APEX
ENVIROTECH, INC.

7844 Madison Avenue, Suite 106 • Fair Oaks, CA 95628
1.800.242.5249 • Ph. 916.535.0200 • Fax 916.535.0207

COPY

May 11, 1995

Mr. Norm Wheat
Ramos Environmental Engineering
1515 South River Road
West Sacramento, CA 95691

Subject: **Underground Storage Tank Closure Report**
River Rat, 9840 Fair Oaks Blvd., Fair Oaks, California

Dear Mr. Wheat:

Apex Envirotech, Inc. (Apex), is pleased to provide Ramos Environmental Engineering (Ramos) this report documenting the results of the soil sampling conducted during the removal of five underground storage tanks (USTs), product piping and dispensers at the subject site. In addition, this report documents the results of the soil sampling conducted on the stockpiled soil generated during the removal of the UST system. The purpose of the investigation was to characterize the site's shallow subsurface exposed during the removal of the USTs, perform regulatory UST closure sampling and characterize the excavated soil stockpiled on site.

This report is based, in part, on information obtained by Apex from Ramos and is subject to modification as newly acquired information may warrant.

SITE DESCRIPTION

The site is a former retail gasoline station located one-eighth mile north of the American River in Fair Oaks, Sacramento County, California. The site is located in a commercial/residential area at the corner of Fair Oaks Blvd. and Pennsylvania Ave. The four 4,000 and one 8,000 gallon single-wall steel gasoline tanks were greater than 30 years in age. The tanks had been non-operational for approximately one year.

RESULTS OF UST REMOVAL

Approximately 350 cubic yards of sand backfill material was excavated prior to removal of the USTs and product lines. The Sacramento County Environmental Management Department (SCEMD) inspected the tanks upon removal. Apex personnel was not summoned to the site until after tanks #1, #2 and #3 (Figure 1) had been removed and transported from the site. The SCEMD representative, Mr. Cris Hamilton, reported that tank #2 was corroded and contained numerous corrosion pits. Tanks # 4 and #5 were inspected by Apex personnel and were reported

to be in poor condition. A hole approximately 1-½ inches in diameter was documented along the west side of Tank #5. The product lines were in fair condition with slight corrosion. Please refer to Attachment 1 for photographs. Once the tanks were removed, the tank basin excavation dimensions measured approximately 38 feet in width by 55 feet in length by 15 feet in total depth. The native soils encountered in the sidewalls and bottom of the UST basin and product trenches consisted of a medium brown sand.

Prior to removal, 950 gallons of gasoline was removed from the USTs then the tanks were triple-rinsed and the rinseate manifested and transported from the site for proper disposal. Rushway Trucking of Newcastle, California transported the removed tanks to Triangle, Inc. of Sacramento, California as non-hazardous waste.

On April 25, 1995, Apex personnel collected ten soil samples beneath the former USTs and on May 1 and 2, 1995, Apex personnel collected twelve soil samples beneath the former product lines and dispensers. The location of the samples (Figure 1) are in accordance with the "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" (dated August 10, 1990) and recommendations from SCEMD. Thirty-six soil samples were collected on May 1 and 2, 1995, under the direction of the SCEMD, from the stockpiled soil and composited, at the laboratory, into nine samples for analyses. All activities were performed in accordance with the Apex Standard Operating Procedures located in Attachment 2.

The samples were delivered, under chain-of-custody, to Sparger Technology, Inc. of Sacramento, California, a state-certified analytical laboratory for analyses of: total petroleum hydrocarbons (TPH), as gasoline, by modified EPA Method 8015, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020 and STLC lead by CAM1.

The analytical results are summarized in Table 1. The laboratory reports and chain-of-custody forms are included in Attachment 3. Concentrations of TPH, as gasoline, ranged from 1.5 to 4,600 parts-per-million (ppm) for samples collected along the western end of the former USTs. The remaining soil samples collected in the former UST basin reported below the reporting limit (BDL) for TPH, as gasoline, with the exception of T4E-15' that reported 490 ppm. TPH, as gasoline, ranging from BDL to 7,400 ppm was reported for samples collected within the product line trenches and beneath the dispensers along the northern island. The soil sample, PL-3, collected west of the southern most island and soil sample PL-10 collected at the southern most island reported TPH, as gasoline, at 3,900 and 5.0 parts-per-million (ppm), respectively. The remaining product line samples reported BDL for TPH, as gasoline. Benzene concentrations were reported at BDL for all soil samples collected in the UST basin and all but three in the product line and dispenser trenches. Concentrations of WET lead reported BDL for all soil samples collected within the former UST basin with results reported from BDL to 6.5 mg/L for soil samples collected within the former product line trenches and beneath the former dispensers.

STOCKPILE SOIL

The analytical laboratory results reported BDL for TPH, as gasoline, and BTEX for all soil samples collected in the stockpiled soil with the exception of 9(A-D) Composite. The 9(A-D) Composite reported 49 ppm for TPH, as gasoline, BDL for benzene, 0.093 for toluene, 0.16 for ethylbenzene and 1.5 ppm for total xylenes. The composite 9(A-D) was collected from the soil generated during the excavation of the product line trenches where the soil sample PL-3 was collected. The WET lead analyses of the stockpiled soil ranged from BDL to 6.8 mg/L.

REMARKS/SIGNATURES

The information contained within this report reflects our professional opinions and was developed in accordance with currently available information. This report was prepared solely for the use of Ramos. Any reliance on this report by parties other than Ramos shall be at their own risk. The report was prepared under the direct supervision of the professional geologist, registered with the State of California, whose signature appears below.

Apex is pleased to be of continued service to Ramos. If you have any questions or comments, please do not hesitate to call us at (916)535-0200.

Sincerely;
APEX ENVIROTECH, INC.

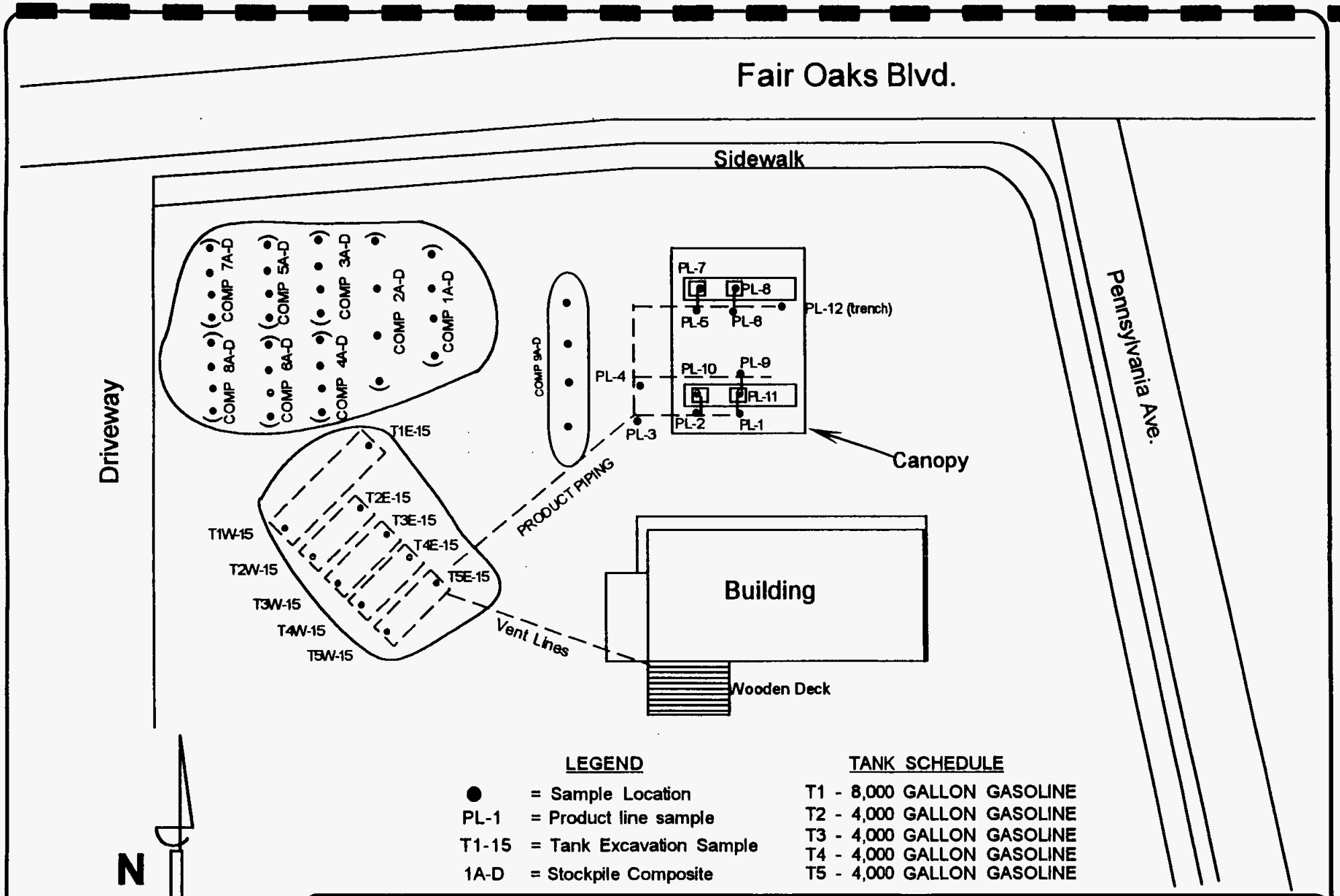
Jacqueline R. Doub
Project Manager

Pat Wright
Principal Geologist
CRG No. 00529

Attachments

REGISTERED GEOLOGIST
PAT WRIGHT
No. 529
STATE OF CALIFORNIA

FIGURE



LEGEND

●	= Sample Location
PL-1	= Product line sample
T1-15	= Tank Excavation Sample
1A-D	= Stockpile Composite

TANK SCHEDULE

T1 - 8,000 GALLON GASOLINE
T2 - 4,000 GALLON GASOLINE
T3 - 4,000 GALLON GASOLINE
T4 - 4,000 GALLON GASOLINE
T5 - 4,000 GALLON GASOLINE

APEX ENVIROTECH, INC.

DRAWN BY: Mark Andrews
DATE: 5/10/95
REVISIONS

Site Map
Soil Sample Locations

River Rat
9840 Fair Oaks Blvd
Fair Oaks, California

FIGURE
1

PROJECT NUMBER:
RAM03.001

TABLE

TABLE 1
ANALYTICAL RESULTS: SOIL
River Rat
9840 Fair Oaks Blvd, Fair Oaks, California
(All results in parts-per-million)

Sample ID	Date Collected	Sample Depth (Feet)	Total Petroleum Hydrocarbons As Gasoline	Aromatic Volatile Organics				Wet Lead (mg/L)
				Benzene	Toluene	Ethyl-benzene	Total Xylenes	
T1E-15'	4/25/95	15.0	<	<	<	<	<	<
T1W-15'	4/25/95	15.0	500*	<	<	<	0.28	<
T2E-15'	4/25/95	15.0	<	<	<	<	<	<
T2W-15'	4/25/95	15.0	1.5*	<	<	<	<	<
T3E-15'	4/25/95	15.0	<	<	<	<	<	<
T3W-15'	4/25/95	15.0	<	<	<	<	<	<
T4E-15'	4/25/95	15.0	490*	<	0.44	1.1	5.7	<
T4W-15'	4/25/95	15.0	340	<	5.4	6	22	<
T5E-15'	4/25/95	15.0	<	<	<	<	<	<
T5W-15'	4/25/95	15.0	4600	<	270	120	440	<
PL1@3'	5/1/95	3.0	<	<	<	<	<	1.1
PL2@2.5'	5/1/95	2.5	<	<	<	<	<	1.3
PL3@2.5'	5/1/95	2.5	3,900	<	<	19	70	3.8
PL4@3'	5/1/95	3.0	<	<	<	<	<	1.4
PL5@3'	5/1/95	3.0	<	<	<	<	<	0.91
PL6@1.5'	5/1/95	1.5	2,500	3	19	20	100	2.3
PL7@2'	5/1/95	2.0	4,300	<	43	25	90	2.6
PL8@3'	5/1/95	3.0	7,400	18	180	130	440	6.5
PL9@3.5'	5/1/95	3.5	<	<	<	<	<	1.5
PL10@1.5'	5/1/95	1.5	5.0	0.24	0.29	0.032	110	15
PL11@3'	5/1/95	3.0	<	<	<	<	<	4.5
Trench	5/2/95	3.0	<	<	<	<	<	<
STP1A-1D	5/1/95	NA	<	<	<	<	<	5.1
STP2A-2D	5/1/95	NA	<	<	<	<	<	6.8
STP3A-3D	5/1/95	NA	<	<	<	<	<	3.7
STP4A-4D	5/1/95	NA	<	<	<	<	<	4.6
5(A-D)Comp.	5/2/95	NA	<	<	<	<	<	<
6(A-D)Comp.	5/2/95	NA	<	<	<	<	<	<
7(A-D)Comp.	5/2/95	NA	<	<	<	<	<	<
8(A-D)Comp.	5/2/95	NA	<	<	<	<	<	<
9(A-D)Comp.	5/2/95	NA	49*	<	0.093	0.16	1.5	<

NOTES:

<	=	Below detection limits per "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites"(August 10, 1990) Practical Quanitation Reporting Limits. (PQL for BTEX = 0.005 ppm, TPH as gasoline and diesel = 1.0 ppm).
NA	=	Not Analyzed/Applicable
*	=	Weathered Gasoline Detected
T1E-15'	=	Soil Sample Collected Beneath the Tank #1on the East End of the Tank at 15 feet below surface
PL11@3'	=	Product Line Sample Collected at 3 feet below surface
Trench	=	Product Line Sample Collected at 3 feet below surface
STP4A-4D	=	Stockpile Soil Composite Sample
9(A-D)	=	Stockpile Soil Composite Sample

ATTACHMENT 1
PHOTOGRAPHS

Error

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ATTACHMENT 2
APEX STANDARD OPERATING PROCEDURES

SOP - 2
SOIL EXCAVATION AND SAMPLING

Excavation and subsequent soil sampling is performed under the direction of a registered geologist or civil engineer. To reduce the potential for cross-contamination, all excavation equipment is either steam cleaned or washed prior to use and between excavations. Soil samples for chemical analysis are collected in cleaned, thin-walled brass tubes of varying diameters and lengths (e.g., 6 inches long by 2 inches outside diameter) or other appropriate cleaned sample container. If used, one tube may be set in a 2-inch inside diameter, hand-driven sampler. To reduce the potential for cross-contamination between samples, the sampler is washed in a solution and doubly rinsed between each sampling event.

Upon recovery, a portion of the soil sample is sealed for later screening with either a portable photoionization detector, flame ionization detector, or an explosimeter. Another portion of the sample is used for description of the excavated materials. A third portion of the sample is hermetically sealed, labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. These procedures minimize the potential for cross-contamination and volatilization of volatile organic compounds prior to chemical analysis.

In the event the soil samples cannot be submitted to the analytical laboratory on the same day they are collected (e.g., due to weekends or holidays), the samples are temporarily stored until the first opportunity for submittal either on ice in a cooler, such as when in the field, or in a refrigerator at Apex's office.

SOP - 3
SOIL CLASSIFICATION

Soil samples are classified according to the Unified Soil Classification System. Representative portions of the samples may be submitted, under strict chain-of-custody, to an analytical laboratory for further examination and verification of the in-field classification and analysis of soil mechanical and/or petrophysical properties. The soil types are indicated on logs of either excavations or borings together with depths corresponding to the sampling points and other pertinent information.

SOP - 4
SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES

Sample identification and chain-of-custody procedures ensure sample integrity as well as document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, sampling methodology, name(s) of on-site personnel, and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s), and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name, and any other relevant information will also be recorded.

SOP - 5
LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at method-specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

1. Participation in state and federal laboratory accreditation/certification programs;
2. Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
3. Standard operating procedures describing routine and periodic instrument maintenance;
4. "Out-of-Control"/Corrective Action documentation procedures; and,
5. Multi-level review of raw data and client reports.

ATTACHMENT 3
ANALYTICAL LABORATORY RESULTS REPORT AND
CHAIN-OF-CUSTODY FORM

Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

III Quality Control

A. **Project Specific QC.** No project specific QC (i.e., spikes and/or duplicates) was requested.

B. **Method Blank Results.** A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your sample.

No target parameters were detected in the method blank associated with your sample at the reporting limit levels noted on the data sheets in the Analytical Results section.

C. **Laboratory Control Spike.** A Laboratory Control Spike (LCS) is a sample which is spiked with known analyte concentrations, and analyzed at approximately 10% of the sample load in order to establish method-specific control limits. The LCS results associated with your samples are on the attached Laboratory Control Spike and Laboratory Control Spike Duplicate Analysis Report.

D. **Matrix Spike Results.** A Matrix Spike is a sample which is spiked with known analyte concentrations, and analyzed at approximately 10% of the sample load in order to establish method-specific control limits. The Matrix Spike results associated with your samples are on the attached Matrix Spike and Matrix Spike Duplicate Analysis Report.

Accuracy is measured by Percent Recovery as in:

$$\% \text{ recovery} = \frac{(\text{measured concentration}) \times 100}{(\text{actual concentration})}$$

IV Analysis Results

Results are on the attached data sheets.

8020/8015 Modified Analysis Report
Project: River RAT-452 (RAM03.001)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: Apr 25, 1995
Date Received: Apr 26, 1995
Date Analyzed: May 1, 1995
Invoice #: 4678

Matrix: Soil

Unit = ug/g

Lab ID	Client ID	B	Det Limit	T	Det Limit	E	Det Limit	X	Det Limit	TPHgas	Det Limit	Surrogate % Recovery of Trifluorotoluene	Dilution 1:
ST95-04-779A	T1E-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	83%	1
ST95-04-781A	T1W-15'	ND	0.10	ND	0.10	ND	0.10	0.28	0.10	500 *	20	128%	20
ST95-04-783A	T2E-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	103%	1
ST95-04-785A	T2W-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	1.5 *	1.0	97%	1
ST95-04-787A	T3E-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	102%	1
ST95-04-789A	T3W-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	75%	1
ST95-04-791A	T4E-15'	ND	0.10	0.44	0.10	1.1	0.10	5.7	0.10	490 *	20	141% **	20
ST95-04-793A	T4W-15'	ND	1.0	5.4	1.0	6.0	1.0	22	1.0	340	200	98%	200
ST95-04-795A	T5E-15'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	104%	1
ST95-04-797A	T5W-15'	ND	12	270	12	120	12	440	12	4600	2500	110%	2500

ppb = parts per billion = ug/L = micrograms per Liter
ppm = parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit

*** Weathered gasoline was detected.**

**** High surrogate recovery due to matrix interference.**

R. L. James, Principal Chemist

May 3, 1995
Date Reported

Sparger Technology, Inc.
With Automation in Mind
3050 Fite Circle, Suite 112 • Sacramento, California 95827 • (916) 362-8947 • FAX (916) 362-0947
Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020/8015 Modified Analysis Report
Project: River RAT-452 (RAM03.001)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: May 1, 1995
Date Received: May 2, 1995
Date Analyzed: May 4, 1995
Invoice #: 4706

Matrix: Soil

Unit = mg/kg

Lab ID	Client ID	B	Det Limit	T	Det Limit	E	Det Limit	X	Det Limit	TPHgas	Det Limit	Surrogate % Recovery of Trifluorotoluene	Dilution 1:
ST95-05-092A	PL1 @3'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	86%	1
ST95-05-094A	PL2 @2.5'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	50% *	1
ST95-05-096A	PL3 @2.5'	ND	2.5	ND	2.5	19	2.5	70	2.5	3900	500	79%	500
ST95-05-098A	PL4 @3'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	84%	1
ST95-05-100A	PL5 @3'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	60% *	1
ST95-05-102A	PL6 @1.5'	3.0	2.5	19	2.5	20	2.5	100	2.5	2500	500	104%	500
ST95-05-104A	PL7 @2'	ND	2.5	43	2.5	25	2.5	90	2.5	4300	500	101%	500
ST95-05-106A	PL8 @3'	18	12	180	12	130	12	440	12	7400	2500	101%	2500

ppb = parts per billion = ug/L = micrograms per Liter
ppm = parts per million = mg/kg = milligrams per kilogram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*** Low surrogate recovery due to matrix effects.**

R. L. James, Principal Chemist

May 9, 1995
Date Reported

Sparger Technology, Inc.
With Automation in Mind
Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division
3050 Fite Circle, Suite 112 • Sacramento, California 95827 • (916) 362-8947 • FAX (916) 362-0947

8020/8015 Modified Analysis Report
Project: River RAT-452 (RAM03.001)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: May 1, 1995
Date Received: May 2, 1995
Date Analyzed: May 4, 1995
Invoice #: 4706

Matrix: Soil

Unit = mg/kg

Lab ID	Client ID	B	Det Limit	T	Det Limit	E	Det Limit	X	Det Limit	TPHgas	Det Limit	Surrogate % Recovery of Trifluorotoluene	Dilution 1:
ST95-05-108A	PL9 @3.5'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	71%	1
ST95-05-110A	PL10 @1.5'	0.24	0.025	0.29	0.025	0.032	0.005	110	0.005	5.0	1.0	78%	**
ST95-05-112A	PL11 @1.5'	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	72%	1
ST95-05-114A	STP1A-1D	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	84%	1
ST95-05-122A	STP2A-2D	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	77%	1
ST95-05-124A	STP3A-3D	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	80%	1
ST95-05-126A	STP4A-4D	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	84%	1

ppb = parts per billion = ug/L = micrograms per Liter
ppm = parts per million = mg/kg = milligrams per kilogram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

** Dilution 1:5 for Benzene & Toluene

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1814)

Sparger Technology, Inc.
With Automation in Mind
3050 Fite Circle, Suite 112 • Sacramento, California 95827 • (916) 362-8947 • FAX (916) 362-0947
Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

3050 Fite Circle, Suite 112 • Sacramento, California 95827 • (916) 362-8947 • FAX (916) 362-0947

8020/8015 Modified Analysis Report
Project: River RAT (452)

Sparger Technology, Inc.
With Automation in Mind

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: May 2, 1995
Date Received: May 3, 1995
Date Analyzed: May 5, 1995
Invoice #: 4712

Matrix: Soil

Unit = mg/kg

Lab ID	Client ID	B	Det Limit	T	Det Limit	E	Det Limit	X	Det Limit	TPHgas	Det Limit	Surrogate % Recovery of Trifluorotoluene	Dilution 1: *
ST95-05-154A	Trench	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	107%	1
ST95-05-156A	7(A-D) Comp.	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	86%	1
ST95-05-158A	8(A-D) Comp.	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	77%	1
ST95-05-160A	6(A-D) Comp.	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	79%	1
ST95-05-162A	5(A-D) Comp.	ND	0.005	ND	0.005	ND	0.005	ND	0.005	ND	1.0	67% *	1
ST95-05-164A	9(A-D) Comp.	ND	0.025	0.093	0.025	0.16	0.025	1.5	0.025	49 **	5.0	88%	5

ppb = parts per billion = ug/L = micrograms per Liter
ppm = parts per million = mg/kg = milligrams per kilogram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

*** Low surrogate recovery due to matrix effects.**

**** Weathered gasoline was detected.**

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. 1614)

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

CAM 1 (STLC): WET
Project: River RAT-452 (RAM03.001)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: Apr 25, 1995
Date Received: Apr 26, 1995
Date Analyzed: May 2, 1995
Invoice #: 4678

Matrix: Soil **Units: mg/L**

Lab ID	Client ID	Lead (Pb) Result	Reporting Limit	Dilution 1:
ST95-04-780A	T1E-15'	ND	0.20	1
ST95-04-782A	T1W-15'	ND	0.20	1
ST95-04-784A	T2E-15'	ND	0.20	1
ST95-04-786A	T2W-15'	ND	0.20	1
ST95-04-788A	T3E-15'	ND	0.20	1
ST95-04-790A	T3W-15'	ND	0.20	1
ST95-04-792A	T4E-15'	ND	0.20	1
ST95-04-794A	T4W-15'	ND	0.20	1
ST95-04-796A	T5E-15'	ND	0.20	1
ST95-04-798A	T5W-15'	ND	0.20	1

ppm = parts per million = mg/L = milligrams per Liter
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 2, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1614)

Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

CAM 1 (STLC): WET
Project: River RAT-452 (RAM03.001)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: May 1, 1995
Date Received: May 2, 1995
Date Analyzed: May 5, 1995
Invoice #: 4706

Matrix: Soil **Units: mg/L**

Lab ID	Client ID	Lead (Pb) Result	Reporting Limit	Dilution 1:
ST95-05-093A	PL1 @3'	1.1	0.20	1
ST95-05-095A	PL2 @2.5'	1.3	0.20	1
ST95-05-097A	PL3 @2.5'	3.8	0.20	1
ST95-05-099A	PL4 @3'	1.4	0.20	1
ST95-05-101A	PL5 @3'	0.91	0.20	1
ST95-05-103A	PL6 @1.5'	2.3	0.20	1
ST95-05-105A	PL7 @2'	2.6	0.20	1
ST95-05-107A	PL8 @3'	6.5	0.20	1
ST95-05-109A	PL9 @3.5'	1.5	0.20	1
ST95-05-111A	PL10 @1.5'	15	0.20	1
ST95-05-113A	PL11 @1.5'	4.5	0.20	1
ST95-05-115A	STP1A-1D	5.1	0.20	1
ST95-05-123A	STP2A-2D	6.8	0.20	1
ST95-05-125A	STP3A-3D	3.7	0.20	1
ST95-05-127A	STP4A-4D	4.6	0.20	1

ppm = parts per million = mg/L = milligrams per Liter
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 8, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1614)

Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

CAM 1 (STLC): WET
Project: River RAT (452)

Attention: Mr. Dave Irby
Ramos Env. Engineering
1515 S. River Road
W. Sacramento, CA 95691

Date Sampled: May 2, 1995
Date Received: May 3, 1995
Date Analyzed: May 8, 1995
Invoice #: 4712

Matrix: Soil **Units: mg/L**

Lab ID	Client ID	Lead (Pb) Result	Reporting Limit	Dilution 1:
ST95-05-155A	Trench	ND	0.20	1
ST95-05-157A	7(A-D) Comp.	ND	0.20	1
ST95-05-159A	8(A-D) Comp.	ND	0.20	1
ST95-05-161A	6(A-D) Comp.	ND	0.20	1
ST95-05-163A	5(A-D) Comp.	ND	0.20	1
ST95-05-165A	9(A-D) Comp.	ND	0.20	1

ppm = parts per million = mg/L = milligrams per Liter
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA.
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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020 Modified Laboratory Control Spike (LCS) & Laboratory Control Spike Duplicate (LCSD) BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	Apr 25, 1995 Apr 26, 1995 May 1, 1995
Project ID:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	ST95-05-001 LCS ST95-05-001 LCSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	31	30	ug/kg	103%	100%	3%
Toluene	30 ppb	ND	30	30	ug/kg	100%	100%	0%
Ethylbenzene	30 ppb	ND	29	30	ug/kg	97%	100%	3%
Xylenes	30 ppb	ND	29	29	ug/kg	97%	97%	0%

Surrogate % Recovery of Trifluorotoluene = 108% LCS 97% LCSD

ppb = parts per billion = ug/kg = micrograms per kilogram
ppm= parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 3, 1995
Date Reported

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Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020 Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD)
BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	Apr 25, 1995 Apr 26, 1995 May 1, 1995
Project ID:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	MS/MSD (Batch)	LAB ID:	ST95-04-872A MS ST95-04-872A MSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	32	29	ug/kg	107%	97%	10%
Toluene	30 ppb	ND	32	27	ug/kg	107%	90%	17%
Ethylbenzene	30 ppb	ND	30	25	ug/kg	100%	83%	18%
Xylenes	30 ppb	ND	29	26	ug/kg	97%	87%	11%

Surrogate % Recovery of Trifluorotoluene = 105% MS 103% MSD

ppb = parts per billion = ug/kg = micrograms per kilogram
ppm= parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 3, 1995
DATE

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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020 Modified Laboratory Control Spike (LCS) & Laboratory Control Spike Duplicate (LCSD) BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 1, 1995 May 2, 1995 May 4, 1995
Project ID:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	ST95-05-004 LCS ST95-05-004 LCSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	29	29	ug/kg	97%	97%	0%
Toluene	30 ppb	ND	29	28	ug/kg	97%	93%	4%
Ethylbenzene	30 ppb	ND	30	30	ug/kg	100%	100%	0%
Xylenes	30 ppb	ND	30	29	ug/kg	100%	97%	3%

Surrogate % Recovery of Trifluorotoluene = 89% LCS 86% LCSD

ppb = parts per billion = ug/kg = micrograms per kilogram
ppm= parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA
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(Certification No. 1614)

Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020 Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD)
BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 1, 1995 May 2, 1995 May 4, 1995
Project ID:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	MS/MSD (Batch)	LAB ID:	ST95-05-092A MS ST95-05-092A MSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	23	23	ug/kg	77%	77%	0%
Toluene	30 ppb	ND	22	21	ug/kg	73%	70%	5%
Ethylbenzene	30 ppb	ND	23	21	ug/kg	77%	70%	9%
Xylenes	30 ppb	ND	23	21	ug/kg	77%	70%	9%

Surrogate % Recovery of Trifluorotoluene = 76% MS 88% MSD

ppb = parts per billion = ug/kg = micrograms per kilogram
ppm= parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
DATE

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA
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Sparger Technology, Inc.
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Analytical Laboratory Division
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Scientific Division

8020 Modified Laboratory Control Spike (LCS) & Laboratory Control Spike Duplicate (LCSD) BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 2, 1995 May 3, 1995 May 5, 1995
Project ID:	452	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	ST95-05-005 LCS ST95-05-005 LCSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	LCS Result	LCSD Result	Units	LCS % Recovery	LCSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	27	28	ug/kg	90%	93%	4%
Toluene	30 ppb	ND	27	28	ug/kg	90%	93%	4%
Ethylbenzene	30 ppb	ND	28	29	ug/kg	93%	97%	4%
Xylenes	30 ppb	ND	28	29	ug/kg	93%	97%	4%

Surrogate % Recovery of Trifluorotoluene = 86% LCS 87% LCSD

ppb = parts per billion = ug/kg = micrograms per kilogram
ppm= parts per million = ug/g = micrograms per gram
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1614)

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Sparger Technology, Inc.
With Automation in Mind

Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

8020 Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD)
BTEX Analysis Report

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 2, 1995 May 3, 1995 May 5, 1995
Project ID:	452	Project Name:	River RAT
Client ID:	MS/MSD	LAB ID:	ST95-05-154A MS ST95-05-154A MSD
Matrix:	Soil	Dilution:	

Name	Conc. Spike Added	Sample Result	MS Result	MSD Result	Units	MS % Recovery	MSD % Recovery	% RPD Recovery
Benzene	30 ppb	ND	27	26	ug/kg	90%	87%	4%
Toluene	30 ppb	ND	27	24	ug/kg	90%	80%	12%
Ethylbenzene	30 ppb	ND	28	24	ug/kg	93%	80%	15%
Xylenes	30 ppb	ND	27	24	ug/kg	90%	80%	12%

Surrogate % Recovery of Trifluorotoluene = 88% MS 88% MSD

ppb = parts per billion = ug/kg = micrograms per kilogram
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R. L. James, Principal Chemist

May 9, 1995
DATE

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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

Metal, (STLC)
LCS / LCSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	Apr 25, 1995 Apr 26, 1995 May 2, 1995
Project #:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	950501A
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Spike Conc.	LCS	LCS % Recovery	LCSD	LCSD % Recovery	% RSD
Lead (Pb)	5.0	5.5	110%	5.7	114%	4%

ppm= parts per million = mg/L = milligram per Liter

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R. L. James, Principal Chemist

May 2, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA
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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

Metal, (STLC)
MS/MSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	Apr 25, 1995 Apr 26, 1995 May 2, 1995
Project #:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	MS/MSD	LAB ID:	ST95-04-777A MS ST95-04-777A MSD
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Sample Conc.	Spike Conc.	MS	MS % Recovery	MSD	MSD % Recovery	% RSD
Lead (Pb)	ND	5.0	5.3	106%	4.9	98%	8%

ppm= parts per million = mg/L = milligram per Liter

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R. L. James, Principal Chemist

May 2, 1995
Date Reported

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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

Metal, (STLC)
LCS / LCSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 1, 1995 May 2, 1995 May 5, 1995
Project #:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	950505A
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Spike Conc.	LCS	LCS % Recovery	LCSD	LCSD % Recovery	% RSD
Lead (Pb)	100	100	100%	96	96%	4%

ppm= parts per million = mg/L = milligram per Liter
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 8, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA
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Sparger Technology, Inc.
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Analytical Laboratory Division
Mobile Laboratory Division
Scientific Division

Metal, (STLC)
MS/MSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 1, 1995 May 2, 1995 May 5, 1995
Project #:	452 (RAM03.001)	Project Name:	River RAT
Client ID:	MS/MSD	LAB ID:	ST95-05-093A MS ST95-05-093A MSD
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Sample Conc.	Spike Conc.	MS	MS % Recovery	MSD	MSD % Recovery	% RSD
Lead (Pb)	1.1	100	92	91%	91	90%	1%

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R. L. James, Principal Chemist

May 8, 1995
Date Reported

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Sparger Technology, Inc.
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Analytical Laboratory Division
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Scientific Division

Metal, (STLC)
LCS / LCSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 2, 1995 May 3, 1995 May 8, 1995
Project #:	452	Project Name:	River RAT
Client ID:	LCS/LCSD	LAB ID:	950508A
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Spike Conc.	LCS	LCS % Recovery	LCSD	LCSD % Recovery	% RSD
Lead (Pb)	5.0	6.0	120%	5.9	118%	2%

ppm= parts per million = mg/L = milligram per Liter
ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1614)

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Metal, (STLC)
MS/MSD Recoveries

Attention:	Mr. Dave Irby Ramos Env. Engineering 1515 S. River Road W. Sacramento, CA 95691	Date Sampled: Date Received: Date Analyzed:	May 2, 1995 May 3, 1995 May 8, 1995
Project #:	452	Project Name:	River RAT
Client ID:	MS/MSD	LAB ID:	ST95-05-254A MS ST95-05-254A MSD
Matrix:	Soil	Dilution:	

Units : (mg/L)

Element	Sample Conc.	Spike Conc.	MS	MS % Recovery	MSD	MSD % Recovery	% RSD
Lead (Pb)	0.48	5.0	6.3	116%	6.3	116%	0%

ppm= parts per million = mg/L = milligram per Liter

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

May 9, 1995
Date Reported

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SPARGER TECHNOLOGY, INC.

3050 Fite Circle, Suite 112
Sacramento, CA 95827
Phone: (916) 362-8947
FAX: (916) 362-0947

Project Manager: PAUL IRBY
Phone: (916) 371-9747
Fax: (916) 371-9312

Report Address: RAMOS ENVIRONMENTAL
P.O. BOX 401
WEST SACRAMENTO, CA. 95691

Billing Address: ENGINEERING

Project Name: River RAT

Project #: [redacted] RAMOS.001
RAMOS JOB # 452

Project Location: 9540 FAIR OAKS BLVD
FAIR OAKS, CA. 95628

P.O. #: RE7321

CHAINOF CUSTODY RECORD

4678

Number:

ANALYSIS REQUEST

REMARKS: PLS SEND COPY OF ANALYTICAL RESULTS TO APEX ENVIROTECH. 7844 MADISON AVE STE 106 FAIR OAKS CA, 95628

WET (STLC)

TCLP

Total

TAT

SAMPLE ID	Sampling: Date	Sampling: Time	Container: 40 mL VOA	Container: Brass Sleeve	Container: 1 L amber bottle	Container: 250 mL Plastic	Container: Other:	Preservative Used: HCl/HNO3/(ICE)	Preservative Used: None	Preservative Used: Other:	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Other:	TCLP: BTEX (602/8020)/503.1	TCLP: BTEX/TPHgas (602/8020/8015)	TCLP: TPHdiesel/TPHmotor oil(8015)	TCLP: EPA 601/8010/502.2/504	TCLP: EPA 602/8020	TCLP: EPA 608/8080 (Pesticides)/505/508	TCLP: EPA 608/8080 (PCB's)	TCLP: EPA 624/8240/524.2	TCLP: EPA 625/8270/525	Organic Lead	Total Oil & Grease (5520)	STLC - WET LEAD	Total: CAM-17 Metals	Total: CAM-5 Metals (Cd, Cr, Pb, Ni, Zn)	Total: Other:	TAT: Standard Turnaround	TAT: Rush Services (48hr), (24hr), or (12	TAT: Holiday/Weekend Rush
T1E-15'	4-25-95	1:20 pm		X				X				X				X										X				X		
T1W-15'	"	1:05 pm																														
T2E-15'		1:00 pm																														
T2W-15'		1:15 pm																														
T3E-15'		12:50 pm																														
T3W-15'		1:10 pm																														
T4E-15'		12:30 pm																														
T4W-15'		12:45 pm																														
T5E-15'		12:20 pm																														
T5W-15'		12:25 pm																														

Relinquished by:	Received by:	Relinquished by:	Received by:
[signature]	[signature]		
Date: 4/26/95 Time: 2:55 P.M.	Date: 4/26/95 Time: 2:55 P.M	Date: Time:	Date: Time:

SPARGER TECHNOLOGY, INC.
3050 Fite Circle, Suite 112
Sacramento, CA 95827
Phone: (916) 362-8947
FAX: (916) 362-0947

CHAIN OF CUSTODY RECORD

Number: 4706

Project Manager: DAVE IRBY
Phone: (916)
Fax: (916)

Report Address: RAMOS ENVIRONMENTAL P.O. BOX 401 WEST SACRAMENTO, CA 95691
Billing Address: SAME

Project Name: River CAT
Project #: 452

Project Location: 9340 FAIROAKS BLVD FAIROAKS, CA
P.O. #: RE7321

ANALYSIS REQUEST

REMARKS: pls send copy of ANALYTICAL TO APEX
APEX JOB# RAMO3-001

SAMPLE ID	Date	Time	Sampling	Container: 40 mL VOA	Container: Brass Sleeve	Container: 1 L amber bottle	Container: 250 mL Plastic	Container: Other:	Preservative Used: HCl/HNO3 (CB)	Preservative Used: None	Preservative Used: Other:	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Other:	TCLP: BTEX (602/8020/503.1)	TCLP: BTEX/TPHgas (602/8020/8015)	TCLP: TPHdiesel/TPHmotor oil(8015)	TCLP: EPA 601/8010/502.2/504	TCLP: EPA 602/8020	TCLP: EPA 608/8080 (Pesticides)/505/508	TCLP: EPA 608/8080 (PCB's)	TCLP: EPA 624/8240/524.2	TCLP: EPA 625/8270/525	Organic Lead	Total Oil & Grease (5520)	WET (STLC): CAM-17 Metals	WET (STLC): CAM 5 Metals (Cd, Cr, Pb, Ni, Zn)	WET (STLC): Other: WET LEAD	TCLP: Total	TAT: STANDARD	TAT: Rush Services (48hr), (24hr), or (12	TAT: Holiday/Weekend Rush
PL1 @ 3'	6/1/95	1:35pm		X				X					X				X												X		X		
PL2 @ 2.5'		1:45pm																															
PL3 @ 2.5'		1:50pm																															
PL4 @ 3'		1:53pm																															
PL5 @ 3'		1:55pm																															
PL6 @ 1.5'		2:00 pm																															
PL7 @ 2'		2:05pm																															
PL8 @ 3'		2:05pm																															
PL9 @ 3.5'		2:35pm																															
PL10 @ 1.5'		2:40pm																															
PL11 @ 1.5'		2:45pm		X									X				X												X		X		

Relinquished by: [signature]
Date: 5/2/95 Time: 12:05pm

Received by: [signature]
Date: 5/2/95 Time: 12:10pm

Relinquished by:
Date: Time:

Received by: X X
Date: Time:

Page 2 of 2

SPARGER TECHNOLOGY, INC.

3050 Fite Circle, Suite 112
Sacramento, CA 95827
Phone: (916) 362-8947
FAX: (916) 362-0947

Project Manager: DAVE ERBY
Phone: (916) 371-3477
Fax: (916) 371-9312

Report Address: RAMOS ENVIRONMENTAL
P.O. BOX 401
WEST SACRAMENTO, CA. 95691

Billing Address: SAME

Project Name: RIVER RAT
Project #: 452

Project Location: 9940 FAIR OAKS BLVD
FAIR OAKS CA,

P.O. #: RE7321

CHAIN OF CUSTODY RECORD

Number: 4706

ANALYSIS REQUEST

REMARKS: PLS SEND APEX COPY OF ANALYTICAL
ALL SAMPLES ARE 4 INTO ONE COMPOSITES

WET (STLC) X
TCLP

SAMPLE ID	Sampling: Date	Sampling: Time	Container: 40 mL VOA	Container: Brass Sleeve	Container: 1 L amber bottle	Container: 250 mL Plastic	Container: Other:	Preservative Used: HCl/HNO3/ICE	Preservative Used:	Preservative Used:	Preservative Used: None	Preservative Used: Other:	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Other:	TCLP: BTEX (602/8020)/502.1	TCLP: BTEX/TPHgas (602/8020/8015)	TCLP: TPHdiesel/TPHmotor oil(8015)	TCLP: EPA 601/8010/502.2/504	EPA 602/8020	EPA 608/8080 (Pesticides)/505/508	EPA 608/8080 (PCB's)	EPA 624/8240/524.2	EPA 625/8270/525	Organic Lead	Total: Oil & Grease (5520)	Total:	Total:	Total:	CAM-17 Metals	CAM-5 Metals (Cd, Cr, Pb, Ni, Zn)	Other: WET LEAD	TAT: STANDARD	TAT: Rush Services (48hr), or (12	TAT: Holiday/Weekend Rush
STP1A-1D	5/1/95	2:50pm		X														X														X	X		
STP2A-2D	"	2:55pm		"																															
STP3A-3D	"	3:05pm		"																															
STP4A-4D	X	3:15pm		X														X														X	X		
~~X~~																																			
See Remarks																																			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	5/2/95	12:05pm	[signature]	5/2/95	12:10pm

Relinquished by:	Date:	Time:	Received by:	Date:	Time:

SPARGER TECHNOLOGY, INC.
3050 Fite Circle, Suite 112
Sacramento, CA 95827
Phone: (916) 362-8947
FAX: (916) 362-0947

CHAINOF CUSTODY RECORD

Number: 4712

Project Manager: Mark Andrews
Phone: 535-0200
Fax: 535-0207

Report Address: APEX- Fair Oaks
Billing Address:

Project Name: River Rat
Project #: 452
Project Location: 9840 Fair Oaks Blvd. Fair Oaks, CA
P.O. #: RE 7321

ANALYSIS REQUEST

REMARKS: 2/3

SAMPLE ID	Sampling: Date	Sampling: Time	Container: 40 mL VOA	Brass Sleeve	1 L amber bottle	250 mL Plastic	Other:	Preservative Used: HCl/HNO3/ICE	None	Other:	Matrix: Water	Soil	Air	Other:	BTEX (602/8020/503.1	BTEX/TPHgas (602/8020/8015)	TPHdiesel/TPHmotor oil(8015)	EPA 601/8010/502.2/504	EPA 602/8020	EPA 608/8080 (Pesticides)/505/508	EPA 608/8080 (PCB's)	EPA 624/8240/524.2	EPA 625/8270/525	Organic Lead	Total Oil & Grease (5520)	LEAD WET	CAM-17 Metals	CAM-5 Metals (Cd, Cr, Pb, Ni, Zn)	Other:	STLC	TAT: Rush Services (48hr), (24hr), or (12	Holiday/Weekend Rush
6A	5-2-95	16:44		X					X			X				X	}									X				X		
6B	↓	15:46		X					X			X				X	}	4:1 COMPOSITE								X				X		
6C		15:48		X					X			X				X	}									X				X		
6D		15:50		X					X			X				X	}									X				X		
5A		15:52		X					X			X				X	}									X				X		
5B		15:54		X					X			X				X	}	4:1 COMPOSITE								X				X		
5C		15:56		X					X			X				X	}									X				X		
5D	↓	15:58		X					X			X				X	}									X				X		

TCLP / Total / WET (STLC) / TCLP

Relinquished by:	Received by:	Relinquished by:	Received by:
[signature]	[signature]		
Date: 5-3-95 Time: 11:25am	Date: 5/3/95 Time: 11:25	Date: Time:	Date: Time:

SPARGER TECHNOLOGY, INC.
3050 Fite Circle, Suite 112 Phone: (916) 362-8947
Sacramento, CA 95827 FAX: (916) 362-0947
Project Manager: Phone: 535-0200
Mark Andrews Fax: 535-0207
Report Address: Billing Address:
APEX - Fair Oaks

CHAIN OF CUSTODY RECORD

4712
Number:

Project Name: River Rat
Project #: 452
Project Location: 9840 Fair Oaks Blvd. Fair Oaks, CA
P.O. #: RE 7321

ANALYSIS REQUEST

REMARKS: Composite SAMPLES 4:1 1/3
5, 6, 7, 8, 9 (A→D)

WET (STLC)
TCLP
Total

SAMPLE ID	Date	Time	Sampling	Container: 40 mL VOA	Container: Brass Sleeve	Container: 1 L amber bottle	Container: 250 mL Plastic	Container: Other:	Preservative Used: HCl/HNO3/ICE	Preservative Used:	Preservative Used:	Preservative Used: None	Preservative Used: Other:	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Other:	TCLP: BTEX (602/8020)/503.1	TCLP: BTEX/TPHgas (602/8020/8015)	TCLP: TPH diesel/TPH motor oil (8015)	TCLP: EPA 601/8010/502.2/504	TCLP: EPA 602/8020	TCLP: EPA 608/8080 (Pesticides)/505/508	TCLP: EPA 608/8080 (PCB's)	TCLP: EPA 624/8240/524.2	TCLP: EPA 625/8270/525	Organic Lead	Total Oil & Grease (5520)	LEAD WET	CAM-17 Metals	CAM-5 Metals (Cd, Cr, Pb, Ni, Zn)	Other:	STLC	Rush Services (48hr), (24hr), or (12	Holiday/Weekend Rush	TAT
Trench	5-2-95	15:10			X							X			X				X									X					X			
7A		15:19			X							X			X				X									X					X			
7B		15:21			X							X			X				X		4:1 COMPOSITE								X					X			
7C		15:22			X							X			X				X									X					X			
7D		15:24			X							X			X				X									X					X			
8A		15:36			X							X			X				X									X					X			
8B		15:38			X							X			X				X		4:1 COMPOSITE								X					X			
8C		15:40			X							X			X				X									X					X			
8D	↓	15:42			X							X			X				X									X					X			

Relinquished by:	Received by:	Relinquished by:	Received by:
Date: 5-2-95 Time: 07:11 AM	Date: 5/3/95 Time: 11:25	Date:	Time:	Date:	Time:

SPARGER TECHNOLOGY, INC.

3050 Fite Circle, Suite 112
Sacramento, CA 95827

Phone: (916) 362-8947
FAX: (916) 362-0947

CHAINOF CUSTODY RECORD

Number: 4712

Project Manager: Mark Andrews
Phone: 635-0200
Fax: 535-0207

Report Address: APEX- Fair Oaks
Billing Address:

Project Name: River Rat
Project #: 452
Project Location: 9840 Fair Oaks Blvd. Fair Oaks, CA
P.O. #: RE 7321

ANALYSIS REQUEST

REMARKS: 3/3

WET (STLC) / TCLP / Total

SAMPLE ID	Sampling: Date	Sampling: Time	Container: 40 mL VOA	Container: Brass Sleeve	Container: 1 L amber bottle	Container: 250 mL Plastic	Container: Other:	Preservative Used: HCl/HNO3/ICE	Preservative Used:	Preservative Used:	Preservative Used: None	Preservative Used: Other:	Matrix: Water	Matrix: Soil	Matrix: Air	Matrix: Other:	BTEX (602/8020/503.1)	BTEX/TPHgas (602/8020/8015)	TPHdiesel/TPHmotor oil(8015)	EPA 601/8010/502.2/504	EPA 602/8020	EPA 608/8080 (Pesticides)/505/508	EPA 608/8080 (PCB's)	EPA 624/8240/524.2	EPA 625/8270/525	Organic Lead	Total Oil & Grease (5520)	LEAD WET		CAM-17 Metals	CAM-5 Metals (Cd, Cr, Pb, Ni, Zn)	Other:		TAT: Std	TAT: Rush Services (48hr), (24hr), or (12	TAT: Holiday/Weekend Rush
9A	5-2-95	16:00		X							X			X				X	}									X						X		
9B		16:02		X							X			X				X	}	4:1 COMPOSITE								X						X		
9C		16:04		X							X			X				X	}									X						X		
9D		16:06		X							X			X				X	}									X						X		

Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time: