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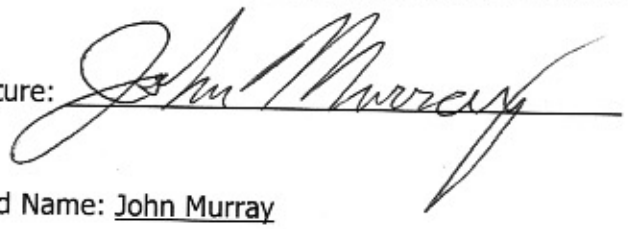
By Alameda County Environmental Health 10:06 am, Jul 28, 2016

July 27, 2016

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540

I, John Murray, hereby authorize ERAS Environmental, Inc. to submit the Addendum to Workplan for Limited Phase II Subsurface Investigation for 3037-3115 Adeline St., Oakland in Oakland, California, dated July 26, 2016 to the Alameda County Health Care Services Agency.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Signature: 

Printed Name: John Murray

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July 26, 2016

Mr. John Murray
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1196 32nd Street
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Subject: Addendum to Workplan for
Limited Phase II Subsurface Investigation
3037-3115 Adeline Street, Oakland, California
ERAS Project Number 14-001

Dear Mr. Murray:

ERAS Environmental, Inc. (ERAS) is pleased to present this Addendum to the Workplan for Limited Phase II Subsurface Investigation for the subject site (the "Property"). This amends the workplan for the Property prepared by ERAS and dated August 7, 2014.

Background

The amendments and changes presented herein are based on ERAS understanding of discussions during a meeting with Mr. Mark Detterman and Ms. Dilan Roe of the Alameda County Health Care Services Agency (ACHCSA) on July 13, 2016. The work proposed herein amends the scope of the soil mitigation that will be conducted as part of the installation of a Vapor Mitigation System (VMS) at the Property.

The VMS was described in a Basis of Mitigation Design (BMD) report by Sustainable Technologies, dated February 5, 2016. Based on the meeting the following are the changes to the scope of work to be performed during the installation of the VMS. The changes have to do with the scope of soil excavation and disposal. The BMD report indicates soil would be excavated in a 35-foot radius from the edge of the building starting in the area of Boring PES-B2 and VP-1.

Proposed Work

The layout of the Property with the locations of borings and known concentrations of total petroleum hydrocarbons quantified as diesel range organic hydrocarbons are shown on the attached revised **Figure 1**. A detail map showing the areas proposed to be excavated are shown on the attached **Figure 2**. Updated **Table 1** and **Table 1a** summarizing results of laboratory analyses performed on soil samples collected at the Property are also attached.

- The trench and piping for the VMS will be extended along the entire length of the outside of the office area. This length is approximately 48 feet. The trench will be placed as close as possible to the building likely approximately 1-2 feet and will be excavated to 3 feet wide and 3 feet deep. The VMS will be installed as specified in the Basis of Design Report. The soil excavated in that area will remove some or all of the shallow hydrocarbon-contaminated soil that was detected in Borings B-3, B-6 and PES-2.

- Soil will be excavated from a 10 by 10 by 3-foot deep area centered on Boring B-2 in order to remove soil containing petroleum hydrocarbons as well as copper and lead.

- Confirmation soil samples are proposed to be collected for each 20 feet of sidewall length and for each 50 square feet of bottom of excavation. The approximate locations of these samples are shown on **Figure 2**.

- The confirmation soil samples from the excavations will be analyzed for total petroleum hydrocarbons quantified as gasoline range organics (TPH-gro), diesel range organics (TPH-dro), oil range organics (TPH-oro) by EPA Method 8015, full scan volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, copper, lead, and tin.

- Soil samples from the excavation area around B-2 will be analyzed on a rush turnaround time and if concentrations of contaminants are above direct contact ESLs, additional soil will be excavated from that area in an attempt to remove at least metals to below ESLs.

- Excavated soil will be stockpiled on site, sampled and covered. Samples will be collected for laboratory analysis and analyzed for appropriate contaminants for disposal on a rush turnaround time. Following acceptance of the soil by the appropriate landfill, a certified hauler will be contracted to dispose of the soil.

- Certified backfill (from a source that can provide laboratory analytical data of the soil) will be imported, compacted and the areas of excavation will be paved.

- Following site restoration, soil gas samples will be collected in the immediate vicinity of the VMS as well as of the effluent from the system to gauge the effectiveness of

the mitigation system. The approximate locations of the soil gas samples are shown on **Figure 2**.

- ERAS will prepare a final report summarizing the field activities, the results of the confirmation soil and vapor testing and the disposal of waste soil.

If you have questions or comments regarding this addendum of the information in the workplan please contact me at 510-247-9885 x304, or by e-mail dave@eras.biz.

ERAS thanks you for the opportunity to serve you.

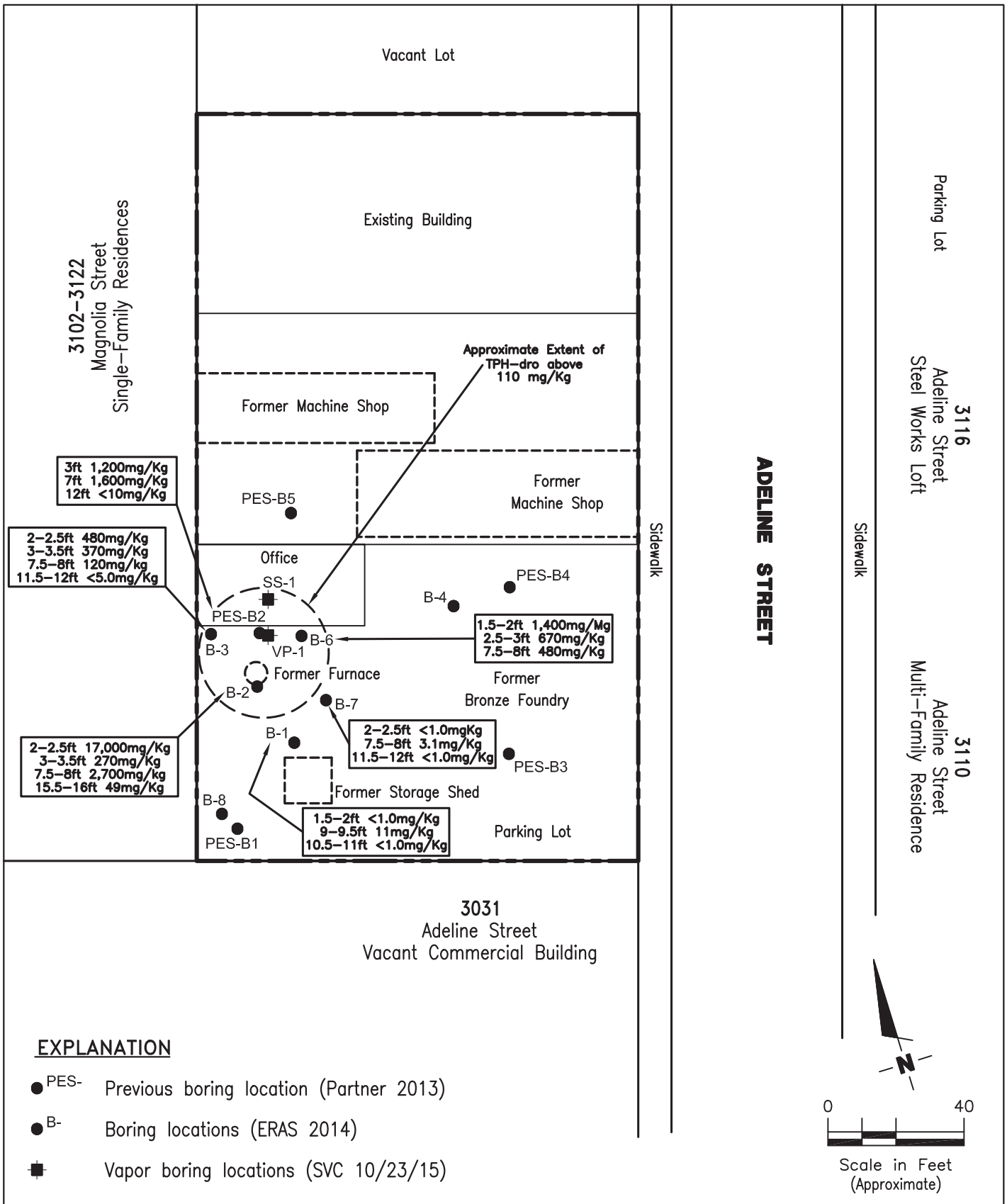
Sincerely,
ERAS Environmental, Inc.

REGISTERED GEOLOGIST
R. CURTIS PAYTON II
No. 5608
STATE OF CALIFORNIA

Curtis Payton
California Registered Professional Geologist 5608

David Siegel
Senior Program Manager

Attachments: Figure 1 – TPH-dro Extent & Boring Location Map
Figure 2 – Proposed Excavation and Sampling Map
Table 1 – Analytical Results - Soil
Table 1a – Additional Analytical Results - Soil



EXPLANATION

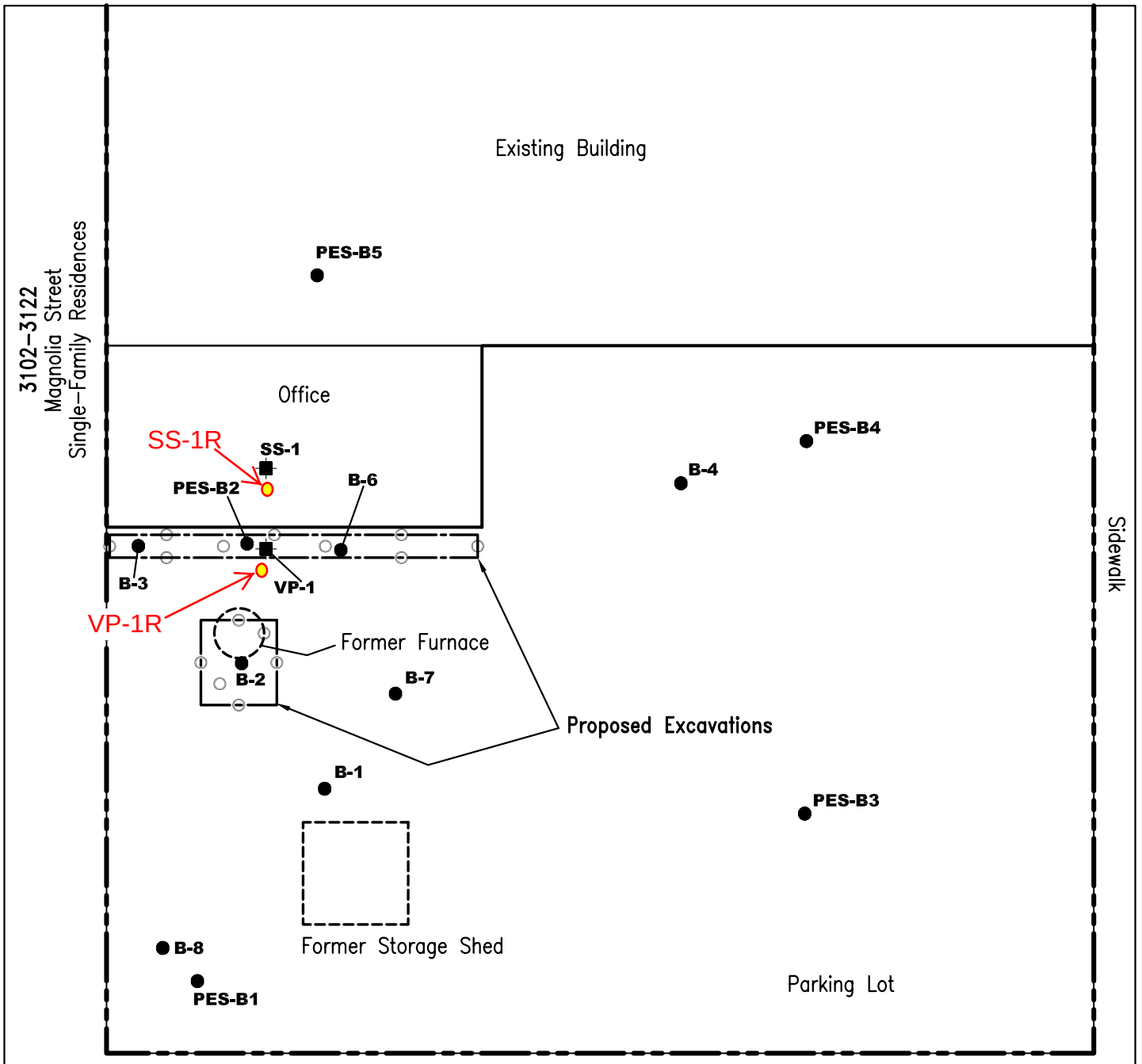
- ● PES- Previous boring location (Partner 2013)
- ● B- Boring locations (ERAS 2014)
- ■ Vapor boring locations (SVC 10/23/15)

TPH-dro EXTENT & BORING LOCATION MAP

DATE 07/2016 REVIEWED BY AS & DS	– 3037–3115 Adeline Street Oakland, California	JOB NUMBER 14–002–J FIGURE 1

ERAS Environmental Inc.

ERAS 07-18-2016 TPH-dro Extent & Boring location map.dwg



PROPOSED EXCAVATION AND SAMPLING MAP

DATE 07/2016 REVIEWED BY AS & DS	– 3037–3115 Adeline Street Oakland, California	JOB NUMBER 14–002–J FIGURE 2

ERAS Environmental Inc.

ERAS 07-18-2016 Proposed Excavation Map.dwg

TABLE 1. ANALYTICAL RESULTS - SOIL

3037-3115 Adeline Street, Oakland

Sample ID	Date	TPH-gro	TPH-dro	TPH-dro*	TPH-oro	TPH-oro*	Copper	Lead	Tin	Napthalene
		(mg/Kg)								
PES-B1-3	1-May-13	NA	NA	NA	NA	NA	160	43	NA	NA
PES-B2-3	1-May-13	46	**1,200**	NA	950	NA	1,200	140	NA	5.30
PES-B2-7	1-May-13	NA	**1,600**	NA	860	NA	15	<3.0	NA	NA
PES-B2-12	1-May-13	NA	<10	NA	<10	NA	11	8	NA	NA
PES-B2-18	1-May-13	NA	<10	NA	<10	NA	17	<3.0	NA	NA
PES-B3-3	1-May-13	<10	<10	NA	<10	NA	17	<3.0	NA	<4.3
PES-B4-3	1-May-13	NA	NA	NA	NA	NA	11	<3.0	NA	NA
PES-B4-11	1-May-13	<10	<10	NA	<10	NA	NA	NA	NA	<5
PES-B5-3	1-May-13	NA	NA	NA	NA	NA	18	44	NA	NA
PES-B5-7	1-May-13	<10	<10	NA	<10	NA	NA	NA	NA	<3.8
B-1, 1.5-2	21-Oct-14	<1	<1.0	NA	<5.0	NA	210	25	<5.0	NA
B-1, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	22	6.7	<5.0	NA
B-1, 9-9.5	21-Oct-14	<1	11	NA	100	NA	NA	NA	NA	NA
B-1, 10.5-11	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA	NA
B-2, 2-2.5	21-Oct-14	**540**	**17,000**	**20,000**	8,700	**11,000**	1,200	**650**	78	NA
B-2, 3-3.5	21-Oct-14	190	270	NA	<250	NA	24	7.8	<5	NA
B-2, 7.5-8	21-Oct-14	200	**2,700**	NA	1,700	NA	NA	NA	NA	NA
B-2, 15.5-16	21-Oct-14	4.1	49	NA	38	NA	NA	NA	NA	NA
B-3, 2-2.5	21-Oct-14	<1	480	NA	430	NA	31	7.0	<5	NA
B-3, 3-3.5	21-Oct-14	150	370	NA	<250	NA	22	8.8	<5	NA
B-3, 7.5-8	21-Oct-14	<1	120	NA	100	NA	NA	NA	NA	NA
B-3, 11.5-12	21-Oct-14	<1	<5.0	NA	<5.0	NA	NA	NA	NA	NA
B-4, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	18	5.8	<5	NA
B-4, 7.5-8	21-Oct-14	<1	<5.0	NA	<5.0	NA	NA	NA	NA	NA
B-4, 9.5-10	21-Oct-14	<1	1.2	NA	<5.0	NA	NA	NA	NA	NA
B-6, 1.5-2	21-Oct-14	55	**1,400**	NA	1,200	NA	380	120	20	NA
B-6, 2.5-3	21-Oct-14	180	670	NA	280	NA	22	7.1	<5	NA
B-6, 7.5-8	21-Oct-14	40	480	NA	280	NA	NA	NA	NA	NA
B-6, 15.5-16	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA	NA
B-7, 2-2.5	21-Oct-14	<1	<1.0	NA	<5.0	NA	87	18	<5	NA
B-7, 3-3.5	21-Oct-14	NA	NA	NA	NA	NA	18	7.1	<5	NA
B-7, 7.5-8	21-Oct-14	<1	3.1	NA	14	NA	NA	NA	NA	NA
B-7, 11.5-12	21-Oct-14	<1	<1.0	NA	<5.0	NA	NA	NA	NA	NA
B-8, 1.5-2	21-Oct-14	NA	NA	NA	NA	NA	23	10	<5	NA
ESL[1]		770	570	570	--	--	--	--	--	0.33
ESL[2]		2,800	880	880	32,000	32,000	14,000	160	--	350

Notes

NA = Not analyzed

(mg/Kg) = Miligrams per kilogram

TPH-gro = Total petroleum hydrocarbons quantified as gasoline range organics

TPH-dro = Total petroleum hydrocarbons quantified as diesel range organics

TPH-oro = Total petroleum hydrocarbons quantified as oil range organics

TPH-dro* = Total petroleum hydrocarbons quantified as diesel range organics run without silica gel cleanup

TPH-oro* = Total petroleum hydrocarbons quantified as oil range organics run without silica gel cleanup

ESL[1] = Environmental Screening Levels set forth by the RWQCQ to protect drinking water

ESL[2] = Environmental Screening Levels for soil exposure: construction worker

Bold type indicates reported value above the ESL.

TABLE 1a. ADDITIONAL ANALYTICAL RESULTS - SOIL

3037-3115 Adeline Street, Oakland

PCDDs & PCDFs	B-2-2.5 Results in pg/g	WHO-TEF	ESL pg/g
1,2,3,4,6,7,8-HpCDD	4.16	0.01	180
OCDD	8.42	0.0003	6,000
2,3,4,7,8-PeCDF	4.1	0.3	60
1,2,3,4,7,8-HxCDF	5.42	0.1	18
1,2,3,6,7,8-HxCDF	5.42	0.1	18
2,3,4,6,7,8-HxCDF	8.82	0.1	18
1,2,3,4,6,7,8-HpCDF	31.9	0.01	180
Total tetradioxins	5.7		
Total heptadioxins	8.76		
Total tetrafurans	19.6		
Total heptafurans	31.9		
Total hexafurans	60.6		
Total pentafurans	23.7		

SVOCs	Results in mg/Kg	ESL !	ESL *
2-methylnapththalene	**31**	0.25	670

PCBs
Non detected above their respective detection limit

TPH	Results in mg/Kg	ESL !	ESL *
TPH-dro	**3,500**	570	880
TPH-oro	**2,200**	--	32,000

Notes:

pg/g = picograms per gram

WHO-TEF = World Health Organization Toxic Equivalency Factor

! ESL – Environmental Screening Levels set forth by the RWQCQ to protect drinking water

* ESL – Environmental Screening Levels for soil exposure: construction worker