ERAS

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March 25, 2004

RU2572

Mr. Clayton Keats See the Doctor Transmission 16611 East 14th Street San Leandro, CA 94607

Re:

Workplan Summary for Soil Remediation and Further Investigation at 16611 East 14th Street, San Leandro, California

ERAS Project Number 03088C

Dear Mr. Keats:

The following is a summary of work proposed to remove contaminated soil remaining in soil in two localized areas at the subject site and further investigate the vertical extent of transmission fluid in soil at the subject site in one of those areas. The proposed scope of work is based on letter to the owner, Mr. Clayton Keats, from Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA), dated March 23, 2004.

Background

PIERS Phase II Investigation

On May 23, 2003, PIERS drilled six shallow soil borings at the Property. The borings were drilled through concrete or asphalt in 5 locations, the sixth was collected in an unpaved area. The samples were collected from depths of 6 inches (0.5 feet), according to PIERS and the sample descriptions on the chain-of-custody documentation. Fill beneath the paved surfaces consisted of 2-3 inches of sand, silt and gravel. No fill was present in the unpaved area. The locations of the samples and analytical results are presented on **Figure 1**.

Soil samples were collected in the parts washing machine area (PW#1 and PW#2), oil storage areas (OS#1 and OS#2) and in the transmission storage rack areas (TR#1 and TR#2). Sample PW#1 was analyzed for volatile organic compounds by EPA 8260; no VOCs were detected. Samples OS#1, OS#2 and PW#2 were analyzed for petroleum oil and grease (O&G) by method E1164. O&G concentrations were detected in samples OS#1 and PW#2 at 150mg/Kg and 270 mg/Kg.

Total petroleum hydrocarbon as transmission fluid (TPH-to) was detected at 4,680 mg/Kg in the sample TR#1 collected from 6-inches below surface, directly beneath the

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asphalt area of the northern transmission rack storage area. TPH-to was detected at 14,700 mg/Kg in soil sample TR#2 collected from 6-inches below surface in the unpaved (western) transmission rack area. These two areas were small topographic low spots where surface water runoff appeared to collect.

PIERS Phase 2 Investigation - Additional Sampling

PIERS excavated soil from the two locations where elevated concentrations of TPH-to were detected. On June 6, 2003, four confirmatory soil samples were collected from the excavation. Soil samples were collected from the excavation sidewall at a depth of approximately 1.5 feet and from the bottom at approximately 2.4 feet.

The soil samples were sent to McCampbell Analytical, Inc. for analysis for transmission oil. TPH-to was detected at 570 mg/Kg in the bottom sample in one transmission ns rack area, and at 810 mg/Kg in sidewall sample from the other transmission rack area. Unfortunately, it appears that PIERS may have reversed the sample numbers (TR#2 in the area designated as TR#1 in the previous investigation) so it is uncertain from which area each of these samples were collected. However, the interpretation of the chromatogram patterns for those samples has confirmed the correct location for these samples as described below.

ERAS Limited Soil Investigation

In response to the letter to Mr. Clayton Keats from the ACHCSA, dated October 20, 2003, ERAS prepared a Workplan Summary dated November 7, 2003. The workplan summary proposed the drilling of 10 soil borings to collect soil samples from a depth of approximately 3 feet below ground surface (bgs). The workplan was approved with additions in a letter from the ACHCSA, dated November 13, 2003.

A total of 12 soil borings were drilled by ERAS on November 19, 2003. Soil samples from two borings inside the parts washing area were analyzed for mineral spirits. The remaining samples were analyzed for extractable fuel hydrocarbons fuel fingerprint that included evaluation for the presence of diesel fuel, kerosene and motor oil. All of the samples were analyzed for total lead as a result of an elevated concentration of lead detected in waste drums containing soil excavated from the subject site by PIERS. None of the soil samples contained detectable concentrations of petroleum hydrocarbons. The concentrations of lead were within normal background concentrations.

A review of the chromatograms from the soil sample TR#1 collected by PIERS indicated the petroleum hydrocarbons detected in the samples from TR#1 was likely the result of asphalt included in the sample. This is consistent with the area of TR#1 being paved. The hydrocarbon in the sample from TR#2 was determined to be hydraulic oil, based on the chromatogram pattern.

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The analytical results of soil samples collected from the subject site are summarized in **Table 1**.

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Proposed Scope of Work

This work plan is designed to resolve the issues addressed in items #1, 2 and 3 of the March 23, 2004 letter. Atem #1 indicates the potential impact to groundwater from the surface release must be evaluated. This issue will be evaluated by collecting soil samples in the one identified "hot spot" (TR#1) from depths of approximately 4 feet and 7 feet. Soil will be screened during boring by odor and visually since the known According contaminant is non-volatile transmission oil. A boring log will be prepared during the boring.

Item #2 will be addressed by removing additional soil from the area of PIERS samples TR#1 and TR#2. Note the excavation will be performed prior to performing the soil borings discussed immediately above. A sample collected at the bottom of the excavation at TR#1 contained 570 ppm of petroleum hydrocarbons. It is anticipated the excavation at that location will be approximately three feet by three feet by four feet deep. Confirmation soil samples will be collected from the sidewalls of this excavation at a depth of approximately 1 foot below ground surface (bgs) and from the bottom at a depth of approximately 4 feet bgs. - akt and and for Toff to a the a-mo

A sample collected from the sidewall at TR#2 contained 830 ppm of petroleum hydrocarbons. This area will be excavated to laterally enlarge the size of the original excavation. Confirmation soil samples will be collected from the sidewalls of this excavation at a depth of approximately 1 foot bgs. 😽 portions .

Item #3 indicates a deed restriction will be placed on the subject site is soil exceeding 500 parts per million (ppm) remains. The excavation described above is designed to remove soil greater that this concentration in the known areas of contamination.

The work proposed to resolve these issues will include the following tasks:

- 1) Update the site-specific Health and Safety Plan.
- 2) Enlarge the excavation in the TR#1 area to approximately 3 by 3 feet to a depth of approximately 4 feet. Enlarge the excavation in the area of TR#2 to approximately 3 by 3 feet. 5 test 2
- 3) Collect confirmation soil samples by hand from each of the 4 sidewalls of each excavation at a depth of approximately 1 foot bgs. Collect a soil sample from the bottom of the excavation at TR#1 at a depth of approximately 4 feet. ERAS standard operating procedures for hand sampling are described below.
- 4) A soil boring will be advanced using a hand auger at the middle the TR#1 excavation. The boring will be advanced to a depth of approximately 7 feet. A soil sample will be collected from that depth using a slide hammer. ERAS standard operating procedures for soil boring by hand and sampling are described below.

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- 5) Analyze soil samples on a 48-hour turnaround time for the presence of TPH-hydraulic oil and TPH-motor oil with silica gel strip, and total lead.
- After soil samples are collected, the soil boring will be properly sealed with clean cement grout by ERAS.
- 7) All soil generated by the proposed investigation will be temporarily stored onsite in 55-gallon drums. A soil sample will be taken from each drum for laboratory analysis. After laboratory results are received, the waste will be removed for proper disposal by a certified waste hauler.
- 8) A report will be prepared detailing the field activities and evaluating the findings of the investigation. The report will include details of field procedures, a map of sample locations, results of laboratory analysis of contaminants in the soil, and documentation of proper disposal of waste soil and water. The report will be reviewed and certified by a State of California Registered Geologist.

Please call if you have any question regarding the previous work performed or this proposed work.

Sincerely,

ERAS Environmental, Inc.

Gail M. Jones

California Registered Geologist 5725

Attachments:

Figure 1. Boring Location Map

Table 1. Soil Sample Analytical Results

Standard Operating Procedures

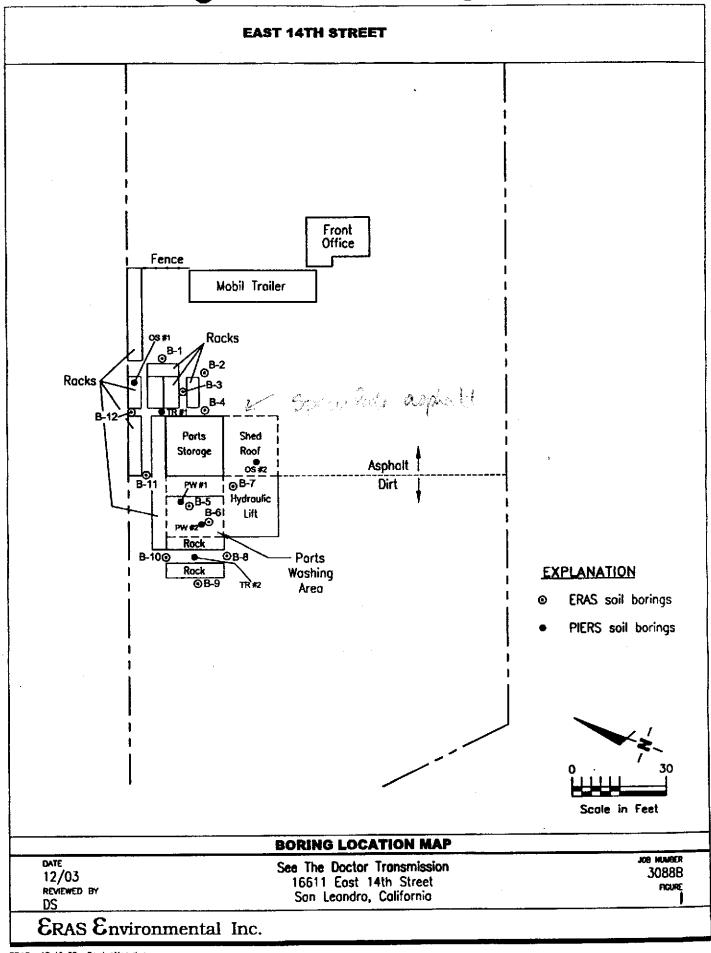


Table 1 Soil Sample Analytical Results

16611 East 14th Street San Leandro, CA

Sample #	Depth (feet)	Date	Consultant	VOC's	TPH Trans. Fluid	Petroleum Oil & Grease	TPH-D	TPH-mo	Kerosene
Parts Wash #1	0.5	6/4/2003	PIERS	ND	NA NA	NA		1	
Parts Wash #2	0.5	6/4/2003	PIERS	NA	NA I	270			
Oil Stg. #1	0.5	6/4/2003	PIERS	NA	l NA	150			
Trans. Rack 1	0.5	6/4/2003	PIERS	NΑ	4,680	NA			
Trans Rack 2	0.5	6/4/2003	PIERS	NA	14,700	NA			
Oil Stg. #2	0.5	6/4/2003		NA	NA	ND<50			
Trans Rack #1 (1.5')	1.5	6/6/2003	PIERS				ND<1	ND<1	
Trans Rack #1 (2.4')	2.4	6/6/2003	PIERS				150	570	
Trans Rack #2 (1.5')	1.5	6/6/2003	PIERS				91	830	
Trans Rack #2 (2.4')	2.4	6/6/2003	PIERS				ND<1	ND<1	
B-1, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-2, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-3, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-4, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-5, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-6, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-7, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-8, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-9, 3-3.5	3	11/19/2003	ERA\$				ND<1	ND<10	ND<1
B-10, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-11, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1
B-12, 3-3.5	3	11/19/2003	ERAS				ND<1	ND<10	ND<1

Notes

NA ND Not Applicable Not Detectable

VOC's

Volatile Organic Compounds

TPH-Ď

Total Petroleum Hydrocarbon as Diesel

TPH-mo

Total Petroleum Hydrocarbon as MotorOil

TPH-trans fluid

Total Petroleum Hydrocarbon as Transmission Fluid

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STANDARD OPERATING PROCEDURE - HAND BORINGS SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, the surface is either cored if concrete or hammered through using a pick, if asphalt.

A hand operated coring device equipped with a 3-inch diameter auger bit is advanced into the soil until full. The auger is removed and emptied and this process is repeated until the desired depth is reached. The hand auger is removed and a slide hammer core sampling device, equipped with two 3-inch long, 2inch diameter brass liners is advanced six inches into the undisturbed soil at the bottom of the borehole.

One of the 3-inch liners is selected and the ends of the tube are covered with Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the borehole number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flameionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in covered 5-gallon plastic buckets or 55-gallon drums at the project site.

BOREHOLE GROUTING FOR HAND BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE - SOIL SAMPLING BY HAND

Sites that require shallow soil samples such as soil stockpiles, excavation sidewalls, backhoe buckets, surface contamination, shallow subsurface contamination, drums containing soil, etc., will be collected by hand. A relatively undisturbed sample shall be obtained in a clean brass liner. For shallow (generally five feet or less) subsurface soil sampling use a steel core sampler equipped with a clean brass liner and advanced into the soil with a slide hammer. For soil stockpiles excavations and surface contamination, the outer surface of the soil is removed and a clean brass liner is immediately driven into the soil by hand or with a hammer. In deep excavations where safety factors preclude the direct sampling of the bottom or sidewall, a backhoe bucket retrieves soil.

TOOL SELECTION AND OPERATION

For soil stockpiles, backhoe buckets, surface contamination or drums, a shovel or trowel may be used to move the surface of the soil. Dig or scrape away at least four inches of soil at the selected sample location. A brass liner should immediately be pushed into the soil by hand or if necessary driven with a hammer. To avoid damaging the liner, hold a block of wood against the liner and hit the wood to drive the liner into the soil until full.

In cases where a deeper sample is required use a hand auger to dig to the required sample depth. Remove the hand auger and use a slide hammer sample equipped with a clean brass liner to obtain the sample. The sampler consists of a stainless steel shoe that holds the sample liner. Place a clean liner in the shoe and screw it tightly to the slide hammer. Place a chalk mark on the slide hammer six inches above the ground surface and drive the sampler until the chalk mark is at the surface. Remove the sample by back-hitting the slide weight up against the handle of the slide hammer until the shoe is free. The hand auger and sampler shoe will by cleaned with water, then soap solution and then rinsed with distilled water between samples to minimize the possibility of cross contamination.