McLaren
Environmental
Engineering
Rancho Cordova: (916) 638-3696
Los Angeles: (714) 756-2667
Alameda: (415) 521-5200

LETTER OF TRANSMITTAL

TO Alameda County Health Agency
80 Swan Way Rm 200
Oakland Ca. 94621

DATE 1/15/89	JOB NO. UPS-1.0
ATTENTION Ariu Levi	
RE: Analytical Results	

WE ARE SENDING YOU ☐ Attached ☐ Under seperate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	DESCRIPTION
		NORTH SIDE PROJECT.

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit copies for approval
☐ For your use ☐ Approved as noted ☐ Submit copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Dear Mr. Levi; Enclosed are the analytical results for the soil and grab water samples taken January 4, 1990 from the UST at the UPS yard in Oakland.
It would be helpful to me if you would call and inform me as to what specification you follow in Alameda County for tank removal and instalation. Results for samples taken January 8, 1990 should be available on the 16th.

COPY TO

SIGNED: Brad Wright
Ext. # 748-5697

McLaren Environmental Engineering

Date: January 12, 1990
LP #: 2597

Brent Brelje
McLaren
980 Atlantic Avenue
Alameda, CA 94501

Dear Mr. Brelje:

Enclosed are the laboratory results for the two sample(s) submitted by you to the McLaren Analytical Laboratory on January 5, 1990, for the project *UPS 1.0*.

The analyses you requested are:

602 (BTEX) & TVH (TPH-G) (1 - Water)
8020 (BTEX) & TVH (TPH-G) (1 - Soil)

The report consists of the following sections:

1. A copy of the chain of custody
2. Sample description (chain of custody summary form)
3. Quality Control Report
4. Comments
5. Analytical results

Unless otherwise instructed by you, samples will be disposed of two weeks from the date of this letter.

Thank you for choosing McLaren Analytical Laboratory. We are looking forward to serving you in the future. Should you have any questions concerning this analytical report or the analytical methods employed, please do not hesitate to call.

Sincerely,

Jill P. Slater, Ph.D.
Laboratory Director

Shakoora S. Azimi
Quality Assurance Officer

11101 White Rock Road, Rancho Cordova, CA 95670 (916) 638-3696

000962

CHAIN OF CUSTODY RECORD

Sampler: Brad Wright Date Shipped: 1/4/90 Carrier: Fed Ex

Telephone: (415) 521-5200 Airbill Number: 2031249455 Cooler: 1

SHIP TO:
McLaren Analytical Laboratory
11101 White Rock Road
Rancho Cordova, CA 95670
(916) 638-3696

SEND RESULTS TO:
Client Name: Brad Wright / Brent Brelje
Company: McLaren
Address: 1135 Atlantic Ave
Phone: (415) 521-5200

PROJECT NAME: OPS-1.0 **PROJECT #:** 26401

LABORATORY PROJECT (LP) #: 2597 **P.O. #:**

Relinquished by: (Signature) Brad Wright Received by: (Signature) Date: 1/4/89 Time: 1400

Relinquished by: (Signature) Received by: (Signature) Date: Time:

Relinquished by: (Signature) Received at lab by: (Signature) Michael A. Newberry Date: 1/5/90 Time: 10:00

ANALYSIS REQUEST

Sample ID Number	Sample Description	Date/Time	Analysis Requested	T.A.T.	Type of Container	Number of Containers	Lab ID
028576	Under dispenser pipe	1/4/89	TPH/g BTEX	3	Brass tube	1	35217
028577	Surface Grab	1/4/89	TPH/g	3	VOA	1	35218
028578		1/4/89	Spare	3	VOA	1	
028579		1/4/89	Spare	3	VOA	1	
028580		1/4/89	Spare	3	VOA	1	same ID as 35218
028581		1/4/89	BTEX	3	VOA	1	
028582		1/4/89	Spare	3	VOA	1	
028583		1/4/89	Spare	3	VOA	1	
028584		1/4/89	Spare	3	VOA	1	

Special Instructions/Comments:
Bubbles in VOA's unavoidable sample taken from disturbed area.

Sample Condition Upon Receipt:

Expected Analytical Turn-Around Times:

1 = Immediate Attention:	2 = Rush:	3 = Standard:	4 = Standard:
24 hours	48 hours	1 week	2 weeks

Laboratory Disposition:
Storage Refrigerator ID _____
Storage Freezer ID _____

Secured:
Yes ___
No ___

McLaren Analytical Laboratory
11101 White Rock Road
Rancho Cordova, CA 95670
(916) 638-3696

Client: Brent Brelje
McLaren
Alameda, CA 94501

L.P. #:	2597	Project Name:	UPS-1.0
Date Rec'd:	1/5/90	Project #:	26401
Date Due:	1/12/90	Contact:	Brent Brelje
Section:	GC	Phone:	415-521-5200

Samples received on 1/5/90 @ 10:00 under Chain(s) of Custody 000962. Chain(s) of Custody agree(s) with sample container(s). Samples received included:

- 1 sample(s) in voa vials for BTEX/TPH-G analysis(es);

- 1 sample(s) in a brass tube for BTEX/TPH-G analysis(es).

Correction(s) made and/or Problem(s): None

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QUALITY CONTROL REPORT

METHOD BLANK RESULTS: A method blank (MB) is a laboratory generated sample free of any contamination. The method blank assesses the degree to which the laboratory operations and procedures cause false-positive analytical results for your samples. The method blank results associated with your samples are attached.

LABORATORY CONTROL SPIKES

The LCS Program:

The laboratory control spike is a well characterized matrix (organic pure type II for water samples and contamination free sand for soil samples) which is spiked with certain target parameters and analyzed in duplicate at approximately 10% of the sample load in order to assure the accuracy and precision of the analytical method. The results of the laboratory control spike associated with your samples are attached.

Accuracy is measured using percent recovery, i.e.:

$$\text{Percent Recovery} = \frac{\text{(measured concentration)}}{\text{(actual concentration)}} \times 100$$

Precision is measured using the relative percent difference (RPD) from duplicate tests, i.e.:

$$\text{RPD} = \frac{\%\ \text{Recovery of Spike}_{(1)} - \%\ \text{Recovery of Spike}_{(2)}}{(\%\ \text{Recovery of Spike}_{(1)} + \%\ \text{Recovery of Spike}_{(2)})/2} \times 100$$

Control limits for accuracy and precision are different for different methods. They may also vary with the different sample matrices. They are based on laboratory average historical data and EPA limits which are approved by the Quality Assurance Department. McLaren Analytical Laboratory reanalyzes samples if the precision or accuracy is out of acceptance control limits.

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QUALITY CONTROL REPORT

METHOD BLANK

Method: 602 (BTEX) & TVH
Units: ug/L (ppb)

COMPOUNDS	REPORTING LIMIT	RESULTS OF THE MB
Benzene	0.5	BRL
Toluene	0.5	BRL
Ethyl Benzene	0.5	BRL
p-Xylene	0.5	BRL
m-Xylene	0.5	BRL
o-Xylene	0.5	BRL
Total Volatile Hydrocarbons	50.	BRL

LABORATORY CONTROL SPIKE

Method: 602 (BTEX) & TVH
Units: ug/L (ppb)

COMPOUNDS	CONCENTRATION SPIKED	CONCENTRATION MEASURED	ACCURACY % RECOVERY	PRECISION RPD
Chlorobenzene	10.	10.	100	11
Benzene	10.	11.	110	10
Ethyl Benzene	10.	10.	100	11
Total Volatile Hydrocarbons	100.	120.	120	16

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QUALITY CONTROL REPORT

METHOD BLANK

Method: 8020 (BTEX) & TVH
Units: ug/g (ppm)

COMPOUNDS	REPORTING LIMIT	RESULTS OF THE MB
Benzene	0.02	BRL
Toluene	0.02	BRL
Ethyl Benzene	0.02	BRL
p-Xylene	0.02	BRL
m-Xylene	0.02	BRL
o-Xylene	0.02	BRL
Total Volatile Hydrocarbons	1.	BRL

LABORATORY CONTROL SPIKE

Method: 8020 (BTEX) & TVH
Units: ug/g (ppm)

COMPOUNDS	CONCENTRATION SPIKED	CONCENTRATION MEASURED	ACCURACY % RECOVERY	PRECISION RPD
Chlorobenzene	0.50	0.44	88	9
Benzene	0.50	0.50	100	9
Ethyl Benzene	0.50	0.57	114	15
Total Volatile Hydrocarbons	5.	6.	120	0

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COMMENTS

The samples in this project were analyzed by the methods requested on the chain of custody with no deviations in procedure.

ANALYTICAL RESULTS

Test methods may include minor modifications of published EPA methods (e.g., reporting limits or parameter lists). Reporting limits are adjusted to reflect dilution of the sample when appropriate. Solids and waste are analyzed with no correction made for moisture content. Results are corrected for concentrations of analytes which may be found in the blanks.

ABBREVIATIONS USED IN THIS REPORT:

BRL	Below reporting limit
MB	Method Blank
MS	Matrix Spike
MSD	Matrix Spike Duplicate
LCS	Laboratory Control Spike
LCSD	Laboratory Control Spike Duplicate
RPD	Relative Percent Difference

Results are on the attached data sheets.

VOLATILE AROMATIC COMPOUNDS
MODIFIED EPA METHOD 602 (BTEX)
AND
TOTAL VOLATILE HYDROCARBONS

Project: UPS 1.0 26401

Lab Project Number: 2597

Sample Location: Surface Grab

Lab ID Number: 35218

Sample Number: 028577-84

Date Received: 01/05/90

Date Sampled: 01/04/90

Date Analyzed: 01/06/90

COMPOUND	ANALYTE CONCENTRATION ug/L (ppb)	REPORTING LIMIT ug/L (ppb)
Benzene	380.	50.
Toluene	880.	50.
Ethyl Benzene	BRL	50.
p-Xylene	BRL	50.
m-Xylene	BRL	50.
o-Xylene	90.	50.
Total Volatile Hydrocarbons	5000.	5000.
Surrogate recovery (percent) a,a,a-Trifluorotoluene	83	

Comments: 1:100 dilution used in analysis.

Approved By: A. Putnam Date: 01/09/90

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VOLATILE AROMATIC COMPOUNDS
MODIFIED EPA METHOD 8020 (BTEX)
AND
TOTAL VOLATILE HYDROCARBONS

Project: UPS 1.0 26401

Lab Project Number: 2597

Sample Location: Under Dispenser Pipe

Lab ID Number: 35217

Sample Number: 028576

Date Received: 01/05/90

Date Sampled: 01/04/90

Date Analyzed: 01/10/90

COMPOUND	ANALYTE CONCENTRATION ug/g (ppm)	REPORTING LIMIT ug/g (ppm)
Benzene	BRL	0.02
Toluene	BRL	0.02
Ethyl Benzene	BRL	0.02
p-Xylene	BRL	0.02
m-Xylene	BRL	0.02
o-Xylene	BRL	0.02
Total Volatile Hydrocarbons	BRL	1.
Surrogate recovery (percent): a,a,a-Trifluorotoluene	77	

Comments:

Approved By: _____ Date: 01/11/90
A. Putnam

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