



March 27, 2019

LIMITED PHASE II SUBSURFACE INVESTIGATION

Property Identification:

Point Vincente Park/Civic Center
30940 Hawthorne Boulevard
Rancho Palos Verdes, California 90275

AEI Project No. 400935

Prepared for:

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Point Vincente Park/Civic Center
30940 Hawthorne Boulevard
Rancho Palos Verdes, California 90275
AEI Project No. 400935

AEI Consultants (AEI) is pleased to provide this report which describes the activities and results of the Limited Phase II Subsurface Investigation (Phase II) performed at the above referenced subject property herein referenced as the "Site" (Figures 1 and 2). This investigation was completed in general accordance with the authorized scope of services outlined in our authorized proposal number 60629.

1.0 SITE DESCRIPTION

The Site consists of an approximate 23-acre parcel containing six buildings on the southern side of Hawthorne Boulevard in a mixed residential and commercial area of Rancho Palos Verdes, California (Figure 2).

The Site is relatively flat at an elevation of approximately 352 feet above mean sea level and is located atop a bluff that slopes southwest toward the ocean. The regional topographic gradient direction slopes toward the southwest and, therefore, the direction of groundwater flow beneath the Site is inferred to be to the southwest. The Pacific Ocean is located approximately 0.27-mile to the southwest.

Based on a review of a Phase I Environmental Site Assessment (ESA) performed by Professional Service Industries, Inc. (PSI) dated September 8, 2010. Groundwater at the Site is estimated to be greater than 20 feet below ground surface (bgs).

2.0 BACKGROUND

A Draft Phase I Environmental Site Assessment (ESA) was performed by AEI as detailed in a report dated February 28, 2019 (AEI Project Number 400935). As detailed in the Draft Phase I ESA, The Site was historically used for military purposes/Nike Missile Facilities from 1932 to 1974, these included the developed of anti-aircraft fire control and gun emplacements. The Site was designated as Los Angeles Defense Area (LADA) #55, a part of the air defense system of Los Angeles during the Cold War. The Nike defense system operated until approximately 1974. The

Limited Phase II Subsurface Investigation

30940 Hawthorne Boulevard, Rancho Palos Verdes, California 90275

Nike Ajax missile was put in service in 1953 and used several acid or corrosive mixtures in the propellant system. The starting fluid was 99% Unsymmetrical Dimethylhydrazine (UDMH). The propellant was 83% JP-4 turbine engine fuel and 17% UDMH. The Missile oxidizer was inhibited Red Fuming Nitric Acid (IRFNA), composed of 83% Nitric Acid, 14% Nitrogen Dioxide, 0.6% Hydrofluoric Acid. The Nike Hercules missile was put in service in 1958 and did not use liquid propellants. According to the Department of Defense (DOD), potentially hazardous materials used at the Site during the operation of the Nike Missile Facility may have included nitrosamines, JP fuel, octane, gasoline, 2-propanol, trichloroethylene (TCE), acetone, 2-Butanone (MEK), tetrachloroethylene (PCE), polychlorinated biphenyls (PCBs), waste oils, paints, and ethylene glycol.

During the Phase I ESA, previous reports and regulatory agency records recorded at least three Underground Storage Tanks (USTs) were removed from the Site and several 55-gallon drums were identified (undisclosed contents) during military decommissioning activities (circa Late 1970s).

Sampling was reportedly completed at the time of the UST removal, however, the sampling data associated with three excavated USTs was not found by AEI nor by previous consultants. Previous reports identified several hazardous waste and/or materials on Site. These included paints, acids, fuels, waste/mixed oils, PCBs, unspecified organic liquid mixtures, and household wastes.

Limited sampling events were completed in 2005 and 2009 and results of these sampling events indicated non-detect to low levels of constituents including metals and pesticides. However, the Site is slated for redevelopment (pending government approval) as a new community/civic center, thus additional investigations were warranted to determine if the former uses of the property have impacted the Site.

3.0 INVESTIGATION EFFORTS

AEI was requested to perform a Limited Phase II Subsurface Investigation including the collection of soil samples, to evaluate if the historic site operations have significantly impacted the shallow subsurface of the Site.

This work was performed under the oversight of a California licensed Professional Geologist.

3.1 Health and Safety Plan

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

3.2 Permitting and Utility Clearance

Drilling permits were not required for this investigation. The public underground utility locating service DigAlert was notified to identify public utilities in the work area. Private utility locating was conducted by Pacific Coast Locators, Inc. (PCL) of La Crescenta, California to identify underground utilities on the subject property.

On February 27, 2019, boring and utility clearance using geophysical methods was conducted by PCL. The purpose of the boring clearance was to evaluate the potential presence of current or

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former underground utilities. The boring clearance was conducted using a magnetometer and ground penetrating radar. Where the results from the utility clearance indicated the presence of potential subsurface obstructions, the proposed boring locations were adjusted accordingly.

3.3 Drilling and Soil Sample Collection

On February 27, 2019, twenty (20) soil borings (B-1 through B-20) were advanced on the Site (Figure 2). The borings were advanced by Strongarm Environmental Field Services of Norwalk, California using a truck mounted direct-push drilling rig. The borings were advanced to depths between 5 and 10 feet below ground surface (bgs). The locations of the borings are listed below:

- Boring B-1 was advanced at the northern asphalt parking area.
- Boring B-2 was advanced at the western asphalt parking area.
- Boring B-3 was advanced to the south of boring B-2.
- Boring B-4 was advanced in the grass field adjacent to the west of the tennis court.
- Boring B-5 was advanced southeast of boring B-3.
- Boring B-6 was advanced east of boring B-5.
- Boring B-7 was advanced in the grass field, north of the tennis court.
- Boring B-8 was advanced east of boring B-8.
- Boring B-9 was advanced south of boring B-8.
- Boring B-10 was advanced at the eastern overflow parking area.
- Boring B-11 was advanced east of boring B-10.
- Boring B-12 was advanced to the east of boring B-11.
- Boring B-13 was advanced near the maintenance shed.
- Boring B-14 was advanced north of the helicopter pad.
- Boring B-15 was advanced at the helicopter pad.
- Boring B-16 was advanced adjacent to the above ground storage tanks.
- Boring B-17 was advanced at the southern boundary of the Site.
- Boring B-18 was advanced to the east of boring B-17.
- Boring B-19 was advanced to the north of boring B-18.
- Boring B-20 was advanced northeast of boring B-19.

The borings were advanced using 2.5-inch outer diameter rods and samples were collected by advancing the rods with acetate sample liners in approximately 4-foot intervals. After each interval, the core was retrieved, core barrel disassembled, and the sample liner was removed and transferred to the onsite geologist.

The soil borings were logged using the Unified Soil Classification System. A photo ionization detector (PID) was used to screen soil samples in the field and the PID readings for each sample were included on the boring logs (Appendix A). Selected soil samples were sealed with Teflon tape and plastic end caps.

Down-hole equipment was decontaminated using a triple rinse system containing detergent.

3.4 Boring Destruction

Following completion of sample collection and removal of tooling, the borings were backfilled with hydrated granular bentonite and completed at the surface to match the surrounding conditions.



3.5 Laboratory Analyses

On February 27, 2019, sixty-five (65) samples were collected, labeled and placed into a cooler with ice following sampling. The samples were transferred under appropriate chain-of-custody documentation to Eurofins/Calscience of Garden Grove, California. Laboratory analytical documentation is provided in Appendix B.

Laboratory analysis of twenty (20) soil samples consisted of the following:

- Total Petroleum Hydrocarbons (TPH-cc) using U.S. Environmental Protection Agency (EPA) Test Method 8015M
- Volatile Organic Compounds (VOCs) using U.S. EPA Test Method 8260B

Laboratory analysis of six (6) soil samples consisted of the following:

- Organochlorine Pesticides (OCPs) using U.S. EPA Test Method 8081A

Laboratory analysis of forty-one (41) soil samples consisted of the following:

- CAM-17 Metals using U.S. EPA Test Method 6010B/7471A

3.6 Investigation Derived Wastes

No investigation derived waste was created during this investigation.

4.0 FINDINGS

The analytical results for petroleum hydrocarbons, VOCs, OCPs, and metals in soil were reviewed and compared to the Environmental Screening Levels (ESLs) published by the San Francisco Bay regional Water Quality Control Board (RWQB) and updated as of January 2019. The ESLs are conservative screening levels for over one hundred chemicals and enable the evaluation of the potential impact of these chemicals in soil, groundwater, soil vapor and indoor air. They are intended to help expedite the identification and evaluation of potential environmental concerns and impacted sites.

Soil results for metals were also reviewed and compared to the background concentrations of metals that naturally exist in Southern California soils. A study entitles Background Concentrations of Trace and Major Elements in California Soils, dated March 1996, by the Kearny Foundation of Soil Science was also reviewed for information on the concentrations of background metals in California soils. The Kearny report is a relevant source used by public policy makers and those in the private sector concerned with environmental remediation and land use planning.

4.1 Geology and Hydrogeology

Sediment encountered in each of the borings generally consisted of dense silty sands interbedded with clayey sands and stiff clays (Appendix A).

Groundwater was not encountered in borings B-1 through B-20 and was not a part of this investigation.



4.2 Soil Sample Analytical Results

The following information is a summary of the soil sample analytical test results (Appendix B). This information has also been included in Tables 1, 2, and 3.

- Arsenic was detected in two samples (B-14-1 and B-15-2.5) collected from the two borings advanced near the helicopter pad at concentrations that exceed the California Maximum Background Concentration (CMBC) of 11.0 mg/kg.
 - The sample collected at a depth of 1-foot from boring B-14 had a detected concentration of 50.5 mg/kg.
 - Analysis of the sample from boring B-14 at 2.5 feet was non-detect for arsenic.
 - The sample collected at a depth of 2.5-feet from boring B-15 had a detected concentration of 13.2 mg/kg.
 - Analysis of the sample from boring B-15 at 5 feet indicated a concentration below the CMBC.
- Other metals were detected in the soil samples collected as part of this investigation. However, the detected concentrations of the metals were below their respective comparison levels or were within background levels.
- Total petroleum hydrocarbons, VOCs, and OCPs were analyzed as part of this investigation. However, the detected concentrations were well below their respective comparison levels.

5.0 SUMMARY AND CONCLUSIONS

AEI has completed a Limited Phase II at the Site. The purpose of the Phase II at the Site was to evaluate current conditions related to historic Site operations within the Site from at least 1932 through at least 1974 as revealed in a Draft Phase I ESA by AEI dated February 28, 2019. A total of twenty (20) borings (B-1 through B-20) were advanced at the Site for the collection of soil samples.

The soil samples collected as part of this investigation were analyzed for petroleum hydrocarbons, VOCs, OCPs, and metals. With the exception of arsenic, the detected concentrations of these analytes were below their respective comparison levels.

Arsenic was detected above the background concentration in two soil samples collected from depths of 1 foot and 2.5 feet bgs in soil borings B-14 and B-15, respectively. The detected concentration of arsenic in sample B-14-1 was 50.5 mg/kg and in sample B-15-2.5 was 13.2 mg/kg which exceeds the background comparison level of 11 mg/kg set by the Kearny foundation.

The detected concentration of arsenic in sample B-14-2.5 was non detect. The soil sample collected from 5 feet bgs from boring B-15 was analyzed for arsenic. The detected concentration of arsenic in sample B-15-5 was below the CMBC. Vertical delineation of the two isolated areas of elevated arsenic has been achieved. AEI recommends additional step out sampling to further delineate the lateral characterization of the arsenic impacted soil.

Based on these results, AEI recommends the preparation of a Soils Management Plan (SMP) to manage the arsenic impacted soil during any future redevelopment which may occur at the Site to minimize direct exposure to the soil during redevelopment activities.



6.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the Site. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

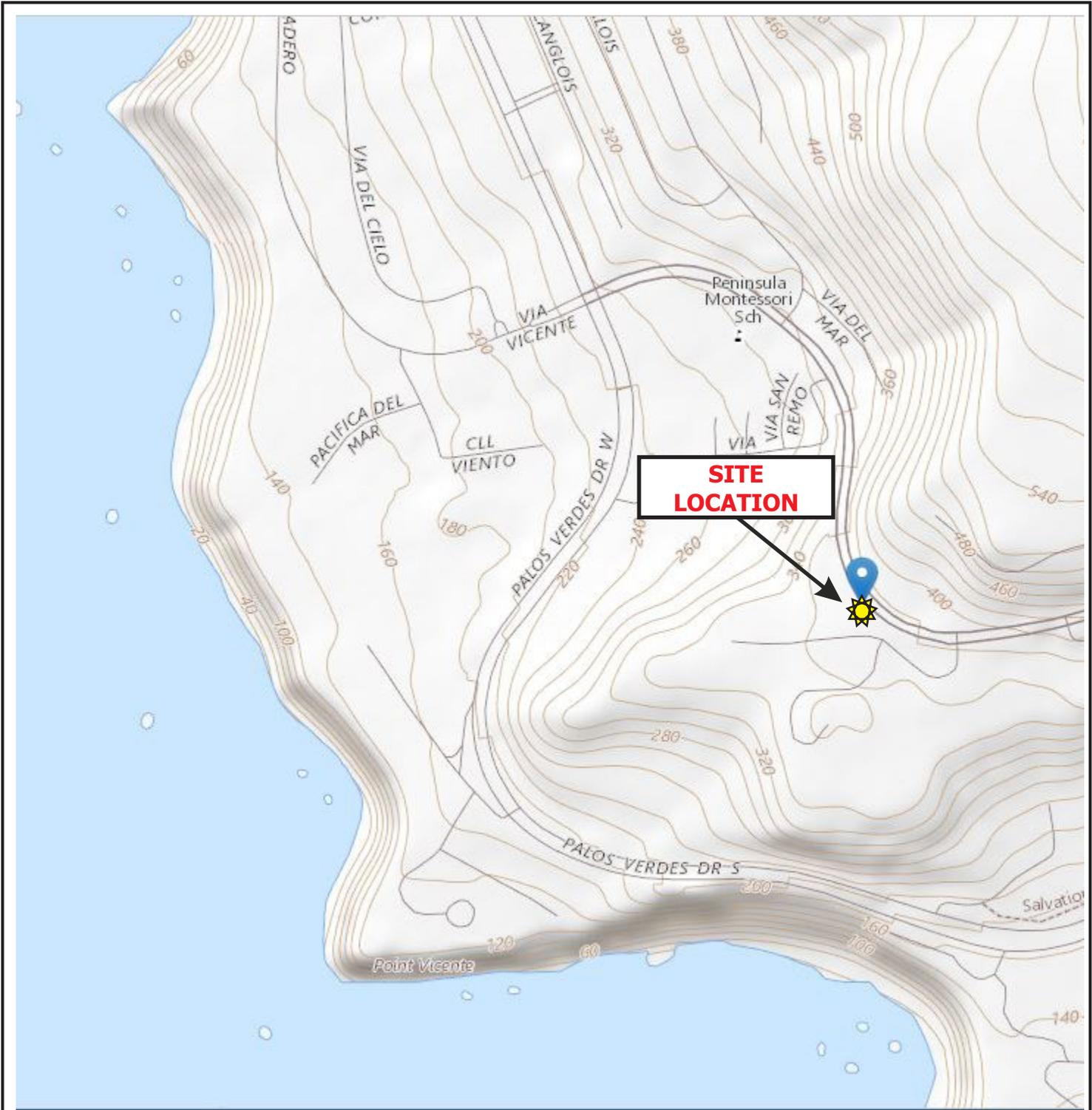
This investigation was prepared for the sole use and benefit of Mr. Matt Waters/Rancho Palos Verdes. All reports, both verbal and written, whether in draft or final, are for the benefit of Mr. Matt Waters/Rancho Palos Verdes. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by Mr. Matt Waters/Rancho Palos Verdes. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

If there are any questions regarding our investigation, please do not hesitate to contact AEI at (310) 798-4255.

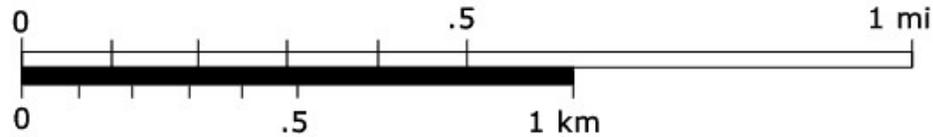
Sincerely,
AEI Consultants



FIGURES



TN* / MN
13°



LEGEND

Map: Redondo Beach, California Quadrangle
 Date: 1996
 Source: USGS



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SITE LOCATION MAP

30940 Hawthorne Boulevard,
 Rancho Palos Verdes, California 90275

FIGURE 1
 Project Number 400935



LEGEND

- Approximate Property Boundary
- B-20 Approximate Soil Boring Locations



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SITE MAP

30940 Hawthorne Boulevard
 Rancho Palos Verdes, California 90275

FIGURE 2
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TABLES

TABLE 1: SOIL SAMPLE DATA SUMMARY
30940 Hawthorne Boulevard, Rancho Palos Verdes, California 90275
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Location ID	Date	Depth (feet bgs)	U.S. EPA Method 8015B			U.S. EPA Method 8260B							
			TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-o (mg/kg)	Acetone (mg/kg)	Ethyl- benzene (mg/kg)	p/m Xylene (mg/kg)	o-Xylene (mg/kg)	Methylene Chloride (mg/kg)	Carbon Disulfide (mg/kg)	1,3,5- Trimethyl- benzene (mg/kg)	All Other VOCs (mg/kg)
B-1	2/27/2019	5	ND<15	5.1	19	0.021 J	0.00021 J	0.00087 J	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-2	2/27/2019	5	ND<15	ND<15	ND<15	0.036 J	ND<0.0050	0.00042 J	ND<0.0050	ND<0.050	ND<0.050	ND<0.0050	<RL
B-3	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-4	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-5	2/27/2019	5	ND<15	ND<15	ND<15	0.0075 J	ND<0.0050	ND<0.0050	ND<0.0050	0.0024 J	ND<0.050	ND<0.0050	<RL
B-6	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-7	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.130	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.051	ND<0.0051	<RL
B-8	2/27/2019	5	ND<15	ND<15	ND<15	0.0071 J	ND<0.0050	ND<0.0050	ND<0.0050	0.0024 J	ND<0.050	ND<0.0050	<RL
B-9	2/27/2019	5	ND<15	ND<15	4.5 J	ND<0.130	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.051	ND<0.0051	<RL
B-10	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-11	2/27/2019	5	ND<15	7.1 J	15	0.011 J	0.00027 J	0.00088 J	ND<0.0051	ND<0.051	ND<0.051	ND<0.0051	<RL
B-12	2/27/2019	5	ND<15	6.6 J	35	ND<0.120	0.00025 J	0.00099 J	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-13	2/27/2019	5	ND<750	420 J	2,200	ND<0.130	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.051	ND<0.0051	<RL
B-14	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	0.00077 J	ND<0.0050	<RL
B-15	2/27/2019	5	ND<290	330	1,400	0.0098 J	0.0015 J	0.0058	0.0016 J	ND<0.050	ND<0.050	ND<0.0050	<RL
B-16	2/27/2019	5	ND<15	ND<15	4.8 J	ND<0.130	0.0028 J	0.0012 J	0.00058 J	ND<0.051	ND<0.051	ND<0.0051	<RL
B-17	2/27/2019	5	ND<73	97	290	ND<0.120	0.022	0.040	0.039	0.0016 J	ND<0.050	0.00088 J	<RL
B-18	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.120	0.00016 J	0.00045 J	ND<0.0049	ND<0.049	ND<0.049	ND<0.0049	<RL
B-19	2/27/2019	5	ND<730	410 J	1,900	ND<0.130	0.0073	0.016	0.0055	ND<0.050	ND<0.050	ND<0.0050	<RL
B-20	2/27/2019	5	ND<15	ND<15	ND<15	ND<0.130	ND<0.0051	ND<0.0051	ND<0.0051	ND<0.051	ND<0.051	ND<0.0051	<RL
Comparison Values in mg/kg from U.S. San Francisco bay Regional Water Quality Control Board Environmental Screening Levels; Table S-1; January 2019			2,000	1,200	180,000	670,000	26	2,500	25	--	--	Varies	

Notes:

mg/kg	Analyses performed by Eurofins/Calscience, Garden Grove, California	EPA	Environmental Protection Agency
ND<	Milligrams per kilogram	--	Comparison Value not Applicable
bgs	Not detected above the reporting limit (RL)	TPH-g	Total Petroleum Hydrocarbons as gasoline
VOCs	below ground surface	TPH-d	Total Petroleum Hydrocarbons as diesel
Bold	Volatile Organic Compounds	TPH-o	Total Petroleum Hydrocarbons as oil
J	Result exceeds applicable Comparison Value		
	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated		

TABLE 2: SOIL SAMPLE METALS DATA SUMMARY
 30940 Hawthorne Boulevard, Rancho Palos Verdes, California 90275
 AEI Project No. 400935

U.S. EPA Method 6010B/7471A for CAM-17 Metals (TTLIC)																				
Location ID	Date	Depth	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
		(feet bgs)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-1	2/27/2019	1	ND<0.750	5.82 B	1,010	0.731	4.82	38.7	5.93	24.0	ND<0.500	0.0315 J	2.98	54.7 B	ND<0.750	0.0896 J	ND<0.750	96.9	59.5	
		2.5	ND<0.785	ND<0.785	1,540	0.745	0.953	28.8	11.2	19.3	1.70	0.0116 J	ND<0.262	32.7 B	ND<0.785	0.0899 J	ND<0.785	37.8	33.1	
B-2	2/27/2019	1	ND<0.777	1.06 B	50.0	0.253 J	ND<0.518	6.91	5.12	6.73	0.198 J	0.0357 J	ND<0.259	6.35 B	ND<0.777	ND<0.259	ND<0.777	20.3	20.2	
		2.5	ND<0.735	5.96 B	1830	0.719	0.772	26.2	8.29	14.1	ND<0.490	ND<0.0877	ND<0.245	28.0 B	ND<0.735	ND<0.245	ND<0.735	44.2	29.5	
B-3	2/27/2019	1	ND<0.750	ND<0.750	48.7	0.279	4.47	15.6	7.84	25.7	ND<0.500	ND<0.0877	9.00	40.4 B	ND<0.750	ND<0.250	0.194 B,J	22.5	51.7	
		2.5	ND<0.765	2.79 B	1,490	0.938	0.707	33.9	11.1	17.8	ND<0.510	ND<0.0794	ND<0.255	33.7 B	ND<0.765	ND<0.255	ND<0.765	51.4	33.7	
B-4	2/27/2019	1	ND<0.735	0.273 B,J	1,630	0.789	1.48	32.7	11.4	24.6	8.56	0.0249 J	ND<0.245	34.7 B	ND<0.735	0.322	ND<0.735	41.8	41.3	
		2.5	ND<0.758	ND<0.758	586	0.340	0.227 J	20.9	4.21	13.0	2.95	ND<0.0862	ND<0.253	15.8 B	ND<0.758	ND<0.253	0.827 B	10.0	11.3	
B-5	2/27/2019	1	ND<0.758	ND<0.758	1,400	0.926	0.471 J	33.7	13.1	19.8	1.29	ND<0.0794	ND<0.253	33.5 B	ND<0.758	ND<0.253	0.497 B,J	48.8	34.4	
		2.5	ND<0.735	ND<0.735	1,080	0.864	0.466 J	34.1	13.2	19.6	ND<0.490	0.00586 J	ND<0.245	35.1 B	ND<0.735	ND<0.245	0.258 B,J	46.9	32.9	
B-6	2/27/2019	1	ND<0.773	0.974 B	1,580	0.943	0.598	36.8	12.5	19.8	ND<0.515	ND<0.0820	ND<0.258	36.6 B	ND<0.773	ND<0.258	ND<0.773	51.9	37.7	
		2.5	ND<0.739	ND<0.739	1,370	0.567	0.434 J	24.3	18.1	18.8	1.78	ND<0.0833	ND<0.246	49.7 B	ND<0.739	ND<0.246	ND<0.739	42.7	27.9	
B-7	2/27/2019	1	ND<0.750	2.38 B	1,820	0.861	0.803	31.4	11.2	19.8	ND<0.500	ND<0.0794	0.136 J	35.6 B	ND<0.750	ND<0.250	ND<0.750	49.5	34.9	
		2.5	ND<0.746	2.64 B	1,950	0.850	0.749	30.8	10.6	19.1	ND<0.498	ND<0.0862	ND<0.249	34.3 B	ND<0.746	ND<0.249	ND<0.746	49.6	33.6	
B-8	2/27/2019	1	ND<0.735	ND<0.735	2,800	0.860	0.730	33.9	11.7	21.2	1.17	0.00659 J	ND<0.245	37.6 B	ND<0.735	ND<0.245	ND<0.735	45.7	36.1	
		2.5	ND<0.746	ND<0.746	2,660	0.927	0.802	34.1	12.0	21.9	ND<0.498	ND<0.0847	ND<0.249	38.5 B	ND<0.746	ND<0.249	ND<0.746	47.6	33.6	
B-9	2/27/2019	1	ND<0.746	ND<0.746	1,630	0.650	2.57	38.3	11.9	31.2	21.1	0.0195 J	0.642	36.3 B	ND<0.746	0.880	0.736 B,J	39.9	66.8	
		2.5	ND<0.743	ND<0.743	87.9	0.388	0.646	11.2	12.0	20.1	42.7	ND<0.0862	ND<0.248	20.4 B	ND<0.743	ND<0.248	ND<0.743	13.0	58.5	
B-10	2/27/2019	1	ND<0.785	0.787 B	42.5	0.236 J	ND<0.524	14.6	4.55	10.6	33.2	ND<0.0877	ND<0.262	9.90 B	ND<0.785	ND<0.262	ND<0.785	24.7	23.1	
		2.5	ND<0.769	5.41 B	874	0.758	3.25	35.4	6.35	28.4	6.22	0.0561 J	2.64	51.7 B	ND<0.769	ND<0.256	0.156 B,J	73.7	69.2	
B-11	2/27/2019	1	ND<0.754	6.26	531	0.421	0.423 J	14.8	4.62	13.6	3.68	0.0125 J	0.494	14.4 B	ND<0.754	ND<0.251	ND<0.754	25.1	32.0	
		2.5	ND<0.743	ND<0.743	1,790	0.714	1.13	32.4	13.7	27.1	ND<0.495	ND<0.0877	0.524	45.3 B	ND<0.743	ND<0.248	1.14 B	43.7	42.4	
B-12	2/27/2019	1	ND<0.728	7.37	416	0.399	0.695	12.3	3.30	11.7	2.90	0.0151 J	0.822	12.1 B	ND<0.728	ND<0.243	1.19 B	22.9	30.0	
		2.5	ND<0.781	2.07	197	0.305	0.772	9.07	3.51	21.0	6.42	0.0186 J	0.453	16.2 B	ND<0.781	ND<0.260	1.23 B	24.8	28.6	
B-13	2/27/2019	1	ND<0.735	3.15	805	0.626	1.37	43.7	19.9	44.2	38.7	0.0179 J	0.290	60.8 B	ND<0.735	ND<0.245	ND<0.735	39.8	98.2	
		2.5	ND<0.758	ND<0.758	2,010	0.804	0.867	38.2	15.4	28.9	ND<0.505	ND<0.0877	ND<0.253	66.4 B	ND<0.758	ND<0.253	0.364 B,J	58.5	47.5	
B-14	2/27/2019	1	ND<0.765	50.5	603	0.379	0.572	11.3	5.37	22.3	51.4	0.0156 J	0.570	16.5 B	ND<0.765	ND<0.255	ND<0.765	17.7	901	
		2.5	ND<0.781	ND<0.781	1,980	0.793	0.603	33.1	11.7	21.6	ND<0.521	ND<0.0820	ND<0.260	40.4 B	ND<0.781	ND<0.260	0.404 B,J	46.4	36.4	
B-15	2/27/2019	1	ND<0.743	2.82	1,060	0.568	1.05	25.8	8.21	15.6	1.05	0.0141 J	1.03	33.6 B	ND<0.743	ND<0.248	ND<0.743	39.7	33.7	
		2.5	4.05	13.2	1,050	0.715	1.90	21.7	0.478	3.82	ND<0.493	0.0477 J	0.284	8.75	ND<0.739	ND<0.246	ND<0.739	63.7	14.9	
B-16	2/27/2019	1	ND<0.758	ND<0.758	812	0.460	0.555	24.9	12.3	19.4	0.534	ND<0.0794	0.227 J	42.0 B	ND<0.758	ND<0.253	1.15 B	24.2	28.3	
		2.5	ND<0.718	ND<0.718	165	0.453	0.834	28.2	15.5	20.6	1.95	ND<0.0862	ND<0.239	51.4 B	ND<0.718	ND<0.239	ND<0.718	15.9	28.7	
B-17	2/27/2019	1	ND<0.728	ND<0.728	468	0.575	1.21	36.8	16.4	28.4	ND<0.485	ND<0.0862	0.863	63.2 B	ND<0.728	ND<0.243	0.536 B,J	28.5	35.1	
		2.5	ND<0.773	0.735 J	759	0.633	0.838	32.9	14.1	24.7	ND<0.515	ND<0.0862	0.843	45.0 B	ND<0.773	ND<0.258	0.831 B	35.8	36.1	
B-18	2/27/2019	1	ND<0.785	6.15	443	0.869	3.57	59.0	6.15	40.9	11.7	0.0438 J	3.03	62.5 B	ND<0.785	0.0945 J	ND<0.785	110	99.6	
		2.5	ND<0.773	1.83	65.0	0.247 J	ND<0.515	5.03	3.27	10.6	5.48	0.00754 J	ND<0.258	10.2 B	ND<0.773	ND<0.258	0.332 B,J	14.5	19.9	
B-19	2/27/2019	1	ND<0.746	2.38	1,420	0.717	1.55	35.4	14.0	25.9	0.972	0.206	0.835	49.4 B	ND<0.746	ND<0.249	0.290 B,J	42.2	41.8	
		2.5	ND<0.761	2.00	1,360	0.579	0.800	27.2	9.88	14.5	ND<0.508	0.00865 J	0.552	34.0 B	ND<0.761	ND<0.254	0.176 B,J	32.0	28.2	
B-20	2/27/2019	1	ND<0.773	0.558 J	95.2	0.234 J	ND<0.515	5.28	2.84	5.76	3.72	0.0122 J	ND<0.258	6.04 B	0.447 B,J	ND<0.258	0.499 B,J	11.5	19.9	
		2.5	ND<0.758	2.14	798	0.462	1.31	21.3	7.06	14.0	2.43	0.0369	0.628	22.0 B	ND<0.758	0.289	0.952 B	27.6	31.6	
Comparison Values based on California Maximum Background Concentration in mg/kg*			1.95	11.0	1,400	2.7	1.7	1,579	46.9	96.4	97.1	0.90	9.6	509	0.430	8.30	1.10	288	236	
Comparison Values in mg/kg from U.S. San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels; Table S-1; January 2019			160	0.31	220,000	6,900	4,000	6.2	1900	47,000	380	190.0	5,800	64,000	5,800	5,800	12.0	5,800	350,000	

Notes:

- Analyses performed by Eurofins/Calscience, Garden Grove, California
- mg/kg Milligrams per kilogram
- bgs Below ground surface
- ND< Not detected above the Reporting Limit (RL)
- EPA Environmental Protection Agency
- J Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated
- B Analyte was present in the associated method blank
- Bold** Result exceeds applicable Comparison Value
- * From Kearney Foundation of Soil Science 1996 Report "Background Concentrations of Trace and Major Elements in California Soils"
- CAM California Administrative Manual - presently known as the California Code of Regulations
- TTLIC Total Threshold Limit Concentrations - the limit at which concentrations of a metal in soil is considered hazardous

TABLE 3: SOIL SAMPLE ORGANOCHLORINE PESTICIDES DATA SUMMARY
30940 Hawthorne Boulevard, Rancho Palos Verdes, California 90275
AEI Project No. 400935

Location ID	Date	Depth (feet bgs)	U.S. EPA Method 8081A				
			4,4'-DDE	Dieldrin	Chlordane	4,4'-DDT	All Other OCPs
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-10	2/27/2019	1	ND<0.099	ND<0.099	ND<0.099	ND<0.099	<RL
B-11	2/27/2019	1	0.0042 J	0.0022 J	ND<0.0050	ND<0.0050	<RL
B-12	2/27/2019	1	ND<0.020	ND<0.020	ND<0.020	ND<0.020	<RL
B-13	2/27/2019	1	0.0029 J	ND<0.0050	0.082	0.022	<RL
B-14	2/27/2019	1	0.0032 J	0.0028 J	0.032 J	0.0086	<RL
B-15	2/27/2019	1	ND<0.0050	ND<0.0050	ND<0.050	ND<0.0050	<RL
Comparison Values in mg/kg from U.S. San Francisco bay Regional Water Quality Control Board Environmental Screening Levels; Table S-1; January 2019			8.3	0.16	2.2	8.5	Varies

Notes:

- Analyses performed by Eurofins/Calscience, Garden Grove, California
- mg/kg Milligrams per kilogram
- ND< Not detected above the Reporting Limit (RL)
- bgs below ground surface
- OCPs Organochlorine Pesticides
- Bold** Result exceeds applicable Comparison Value
- J Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated
- EPA Environmental Protection Agency
- Comparison Value not Applicable
- DDE Dichlorodiphenyldichloroethylene
- DDT Dichlorodiphenyltrichloroethane