



**AEI CONSULTANTS**  
 3210 Old Tunnel Road, Suite B  
 Lafayette, CA 94549  
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**Date:** June 27, 2002      Hard Copy Sent? Y  N

**To:** Leroy Griffin

**Phone:**  
**Fax:** 510-238-7761

**From:** Nathan

**Pages:** 8, including this cover page

**Subject: 2201 West Street**

Here are the analytical results and the permit for the job at 2201 West Street. I need an idea of what further work you want done so we can get a proposal to the client and make a work plan as soon as possible.

Please let me know if you have any further questions.

Nathan

**City Of Oakland**  
**FIRE PREVENTION BUREAU**  
250 Frank Ogawa Plaza, Ste. 3341  
Oakland California 94612-2032  
510-238-3851



*Permit To Excavate And Install, Repair,  
Or Remove Inflammable Liquid Tanks*

Oakland, California June 3, 2002

Tank Permit Number: 33-02

**Permission Is Hereby Granted To:**

Remove fuel oil Tank And Excavate Commencing: Feet Inside: property Line.

On The: W side of West street, 200 feet N of 22nd Street

Site Address: 2201 West Street Present Storage: Fuel Oil

Owner: Santilli & Foster Construction Address: 111 Myrtle St., #201B, Oakland, 94607 Phone: (510) 893-4969

Applicant: AEI Consultants Address: 3201 Old Tunnel Rd., Lafayette, 94549 Phone: (925) 283-6000

Dimensions Of Street (sidewalk) Surface To Be Disturbed : X No. Of Tanks 1 Capacity 500 Gallons, Each

Remarks

This Permit Is Granted In Accordance With Existing City Ordinances. Owner Hereby Agrees To Remove Tanks On Discontinuance Of Use Or When Notified By The City Authorities When Installing, Removing Or Repairing Tanks, No Open Flame To Be On Or Near Premises.

## CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Type Of Inspection:

Inspected And Passed On: \_\_\_\_\_

Approved: \_\_\_\_\_

*Jandra K. McLean*  
Fire Marshal

UST/AST Installations/modifications: \_\_\_\_\_

By: \_\_\_\_\_

Pressure Test: Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

Primary Piping Test: Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

Inspection Fee Paid: \$ 540.00

Received By: ck#4540 rec#841056 McC

Secondary Containment & Sump Testing:

Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

Final: Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_

*Before Covering Tanks, Above Certification Must Be Signed When Ready For Inspection Notify Fire Prevention Bureau 238-3851*

**THIS PERMIT MUST BE LEFT ON THE WORK SITE AS AUTHORITY THEREFORE**

Distribution: White - Fire Prevention Bureau, Yellow - Contractor, Pink - Electrical Inspection

McCampbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5500  
 Telephone: 925-798-1620 Fax: 925-798-1622  
 http://www.mccampbell.com E-mail: info@mccampbell.com

All Environmental, Inc.

3210 Old Tunnel Rd., Ste. B

Lafayette, CA 94549-4157

Client Project ID: 5251; Santilli & Forster

Date Sampled: 06/19/02

Date Received: 06/19/02

Client Contact: Natban Garfield

Date Extracted: 06/19/02

Client P.O.:

Date Analyzed: 06/20/02-06/25/02

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

Extraction method: SW8030B

Analytical method: SW8021B/8015Cm

Work Order: 0206306

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	FB-9'	S	N/A	ND<5.0	15	31	20	60	100	99.1
002A	S/KP 1-4	S	N/A	ND<0.5	ND<0.05	ND<0.05	0.098	0.32	10	111

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

\*water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, and TCLP extracts in ug/L.

DF = dilution factor

# cluttered chromatogram, sample peak coelutes with surrogate peak.

=The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant (aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (standard solvent); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) no recognizable pattern; k) TPH pattern that does not appear to be derived from gasoline (aviation gas).

DHS Certification No. 1644

Edward Hamilton, Lab Director

**McC Campbell Analytical Inc.**  
 110 2nd Avenue South, #137, Pacheco, CA 94553-5560  
 Telephone: 925-798-1620 Fax: 925-798-1622  
 http://www.mcccampbell.com E-mail: mg@mcampbell.com

All Environmental, Inc 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157	Client Project ID: 5251, Santilli & Forster	Date Sampled: 06/19/02
	Client Contact: Nathan Garfield	Date Received: 06/19/02
	Client P.O.:	Date Extracted: 06/26/02
		Date Analyzed: 06/26/02

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel\***

Extraction method: SW3550C Analytical method: SW8015C Work Order: 0200306

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0206306-001A	EB-9	S	660.0	1	97.0
0206306-002A	STKP 1-4	S	160.0	1	96.0

Reporting Limit for DI = 1: ND means not detected at or above the reporting limit	W S	NA 1.0	NA mg/Kg
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\* water and vapor samples are reported in ug/l, wipe samples in ug/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/l, and all T.P.P. / S.T.C. / S.P.L.P extracts in ug/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

† The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than - 2 vol % sediment; k) kerosene/xerose range; l) bunker oil; m) fuel oil; a) standard solvent.

DHS Certification No. 1644

DP Edward Hamilton, Lab Director

**McCampbell Analytical Inc.**

110 2nd Avenue South, #07, Pacifico, CA 94533-5500  
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All Environmental, Inc.  
 3210 Old Tunnel Rd., Ste. B  
 Lafayette, CA 94549-4157

Client Project ID: 5251; Santilli & Forster  
 Client Contact: Nathan Garfield  
 Client P.O.

Date Sampled: 06/19/02  
 Date Received: 06/19/02  
 Date Extracted: 06/19/02  
 Date Analyzed: 06/21/02

**Volatiles Organics by GC/MS (Basic Target List)\***

Extraction Method: SW5010B

Analytical Method: SW8260B

Work Order: 0206306

Lab ID: \_\_\_\_\_  
 Client ID: 0206306-001A  
 Matrix: EB-9  
 Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<10,000	200	50	Benzene	ND<1000	200	5.0
Bromobenzene	ND<1000	200	5.0	Bromochloromethane	ND<1000	200	5.0
Bromodichloromethane	ND<1000	200	5.0	Bromoform	ND<1000	200	5.0
Bromomethane	ND<1000	200	5.0	2-Butanone (MEK)	ND<2000	200	10
n-Butyl benzene	ND<1000	200	5.0	sec-Butyl benzene	ND<1000	200	5.0
tert-Butyl benzene	ND<1000	200	5.0	Carbon Disulfide	ND<1000	200	5.0
Carbon Tetrachloride	ND<1000	200	5.0	Chlorobenzene	ND<1000	200	5.0
Chloroethane	ND<1000	200	5.0	2-Chloroethyl Vinyl Ether	ND<2000	200	10
Chloroform	ND<1000	200	5.0	Chloromethane	ND<1000	200	5.0
2-Chlorotoluene	ND<1000	200	5.0	4-Chlorotoluene	ND<1000	200	5.0
Dibromochloromethane	ND<1000	200	5.0	1,2-Dibromo-3-chloropropane	ND<1000	200	5.0
1,2-Dibromoethane (EDB)	ND<1000	200	5.0	Dibromomethane	ND<1000	200	5.0
1,2-Dichlorobenzene	ND<1000	200	5.0	1,3-Dichlorobenzene	ND<1000	200	5.0
1,4-Dichlorobenzene	ND<1000	200	5.0	Dichlorodifluoromethane	ND<1000	200	5.0
1,1-Dichloroethane	ND<1000	200	5.0	1,2-Dichloroethane (1,2-DCA)	ND<1000	200	5.0
1,1-Dichloroethene	ND<1000	200	5.0	cis-1,2-Dichloroethene	ND<1000	200	5.0
trans-1,2-Dichloroethene	ND<1000	200	5.0	1,2-Dichloropropane	ND<1000	200	5.0
1,3-Dichloropropane	ND<1000	200	5.0	2,2-Dichloropropane	ND<1000	200	5.0
1,1-Dichloropropene	ND<1000	200	5.0	cis-1,3-Dichloropropene	ND<1000	200	5.0
trans-1,3-Dichloropropene	ND<1000	200	5.0	Ethylbenzene	16,000	200	5.0
Hexachlorobutadiene	ND<1000	200	5.0	2-Hexanone	ND<1000	200	5.0
Iodomethane (Methyl iodide)	ND<2000	200	10	4-Isopropyl toluene	5200	200	5.0
Isopropylbenzene	4200	200	5.0	4-Methyl-2-pentanone (MIBK)	ND<1000	200	5.0
Methylene chloride	ND<1000	200	5.0	Methyl-1-butyl ether (MTBE)	ND<1000	200	5.0
Naphthalene	10,000	200	5.0	n-Propyl benzene	8500	200	5.0
Styrene	ND<1000	200	5.0	1,1,1,2-Tetrachloroethane	ND<1000	200	5.0
1,1,2,2-Tetrachloroethane	ND<1000	200	5.0	Tetrachloroethene	ND<1000	200	5.0
Toluene	ND<1000	200	5.0	1,2,3-Trichlorobenzene	ND<1000	200	5.0
1,2,4-Trichlorobenzene	ND<1000	200	5.0	1,1,1-Trichloroethane	ND<1000	200	5.0
1,1,2-Trichloroethane	ND<1000	200	5.0	Trichloroethene	ND<1000	200	5.0
Trichlorofluoromethane	ND<1000	200	5.0	1,2,3-Trichloropropane	ND<1000	200	5.0
1,2,4-Trimethylbenzene	43,000	200	5.0	1,3,5-Trimethylbenzene	19,000	200	5.0
Vinyl Acetate	ND<10,000	200	50	Vinyl Chloride	ND<1000	200	5.0
Xylenes	63,000	200	5.0				

**Surrogate Recoveries (%)**

%SS1:	93.6	%SS2:	90.3
%SS3:	105		

**Comments:**

\*water and vapor samples are reported in ug/L, soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP/SPLP extracts in ug/L.  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis  
 (h) lighter than water immiscible sheet/product is present; (i) liquid sample that contains greater than --2 vol. % sediment; (j) sample diluted due to high organic content.

<b>McCampbell Analytical Inc.</b>		110 2nd Avenue South, #177, Pacheco, CA 94533-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com	
All Environmental, Inc. 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157	Client Project ID: 5251; Sanfilli & Forster	Date Sampled: 06/19/02	
	Client Contact: Nathan Garfield	Date Received: 06/19/02	
	Client P.O.:	Date Extracted: 06/19/02	
		Date Analyzed: 06/21/02	

**Volatiles Organics by GC/MS (Basic Target List)\***  
 Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0206306

Lab ID	0206306-002A
Client ID	STKP 14
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1000	20	50	Benzene	ND<100	20	5.0
Bromobenzene	ND<100	20	5.0	Bromochloromethane	ND<100	20	5.0
Bromodichloromethane	ND<100	20	5.0	Bromoform	ND<100	20	5.0
Bromomethane	ND<100	20	5.0	2-Butanone (MEK)	ND<200	20	10
n-Butyl benzene	ND<100	20	5.0	sec-Butyl benzene	ND<100	20	5.0
tert-Butyl benzene	ND<100	20	5.0	Carbon Disulfide	ND<100	20	5.0
Carbon Tetrachloride	ND<100	20	5.0	Chlorobenzene	ND<100	20	5.0
Chloroethane	ND<100	20	5.0	2-Chloroethyl Vinyl Ether	ND<200	20	10
Chloroform	ND<100	20	5.0	Chloromethane	ND<100	20	5.0
2-Chlorotoluene	ND<100	20	5.0	3-Chlorotoluene	ND<100	20	5.0
Dibromochloromethane	ND<100	20	5.0	1,2-Dibromo-3-chloropropane	ND<100	20	5.0
1,2-Dibromochloroethane (EDB)	ND<100	20	5.0	Dibromomethane	ND<100	20	5.0
1,2-Dichlorobenzene	ND<100	20	5.0	1,3-Dichlorobenzene	ND<100	20	5.0
1,4-Dichlorobenzene	ND<100	20	5.0	Dichlorodifluoromethane	ND<100	20	5.0
1,1-Dichloroethane	ND<100	20	5.0	1,2-Dichloroethane (1,2-DCA)	ND<100	20	5.0
1,1-Dichloroethene	ND<100	20	5.0	cis-1,2-Dichloroethene	ND<100	20	5.0
trans-1,2-Dichloroethene	ND<100	20	5.0	1,2-Dichloropropane	ND<100	20	5.0
1,3-Dichloropropane	ND<100	20	5.0	2,2-Dichloropropane	ND<100	20	5.0
1,1-Dichloropropene	ND<100	20	5.0	cis-1,3-Dichloropropene	ND<100	20	5.0
trans-1,3-Dichloropropene	ND<100	20	5.0	Bihybenzene	ND<100	20	5.0
Hexachlorobutadiene	ND<100	20	5.0	2-Hexanone	ND<100	20	5.0
Iodomethane (Methyl iodide)	ND<200	20	10	4-Isopropyl toluene	ND<100	20	5.0
Isopropylbenzene	ND<100	20	5.0	4-Methyl-2-pentanone (MIBK)	ND<100	20	5.0
Methylene chloride	ND<100	20	5.0	Methyl-t-butyl ether (MTBE)	ND<100	20	5.0
Naphthalene	ND<100	20	5.0	n-Propyl benzene	ND<100	20	5.0
Styrene	ND<100	20	5.0	1,1,1,2-Tetrachloroethane	ND<100	20	5.0
1,1,2,2-Tetrachloroethane	ND<100	20	5.0	Tetrachloroethene	ND<100	20	5.0
Toluene	ND<100	20	5.0	1,2,3-Trichlorobenzene	ND<100	20	5.0
1,2,4-Trichlorobenzene	ND<100	20	5.0	1,1,1-Trichloroethane	ND<100	20	5.0
1,1,2-Trichloroethane	ND<100	20	5.0	Trichloroethene	ND<100	20	5.0
Trichlorofluoromethane	ND<100	20	5.0	1,2,3-Trichloropropane	ND<100	20	5.0
1,2,4-Trimethylbenzene	ND<100	20	5.0	1,3,5-Trimethylbenzene	ND<100	20	5.0
Vinyl Acetate	ND<1000	20	50	Vinyl Chloride	ND<100	20	5.0
Xylenes	ND<100	20	5.0				

Surrogate Recoveries (%)	
%SS1	96.8
%SS3	93.4
%SS2	102

Comments: j  
 \*water and vapor samples are reported in ug/L. soil and sludge samples in ug/kg, wipes in ug/wipe and all TCLP / SPLP extracts in ug/l.  
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis  
 (h) lighter than water immiscible sludge/product is present; (i) liquid sample that contains greater than ~2 vol. % sediment, (j) sample diluted due to high organic content

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All Environmental, Inc.  
 3210 Old Tunnel Rd., Ste. B  
 Lafayette, CA 94549-4157

Client Project ID: 5251; Santilli & Forster  
 Client Contact: Nathan Garfield  
 Client P.O.:

Date Sampled: 06/19/02  
 Date Received: 06/19/02  
 Date Extracted: 06/19/02  
 Date Analyzed: 06/22/02-06/24/02

**Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)\***

Extraction Method SW5030D

Analytical Method: SW8021B

Work Order 0206306

Lab ID	0206306-001A	0206306-002A	Reporting Limit for DF = 1
Client ID	EB-9*	STKP 1-4	
Matrix	S	S	
DP	200	2	

Compound	Concentration		S	W
			ug/kg	ug/L
Bromodichloromethane	ND<1000	ND<10		
Bromoform	ND<1000	ND<10	5.0	NA
Bromomethane	ND<1000	ND<10	5.0	NA
Carbon Tetrachloride	ND<1000	ND<10	5.0	NA
Chlorobenzene	ND<1000	ND<10	5.0	NA
Chloroethane	ND<1000	ND<10	5.0	NA
2-Chloroethyl vinyl ether	ND<1000	ND<10	5.0	NA
Chloroform	ND<1000	ND<10	5.0	NA
Chloromethane	ND<1000	ND<10	5.0	NA
Dibromochloromethane	ND<1000	ND<10	5.0	NA
1,2-Dichlorobenzene	ND<1000	ND<10	5.0	NA
1,3-Dichlorobenzene	ND<1000	ND<10	5.0	NA
1,4-Dichlorobenzene	ND<1000	ND<10	5.0	NA
Dichlorodifluoromethane	ND<1000	ND<10	5.0	NA
1,1-Dichloroethane	ND<1000	ND<10	5.0	NA
1,2-Dichloroethane	ND<1000	ND<10	5.0	NA
1,1-Dichloroethene	ND<1000	ND<10	5.0	NA
cis-1,2-Dichloroethene	ND<1000	ND<10	5.0	NA
trans-1,2-Dichloroethene	ND<1000	ND<10	5.0	NA
1,2-Dichloropropene	ND<1000	ND<10	5.0	NA
cis-1,3-Dichloropropene	ND<1000	ND<10	5.0	NA
trans-1,3-Dichloropropene	ND<1000	ND<10	5.0	NA
Methylene chloride	ND<1000	ND<10	5.0	NA
1,1,2,2-Tetrachloroethane	ND<1000	ND<10	5.0	NA
Tetrachloroethene	ND<1000	ND<10	5.0	NA
1,1,1-Trichloroethane	ND<1000	ND<10	5.0	NA
1,1,2-Trichloroethane	ND<1000	ND<10	5.0	NA
Trichloroethene	ND<1000	ND<10	5.0	NA
Trichlorofluoromethane	ND<1000	ND<10	5.0	NA
Vinyl Chloride	ND<1000	ND<10	5.0	NA

**Surrogate Recoveries (%)**


%SS:	101	100
Comments		

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe

Reporting limit for DF = 1; water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg, wipes, ND<0.2ug/wipe


ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains greater than ~2 vol. % sediment; (j) sample diluted due to high organic content.

 Edward Hamilton, Lab Director

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All Environmental, Inc. 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157	Client Project ID: 5251; Santilli & Forster		Date Sampled: 06/19/02
	Client Contact: Nathan Garfield		Date Received: 06/19/02
	Client P.O.:		Date Extracted: 06/19/02
			Date Analyzed: 06/19/02
<b>Petroleum Oil &amp; Grease with Silica Gel Clean-Up*</b>			
Analytical Method: SM5520/P			Work Order: 0206306
Lab ID	Client ID	Matrix	POG
0206306-001A	EB-9*	S	ND
0206306-002A	SIKP 1-4	S	ND
Method Accuracy and Reporting Units		W S	NA 50 mg/Kg

DHS Certification No. 1644

 Edward Hamilton, Lab Director