9.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-2@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-2@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-2@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-2@8.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-3@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-3@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-3@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-3@7.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-4@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-4@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-4@7.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-5@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-5@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-5@6.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-6@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-6@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-6@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-6@8.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-7@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-7@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-7@7.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-8@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-8@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-8@5.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-9@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-9@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-9@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-9@12.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-10@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-10@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-10@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-10@9.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-11@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-11@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-11@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-11@11.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-12@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-12@3.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-12@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-12@10.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-13@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-13@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-13@9.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-14@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-14@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-14@9.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-15@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-15@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-15@7.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-16@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-16@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-16@6.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-17@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-17@3.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-17@5.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-17@7.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-18@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-18@3.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-18@5.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16

TABLE 9
SUMMARY TABLE OF POLYCHLORINATED BIPHENYLS (PCBs) IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

	Concentration (micrograms per kilogram [µg/Kg])									
Sample Number	**Sample Date**	**Aroclor 1016**	**Aroclor 1221**	**Aroclor 1232**	**Aroclor 1242**	**Aroclor 1248**	**Aroclor 1254**	**Aroclor 1260**	**Aroclor 1262**	**Aroclor 1268**
B-18@11.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-19@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-19@3.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-19@5.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-19@14.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-20@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-20@3.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-20@6.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-21@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-21@3.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-21@6.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-22@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-22@3.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-22@5.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23DUP@0.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23@3.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23DUP@3.0'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23@4.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-23DUP@4.5'	4/17/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24DUP@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24DUP@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24DUP@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24@8.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24DUP@8.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24@14.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-24DUP@14.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-25@0.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-25@3.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-25@5.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-25@8.0'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
B-25@13.5'	4/16/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1DUP@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1DUP@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-1@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-2@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-2@2.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-2@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-2@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-2@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-3@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-3@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-3@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-3@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4DUP@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4DUP@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-4@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-5@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-5@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-5@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-5@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-6@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-6@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-6@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16

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SUMMARY TABLE OF POLYCHLORINATED BIPHENYLS (PCBs) IN SOIL
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

	Concentration (micrograms per kilogram [µg/Kg])									
Sample Number	**Sample Date**	**Aroclor 1016**	**Aroclor 1221**	**Aroclor 1232**	**Aroclor 1242**	**Aroclor 1248**	**Aroclor 1254**	**Aroclor 1260**	**Aroclor 1262**	**Aroclor 1268**
SG-6@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-7@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-7@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-7@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-7@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-8@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-8@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-8@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-8@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-9@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-9@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-9@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-9@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-9@15.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10DUP@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10DUP@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-10@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-11@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-11@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-11@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-11@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-12@0.5'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-12@3.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-12@5.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
SG-12@10.0'	4/15/2014	<16	<16	<16	<16	<16	<16	<16	<16	<16
EQUIPMENT BLANK										
EB041514	04/15/2014	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
EB041614	04/16/2014	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
EB041714	04/17/2014	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Notes:
Samples analyzed by EPA Method 8082. All samples were nondetect.
The complete laboratory analytical reports are included as Appendix E.
ND - Non detect at the established method detection limit.

TABLE 10
OMISSIONS FROM SAMPLING PLAN WITH EXPLANATION
Irvine Unified School District K8 Site
Southwest of SR-133, between Trabuco Road and Irvine Boulevard
Irvine, California

Date	SG-6-10	SG-8-5	SG-12-10	SG-16-5	SG-17-5	SG-21-5	SG-22-5	SG-24-5	SG-32-5	SG-34-5
4/17/2014	Vacuum > 100 inches of water	Vacuum > 100 inches of water	Water in probe	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed
5/20/2014	Vacuum > 100 inches of water	Abandoned	Water in probe	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed	Not yet installed
6/17/2014	Not sampled yet	Abandoned	Water in probe (in both original and redrilled probes)	Water in probe	Water in probe	Water in probe	Water in probe	Not sampled yet	Vacuum > 100 inches of water	Vacuum > 100 inches of water
6/18/2014	Sampled redrilled probe in the afternoon	Abandoned	Water in probe (in both original and redrilled probes)	Water in probe	Water in probe	Vacuum > 100 inches of water in the morning, water in probe in the afternoon	Vacuum > 100 inches of water in the morning and the afternoon	Vacuum > 100 inches of water in the morning, continued vacuum with no rebound in the afternoon	Vacuum > 100 inches of water in the morning, sampled in the afternoon	Vacuum > 100 inches of water in the morning, water in probe in the afternoon

Figures

Figures

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Site Location

Existing PA 30 and PA 51 Boundary

K8 School Boundary

0 6,000

Scale (Feet)

Site Conditions

Existing PA 30 and PA 51 Boundary

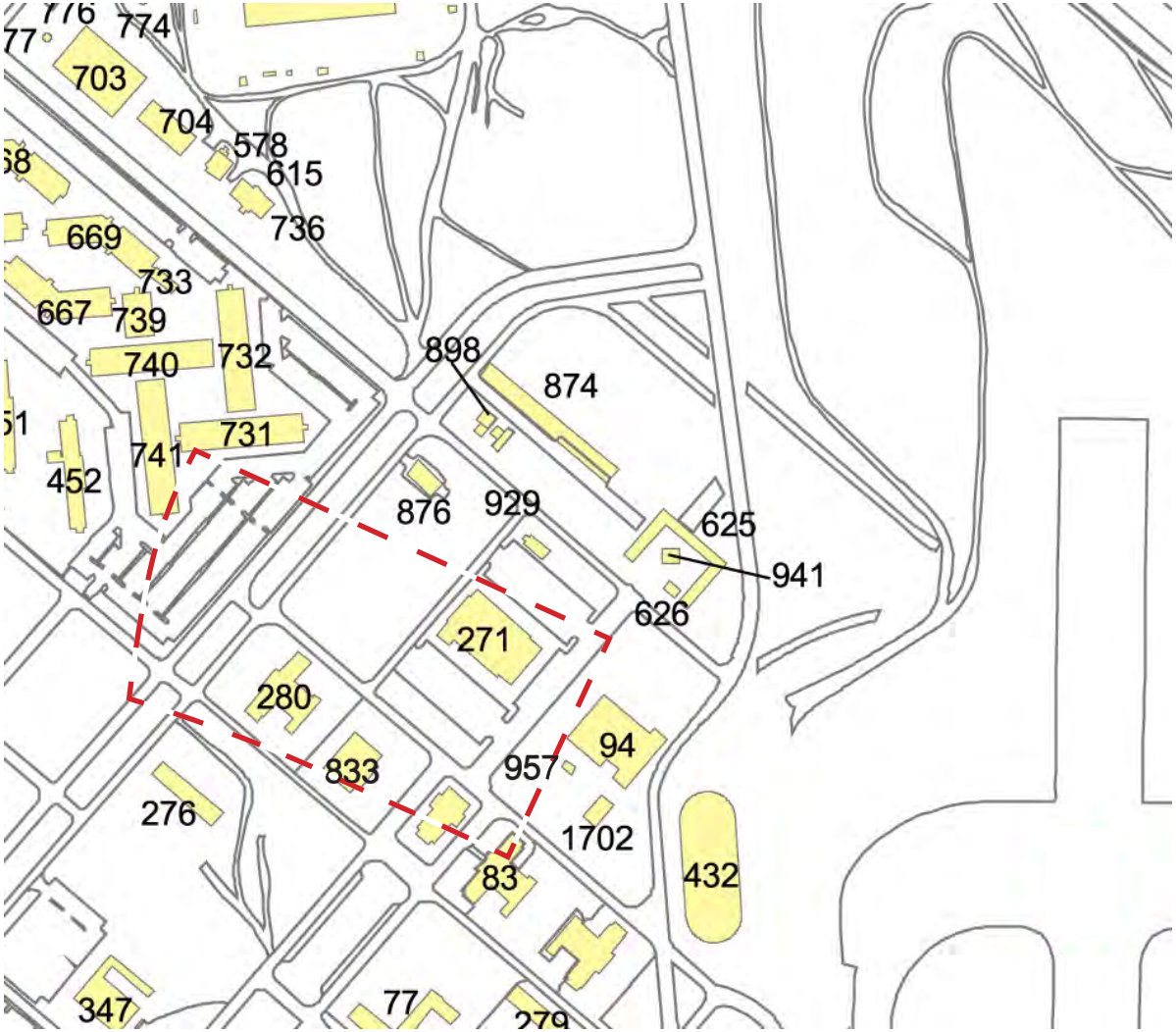
K8 School Boundary

0 500

Scale (Feet)

Source: Google Earth Pro 2011

Former Building Identification



Building/Facility

296 Building/Facility Number

K-8 School Boundary

0 400

Scale (Feet)

Source: Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California. Earth Tech 2003

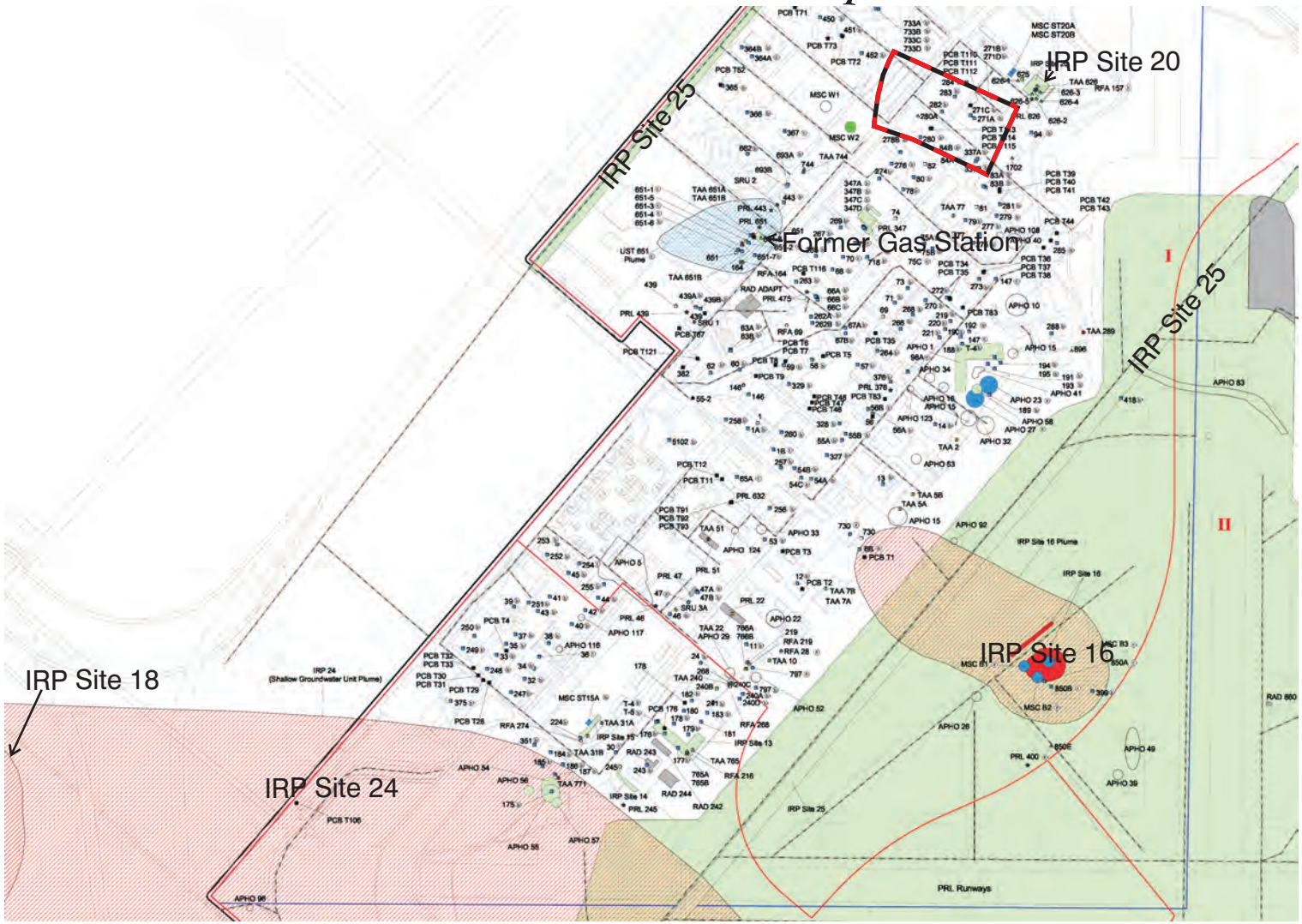
K-8 School Site Plan

- Former Underground Storage Tank
- Former Oil/Water Separator
- Former Transformer Location
- Site Boundary

0 150
Scale (Feet)

Bsemap Source: PJHM 2013

Site Map with Historic Groundwater Plume and IRP Locations



Note: Groundwater plumes reflect conditions in 2003.

Source: Earth Tech 2003

Recent Groundwater Plume Locations

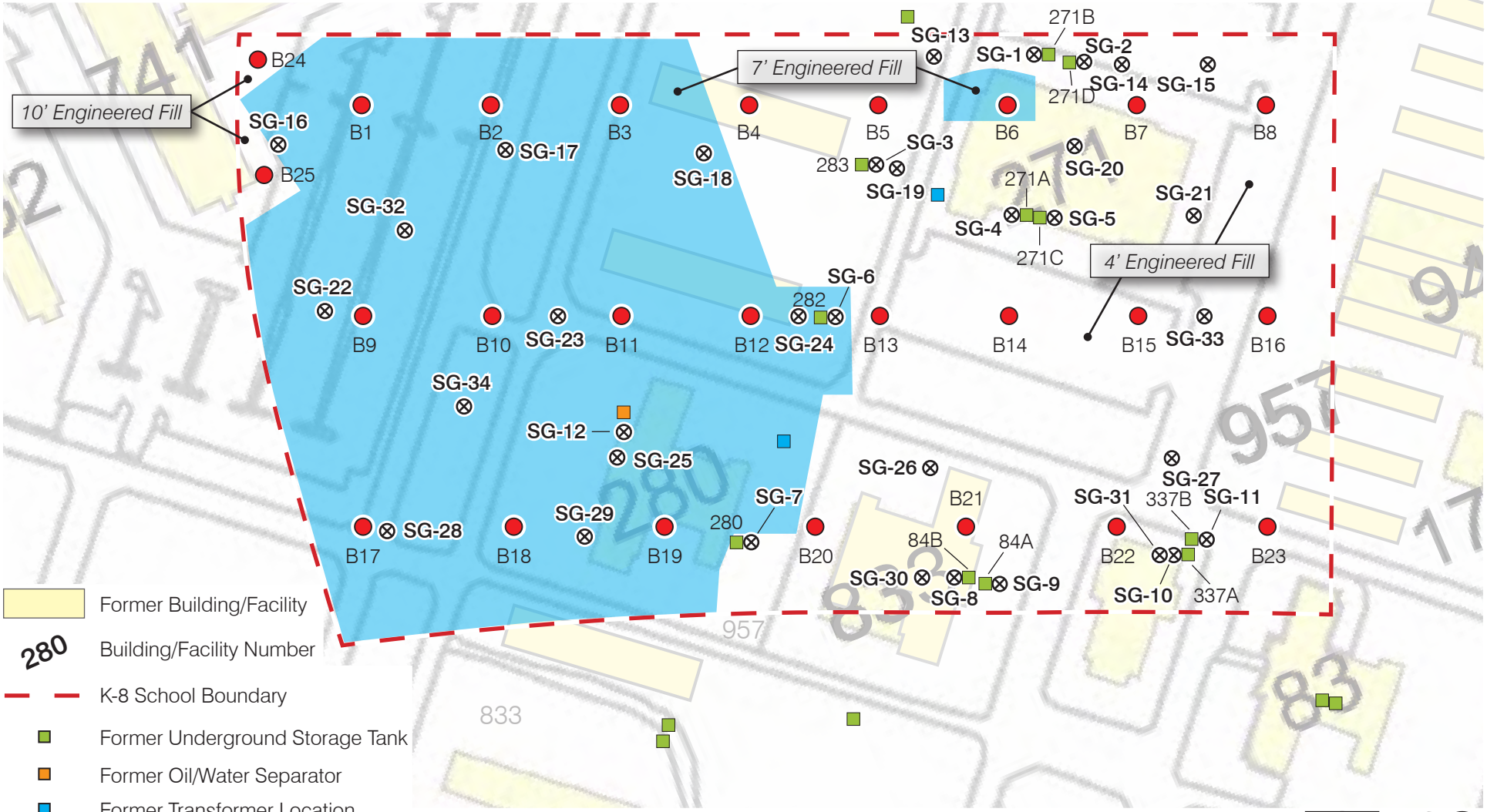
Groundwater Plume Locations — K8 School Boundary — Existing PA 30 and PA 51 Boundary

Note: Groundwater plumes reflect conditions in 2012 and 2013.

Source: Google Earth Pro, 2014; Trevet, Inc. 2013; Enviro Compliance Solutions, Inc. 2013

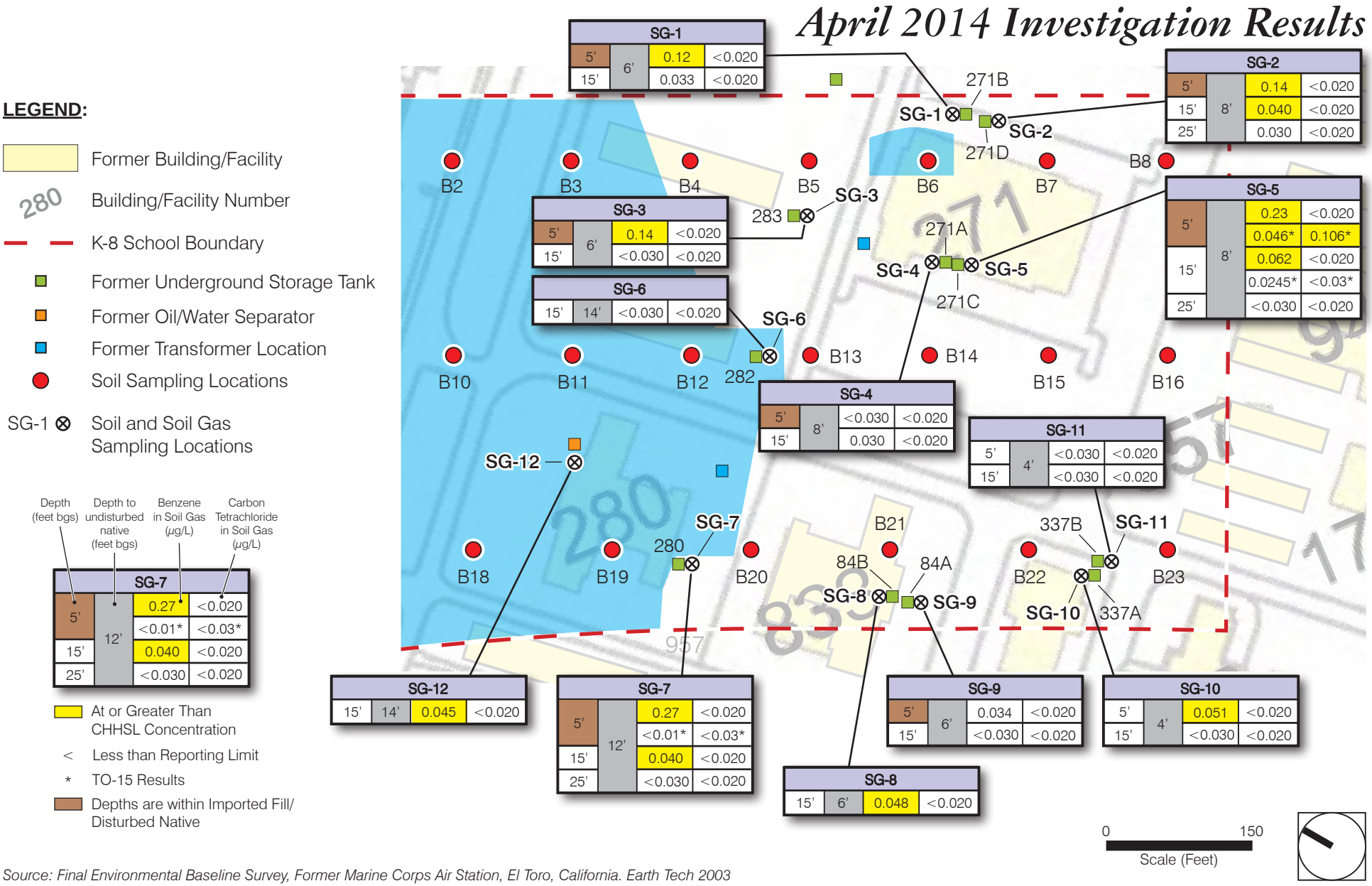
0 1,500
Scale (Feet)

PEA Sampling Locations



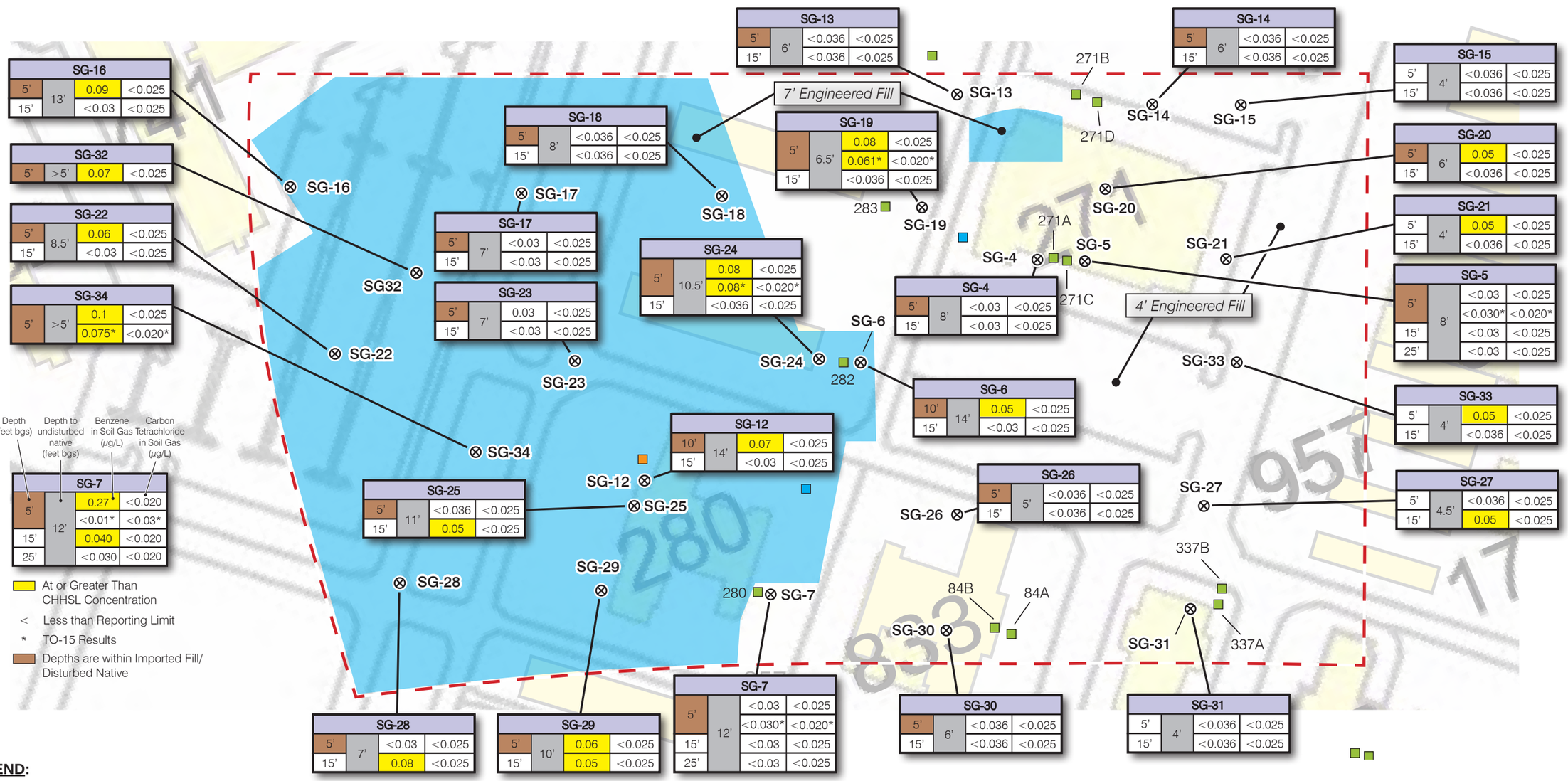
Source: Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California. Earth Tech 2003

April 2014 Investigation Results



Source: Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California. Earth Tech 2003

May 2014 Investigation Results



LEGEND:

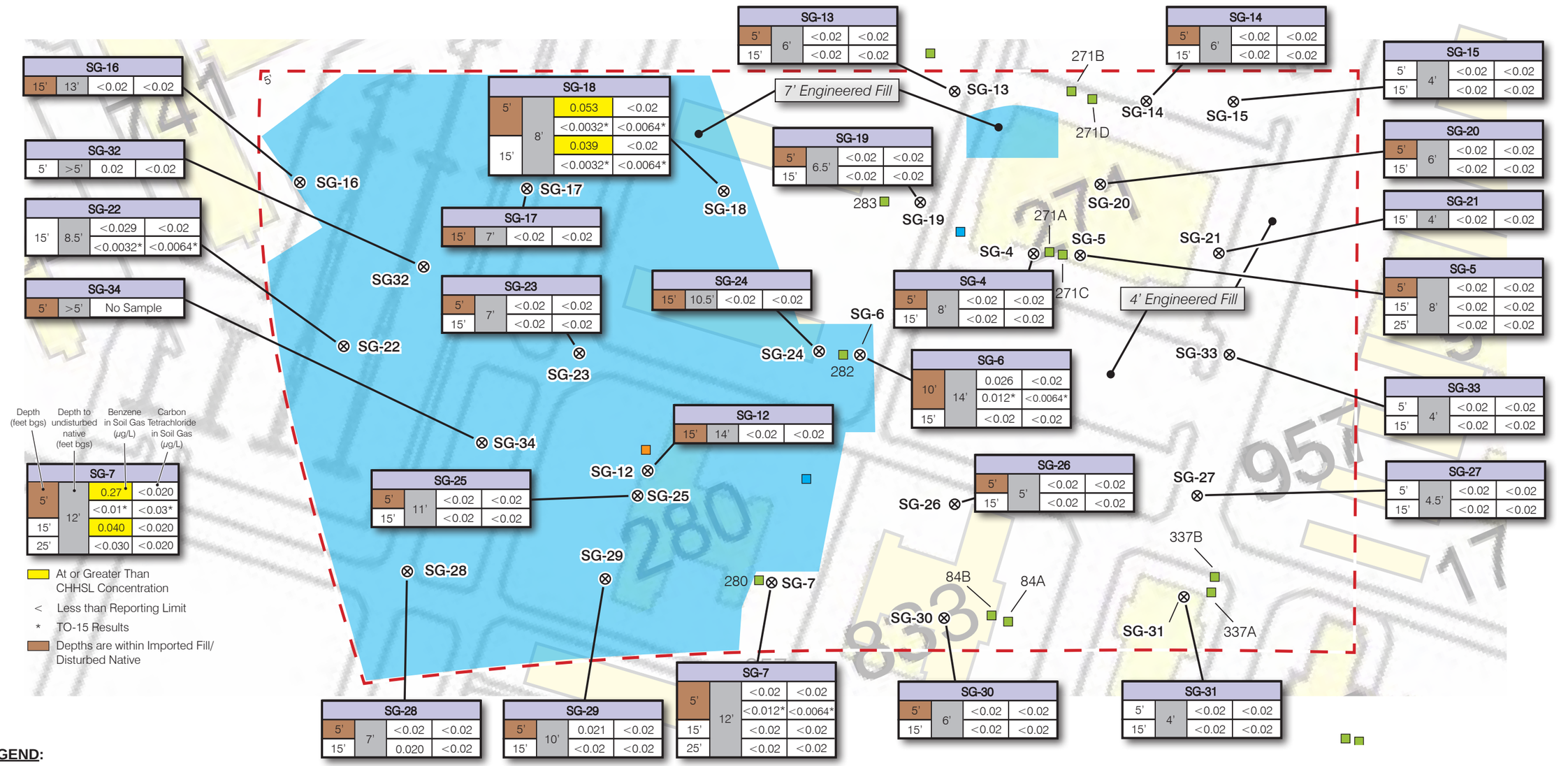
- Former Building/Facility
- 280 Building/Facility Number
- K-8 School Boundary
- Former Underground Storage Tank
- Former Oil/Water Separator
- Former Transformer Location
- SG-1 ⊗ Soil and Soil Gas Sampling Locations

SG-4 through SG-7 and SG-12 are still present from April 2014 investigation.

0 150
Scale (Feet)

Source: Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California. Earth Tech 2003

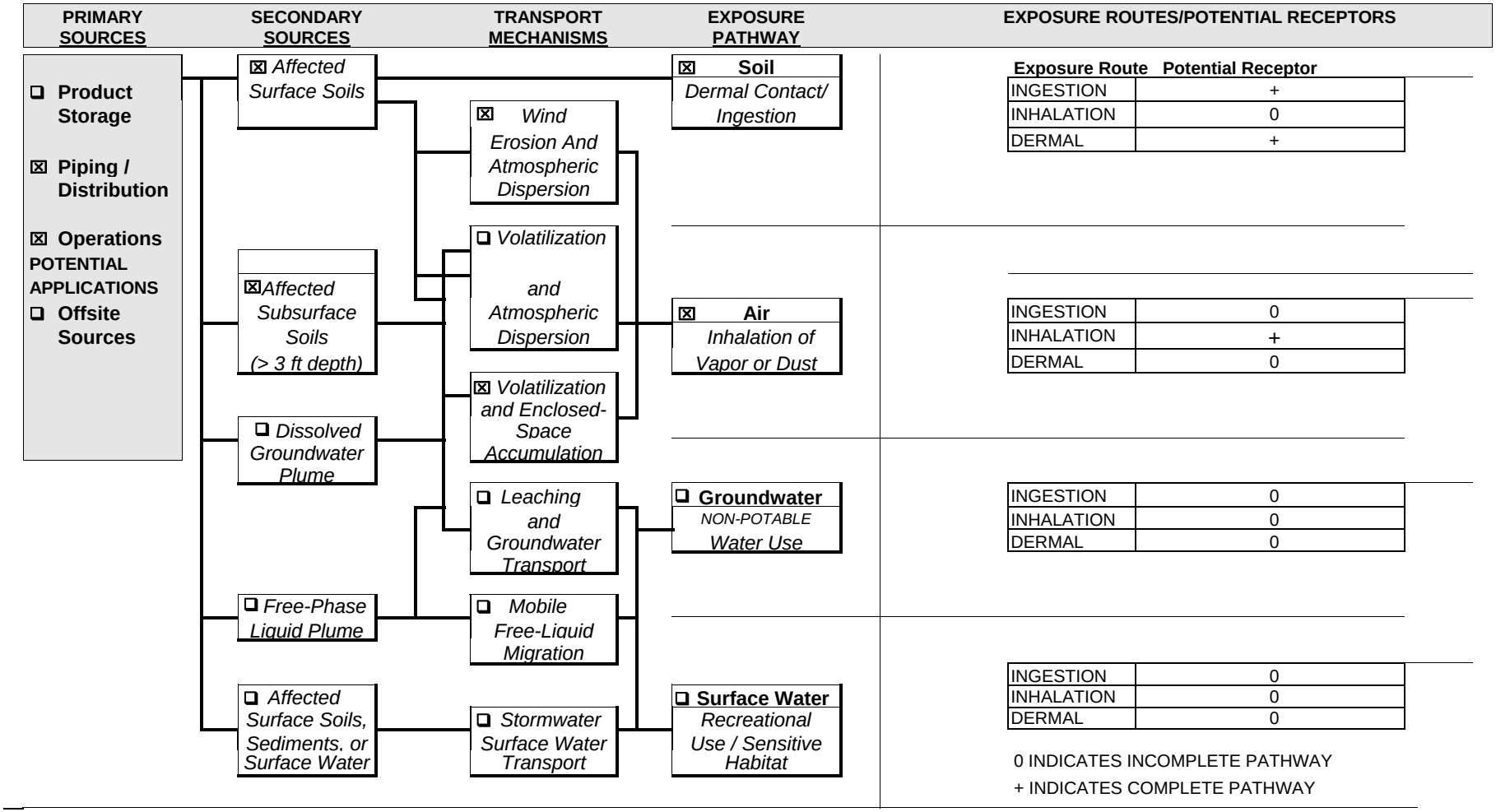
June/July 2014 Investigation Results



Source: Final Environmental Baseline Survey, Former Marine Corps Air Station, El Toro, California. Earth Tech 2003

FIGURE 11 CONCEPTUAL SITE MODEL

K8 – Great Park
Irvine Unified School District
Irvine, California



Appendix A. Site Photographs

Appendix

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PLACEWORKS

SITE PHOTOGRAPHS

Client Name: Irvine Unified School District

Site Location: Irvine Unified School District K8 – Great Park

Project No.: ISD-29.0

Photo No:	Date:
1	11/15/2012

Description:

View of northwestern portion of the site prior to grading, looking west.

Photo No:	Date:
2	11/15/2012

Description:

View of former auditorium building foundation prior to grading, looking west.

PLACEWORKS SITE PHOTOGRAPHS

Client Name:	Irvine Unified School District
Site Location:	Irvine Unified School District K8 – Great Park
Project No.:	ISD-29.0

Photo No:	**Date:**
3	11/15/2012

Description:

View of eastern portion of the site prior to grading, looking southwest.

Photo No:	**Date:**
4	11/15/2012

Description:

View of former auditorium building prior to grading, looking northwest.

PLACEWORKS SITE PHOTOGRAPHS

Client Name: Irvine Unified School District

Site Location: Irvine Unified School District K8 – Great Park

Project No.: ISD-29.0

Photo No:	Date:
5	11/15/2012

Description:

View of building 833 foundation (left) prior to grading, looking north.

Photo No:	Date:
6	11/15/2012

Description:

View of building 280 foundation (left), looking southwest.

PLACEWORKS SITE PHOTOGRAPHS

Client Name: Irvine Unified School District

Site Location: Irvine Unified School District K8 – Great Park

Project No.: ISD-29.0

Photo No: 7	**Date:** 4/15/2014
Description:	

View of Geoprobe drilling equipment collecting soil.

Photo No: 8	**Date:** 4/15/2014
Description:	

View of eastern portion of site, looking southwest, with grading activity surrounding the property.

PLACEWORKS SITE PHOTOGRAPHS

Client Name:	Irvine Unified School District
Site Location:	Irvine Unified School District K8 – Great Park
Project No.:	ISD-29.0

Photo No: 9	**Date:** 5/20/2014
Description:	

View of the installation of a soil gas probe.

Photo No: 10	**Date:** 6/17/2014
Description:	

View of a shut-in test prior to purging SG-16-15'.

PLACEWORKS SITE PHOTOGRAPHS

Client Name:	Irvine Unified School District
Site Location:	Irvine Unified School District K8 – Great Park
Project No.:	ISD-29.0

Photo No: 11	**Date:** 6/17/2014
Description:	

View of northern portion of the site, looking northwest with mobile laboratories in the background.

Photo No: 12	**Date:** 6/18/2014
Description:	

View of a Summa canister being filled at SG-18-5'.

Appendix B. Research Documentation

Appendix

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Appendix C. Environmental Database Search Report

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Appendix D. Health and Safety Plan

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Appendix E. Laboratory Reports

Appendix

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Appendix F. Boring Logs

Appendix

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Appendix G. Risk Model Results

Appendix

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Appendix H. QAPP

Appendix

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