

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KFAIRS, Agency Director

December 24, 1997

STID #4441

REMEDIAL ACTION COMPLETION CERTIFICATION

Ms. Carol Manning
c/o Airport Business Center Partners
1411 Harbor Bay Parkway, Suite 1000,
Alameda, CA 94502

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Subject: Airborne Express, 100 Doolittle Drive, San Leandro,
CA 94501 - Two (2) 12,000 gallon diesel underground storage
tanks (USTs)

Dear Ms. Manning,

This letter confirms the completion of a site investigation and remedial action for the underground storage tank formerly located at the above described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank are greatly appreciated.

Based upon the available information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact Brian P. Oliva, at (510) 567-6737 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung
Director of Environmental Health Services

enclosure

c: Chief, Hazardous Materials Division - files
Brian P. Oliva, ACDEH
Kevin Graves, RWQCB
Lori Casias, SWRCB
Cheryl Gordon, State Cleanup Fund
Mike Bakaldin, San Leandro Fire Department

CASE CLOSURE SUMMARY

Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: November 6, 1997

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy
City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700
Responsible staff person: Brian Oliva Title: Hazardous Mat.Spec.

II. CASE INFORMATION

Site facility name: Airborne Express
Site facility address: 100 Doolittle Drive, San Leandro, CA 94577
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4441
URF filing date: 1/16/96 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:
130-150 Doolittle Drive L P, 1411 Harbor Bay Parkway, 1000 Alameda, CA 94501
Mr. Bill Poland, 600 Townsend Street, San Francisco, CA 94103-4708 (Regarding 100 Doolittle Drive, San Leandro, CA 94577)

Table with 5 columns: Tank No., Size in gal., Contents, Closed in-place or removed?, Date. Rows for #1 and #2 tanks, both containing diesel and removed on 8/4/88.

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unk
Site characterization complete? Yes
Date approved by oversight agency: November 18, 1991
Monitoring Wells installed? Yes Number: one (1)
Proper screened interval? Unk, MW-1 apparently screened from 14 to 34' bgs.
Highest GW depth below ground surface: 6.95' Lowest depth: 7.11'
Flow direction: unknown: presumed southwest (" regional" groundwater flow)
Most sensitive current use: commercial/industrial
Are drinking water wells affected? No Aquifer name: San Leandro Cone
Is surface water affected? No Nearest affected SW name: N/A
Off-site beneficial use impacts (addresses/locations): N/A
Report(s) on file? Yes Where is report(s) filed? Alameda County 1131 Harbor Bay Pkwy Alameda, CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank & Piping Free Product	2-12,000-gallon	removed/unknown destination	8/4/88
Soil	unknown	On-site soil treatment/destination undocumented	
Groundwater Barrels Rinsate*	500-gallon	disposal/H & H Environmental San Francisco, CA	8/3/88
Rinsate*	7500-gallon	disposal/H & H Environmental San Francisco, CA	10/12/88

*Rinsate consists of approximately 99%-water and 1%-diesel.

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before ¹	After ²	Before ³	After
TPH (Gas)	<10	<10	<10,000	<500
TPH (Diesel) ⁴	7600	7600	13,000,000	<500
TPH (Kerosene)	<10	<10	<10,000	<500
Benzene	NA	NA	<500	<1
Toluene	NA	NA	69 ⁵	5
Ethyl benzene	NA	NA	<500	<1
Xylenes	NA	NA	<500	<1
Oil & Grease	NA	NA		
Heavy metals	NA	NA		
Other				

NA=Not Analyzed

¹Initial soil samples collected after removal of the diesel UST were analyzed for total petroleum hydrocarbons as gasoline, kerosene, diesel and aged diesel (TPHg, TPHk, TPHd and TPHd-aged). Samples not analyzed for BTEX.

²"After" soil samples were collected after over-excavation of the UST pit and were analyzed for TPH as diesel only. Confirmation soil samples from the over-excavation were collected from areas with visible diesel fuel staining, and detected TPHd concentrations ranging from 800 ppm at the west side to 2300 ppm at the north side of the former UST pit. The soil sample from boring SB-3, collected at a depth of 7.5' bg, detected TPHd at a concentration of 240 ppm, and non-detectable concentrations of TPHg and TPHk.

³"Before" results represent water sample collected from an area within the tank pit where groundwater was observed. The sample consisted of floating material and water.

⁴According to the laboratory report the chemical constituent resembles aged diesel.

⁵This result was detected in the groundwater sample collected from soil boring SB-1 on 8/25/88.

Comments (Depth of Remediation, etc.):

On August 4, 1988 Aqua Science Engineers removed two (2) 12,000-gallon fiberglass diesel underground storage tanks (USTs) from the site. San Leandro Fire Department files indicate that the tanks were installed in February, 1976. Groundwater was encountered during the UST removals. Immediately following the excavation and removal of the two USTs, five (5) soil samples (A-1 through A-5) were collected from the tank pit side walls, approximately one foot above groundwater level (see Figure 1). In addition, two (2) soil samples (CS-1 and CS-2) were collected from areas within the open shed building. These soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), kerosene (TPHk), diesel (TPHd) and aged diesel (TPHd-aged). Laboratory analytical results of the seven (7) soil samples are summarized in table 1. In addition, one water sample was collected and analyzed for TPHg, TPHk, TPHd, TPHd-aged and BTEX compounds (See Table 1A).

In order to determine the extent of soil and groundwater contamination, four soil borings (SB-1 through SB-4) were placed near the tank pit. One soil sample (SB-3) collected at a depth of 7.5' below grade (bg) detected 240 ppm-aged diesel. Diesel odors were reported in soil cuttings collected from borings SB-2, SB-3 and SB-4 at depths ranging from 5' to 9.5' bgs (See boring logs). The groundwater sample collected from boring SB-1 detected 69 ppb-toluene. Complete analytical results of the soil and groundwater samples collected from the four borings are summarized in Tables 2 and 2A.

On October 12, 1988 additional contaminated soils from the sidewalls of the tank pit were removed and confirmatory soil samples collected. Analytical results of the four confirmatory soil samples (CB, East, North and West) detected TPHd at concentrations of 2000 ppm, 1300 ppm, 2300 ppm and 950 ppm, respectively. Not all contaminated soils were removed from the tank pit due to saturated soil conditions and physical limitations at the site.

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Yes**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Yes**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **None**
Should corrective action be reviewed if land use changes? **Yes**
Monitoring wells Decommissioned: **No**
Number Decommissioned: **None** Number Retained: **One, pending closure**
List enforcement actions taken: **None**
List enforcement actions rescinded: **N/A**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Brian P. Oliva Title: Hazardous Materials Specialist

Signature: Date: 11/6/97

Reviewed by *Brian P. Oliva*

Name: Barney Chan Title: Hazardous Materials Specialist

Signature: *Barney Chan* Date: 10/24/97.

Name: Thomas Peacock Title: Supervising HazMat Specialist

Signature: *Thomas Peacock* Date: 11/18/97

VI. RWQCB NOTIFICATION

Date Submitted to RB:

RB Response: *Approved*

RWQCB Staff Name: Kevin Graves

Title: AWRCE

Signature: *Kevin Graves*

Date: 12/2/97

VII. ADDITIONAL COMMENTS, DATA, ETC.

Groundwater monitoring and sampling occurred on 9/19/89, 5/16/90, 1/16/91, 6/10/91. Laboratory analytical results for the groundwater samples collected from MW-1 were found to contain non-detectable concentrations of TPHg, TPHd, TPHk, TPHmo and BTEX compounds, with the exception of the initial sampling event (9/19/89), which detected toluene at a concentration of 5 ug/L (ppb). These results suggest that the diesel contamination was mostly limited to the excavated soils and had not impacted the quality of the underlying shallow groundwater aquifer.

This site qualifies for case closure as a "Low Risk Soils Case" for the following reasons:

- a) The source has been sufficiently removed or has been remediated.

Approximately 200 cubic yards of soil was removed and treated on site, in addition to the 8000 gallons of purge water disposed of during excavation dewatering.

- b) The site has been adequately characterized.

The four (4) soil borings (SB-1 through SB-4) were emplaced in areas surrounding the former UST excavation. The soil sample collected from boring SB-3, at a depth of 7.5 feet bgs, revealed TPHd at a concentration of 240 mg/kg. The "grab" groundwater sample collected from boring SB-1 revealed toluene at a concentration of 69 ug/L. However, boring SB-3 was further delineated by boring SB-4, with laboratory analysis revealing non-detectable concentrations of TPHd.

- c) Little or no groundwater impact currently exists and no contaminants

are found at levels above established MCLs or other applicable water quality objectives.

Toluene was detected at a concentration of 69 ppb in the "grab" groundwater sample collected from boring SB-1 (August 1988), and 5 ppb for the 9/19/89 sampling event.

- d) No water walls, deeper drinking water wells, surface water or other sensitive receptors are likely to be impacted.

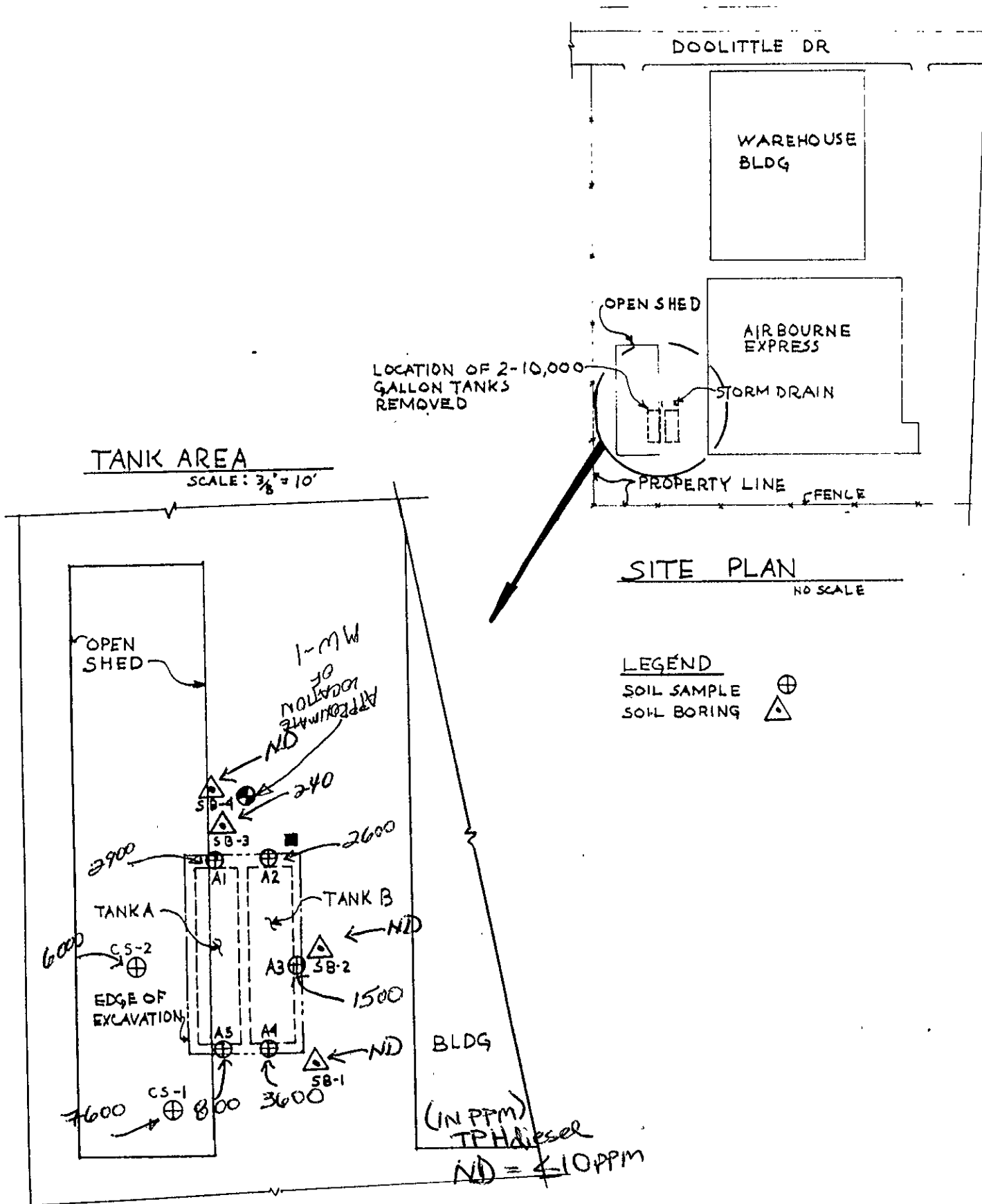
The contamination appears to be localized on site, and does not appear to have affected the quality of groundwater underlying the site.

- e) The site presents no significant risk to human health or the environment.

All detected petroleum hydrocarbon groundwater concentrations are below the primary drinking water MCLs. The contamination appears to be localized and is not migrating off-site at concentrations which would pose a risk to human health or the environment.

FIGURE 1

4. SITE PLAN



3. DISCUSSION AND CONCLUSIONS

The results of the laboratory analysis (Table 1 and 1A) of the soil and groundwater samples indicate hydrocarbons in excess of actionable levels according to guidelines of the San Francisco Regional Water Quality Control Board and the Alameda County Department of Health.

TABLE 1 - TANK PIT SOIL SAMPLES

Sample No.	A1 Result	A2 Result	A3 Result	A4 Result	A5 Result	CS1 Result	CS2 Result
Compound	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
TPH-Gas	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Kerosine	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Diesel	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Aged Diesel*	2,900	2,600	1,500	3,600	800	7,600	6,000

TABLE 1A - TANK PIT WATER SAMPLES

Sample No.	1 Result
Compound	(ppm)
TPH-Gas	N.D.
TPH-Diesel	N.D.
TPH-Kerosine	N.D.
TPH-Aged Diesel	13,000**
Benzene	N.D.
Toluene	N.D.
Xylene	N.D.
Ethyl benzene	N.D.

* According to the laboratory the chemical constituent resembles aged diesel.

** The sample was taken from an area within the tank pit where groundwater was observed. The sample consisted of floating material and water.

Sample results collected from the soil borings are shown in Table 2 and 2A. The sample results indicate that the extent of contamination has not progressed beyond the tank pit.

TABLE 2 - SOIL BORING SAMPLES

Sample No.	SB-1 11'	SB-1 14'	SB-2 11'	SB-3 7.5'	SB-3 10.5'	SB-4 5.5'
Compound	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)	Result (ppm)
TPH-Gas	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Kerosine	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Diesel	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
TPH-Aged Diesel	N.D.	N.D.	N.D.	240	N.D.	N.D.

TABLE 2A - BORING GROUNDWATER SAMPLES

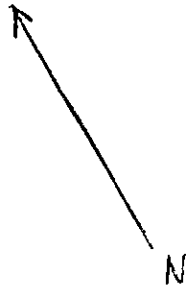
Sample No.	SB-1 Result (ppb)	SB-2 Result (ppb)	SB-3 Result (ppb)	SB-4 Result (ppb)
TPH-Gas	N.D.	N.D.	N.D.	N.D.
TPH-Diesel	N.D.	N.D.	N.D.	N.D.
TPH-Kerosine	N.D.	N.D.	N.D.	N.D.
TPH-Aged Diesel	N.D.	N.D.	N.D.	N.D.
Benzene	N.D.	N.D.	N.D.	N.D.
Toluene	69	N.D.	N.D.	N.D.
Xylene	N.D.	N.D.	N.D.	N.D.
Ethyl benzene	N.D.	N.D.	N.D.	N.D.

Sample results collected from the soil borings are shown in Table 2 and 2A; boring methods and boring logs are found in Appendix C. Soil samples were collected at five foot intervals and at every change in lithology to groundwater. Soil samples were laboratory analyzed that had visible signs ← of contaminator or odors. Groundwater samples from all borings were analyzed. One soil sample (SB-3) taken at 7.5 feet showed 240 ppm TPH quantified on the high boiling point range. Groundwater samples were negative from all borings, with the exception of a trace of toluene found in SB-1. The toluene detected from the sample was 69 ppb, which is below levels of concern. The results indicate that diesel contamination to groundwater has not progressed beyond the tank pit.

Based on soil and groundwater results ASE recommends the following:

1. Remove soils within the tank pit showing elevated hydrocarbon concentrations for on-site treatment.
2. Remove and dispose of groundwater from the tank pit under manifest and backfill the tank pit with imported fill.
3. Treat backfill material on-site and dispose after hydrocarbon concentrations are reduced to acceptable levels.
4. Install a groundwater monitoring well within 10 feet of the tank pit in the downgradient direction. Monitor the well quarterly.

The results of this investigation represent conditions at the time and location at which samples were collected and for the parameters analyzed in



△ SB-4

⊗ MW-1

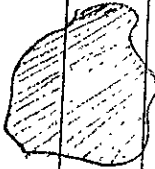
△ SB-3

⊗ R-1

⊗ R-2

Tank 1

Tank 2



P-1
13,000 ppm

△ SB-2

⊗ R-3

OPEN SHED

⊗ SS-2

⊗ R-5

⊗ R-4

⊗ SS-1

△ SB-1

Removal ; August 4, 1988

TABLE ONE
Summary of Chemical Analysis of MW-1 GROUNDWATER Samples
All Results are in parts per billion

Date of Sampling	TPH Diesel	TPH Gasoline	Benzene	Ethyl Benzene	Toluene	Total Xylenes	MTBE
06-19-97	99	< 50*	< 0.5	< 0.5	< 0.5	< 0.5	< 5
EPA METHOD	3510/ 8015M	5030/ 8015M	8020	8020	8020	8020	8020

Notes:

* = Hydrocarbons found in the gasoline range is uncharacteristic of gasoline profile. If quantified using gasoline's response factor, concentration would equal 88 ppb.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Only 99 parts per billion (ppb) TPH-D were detected in groundwater samples collected from monitoring well MW-1.

Based on these results, ASE feels that this site is suitable for case closure. Please consider this report a formal request for case closure.

5.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory.

It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.