

December 10, 1997

Susan Hugo Alameda County Health Agency Department of Environmental Health 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

Dear Ms. Hugo:

RE: MONITORING WELLS DOWNGRADIENT OF THE FORMER STANDARD BRANDS PAINT STORE #147, 4343 SAN PABLO AVENUE, EMERYVILLE, CALIFORNIA

In a December 2, 1997 phone conversation, you inquired as to the plans for abandonment of the two monitoring wells (MW4 and MW5) located across Emery Street and downgradient of the subject Site. These wells were apparently installed by Environ as part of an investigation for the City of Emeryville Redevelopment Agency. Boring logs for these two wells are included in Environ's "Subsurface Investigation Report, Standard Brands Paint, Emeryville, California" dated August 18, 1995. For your convenience, I have included a copy of the two boring logs and report cover with this letter.

Since MW4 and MW5 belong to City of Emeryville Redevelopment Agency, they would be responsible for proper abandonment. Site monitoring wells MW1A, MW2 and MW3 should be abandoned during third quarter 1998, after the requisite year of quarterly monitoring has been completed.

If you have any questions on this matter, please contact me at (510) 533-6710.

Sincerely,

Clifton Davenport, CEG/CHG

Principal

SUBSURFACE INVESTIGATION REPORT STANDARD BRANDS PAINT EMERYVILLE, CALIFORNIA

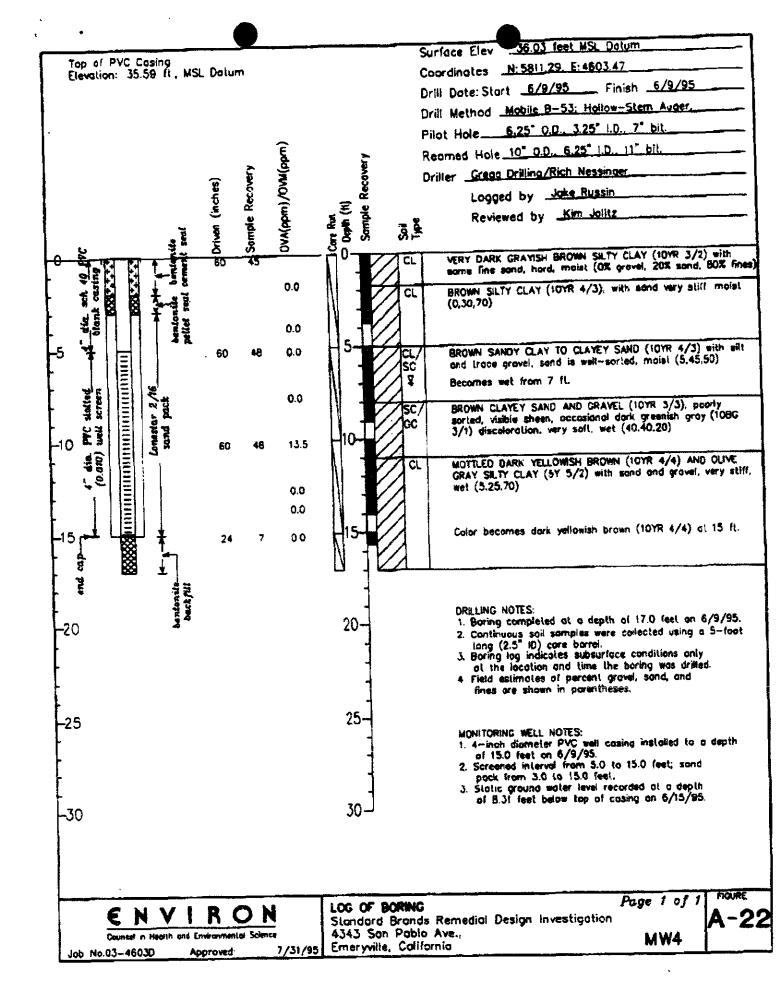
Prepared for

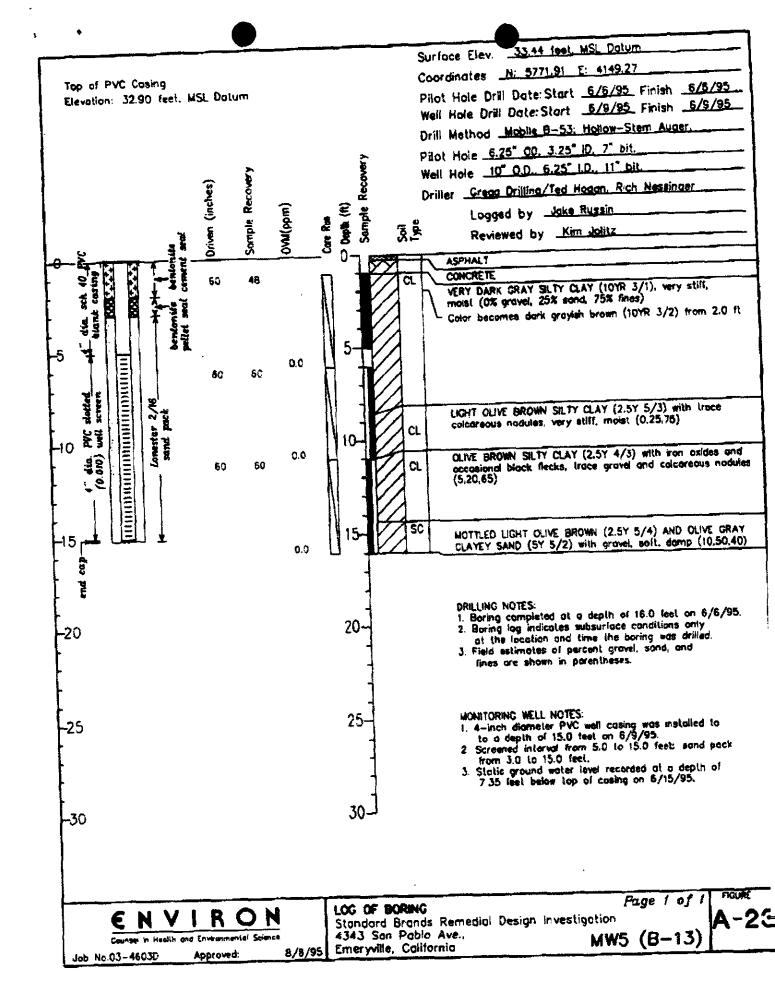
Emeryville Redevelopment Agency

Prepared by

ENVIRON Corporation Emeryville, California

August 18, 1995 03-4603E





Lọg o	F BORING M	IW-1A	Former Standard Brands Paint Store 4343 San Pablo Avenue Emeryville, California				
			DATES DRILL DRILLING CO DRILL TOOLS DRILLER	FAST-	TEK hollow ste	SAMPLING METH TOTAL DEPTH in augedkOGGED BY: DATE DEV.:	L. California Sampler 15 feet bgs P Jones 50 gal
			ARTESIAN JO	NAGER P. Jone 18 NO : 301-00	11-02F	DRAWN BY. DRAW DATE:	P. Jones 11/06/97
				229 Towksbury A	Avenue, Po	NMENTAL CO bint Richmond, California 9 943 • FAX (510) 232-2823	4801
DEPTH S (feet) F	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMPLE NO.	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	DESCRIPTION
		Fill(type 1): Recycled Class II AB Base Rock. SC: Sandy CLAY, light brown, low plasticity, firm, moist, Excavated Native Soil.					-
-10		Fill(type 1): 3/4 inch diameter clean crushed rock. ML: clayey SILT, light brown mottled reddish brown, very low plasticity, brittle,	7				
		moist.			0.0		
				· ;	0.0		

ATTACHMENT A

STANDARD OPERATING PROCEDURES-MONITORING WELL SAMPLING

FAST-TEK Engineering Support Services

Standard Operating Procedures

MONITORING WELL SAMPLING

Prior to groundwater sampling, initial water level and floating liquid hydrocarbon measurements are recorded for each well. Each well is sounded for depth to ascertain if silting has occurred and to verify the actual depth below ground surface. These measurements are used to calculate the volume for each well. At this time, all non-dedicated pumping and sampling supplies are washed with an Alconox solution, rinsed with clean water, and final rinsed with either distilled or deionized water to prevent any cross contamination from other sampling events.

Each well is purged by evacuating a minimum of three well-casing volumes of groundwater from the well. The well-water may be evacuated either by bailing, or pumping. Any of the following may be used for bailing: a dedicated pvc bailer, sterile disposable polyethylene bailer, or a stainless steel bailer. For pumping the groundwater out of the well, a downhole impeller type pump (dedicated or removable with PVC tubing), a downhole dedicated bladder pump, or a surface peristaltic pump is used.

After three to four well volumes are pumped, each well is permitted to recharge to at least 80% of original capacity or for two hours; whichever occurs first. The water is then measured to verify whether the well has stabilized. Stabilization is determined by measuring the parameters of pH; temperature; and electrical conductivity. Stabilized measurements indicate that formation water has entered the well. When two subsequent measurements of these three parameters are within 10% of each other, the well is considered stabilized and is ready to be sampled.

The samples are collected using a new polyethylene bailer with a bottom siphon and nylon cord. The bailers are disposable, and therefore, never reused. The groundwater sample is visually inspected for the presence of free product in the sampling bailer. Agitation is minimized during sample retrieval to prevent aeration during the transfer from the well to the laboratory prepared sample containers. Duplicate water samples are collected from the well and siphoned into three, 40 ml, VOA, septum top vials, with additional 950 ml samples collected in an amber glass bottles or polyethylene bottles depending on the analyses to be performed. The VOA vials are filled completely, leaving no headspace, and are sealed with Teflon-lined lids. All samples are labeled, chilled to 4°C in an ice chest, and sent to a California State Certified hazardous materials testing laboratory under chain-of-custody documentation.

All groundwater samples are collected in accordance with California Regional Water Quality Control Board (RWQCB) procedures described in the Leaking Underground Fuel Tank (LUFT) Field Manual, the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, and local regulatory guidelines.

Standard Environmental Protection Agency (EPA), San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), and Department of Health Services (DHS) methodologies for sampling and analyses are routinely utilized.

Chain of Custody documentation accompanies all samples to the laboratory. A copy of the Chain of Custody documentation is attached to the Certificate of Analysis.

Monitor well purge water is properly stored and labeled on site in DOT 17-H containers pending off site disposal.

ATTACHMENT B

LABORATORY ANALYTICAL/QUALITY CONTROL DATA AND CHAIN OF CUSTODY RECORD



110 Second Avenue South, #D7, Pacheco, CA 94553
Telephone: 510-798-1620 Fax: 510-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

FAST-TEK	Client Project ID: #301-002-02F;	Date Sampled: 09/29/97
247 B Tewksbury Avenue	Keeper/ Standard Brands	Date Received: 09/30/97
Pt. Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 09/30/97
	Client P.O:	Date Analyzed: 09/30/97

10/07/97

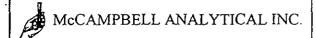
Dear Paul:

Enclosed are:

- 1). the results of 2 samples from your #301-002-02F; Keeper/ Standard Brands project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill 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 please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Edward Hamilton, Lab Director



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FAST-TEK	Client Project ID: #301-002-02F;	Date Sampled: 09/29/97
247 B Tewksbury Avenue	Keeper/ Standard Brands	Date Received: 09/30/97
Pt. Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 09/30/97
	Client P.O:	Date Analyzed: 09/30/97

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	мтве	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
81308	MWIA	w	ND		ND	ND	ND	ND	105
							_		
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								
	· · · · · · · · · · · · · · · · · · ·					<u> </u>			
						<u> </u>			
_			<u></u> .						
						}			
					,				
	·								
			;						
otherwis	g Limit unless te stated; ND detected above	W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
	orting limit	s	1.0 mg/kg	0.05	0.005	0 005	0.005	0 005	

^{*} water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; i) no recognizable pattern

^{*} cluttered chromatogram; sample peak coelutes with surrogate peak

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FAST-T	EK		Client Project ID: #301-002-02F,	Date Sampled: 09/29	/97	
247 B T	ewksbury Ave	nue	Keeper/ Standard Brands	Date Received: 09/30/97  Date Extracted: 09/30-10/01/97		
Pt. Rich	mond, CA 948	01	Client Contact: Paul Jones			
			Client P.O:	Date Analyzed: 09/3	0-10/01/97	
EPA metho		-	Range (C9-C12) Volatile Hydrocarbon 8020 or 602; California RWQCB (SF Bay Region)			
Lab ID	Client ID	Маттіх	TPH(ms)*		% Recovery Surrogate	
81309	MW3	w	310,e		96	
	!					
			,			
·						

S

50 ug/L

1.0 mg/kg

Reporting Limit unless

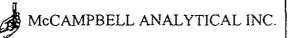
otherwise stated, ND means not detected above

the reporting limit

^{*} water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

a 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) IPH pattern that does not appear to be derived from gasoline (mineral spirits?); f) one to a few isolated peaks present, g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment, j) no recognizable pattern

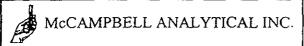


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FAST-TEK	Client Project ID: #3	01-002-02F;	Date Sampled:	09/29/97	
	Keeper/ Standard Br	ands	Date Received	: 09/30/97	
247 B Tewksbury Avenue			Date Extracted: 09/30-10/06/97  Date Analyzed: 09/30-10/06/97		
Pt. Richmond, CA 94801	Client Contact: Paul	Jones			
	Client P.O:				
EPA method 601 or 8010	Volatile F	lalocarbons			
Lab ID	81309			<u> </u>	
Client ID	MW3			<u> </u>	
Matrix	W			<del> </del>	
Compound	· · · · · · · · · · · · · · · · · · ·	Concen	ration	<u> </u>	
Bromodichloromethane	ND	Concen	racion	<u> </u>	
Bromoform(b)	ND ND			<del>                                     </del>	
Bromomethane	ND ND		,	<del> </del>	
Carbon Tetrachloride ^(c)	ND ND			<del> </del>	
Chlorobenzene	ND			<del> </del>	
Chloroethane	ND ND			<del> </del>	
2-Chloroethyl Vinyl Ether ^(d)	ND			<del> </del>	
Chloroform (e)	ND		**************************************	<del> </del>	
Chloromethane	ND			<del></del>	
Dibromochloromethane	ND			<del>                                     </del>	
1,2-Dichlorobenzene	ND			<del></del>	
1,3-Dichlorobenzene	ND				
1,4-Dichlorobenzene	ND				
Dichlorodifluoromethane	ND				
1,1-Dichloroethane	ND			1	
1,2-Dichloroethane	ND		,—		
1,1-Dichloroethene	ND				
cis 1,2-Dichloroethene	ND				
trans 1,2-Dichloroethene	ND				
1,2-Dichloropropane	ND				
cis 1,3-Dichloropropene	ND				
trans 1,3-Dichloropropene	ND				
Methylene Chloride ^(f)	ND<1				
1,1,2,2-Tetrachloroethane	ND				
Tetrachloroethene	ND				
1,1,1-Trichloroethane	ND				
1,1,2-Trichloroethane	ND				
Trichloroethene	ND				
Trichlorofluoromethane	ND		· · · · · · · · · · · · · · · · · · ·		
Vinyl Chloride ^(g)	ND			<u> </u>	
% Recovery Surrogate	101				
Comments				1	

^{*} 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 unless otherwise stated, 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

⁽b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy) ethene, (e) trichloromethane, (f) dichloromethane, (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) highly sample that contains greater than  $\sim$ 5 vol. % sediment; (j) sample diluted due to high organic content



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FAST-TEK		Client Pro	oject ID: #301-002-02F;	Date Sampled: 09/29/97		
247 B Tewks	burv Avenue		tandard Brands	Date Received:	09/30/97	
Pt. Richmond		Client Co	ntact: Paul Jones	Date Extracted: 10/02/97		
		Client P.O	):	Date Analyzed:	10/02/97	
······································	<u> </u>		Naphthalene *	•		
EPA method 82	60				% Recovery	
Lab ID	Client ID	Matrix	Naphthalene		Surrogate	
81309	MW3	w	ND		84	
				y		
				<del></del>		
	<u>.                                  </u>					
<u> </u>						
					}	
	it unless otherwise	w	1.0 ug/L			
	s not detected above orting limit	S	5.0 ug/kg			
	are reported in ug/L, so	oil and sludge sa	mples in ug/kg, wipe samples in ug/wi	ipe and all TCLP / STLC	/ SPLP extracts in	
ug/L						
h) lighter than wa	iter immiscible sheen	s present; 1) liqu	nd sample that contains greater than ~	5 vol % sediment		



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FAST-TEK			ID: #301-002-02F;	Date Sampled: 09/29/97
247 B Tewkst	oury Avenue	Keeper/ Standa	ard Brands	Date Received: 09/30/97
Pt. Richmond,	, CA 94801	Client Contact	Paul Jones	Date Extracted: 09/30/97
		Client P.O:		Date Analyzed: 10/01/97
CA Title 22, Chap	pter 11, Appendix XI	•	Organic Lead	
Lab ID	Client ID	Matrix		Organic Lead *
81308	MWIA	w		ND
			<del></del>	
	<u> </u>			
		-		
		117		0.1 mg/l
stated; ND mean	nt unless otherwise as not detected above porting limit	W S		0.1 mg/L 0.5 mg/kg
		<u> </u>	in mg/kg and wipes in mg/wip	
•	, -	-	ple that contains greater than	

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#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/30/97 - 10/01/97 Matrix: Water

	(mg/L)	i	% Reco	very		
Sample			Amount			RPD
#(81260)	MS	MSD	Spiked	MS	MSD	
			ll			
			1			
0.0	103.8	107.0	100.0	103.8	107.0	3.0
0.0	10.6	10.4	10.0	106.0	104.0	1.9
0.0	10.7	10.6	10.0	107.0	106.0	0.9
0.0	10.7	10.6	10.0	107.0	106.0	0.9
0.0	32.3	31.9	30.0	107.7	106.3	1.2
_						
0	169	172	150	1173	TT4	1.6
	<del></del>	<del></del> _		<u></u> -		
n	28.4	27.1	l 27.3 l	104	99	4.7
Ū	23.1		, _,, <u>,</u>		-	
	#(81260) 0.0 0.0 0.0 0.0	#(81260) MS  0.0 103.8  0.0 10.6  0.0 10.7  0.0 10.7  0.0 32.3	#(81260) MS MSD  0.0 103.8 107.0 0.0 10.6 10.4 0.0 10.7 10.6 0.0 10.7 10.6 0.0 32.3 31.9	#(81260) MS MSD Spiked  0.0 103.8 107.0   100.0   0.0 10.6 10.4   10.0   0.0 10.7 10.6   10.0   0.0 32.3 31.9   30.0    0 169 172   150	#(81260) MS MSD Spiked MS  0.0 103.8 107.0 100.0 103.8  0.0 10.6 10.4 10.0 106.0  0.0 10.7 10.6 10.0 107.0  0.0 10.7 10.6 10.0 107.0  0.0 32.3 31.9 30.0 107.7   0 169 172 150 113	#(81260) MS MSD Spiked MS MSD  0.0 103.8 107.0 100.0 103.8 107.0 0.0 10.6 10.4 10.0 106.0 104.0 0.0 10.7 10.6 10.0 107.0 106.0 0.0 10.7 10.6 10.0 107.0 106.0 0.0 32.3 31.9 30.0 107.7 106.3

% Rec. = MS - Sample) / amount spiked x 100

RPD = MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

#### QC REPORT FOR VOCs (EPA 8240/8260 )

Date: 10/02/97-10/03/97 Matrix: Water

]		% Reco	very				
Analyte	Sample		i	Amount	}		RPD
	#(80837)	MS	MSD	Spiked	MS	MSD	
	<u> </u>			<u> </u>	ļ_ <del></del>		
						25	2.0
1,1-Dichloroethe	0.0	100.0	97.0	100	100	97	3.0
Trichloroethene	0.0	83.0	83.0	100	83	83	0.0
EDB	0.0	95.0	89.0	100	95	89	6.5
Chlorobenzene	0.0	97.0	93.0	100	97	93	4.2
Benzene	0.0	105.0	101.0	100	105	101	3.9
Toluene	0.0	101.0	100.0	100	101	100	1.0
				ļ	<u></u>		

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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## McCAMPBELL ANALYTICAL INC.

#### QC REPORT FOR EPA 8010/8020/EDB

Date: 09/30/97

Matrix: Water

	Concentration (ug/L)				% Recovery		
Analyte	Sample	MS	MSD	Amount Spiked	MS	MSD	RPD
l				1			
{  1,1-DCE	0.0	10.7	11.3	10.0	107	113	5.5
Trichloroethene	0.0	9.4	9.8	10.0	94	98	4.3
EDB	0.0	8.3	8.9	10.0	83	89	6.9
Chlorobenzene	0.0	9.7	10.1	10.0	97	101	4.5
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	.]			_ ]			

% Rec. = (MS - Sample) / amount spiked x 100

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$ 

#### QC REPORT FOR EPA 8010/8020/EDB

Date: 10/03/97-10/06/97 Matrix: Water

	Concentration (ug/L)				% Recovery		
Analyte	Sample			Amount			RPD
	#(81462	) MS	MSD	Spiked	MS	MSD	
[ ]		<del></del>	<del></del>	1	ļ		
1,1-DCE	0.0	11.3	11.4	10.0	113	114	0.9
Trichloroethene	0.0	10.0	10.1	10.0	100	101	1.0
EDB	0.0	8.9	9.0	10.0	89	90	1.1
Chlorobenzene	0.0	10.0	10.2	10.0	100	102	2.0
Benzene	N/A	N/A	N/A	  N/A	N/A	A\N	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	A/N	N/A	N/A	N/A	N/A	$A \setminus M$	N/A
i	<u></u>			.	1		

% Rec. = (MS - Sample) / amount spiked x 100

RPD =  $(MS - MSD) / (MS + MSD) \times 2 \times 100$ 

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# McCAMPBELL ANALYTICAL INC.

#### QC REPORT FOR ICP and/or AA METALS

Date: 10/01/97

Matrix: Water

1	Concentration (mg/L)				% Recovery		
Analyte	Comple	MS	MSD	Amount	MS	MSD	RPD
	Sample	MS	עפא	 	PIS	145D	
m-t-3 rand	1 77 / 7	37 / 7	*T/B	NY / 7	17/2	NT / 20	NT / 70
Total Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	$A \setminus M$	A/N
Total Zinc	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Copper	N/A	N/A	N/A	N/A	n/a	N/A	N/A
Organic Lead	0.00	4.07	4.18	5.00	81	84	2.6

% Rec. = (MS - Sample) / amount spiked x 100

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$ 

247 B TEWKSDURY AVE. Pt. 72: chmond, CA. 94801 (510) 232-2728 FAX: 232-2823 9538 XFT 5 SAMPLERS: (Signature) JASON FRENCH ANALYSIS PROJECT NAME: JOB NUMBER: KEEPER / STANDARD BRIANDS REQUESTED 301-001-02F DESCRIPTION: MOUITORING WELL SAMPLING EVENT rount of the cardist ADDRESS: 4343 SAN PABLO AVE, EMERYVILLE, LA onlanic CROSS/ REFERENCE NUMBER 19c SAMPLE I.D. DATE TIME STATION LOCATION REMARKS 9129197 1 PLASTIC 1 FRESERVED VOAS 1 AMBER 4 PRESERVED VOAS MWIA 1500 MW3 9/24/97 1700 VOAS LOGG METALS LOTHER GOOD CONDITION_ APPROPRIATE RELINQUISHED BY: (Signature) RECEIVED BY (Signature) DATE DATE TIME TIME RELINQUISHED BY: (Signarufe) DATE RECEIVED BY: (Signature) DATE TAX Janan TIME TIME / RELINQUISHED BY: (Signature) DATE RECEIVED BY: (Signature) DATE TIME TIME RELINQUISHED BY: (Signature) DATE RECEIVED FOR LABORATORY BY: (Signature) DATE TIME TIME

CUUTIN OF COPIONA

#### DRAFT

August 14, 1997

Paul Jones, Project Manager FAST-TEK Eng. Support Services 247 B Tewksbury Avenue Point Richmond, CA 94801

Dear Mr. Jones:

Included are the results from the testing of material submitted on July 30 from your 301-001-02F project. Soil samples W Wall GC and E Wall G were submitted for hydrocarbon characterization. Enclosed are the GC/FID and GC/ECD traces produced. In general, on a GC trace, the volatile material elutes first, close to time zero. The remaining material elutes in increasing boiling point order as the GC run progresses.

The material present in samples W Wall GC and E Wall G is indicative of a highly weathered, non-reformulated gasoline. This low boiling distillate appears as a pattern of peaks eluting from approximately 2 to 12 minutes on the GC/FID traces. The distillation endpoint for these products appears at n-C13, or 235°C. This composition is consistent with gasoline produced before approximately 1960. In addition, the degree of weathering that has occured to the products present in samples W Wall GC and E Wall GC is consistent with releases that have occured greater than 10 years ago. The GC/ECD traces for both samples show a peak indicative of tetraethyl lead (TEL) at approximately 9 minutes. Additional anylyses are available that can confirm this tentative indentification.

Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

Enclosures FAX: (510) 232-2823 NAA0814R.DOC

#### DRAFT

Date of Report: 08/14/97 Date Received: 07/30/97 Project: 301-001-02F

Date Sample Extracted: 07/30/97 Date Sample Analyzed: 07/30/97

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE
FOR FINGERPRINT CHARACTERIZATION
BY CAPILLARY GAS CHROMATOGRAPHY
USING A FLAME IONIZATION DETECTOR (FID)
AND ELECTRON CAPTURE DETECTOR (ECD)

Sample ID

W Wall GC

# GC Characterization

The GC trace using the flame ionization detector (FID) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of gasoline.

The low boiling compounds appeared as a broad hump of unresolved peaks eluting from n-C7 to n-C13. The GC/ECD trace showed the possible presence of tetraethyl lead, a common additive to leaded gasolines. The low boiling product appears to have undergone extensive degradation.

The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

#### DRAFT

Date of Report: 08/14/97 Date Received: 07/30/97 Project: 301-001-02F

Date Sample Extracted: 07/30/97 Date Sample Analyzed: 07/30/97

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE
FOR FINGERPRINT CHARACTERIZATION
BY CAPILLARY GAS CHROMATOGRAPHY
USING A FLAME IONIZATION DETECTOR (FID)
AND ELECTRON CAPTURE DETECTOR (ECD)

#### Sample ID

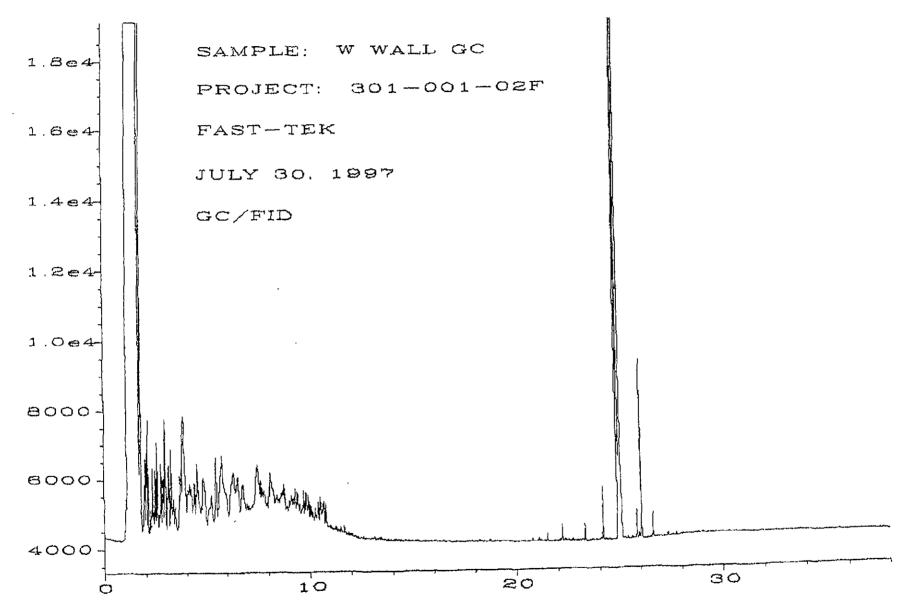
#### E Wall G

# GC Characterization

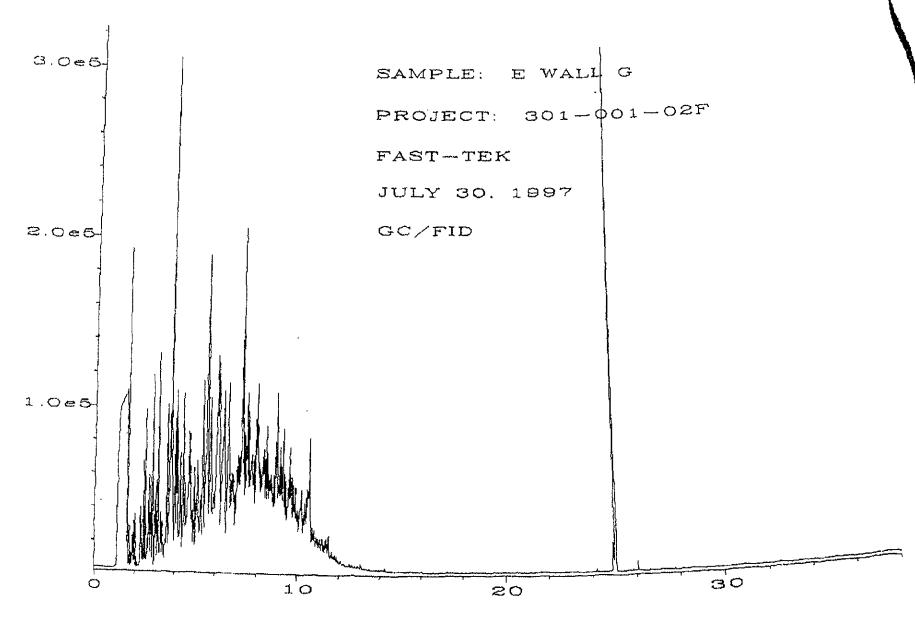
The GC trace using the flame ionization detector (FTD) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of gasoline.

The low boiling compounds appeared as a pattern of peaks eluting from n-C7 to n-C13. The GC/ECD trace showed the possible presence of tetraethyl lead, a common additive to leaded gasolines. The low boiling product appears to have undergone extensive degradation.

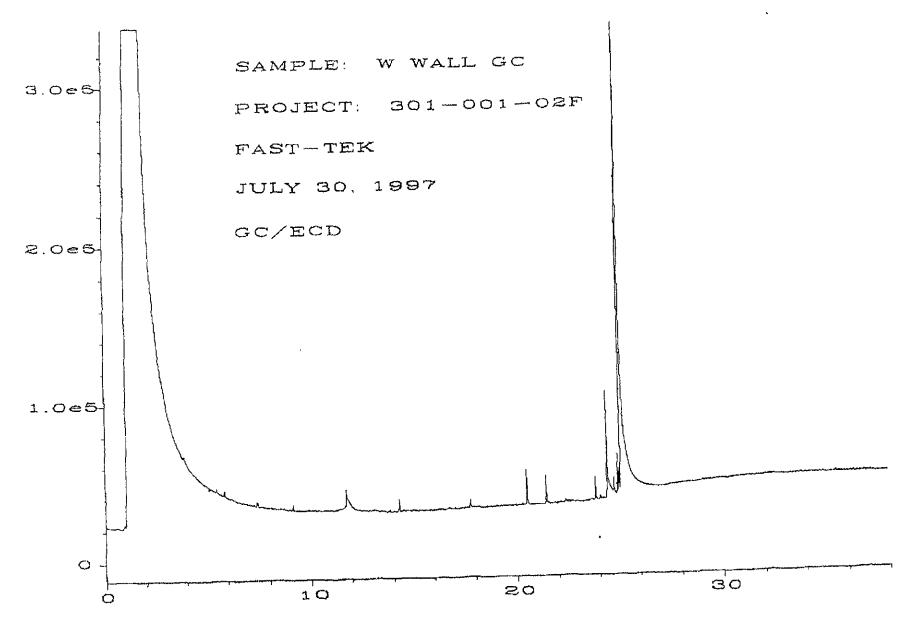
The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.



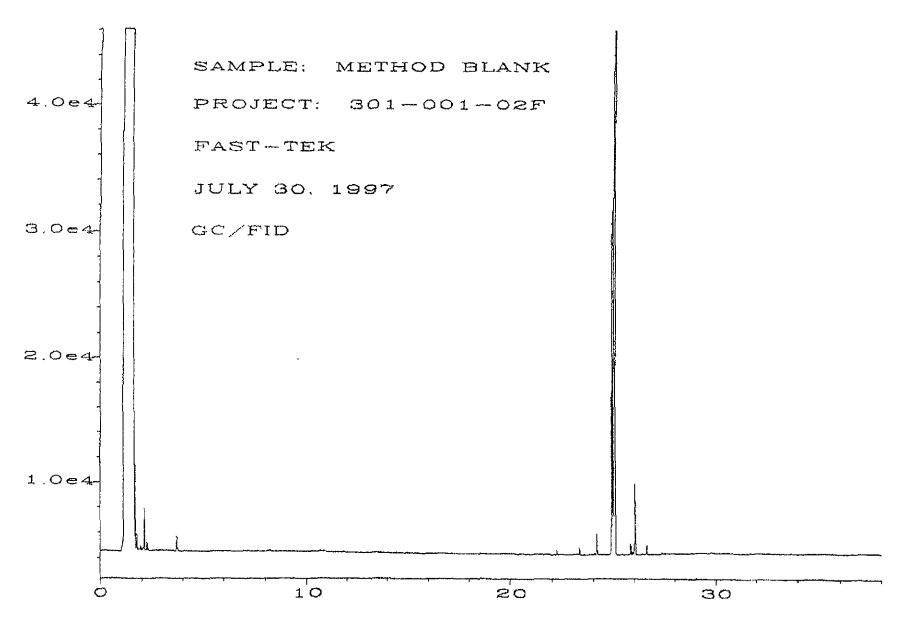
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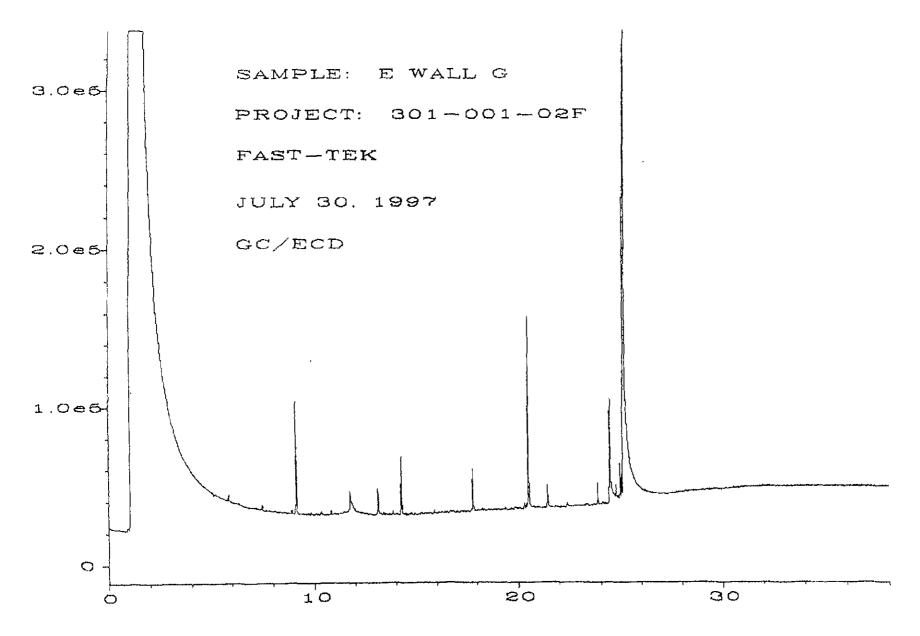
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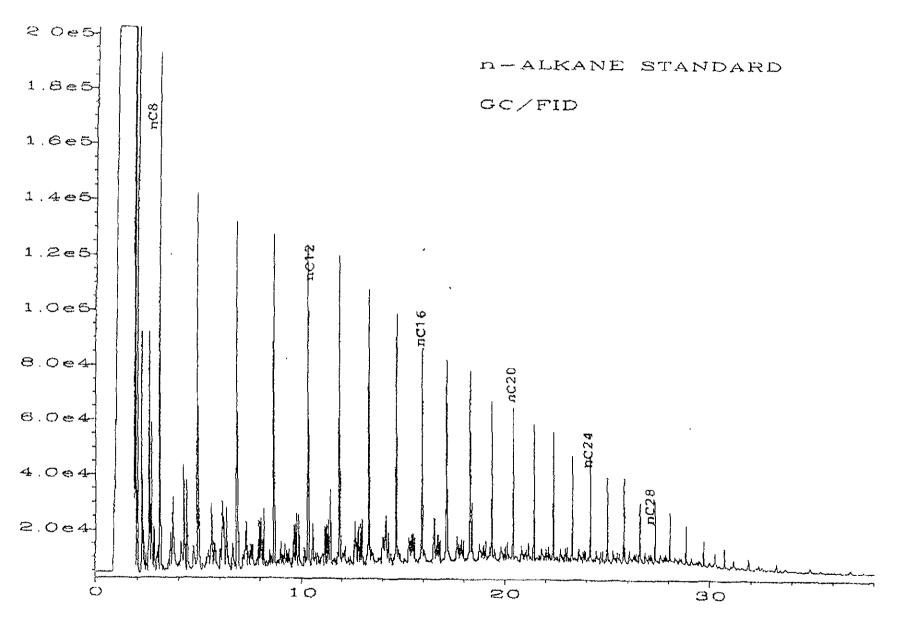
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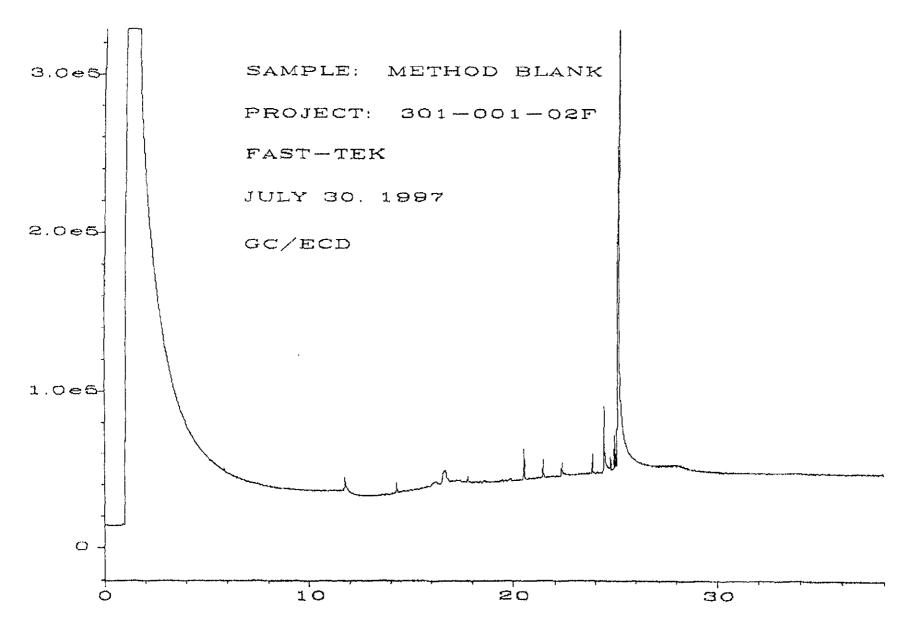
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Sig. 2 in C:\HPCHEM\4\DATA\07-30-97\004R0801.D

#### FRIEDMAN & BRUYA, INC.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: July 23, 1997 Date Received: July 18, 1997

Project: 301-001-02F, Keeper, Emeryville Date Samples Extracted: July 18, 1997 Date Extracts Analyzed: July 21, 1997

# RESULTS FROM THE ANALYSIS OF THE SLUDGE SAMPLE FOR FINGERPRINT CHARACTERIZATION BY CAPILLARY GAS CHROMATOGRAPHY USING A FLAME IONIZATION DETECTOR (FID) AND ELECTRON CAPTURE DETECTOR (ECD)

#### Sample ID

#### GC Characterization

Tank 2 Sludge

The GC trace using the flame ionization detector (FID) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of gasoline.

The low boiling compounds appeared as a pattern of peaks eluting from  $n\text{-}C_7$  to  $n\text{-}C_{12}$  showing a maximum near  $n\text{-}C_7$ . The GC/ECD trace showed the possible presence of tetraethyl lead, a common additive to leaded gasolines.

The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

### FRIEDMAN & BRUYA, INC.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Beth Albertson, M.S. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. Melanie Kirol, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 23, 1997

Paul Jones, Project Manager FAST-TEK Engineering Support Services, Inc. 247-B Tewksbury Avenue Point Richmond, CA 94801

Dear Mr. Jones:

Included are the results from the testing of material submitted on July 18, 1997 from your 301-001-02F, Keeper, Emeryville project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

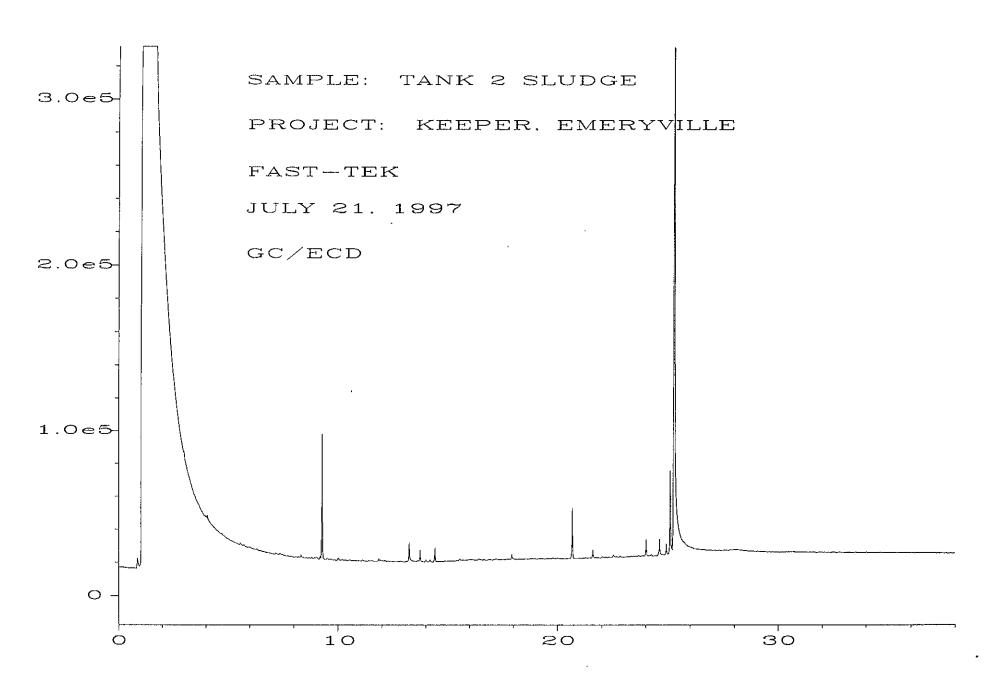
Kurt Johnson Chemist

keh

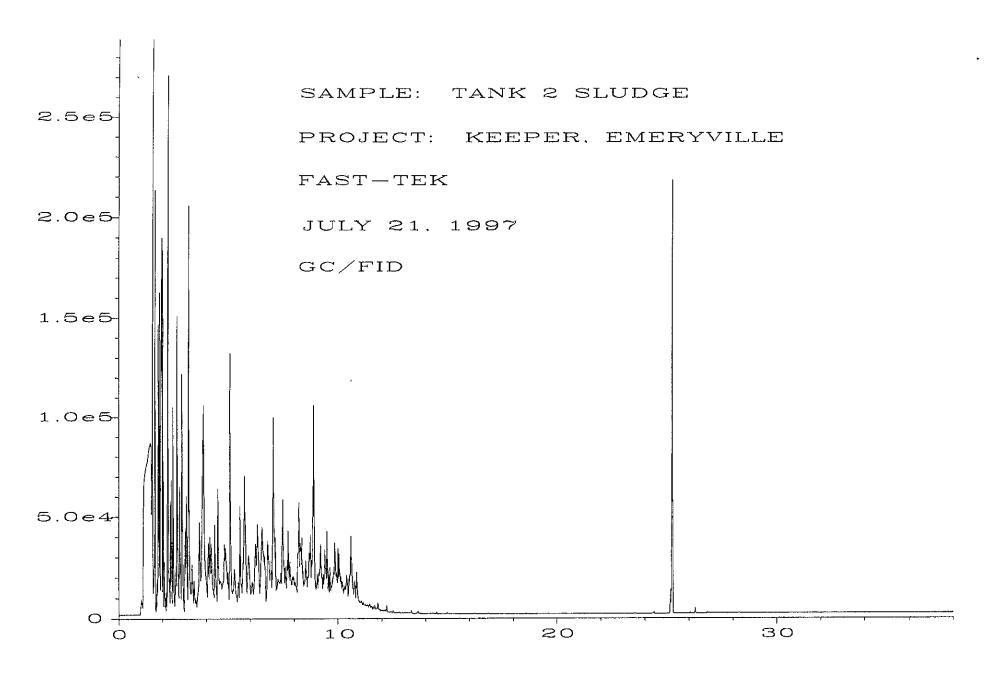
**Enclosures** 

FAX: (510) 232-2823

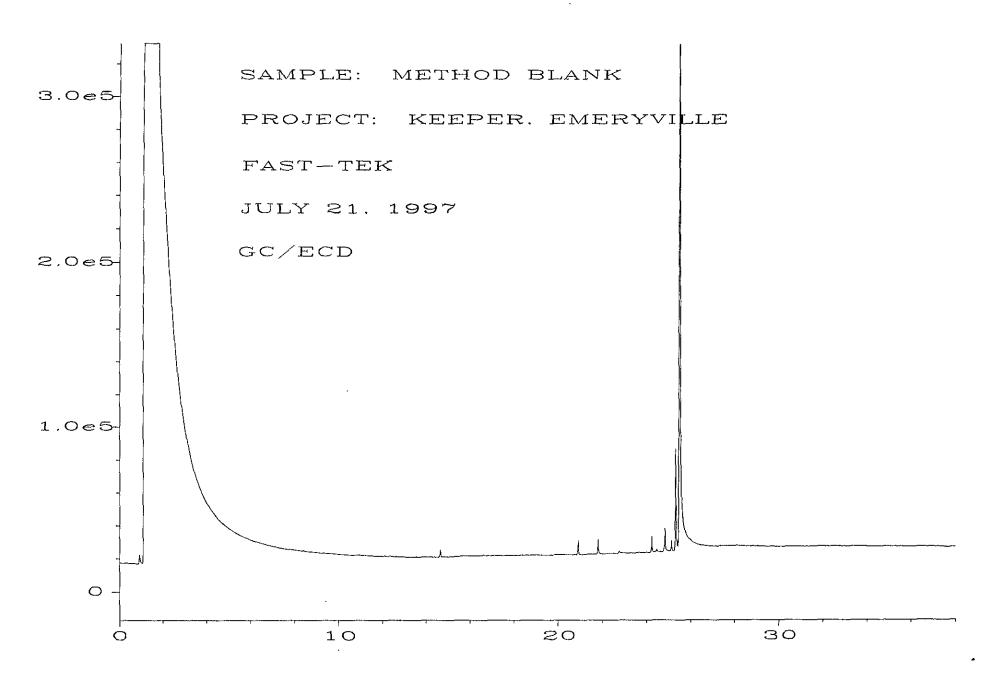
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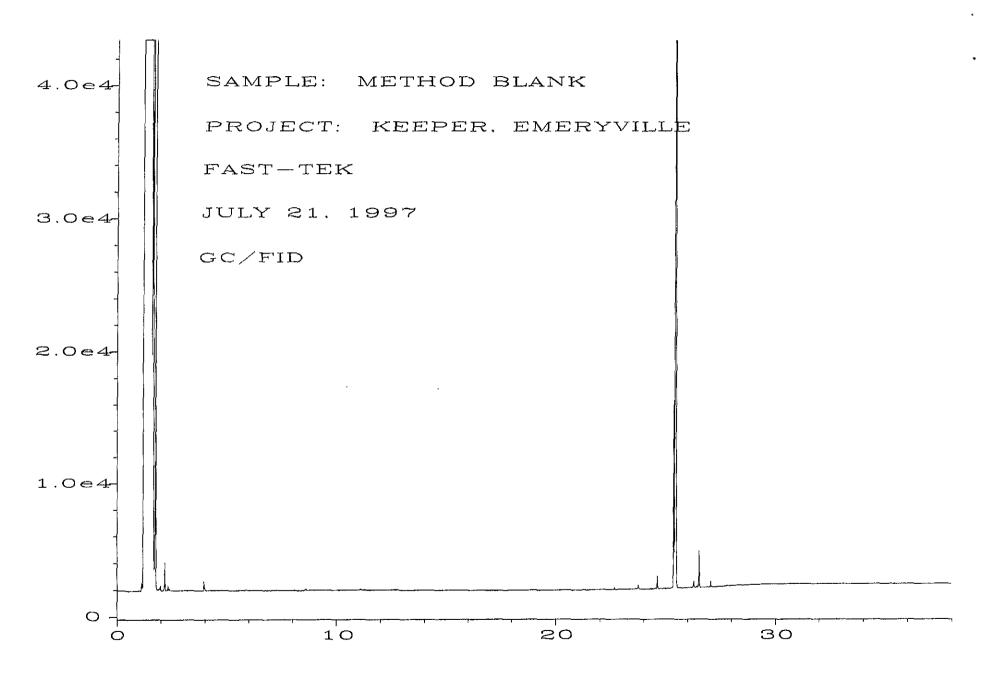
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Sig. 1 in C:\HPCHEM\4\DATA\07-21-97\009F0401.D

TACHFOL, CA 14563 FAX (1:0) 796-1622 MIN PRODUCTING RUSH 22 LIQUE 48 HOUR 5 DA

ANALYSIS REQUEST OTHER REPURT TO Paul James BILL TO FAST-TEK COMPANYI FAST-TEK Engineering Support Services

247.B Temksbury Avenue

Point Richmond, CA 94801

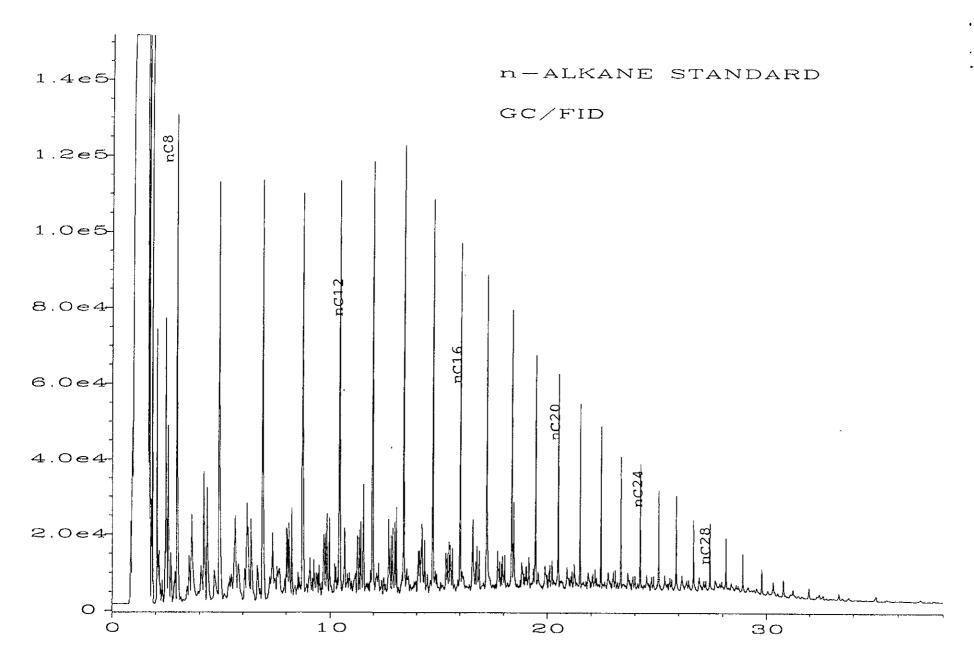
TELE. (SIO) 232-2728

PROJECT NUMBERI 301-001-02 F PROJECT NAME: Keeper Emeryville

PROJECT LOCATION:

SAMPLER SIGNATURE: Juan French

4343 San Pablo Avenue Total Petroleun DI & Grease (5520 ESF/3520 BLF) Total Petroleun Hydrocarbons (418.1) EPA - Priority Pollutant Hetals EPA 624/8240/8260 LEAD (7240/7421/239.2/6010) COMMENTS METHOD DEVREZERYED TYPE CONTAINERS # CONTAINERS SAMPLING MATRIX SAMPLE CPA 602/8020 EPA 601/8010 EPA 608/8080 LOCATION מז SLUDGE DATE TIME DTHER Ž. Tank 2 5ludge 7/17/97 1445 LAB IN 79569 79570 DATE 17/17/97 RECEIVED BYI
RECEIVED BYI RELINQUISHED BY TIME REMARKSI RELINCUISHED BY RELINQUISHED BY: DATE RECEIVED BY LABORATORY



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**FAST-TEK Engineering Support Services** 

General Engineering Contracting License 589008: A, B, C-57, Haz., Asb.

Street Address: 247 B Tewksbury Ave., Pt. Richmond, CA 94801

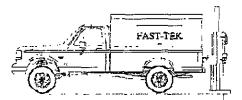
Mailing Address: P.O. Box 10123, San Rafael, CA 94912

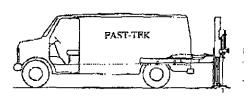
Telephone (510) 232-2728 • Facsimile (510) 232-2823 • e-mail: augerpro@aol.com

# FACSIMILE TRANSMISSION

TO: Ms. Susan Hugo FAX: (510) 337-9335

FROM: Paul E. Jones TOTAL SHEETS: 2





Geoprobe Drilling • Excavating • Hollow Stem Auger Drilling • Waste Disposal • Vapor Extraction Concrete Coring and Cutting • Utility Locating and Borehole Clearance • In-Situ Remediation Delivery Systems • Oxy-Plug™ Injections • Limited Access Drilling • Traffic Control Plans and Equipment

**MESSAGE:** 

Standard Brands Paint Co.

Permit Amendment Request 4343 San Pablo Avenue Emeryville, California

Following is the request to amend the existing UST removal permit at the above-referenced site per our discussion on July 28, 1997. Hard copy will follow.

If you have any questions or comments, I may be reached by telephone at (510) 232-2728-230 or by pager at (415) 451-6434.

**NOTES:** If you did not receive the complete transmission, please call. This fax is privileged and confidential. If you are not an intended recipient, you are notified that any disclosure, dissemination or duplication of this fax is not authorized, and no waiver of any privilege or confidentiality is intended by your receipt of this transmission.