

# AEI Consultants

Environmental & Engineering Services

August 8, 2011

## PHASE II SUBSURFACE INVESTIGATION REPORT

**Property Identification:**

1900 Webster Street  
Oakland, California 94621

AEI Project No. 297305

**Prepared for:**

Pacific Health Clinic  
1940 Webster Street  
Oakland, California 94612

**Prepared by:**

AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA 94597  
(925) 746-6000

San Francisco HQ

Atlanta

Chicago

Costa Mesa

Dallas

Denver

Los Angeles

Miami

New York

Phoenix

Portland

San Jose

National Presence

Regional Focus

Local Solutions





# AEI

## Consultants

2500 Camino Diablo, Walnut Creek, CA 94597

Tel: 925.746.6000 Fax: 925.746.6099

Environmental & Engineering Services

August 8, 2011

Dr. Farah Rana  
Pacific Health Clinic  
1940 Webster Street  
Oakland, California 94612

**Subject: Phase II Subsurface Investigation**

1900 Webster Street  
Oakland, CA 94612  
AEI Project No. 297305

Dear Dr. Rana,

The following report describes the activities and results of the subsurface investigation performed by AEI Consultants at the above referenced property (Figure 1: Site Location Map) on July 20, 2011. The investigation included the collection of soil samples from three (3) locations throughout the property. This investigation was performed in order to assess whether the property had been impacted as a result of the historic operations on site and if associated hazardous materials have affected the subject property subsurface.

## I Site Description and Background

The subject property, which consists of a two-tenant commercial office building, is located at the northeast intersection of Webster Street and 19<sup>th</sup> Street in a commercial area of Oakland, California. The property totals approximately 0.138 acre and is improved with a two-story building totaling approximately 8,000 square feet. The building is constructed slab-on grade with no evidence of a basement or other sub-grade areas. The subject property is currently occupied by Lake Merritt Dental and IKON Office Solutions. On-site operations include dental and copy service office activities. The building occupies the entire subject property lot.

A Phase I Environmental Site Assessment (ESA) was performed by AEI on May 2, 2011. According to historical sources reviewed during the Phase I ESA, the current subject property building was constructed in 1969 by Mr. Edgar Buttner for use as a bank/office building. The subject property was historically occupied by a gasoline service station from approximately 1940 until 1966 (over 25 years). According to records on-file at the Oakland Building Department (OBD), the former gasoline service station was demolished and cleared in 1966; however, no records were on-file with the OBD (as well as the Alameda County Environmental Health Services Department (ACEHSD) or Oakland Fire Department (OFD)) regarding the removal of presumed formerly utilized fuel underground storage tanks (USTs) from the site. In addition, no documentation was available to indicate whether soil samples were collected and analyzed for the presence of petroleum hydrocarbon contamination following the demolition of the



gasoline service station (and potential removal of fuel USTs). Based on the absence of data to confirm whether formerly utilized fuel USTs were removed from the site, or that contamination was present at the time of potential tank removal, the possibility exists that fuel USTs, as well as associated petroleum hydrocarbon contamination may remain in place at the subject property. This former presence of a gasoline service station (and presumed associated fuel USTs) at the subject property site represented a recognized environmental condition (REC).

A Phase II Investigation was requested by the client to determine whether presumed formerly utilized fuel USTs and/or associated petroleum hydrocarbon contamination exists beneath the subject property site due to the historical occupation of the site by a gasoline service station.

## **II Geology and Hydrogeology**

According to the United States Geological Survey (USGS) San Francisco Bay Quadrangle Geologic Map, the area surrounding the subject property is underlain by Holocene era alluvium which is commonly characterized by light-grey to grayish-brown or yellowish-brown gravel, sand, silt, and clay. Texture varies from cobble gravel to clay, mixed or interbedded laterally and vertically in places.

Based on a review of the USGS Oakland West, CA Quadrangle Topographic Map, the subject property is situated approximately 27 feet above mean sea level, and the local topography slopes to north-northeast. The nearest surface water is Lake Merritt, located approximately 0.18 mile East of the property. Based upon local topography and a Groundwater Monitoring Report by Pangea Environmental Services, the direction of groundwater flow beneath the subject property is inferred to be toward the north-northeast.

## **III Investigative Efforts**

AEI performed a site inspection, marked the site, and notified Underground Service Alert North to identify public utilities in the work area more than two working days prior to commencement of drilling. All field activities were carried out under the direct supervision of a California Professional Geologist. Drilling permit #W2011-0390 was obtained from the Alameda County Department of Public Works. Encroachment permits #X1100662 & X1100663 and an obstruction permit were obtained from the City of Oakland.

## **Drilling and Soil Sample Collection**

On July 20, 2011, AEI advanced a total of three (3) soil borings samples taken from three (3) locations (SB-1 through SB-3) at the property. The original scope of work included a total of five (5) planned borings, however due to access limitations including permit restrictions, underground utility locations, and restrictions on drilling on the adjacent property to the southeast, only three borings could be completed. Borings were advanced for the collection of soil samples and three groundwater samples. Boring locations are shown on Figure 3: Site Plan. Soil borings were advanced with a truck-mounted GeoProbe 5410 direct push drilling rig. Drilling was performed by RSI Drilling, a California C57 licensed drilling contractor (License # 802334).

The borings were advanced to total depths ranging from 16 to 20 feet bgs. The soil borings were continuously cored using a GeoProbe MacroCore® sampler which retained the soil cores in



1¾" diameter acrylic liners. The soil cores were examined and logged by the onsite AEI geologist. Soils were screened in the field with a portable photo-ionization detector (PID). In each of the borings, soil samples were collected at approximately 2 to 4 foot intervals where a six-inch sample was cut from the liners. The selected samples were sealed with Teflon tape and plastic caps, labeled with a unique identifier, placed in a cooler filled with ice, and transported to an offsite laboratory. Soil descriptions, field observations and screening data is presented on the borings logs in Appendix A.

## **Boring Destruction**

Upon completion of sampling and measurement activities, all sampling equipment was removed from the boreholes. Each boring was backfilled with neat cement grout to the existing grade.

## **Laboratory Analyses**

Soil and groundwater samples were transported to McCampbell Analytical (Department of Health Services Certification #01644) under chain of custody protocol for analyses following current EPA analytical methodologies. Selected soil samples and all groundwater samples were analyzed for total petroleum hydrocarbons as gasoline, diesel and motor oil with silica gel clean-up (TPH-g/d/mo, respectively), methyl tertiary-butyl ether (MTBE), benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA method 8015B & 8021B.

Analytical results and chain of custody documents are included as Appendix B.

## **IV Findings**

Soils encountered during this investigation consisted of fine to medium grained poorly graded sand, clayey sands, sandy silt and clay. Groundwater was encountered in all three borings at depths ranging from 15.93 below ground surface (bgs) in SB-1 to 21.36 bgs in SB-3.

### Soil Sample Analytical Data

TPH-g was not reported above the laboratory reporting limits in all soil samples analyzed, except for SB-3-16 and SB-3-20, where concentrations were reported at 8.3 mg/kg and 42 mg/kg, respectively.

TPH-d was reported in SB-2-16, SB-3-16, SB-3-20 at concentrations of 7.7 mg/kg, 6.5 mg/kg, and 8.7 mg/kg, respectively. TPH-d was not reported at a reporting limit of 5.0 mg/kg in borings SB-1-16 and SB-2-18.

TPH-mo was reported above the laboratory reporting limit in SB-2-16 at a concentration of 25 mg/kg. TPH-d was reported as non detectable at a reporting limit of 5.0 mg/kg in soil borings SB-1 through SB-3.

In sample SB-3-16, toluene concentrations were reported at 0.041 mg/kg, and xylenes reported at 0.042 mg/kg. For SB-3-20, ethylbenzene was reported at 0.057 mg/kg and xylenes were reported at 0.12 mg/kg. MTBE and benzene were not reported above the laboratory reporting limits in any of the soil samples analyzed.



#### Groundwater Sample Analytical Data

TPH-g and TPH-d levels were below reporting limits for both SB-1 and SB-2, while SB-3 was reported at 59,000 µg/L and 200,000 µg/L for TPH-g and TPH-d, respectively.

TPH-mo levels were below the laboratory reporting limits for all three groundwater samples analyzed.

Benzene was reported in SB-3-W at a concentration of 89 µg/L. Toluene was reported in SB-1-W and SB-3-W at concentrations of 0.50 µg/L and 82 µg/L, respectively. Ethylbenzene was reported in SB-3-W at a concentration of 430 µg/L. Xylenes were reported in SB-1-W, SB-2-W and SB-3-W at concentrations of 0.97 µg/L, 1.0 µg/L and 1,600 µg/L, respectively.

Soil and groundwater sample analytical data is presented in Tables 1 and 2, respectively.

### **V Summary and Conclusions**

This investigation was performed to determine whether the former development of the site as a gasoline station resulted in any impact to the subject property. The investigation included the analyses of five (5) soil and three (3) groundwater samples from three (3) total sampling locations surrounding the subject property. TPH-g/d/mo, toluene, ethylbenzene and xylenes were reported above the laboratory reporting limits in the samples analyzed, however, the concentrations are relatively low with the exception of the groundwater sample SB-3-W with reported concentrations of TPH-g and TPH-d at 59,000 µg/L and 200,000 µg/L, respectively.

The elevated concentrations of petroleum hydrocarbons in groundwater identified down-gradient (northeast) of the subject property along with the historical development of the property as a gasoline station indicate that a release occurred from the former station. The concentrations detected in groundwater were well above Environmental Screening Levels (ESL) for petroleum hydrocarbons in groundwater. Although the ESLs are not statutory cleanup goals, they are risk-based values prepared by the San Francisco Bay Regional Water Quality Control Board (RWQCB) to assist in the evaluation as to whether a particular chemical presents a risk to human health or the environment.

The magnitude and extent of impact beneath the subject property building and surrounding area is not known at this time. Further investigation would be required to understand the nature and extent of the release and to determine whether remedial action would be required. Based on the findings of the investigation, regulatory oversight for the release should be obtained. AEI recommends submitting this report to the Alameda County Environmental Health (ACEH) which may require further investigation to characterize the release.



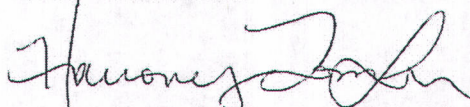
## VI Report Limitation

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 were chosen to provide the requested information, but it cannot be assumed that they are representative of areas not sampled. In addition, AEI has relied on information provided by others, which is assumed to be correct, however, AEI cannot assume any responsibility for its correctness or accuracy. All conclusions and/or recommendations are based on these analyses, observations, provided information, and the governing regulations at the time of the assessment. Conclusions beyond those stated and reported herein should not be inferred from this document.

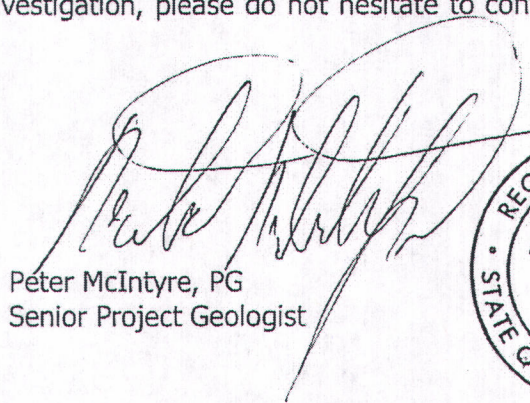
These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

If you have any questions regarding our investigation, please do not hesitate to contact either of the undersigned at (925) 746-6000.

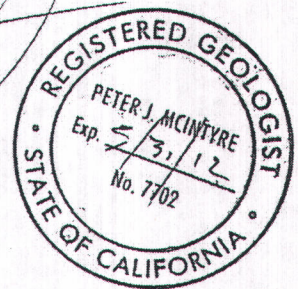
Sincerely,  
AEI Consultants



Harmony TomSun  
Project Geologist



Peter McIntyre, PG  
Senior Project Geologist



## Figures

- Figure 1: Site Location Map
- Figure 2: Site Map
- Figure 3: Site Plan

## Tables

- Table 1: Soil Sample Analytical Data
- Table 2: Groundwater Sample Analytical Data

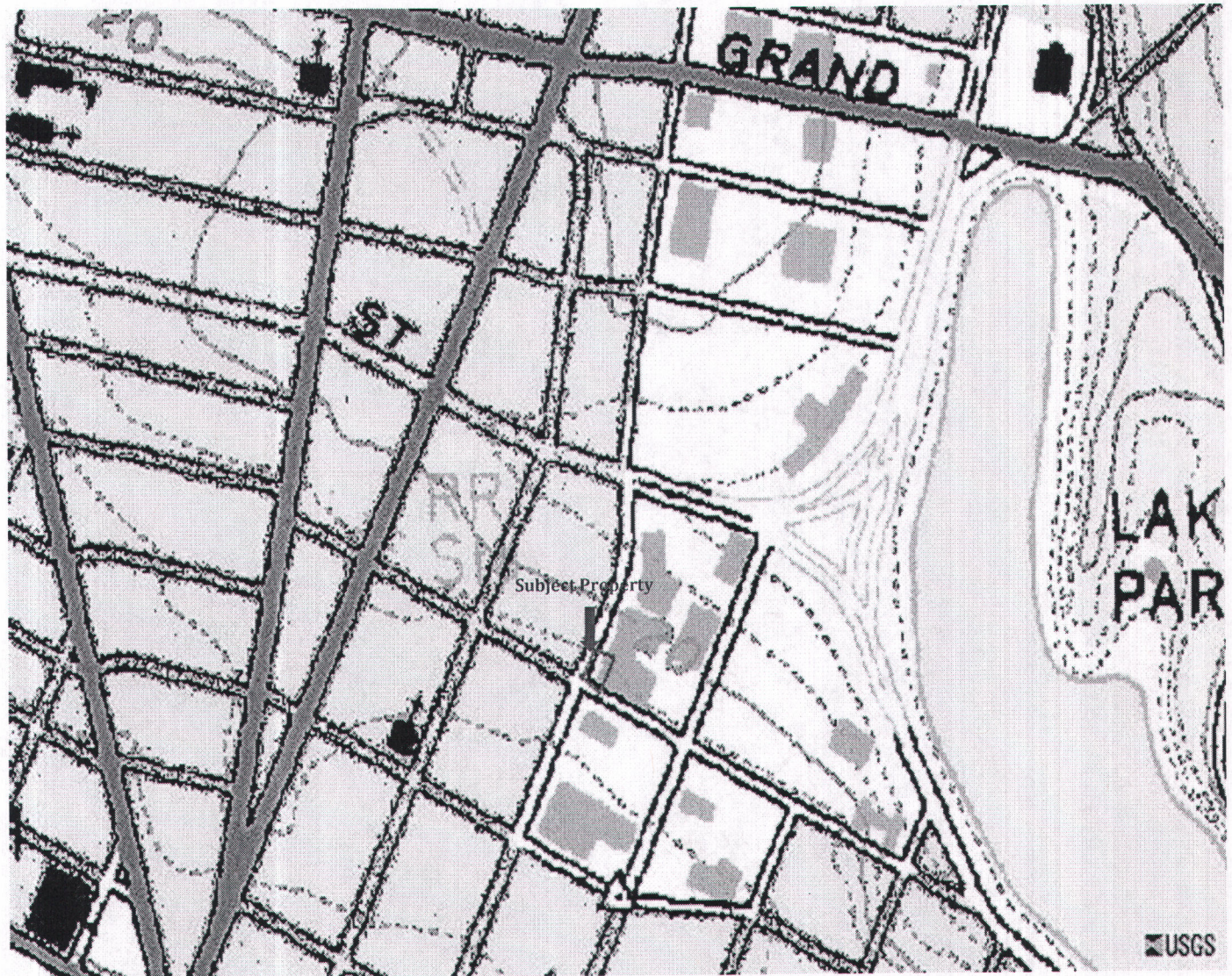
## Appendix A

Soil Boring Logs

## Appendix B

Sample Analytical Documentation with Chain of Custody





## SITE LOCATION MAP

1900 Webster Street, Oakland, California 94621



**AEI**  
Consultants

**FIGURE 1**

Project Number: 297305

Source: USGS (1978)





## SITE MAP

1900 Webster Street, Oakland, California 94621



### Legend

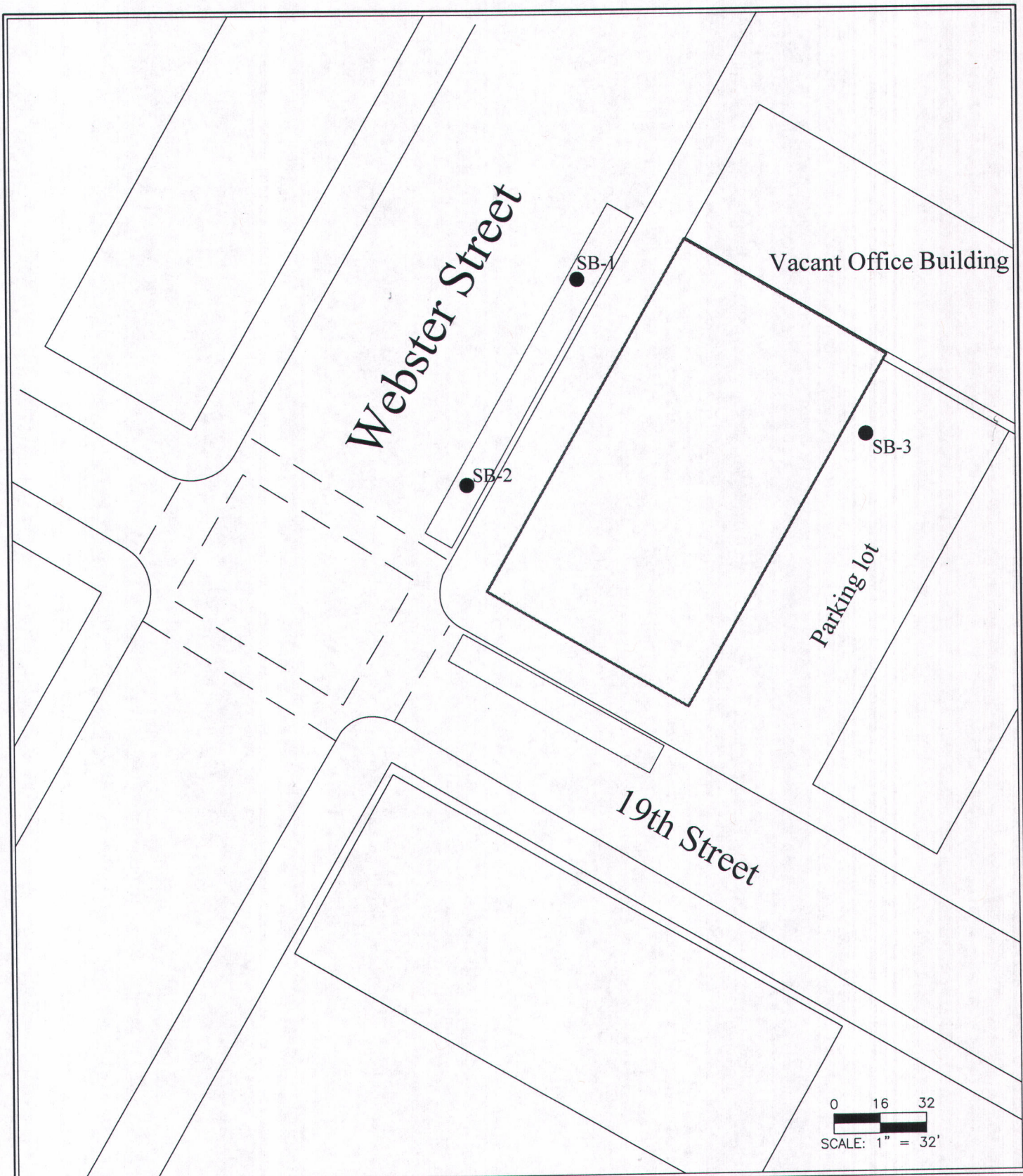
Approximate Property Boundary 

### FIGURE 2

Project Number: 297305

**AEI**  
Consultants





## LEGEND

- / Subject Property
- / Reserved Parking Lane Area
- Soil Boring



## AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

## Site Plan

1900 Webster Street  
Oakland, CA

**FIGURE 3**  
PROJECT NO.297305



**Table 1: Soil Analytical Data**  
**1900 Webster Street, Oakland, CA - AEI Project # 297305**

Sample ID	Date	Depth (feet bgs)	TPH-g mg/kg	TPH-d mg/kg	TPH-mo mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes mg/kg
SB-1-16	7/20/2011	16	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005
SB-2-16	7/20/2011	16	<1.0	<b>7.7</b>	<b>25</b>	<0.05	<0.005	<0.005	<0.005	<0.005
SB-2-18	7/21/2011	18	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005
SB-3-16	7/20/2011	16	<b>8.3</b>	<b>6.5</b>	<5.0	<0.05	<0.005	<b>0.041</b>	<0.005	<b>0.04</b>
SB-3-20	7/20/2011	20	<b>42</b>	<b>8.7</b>	<5.0	<0.50	<0.050	<0.050	<b>0.06</b>	<b>0.12</b>
RL			1.0	1.0	5.0	0.05	0.005	0.005	0.005	0.005
ESL			83	83	2,500	0.023	0.04	2.9	3.3	2.3

**NOTES:**

mg/kg = milligrams per kilogram

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

Benzene, toluene, ethylbenzene, xylenes using by Method 8021B

MTBE = methyl tert-butyl ether using EPA Method 8021B

bgs = below ground surface

RL = detection limit for dilution factor of 1

ESL = Shallow Soil Environmental Screening Levels for Drinking Water San Francisco Bay Regional Water Quality Control Board

TPH-d/mo by EPA Method 8015B

TPH-g, BTEX & MTBE by EPA Method 8021B



**Table 2: Groundwater Analytical Data**  
**1900 Webster Street, Oakland, CA - AEI Project # 297305**

Sample ID	Date	TPH-g µg/L	TPH-d µg/L	TPH-mo µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L
SB-1-W	7/20/2011	<50	<50	<250	<5.0	<0.5	<b>0.50</b>	<0.5	<b>0.97</b>
SB-2-W	7/20/2011	<50	<50	<250	<5.0	<0.5	<0.5	<0.5	<b>1.0</b>
SB-3-W	7/20/2011	<b>59,000</b>	<b>200,000</b>	<b>&lt;10,000</b>	<250	<b>89</b>	<b>82</b>	<b>430</b>	<b>1,600</b>
RL		50	50	250	5.0	1.0	40	30	20
ESL		100	100	100	1,800	46	130	43	100

**NOTES:**

µg/L = micrograms per liter or parts per billion (ppb)

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

MTBE = methyl tertiary-butyl ether

RL=Laboratory reporting limit (with no dilution)

ESL =Groundwater Environmental Screening Levels for Drinking Water, San Francisco Bay Regional Water Quality Control Board

TPH-d/mo by EPA Method 8015B

TPH-g, BTEX & MTBE by EPA Method 8021B



**APPENDIX A**

**SOIL BORING LOGS**



Project: Pacific Health Clinic  
Project Location: 1900 Webster Street, Oakland, CA 94612  
Project Number: 297305

## Key to Log of Boring

### Sheet 1 of 1

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	PID Reading, ppm	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10

#### COLUMN DESCRIPTIONS

- Elevation (feet): Elevation (MSL, feet).
- Depth (feet): Depth in feet below the ground surface.
- Sample Type: Type of soil sample collected at the depth interval shown.
- Sample Number: Sample identification number.
- PID Reading, ppm: The reading from a photo-ionization detector, in parts per million.
- USCS Symbol: USCS symbol of the subsurface material.
- Graphic Log: Graphic depiction of the subsurface material encountered.
- MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
- Well Log: Graphical representation of well installed upon completion of drilling and sampling.
- REMARKS AND OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field personnel.

#### FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity  
COMP: Compaction test  
CONS: One-dimensional consolidation test  
LL: Liquid Limit, percent

PI: Plasticity Index, percent  
SA: Sieve analysis (percent passing No. 200 Sieve)  
UC: Unconfined compressive strength test, Qu, in ksf  
WA: Wash sieve (percent passing No. 200 Sieve)

#### TYPICAL MATERIAL GRAPHIC SYMBOLS

Bentonite	Clayey GRAVEL to Gravely CLAY (GC-CH)	Artificial Fill	Silty SAND to Sandy SILT (SM-MH)
Bentonite chips	Clayey GRAVEL to Gravely CLAY (GC-CL)	SILT, SILT w/SAND, SANDY SILT (MH)	Silty SAND to Sandy SILT (SM-ML)
Bentonite powder	Silty GRAVEL (GM)	SILT, SILT with SAND, SANDY SILT (ML-MH)	Silty to Clayey SAND (SM-SC)
Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)	Silty GRAVEL to Clayey GRAVEL (GM-GC)	High plasticity PEAT (OH)	Poorly graded SAND (SP)
Fat CLAY/SILT (CH-MH)	Silty GRAVEL to Gravely SILT (GM-MH)	Low plasticity PEAT (OL)	Poorly graded SAND with Clay (SP-SC)
Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)	Silty GRAVEL to Gravely SILT (GM-ML)	Low to High plasticity PEAT (OL-OH)	Well graded SAND (SW)
Claystone	Poorly graded GRAVEL with Silt (GP-GM)	Sandstone	Well graded SAND with Clay (SW-SC)
Lean-Fat CLAY, CLAY w/SAND, SANDY CLAY	Gravite	Clayey SAND (SC)	Well graded SAND with Silt (SW-SM)
Cuttings	Gravel	Clayey SAND to Sandy CLAY (SC-CH)	SILT, SILT w/SAND, SANDY SILT (ML)
Lean CLAY/PEAT (CL-OL)	Grout	Clayey SAND to Sandy CLAY (SC-CL)	Bentonite plug
AF	Well graded GRAVEL (GW)	Shale	Asphaltic Concrete (AC)
Clayey GRAVEL (GC)	Well graded GRAVEL with Silt (GW-GM)	Silt	Poorly graded SAND with Silt (SP-SM)
SILTY CLAY (CL-ML)	Poorly to Well graded GRAVEL (GW-GP)	Siltstone	Black Rock - fine grained, exhibiting a bedding
Boulders	Poorly graded GRAVEL (GP)	Silty SAND (SM)	Gray rock, large grain size

#### TYPICAL SAMPLER GRAPHIC SYMBOLS

Shelby Tube (Thin-walled, fixed head)	Other sampler now modified	2.5-inch-OD Modified California w/ brass liners
Shelby Tube (Thin-walled, fixed head)	Auger sampler	Grab Sample
Bulk Sample	CME Sampler	Pitcher Sample
3-inch-OD California w/ brass rings	2-inch-OD unlined split spoon (SPT)	

#### OTHER GRAPHIC SYMBOLS

Water level (at time of drilling, ATD)
Water level (after waiting a given time)
Minor change in material properties within a stratum
Inferred or gradational contact between strata
Queried contact between strata

#### GENERAL NOTES

- Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.



**Project:** Pacific Health Clinic  
**Project Location:** 1900 Webster Street, Oakland, CA 94612  
**Project Number:** 297305

## Log of Boring SB-1

Sheet 1 of 1

<b>Date(s) Drilled</b> July 20, 2011	<b>Logged By</b> Harmony TomSun	<b>Checked By</b> Peter McIntyre
<b>Drilling Method</b> Direct Push	<b>Drill Bit Size/Type</b>	<b>Total Depth of Borehole</b> 20 feet bgs
<b>Drill Rig Type</b> GeoProbe	<b>Drilling Contractor</b> RSI Drilling	<b>Approximate Surface Elevation</b>
<b>Groundwater Level and Date Measured</b> 15.93 feet ATD	<b>Sampling Method(s)</b> Tube	<b>Hammer Data</b>
<b>Borehole Backfill</b> Neat Cement	<b>Location</b>	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	PID Reading, ppm	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
0					SM		Silty sand, dark brown 3/3 7.5YR, fine to medium grained sand, moderately loose, <10% fine grained gravel		
5					SM		Sand, light yellowish brown 6/4 10YR, fine grained sand, <10% very fine grained gravel, moderately loose		
		SB-1-7	2.7		SM		fine to medium grained sand		
10					SC		Clayey sand, light brownish gray 6/2 10YR, fine grained sand, cohesive, moist		
		SB-1-12	5.3				poorly graded medium grained sand		
15					ML		Clayey silt, dark greenish gray 4/1 5G, cohesive, slight plasticity, moist to wet		
		SB-1-16	122.1						
20							Bottom of Boring at 20 feet bgs		
		SB-1-20	36.3						
25									
30									

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\DUPLICATE\297305 Pacific Health (Oakland) - HT Boring Logs.bgs (4-Well Log.tpl)



**Project:** Pacific Health Clinic  
**Project Location:** 1900 Webster Street, Oakland, CA 94612  
**Project Number:** 297305

## Log of Boring SB-2

Sheet 1 of 1

<b>Date(s) Drilled</b> July 20, 2011	<b>Logged By</b> Harmony TomSun	<b>Checked By</b> Peter McIntyre
<b>Drilling Method</b> Direct Push	<b>Drill Bit Size/Type</b>	<b>Total Depth of Borehole</b> 20 feet bgs
<b>Drill Rig Type</b> GeoProbe	<b>Drilling Contractor</b> RSI Drilling	<b>Approximate Surface Elevation</b>
<b>Groundwater Level and Date Measured</b> 17.14 feet ATD	<b>Sampling Method(s)</b> Tube	<b>Hammer Data</b>
<b>Borehole Backfill</b> Neat Cement	<b>Location</b>	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	PID Reading, ppm	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
	0				SM		Silty sand, dark reddish brown 3/3 5YR, fine to medium grained sand, moderately loose, <10% fine grained gravel		
	5				SM		Sand, yellowish brown 5/8 10YR, fine grained sand, <10% very fine grained gravel, poorly graded sand and gravel, moderately loose		
		SB-2-8		<1	SM		Sand, yellowish brown 5/4 10YR, medium grained, <20% clay, friable		
	10				SM		Sand, reddish yellow 7/8 5YR, very fine to fine grained sand, <20% silt, poorly graded, hard, friable		
		SB-2-11		<1					
					SM		poorly graded medium grained sand		
	15				ML		Clayey silt, light yellowish brown 6/4 10YR mottled dark greenish gray 4/1 5G, cohesive, slight plasticity, moist to wet		
		SB-2-16		83.4					
		SB-2-18		245.3					
	20						Bottom of Boring at 20 feet bgs		
		SB-2-20		7.2					
	25								
	30								







## **APPENDIX B**

### **SAMPLE ANALYTICAL DOCUMENTATION WITH CHAIN OF CUSTODY**





**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mcccampbell.com](http://www.mcccampbell.com) E-mail: [main@mcccampbell.com](mailto:main@mcccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

## Analytical Report

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Reported: 07/28/11
	Client P.O.:	Date Completed: 07/26/11

**WorkOrder: 1107605**

July 28, 2011

Dear Harmony:

Enclosed within are:

- 1) The results of the 6 analyzed samples from your project: **#297305; Pacific Health**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

*The analytical results relate only to the items tested.*



<b>McCAMPBELL ANALYTICAL, INC.</b> 1534 WILLOW PASS ROAD PITTSBURG, CA 94565-1701 Website: www.mccampbell.com Email: main@mccampbell.com Telephone: (877) 252-9262 Fax: (925) 252-9269										<b>CHAIN OF CUSTODY RECORD</b> TURN AROUND TIME: RUSH 24 HR 48 HR 72 HR 5 DAY GeoTracker EDF PDF Excel Write On (DW) <input type="checkbox"/> Check if sample is effluent and "J" flag is required									
Report To: <u>HARMONY TOMSON</u>					Bill To: Same <u>AEI</u>														
Company: <u>AEI Consultants</u>					E-Mail: <u>htomsun@aiconsultants.com</u>														
<u>2500 Camino Diablo</u>					<u>Walnut Creek, CA</u>														
Tele: <u>(925) 746-6000</u>					Fax: <u>(925) 746-6099</u>														
Project #: <u>297305</u>					Project Name: <u>Pacific Health</u>														
Project Location: <u>1900 Webster Street, Oakland, CA</u>																			
Sampler Signature: <u>[Signature]</u>																			
SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX				METHOD PRESERVED				Analysis Request	Other	Comments			
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>				Other		
SB-1-7	SB-1	7/20	11:25	1	Under	X					X			BTEX & TPH as Gas (602 / 8021 + 8015) MTBE			Filter Samples for Metals analysis: Yes / No		
SB-1-12			11:30											TPH as Diesel (8015)					
SB-1-16			11:58											Total Petroleum Oil & Grease (1664 / 3250 E/B&F)					
SB-1-20			11:54											Total Petroleum Hydrocarbons (4181)					
SB-2-8	SB-2		9:22											EPA 8260 (BVOCs)					
SB-2-11			9:27											MTBE / BTEX ONLY (EPA 602 / 8021)					
SB-2-16			9:35											EPA 505: 608 / 9081 (CI Pesticides)					
SB-2-18			9:53											EPA 608 / 8087 PCB's ONLY; Arachnids / Cosmetics					
SB-2-20			9:46											EPA 507 / 8141 (NP Pesticides)					
SB-3-4	SB-3		7:32											EPA 515.3 / 8151 (Acidic CI Herbicides)					
SB-3-8			7:44											EPA 324.2 / 624 / 8260 (VOCs)					
SB-3-12			7:49											EPA 525.2 / 625 / 8270 (SVOCs)					
SB-3-16			7:53											EPA 8270 SIM / 8310 (PAHs / PNAs)					
SB-3-20			8:02											CAM 17 Metals (300.8 / 6020)					
															L1FT 5 Metals (300.7 / 200.8 / 6010 / 6020)				
															Lead (300.7 / 200.8 / 6010 / 6020)				
															TPH - Multi Range w/ Silica Gel Cleanup				
															Hold				
Relinquished By: <u>[Signature]</u>		Date:	Time:	Received By: <u>ENVIRO TECH S.P.</u>		COMMENTS: ICK/F _____ GOOD CONDITION _____ HEAD SPACE ABSENT _____ DECHLORINATED IN LAB _____ APPROPRIATE CONTAINERS _____ PRESERVED IN LAB _____  VOAS O&G METALS OTHER PRESERVATION pH<2													
Relinquished By: <u>[Signature]</u>		Date:	Time:	Received By: <u>Derek Lee</u>															
Relinquished By: <u>[Signature]</u>		Date:	Time:	Received By: <u>[Signature]</u>															



No. 7526  
May 25 2010 4:05PM RECEIVED



# McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD  
PITTSBURG, CA 94565-1701

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (877) 252-9262 Fax: (925) 252-9269

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME

☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☐ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Harmony Tomsen Bill To: Same AEI  
Company: AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA E-Mail: htomsen@aiconsultants.com  
Tele: (925) 746-6000 Fax: (925) 746-6099  
Project #: 297305 Project Name: Pacific Health  
Project Location: 1909 Webster Street, Oakland, CA  
Sampler Signature: [Signature]

Analysis Request															Other	Comments	
BTX & TPH as Gas (602 / 8021 + 8016) MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 8520 E/GAT)	Total Petroleum Hydrocarbons (418 1)	EPA 8260 (HVOCS)	MTBE / BTX ONLY (EPA 602 / 8021)	EPA 505 / 608 / 8061 (CI Pesticides)	EPA 608 / 8062 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8316 (PAHs / PNAcs)	CAM 17 Metals (200.8 / 6020)	LUFT 5 Metals (200.7 / 206.8 / 6010 / 6020)	Lead (200.7 / 206.8 / 6010 / 6020)	TPH Multi Ring w/ SGC	Filter Samples for Metals analysis: Yes / No
																X	Hold
																XXX	

+1  
+20  
+15

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED			
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other
SB-3-24	SB-3	7/20	8:06	1	liner	X					X			
SB-1-W	SB-1	7/20	12:50	4	VOA Amp	X					X			
SB-2-W	SB-2	1	10:45	1		X					X			
SB-3-W	SB-3	1	8:53	1		X					X			

Relinquished By: [Signature] Date: 7/21 Time: 10:22 Received By: ENVIRO-TECH  
Relinquished By: Envirotech Date: 7/21 Time: 16:30 Received By: Derek Cat  
Relinquished By: Derek Cat Date: 7/21 Time: 16:50 Received By: [Signature]

5.2  
ICM/  
GOOD CONDITION  
HEAD SPACE ABSENT  
DECHLORINATED IN LAB  
APPROPRIATE CONTAINERS  
PRESERVED IN LAB  
COMMENTS:  
VOAS O&G METALS OTHER  
PRESERVATION pH<2



# McCampbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1107605

ClientCode: AEL

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

### Report to:

Harmony TomSun  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
(925) 944-2899 FAX: (925) 944-2895

Email: htomsun@aeiconsultants.com  
cc:  
PO:  
ProjectNo: #297305; Pacific Health

### Bill to:

Sara Guerin  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
sguerin@aeiconsultants.com

Requested TAT: 5 days

Date Received: 07/21/2011

Date Printed: 07/21/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1107605-003	SB-1-16	Soil	7/20/2011 11:38	<input type="checkbox"/>		A										
1107605-008	SB-2-18	Soil	7/20/2011 9:53	<input type="checkbox"/>		A										
1107605-014	SB-3-20	Soil	7/20/2011 8:02	<input type="checkbox"/>		A										
1107605-016	SB-1-W	Water	7/20/2011 12:50	<input type="checkbox"/>	A											
1107605-017	SB-2-W	Water	7/20/2011 10:45	<input type="checkbox"/>	A											
1107605-018	SB-3-W	Water	7/20/2011 8:53	<input type="checkbox"/>	A											

### Test Legend:

1	G-MBTX_W	2	TPH(DMO)WSG_S	3		4		5	
6		7		8		9		10	
11		12							

The following SampleIDs: 003A, 008A, 014A, 016A, 017A, 018A contain testgroup.

Prepared by: Zoraida Cortez

### Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



**Sample Receipt Checklist**Client Name: **AEI Consultants**Date and Time Received: **7/21/2011 8:11:31 PM**Project Name: **#297305; Pacific Health**Checklist completed and reviewed by: **Zoraida Cortez**WorkOrder N°: **1107605**Matrix: Soil/WaterCarrier: Derik Cartan (MAI Courier)**Chain of Custody (COC) Information**

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**Sample Receipt Information**

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 5.2°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE )

*\* NOTE: If the "No" box is checked, see comments below.*

Client contacted:

Date contacted:

Contacted by:

Comments:



AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Extracted 07/21/11-07/25/11
	Client P.O.:	Date Analyzed 07/23/11-07/25/11

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline \***

Extraction method: SW5030B

Analytical methods: SW8015Bm

Work Order: 1107605

[illegible]

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	1.0	mg/Kg

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- b6) lighter than water immiscible sheen/product is present
- d1) weakly modified or unmodified gasoline is significant
- d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
- d9) no recognizable pattern



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Extracted: 07/21/11
	Client P.O.:	Date Analyzed: 07/23/11-07/27/11

**Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up\***

Extraction method: SW3510C/3630C/SW3550B/363

Analytical methods: SW8015B

Work Order: 1107605

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1107605-003A	SB-1-16	S	ND	ND	1	119	
1107605-008A	SB-2-18	S	ND	ND	1	95	
1107605-014A	SB-3-20	S	8.7	ND	1	96	e4,e2
1107605-016A	SB-1-W	W	ND	ND	1	73	b1
1107605-017A	SB-2-W	W	ND	ND	1	100	b1
1107605-018A	SB-3-W	W	200,000	ND<10,000	40	84	e4,b6,b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	1.0	5.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- b6) lighter than water immiscible sheen/product is present
- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.

DHS ELAP Certification 1644

  
Angela Rydelius, Lab Manager



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 59924

WorkOrder: 1107605

EPA Method: SW8015Bm

Extraction: SW5030B

Spiked Sample ID: 1107600-003A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	0.60	92.5	91.2	1.36	91.3	93.4	2.27	70 - 130	20	70 - 130	20
MTBE	ND	0.10	106	107	1.42	103	101	1.69	70 - 130	20	70 - 130	20
Benzene	ND	0.10	112	116	3.51	113	114	0.497	70 - 130	20	70 - 130	20
Toluene	ND	0.10	99.1	102	3.29	99.4	101	1.32	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	103	105	1.85	99.9	103	3.00	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	116	119	2.61	113	116	2.63	70 - 130	20	70 - 130	20
%SS:	80	0.10	100	103	2.50	102	101	0.961	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 59924 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-003A	07/20/11 11:38 AM	07/21/11	07/23/11 11:56 AM	1107605-008A	07/20/11 9:53 AM	07/21/11	07/23/11 12:27 PM
1107605-014A	07/20/11 8:02 AM	07/21/11	07/25/11 7:05 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 59926

WorkOrder: 1107605

**EPA Method: SW8015Bm****Extraction: SW5030B****Spiked Sample ID: 1107605-017A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	97.8	102	4.41	90.6	90.3	0.422	70 - 130	20	70 - 130	20
MTBE	ND	10	120	118	1.71	110	116	5.71	70 - 130	20	70 - 130	20
Benzene	ND	10	110	110	0	104	110	6.13	70 - 130	20	70 - 130	20
Toluene	ND	10	89.4	93.4	4.24	90.6	95.5	5.33	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	96	96.8	0.894	92.5	94.4	2.03	70 - 130	20	70 - 130	20
Xylenes	1.0	30	105	107	1.53	105	107	1.08	70 - 130	20	70 - 130	20
%SS:	101	10	101	105	3.96	99	102	2.58	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 59926 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-016A	07/20/11 12:50 PM	07/23/11	07/23/11 12:39 AM	1107605-017A	07/20/11 10:45 AM	07/23/11	07/23/11 12:08 AM
1107605-018A	07/20/11 8:53 AM	07/25/11	07/25/11 8:43 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269**QC SUMMARY REPORT FOR SW8015B**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 59753

WorkOrder: 1107605

**EPA Method: SW8015B****Extraction: SW3550B/3630C****Spiked Sample ID: 1107384-012A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	4.8	40	102	103	0.827	130	115	12.2	70 - 130	30	70 - 130	30
%SS:	92	25	109	110	0.380	105	98	7.31	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

**BATCH 59753 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-003A	07/20/11 11:38 AM	07/21/11	07/25/11 9:21 PM	1107605-008A	07/20/11 9:53 AM	07/21/11	07/26/11 9:49 PM
1107605-014A	07/20/11 8:02 AM	07/21/11	07/26/11 11:06 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$ 

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269**QC SUMMARY REPORT FOR SW8015B**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 59863

WorkOrder: 1107605

**EPA Method: SW8015B****Extraction: SW3510C/3630C****Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	118	113	4.61	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	101	100	1.16	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 59863 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-016A	07/20/11 12:50 PM	07/21/11	07/27/11 7:28 AM	1107605-017A	07/20/11 10:45 AM	07/21/11	07/26/11 7:44 AM
1107605-018A	07/20/11 8:53 AM	07/21/11	07/23/11 4:17 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

  
QA/QC Officer





**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: [www.mccampbell.com](http://www.mccampbell.com) E-mail: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: 877-252-9262 Fax: 925-252-9269

## Analytical Report

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Reported: 08/03/11
	Client P.O.:	Date Completed: 08/03/11

**WorkOrder: 1107605 A**

August 03, 2011

Dear Harmony:

Enclosed within are:

- 1) The results of the **8** analyzed samples from your project: **#297305; Pacific Health,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing  
McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

*The analytical results relate only to the items tested.*





# McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD  
PITTSBURG, CA 94565-1701

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (877) 252-9262 Fax: (925) 252-9269

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME

☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☐ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Harmony Tomson Bill To: Same AEI

Company: AEI Consultants

2500 Camino Diablo  
Walnut Creek, CA

Tele: (925) 746-6000

E-Mail: htomson@aeiconsultants.com

Fax: (925) 746-6099

Project #: 297305

Project Name: Pacific Health

Project Location: 1900 Webster Street, Oakland, CA

Sampler Signatures: Harmony Tomson

### Analysis Request

### Other

### Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED		EPA 8260 (SVOCs) MTBE / STEN ONLY (EPA 602, 8021, 7125) EPA 505 (608 / 9081 (CI Pesticides) EPA 608 / 9081 PCB's ONLY; Aroclors / Congeners EPA 507 / 8141 (NP Pesticides) EPA 8133 / 8131 (Acidic CI Herbicides) EPA 8242 / 624 / 8260 (VOCs) EPA 8252 / 625 / 8270 (SVOCs) EPA 8270 SIN / 8336 (PAHs / PNAs) CAM 17 Metals (200.8 / 6020) LUT 5 Metals (200.7 / 200.8 / 6010 / 6020) Lead (200.7 / 200.8 / 6010 / 6020)	TPH - Multi Range w/ Silica Gel Held	Filter Samples for Metals analysis: Yes / No		
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL				HNO <sub>3</sub>	Other
SB-1-7	SB-1	7/20	11:25	1	Green	X					X						
SB-1-12			11:30														
SB-1-16			11:58														
SB-1-20			11:54														
SB-2-8	SB-2		9:22														
SB-2-11			9:27														
SB-2-16			9:35														
SB-2-18			9:53														
SB-2-20			9:46														
SB-3-4	SB-3		7:32														
SB-3-8			7:44														
SB-3-12			7:49														
SB-3-16			7:53														
SB-3-20			8:02														

Relinquished By: <u>[Signature]</u>	Date: <u>7/21</u>	Time: <u>10:22</u>	Received By: <u>ENVIRO-TECH P.C.</u>	ICAP GOOD CONDITION HEAD SPACE ABSENT DECHLORINATED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB  VOAS O&G METALS OTHER PRESERVATION pH-2
Relinquished By: <u>[Signature]</u>	Date: <u>7/21</u>	Time: <u>16:30</u>	Received By: <u>[Signature]</u>	
Relinquished By: <u>[Signature]</u>	Date: <u>7/24</u>	Time: <u>15:50</u>	Received By: <u>[Signature]</u>	

COMMENTS:







# McC Campbell Analytical, Inc.



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

## CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1107605 **A** ClientCode: AEL

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

**Report to:**  
Harmony TomSun  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
(925) 746-6000 FAX: (925) 746-6099

**Email:** htomsun@aeiconsultants.com  
**cc:**  
**PO:**  
**ProjectNo:** #297305; Pacific Health

**Bill to:**  
Sara Guerin  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
sguerin@aeiconsultants.com

**Requested TAT:** 5 days  
**Date Received:** 07/21/2011  
**Date Add-On:** 07/28/2011  
**Date Printed:** 07/28/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1107605-007	SB-2-16	Soil	7/20/2011 9:35	<input type="checkbox"/>	A	A										
1107605-013	SB-3-16	Soil	7/20/2011 7:53	<input type="checkbox"/>	A	A										

### Test Legend:

1	G-MBTEx_S
6	
11	

2	TPH(DMO)WSG_S
7	
12	

3	
8	

4	
9	

5	
10	

Prepared by: Zoraida Cortez

**Comments:** samples #7&13 off hold per H.T 7/28/11 std tat.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Extracted: 07/28/11
	Client P.O.:	Date Analyzed: 07/30/11

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1107605

[illegible]

Reporting Limit for DF=1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference; %SS = Percent Recovery of Surrogate Standard;  
DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:  
d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram  
d9) no recognizable pattern







AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #297305; Pacific Health	Date Sampled: 07/20/11
		Date Received: 07/21/11
	Client Contact: Harmony TomSun	Date Extracted: 07/28/11
	Client P.O.:	Date Analyzed: 07/31/11-08/01/11

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up\*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1107605

[illegible]

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

e7) oil range compounds are significant

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 60082

WorkOrder: 1107605

**EPA Method: SW8021B/8015Bm****Extraction: SW5030B****Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	N/A	0.60	N/A	N/A	N/A	103	92.5	10.5	N/A	N/A	70 - 130	20
MTBE	N/A	0.10	N/A	N/A	N/A	101	102	1.27	N/A	N/A	70 - 130	20
Benzene	N/A	0.10	N/A	N/A	N/A	99.9	93.3	6.84	N/A	N/A	70 - 130	20
Toluene	N/A	0.10	N/A	N/A	N/A	97.1	91.2	6.31	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	0.10	N/A	N/A	N/A	98	92.3	5.95	N/A	N/A	70 - 130	20
Xylenes	N/A	0.30	N/A	N/A	N/A	99.8	94.7	5.17	N/A	N/A	70 - 130	20
%SS:	N/A	0.10	N/A	N/A	N/A	91	100	9.51	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

**BATCH 60082 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-007A	07/20/11 9:35 AM	07/28/11	07/30/11 11:19 AM	1107605-013A	07/20/11 7:53 AM	07/28/11	07/30/11 11:49 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269**QC SUMMARY REPORT FOR SW8015B**

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 60064

WorkOrder: 1107605

EPA Method: SW8015B		Extraction: SW3550B/3630C							Spiked Sample ID: 1107771-037A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	720	40	NR	NR	NR	109	112	2.22	70 - 130	30	70 - 130	30
%SS:	91	25	72	86	18.0	98	98	0	70 - 130	30	70 - 130	30
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE												

**BATCH 60064 SUMMARY**

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1107605-007A	07/20/11 9:35 AM	07/28/11	08/01/11 10:59 PM	1107605-013A	07/20/11 7:53 AM	07/28/11	07/31/11 2:03 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$ ;  $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

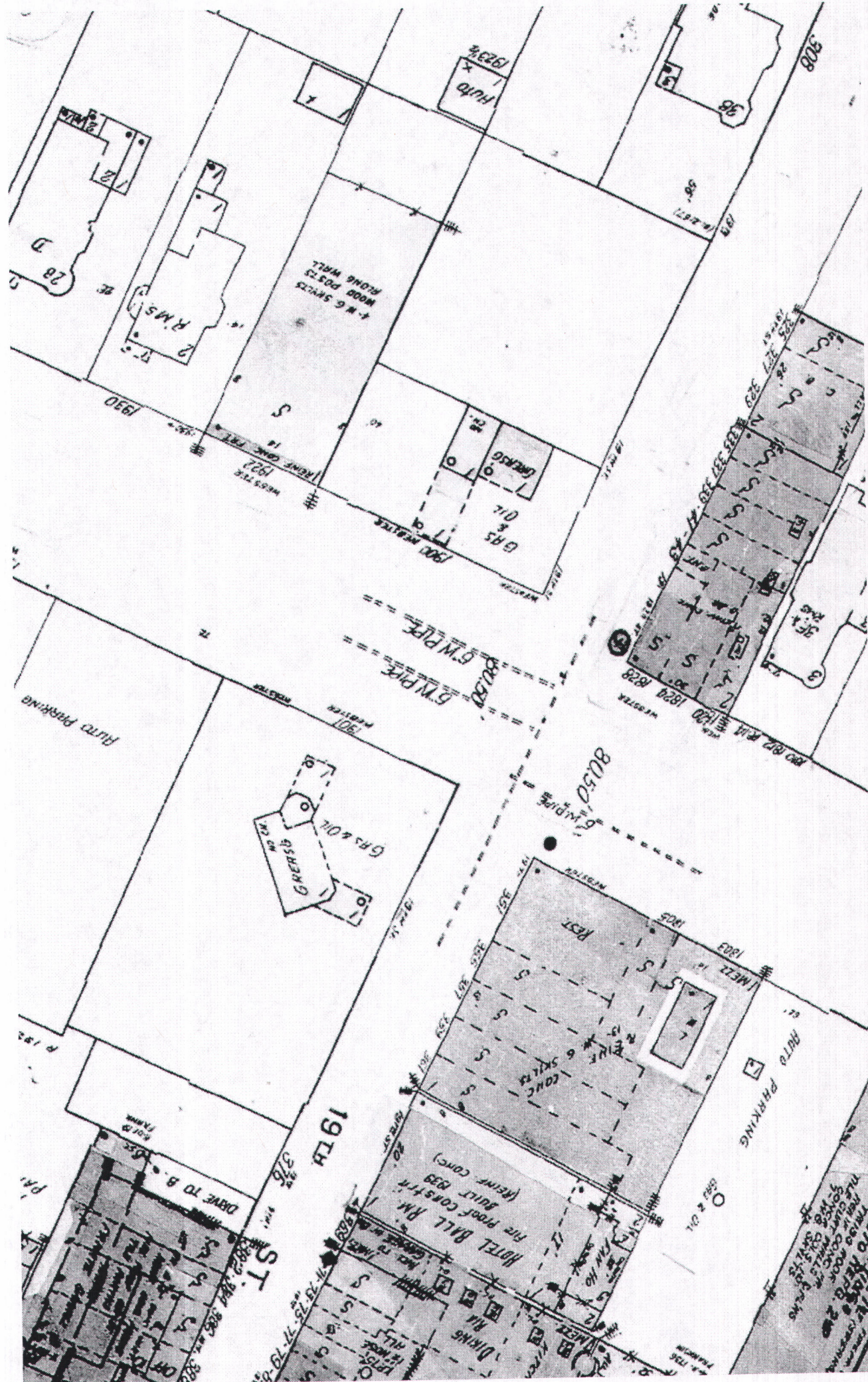
N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

  
QA/QC Officer







## Jan Schutze

---

**From:** Rosemary Chang [rechang@mac.com]  
**Sent:** Thursday, June 21, 2012 1:21 PM  
**To:** js@schutze-inc.com  
**Cc:** Ted Buttner  
**Subject:** photos of 1900 Webster St construction from Ted Buttner

Photos are from 1969.



4/19/69

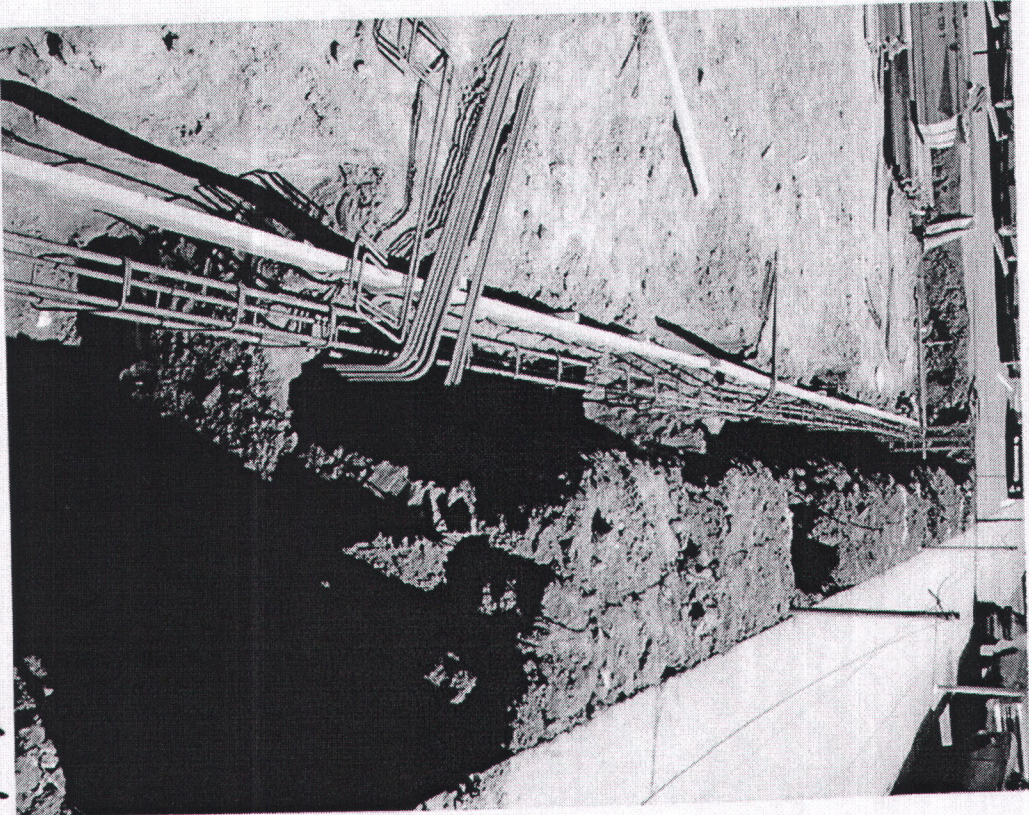


TED MILLER

LEN LEUNING



4-9-6



4/15/69

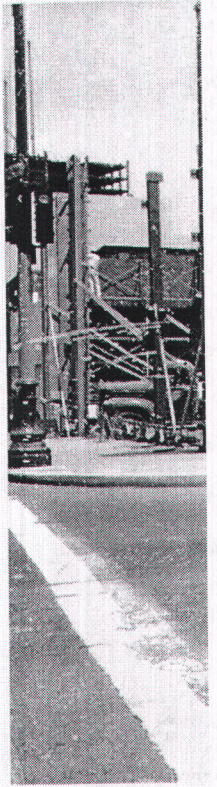
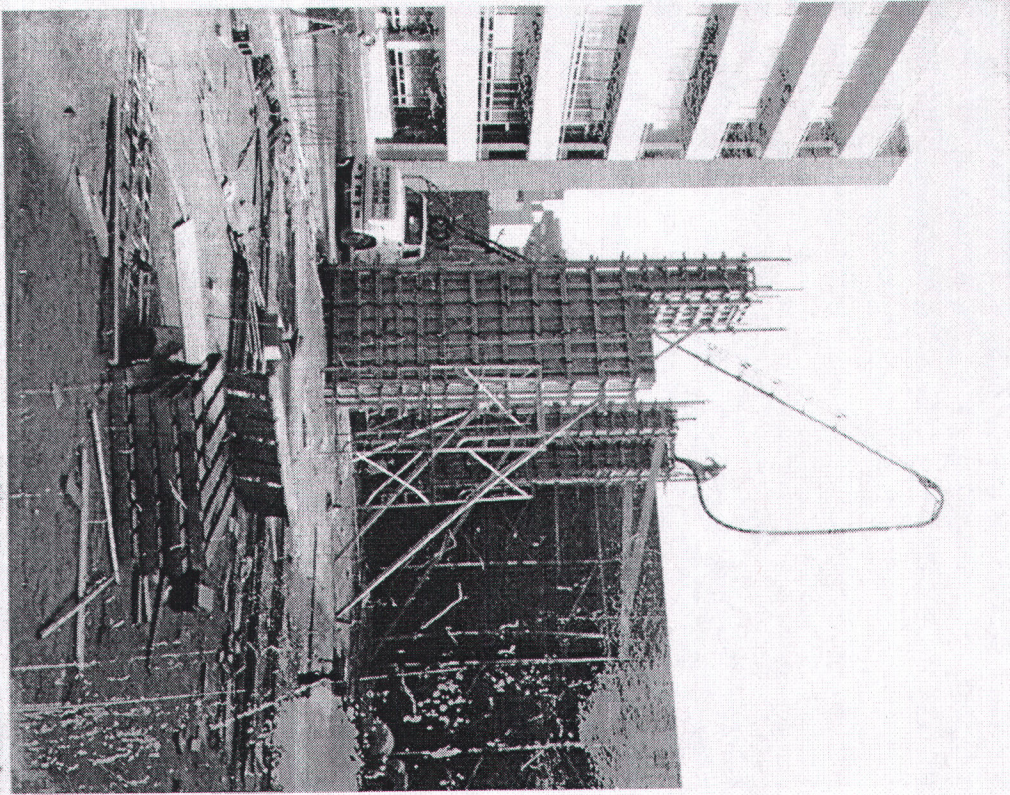
10 PM 54

1ST. CONCRETE

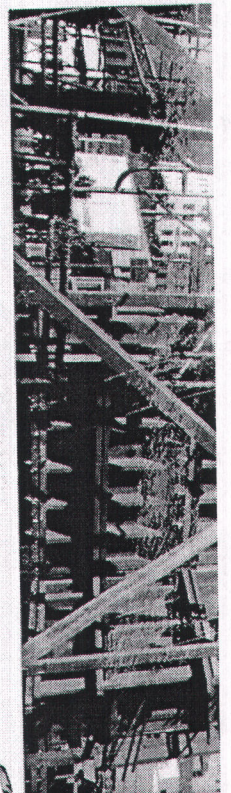
4/18/69







REAR WALL!



PORING MAIN ENTRANCE COLUMN

5/16

FLU-LAMS & ROOF STRUCTURE

6/23/69