

6/26/95
Rec'd BE
+ Reviewed

SOIL REMEDIATION REPORT

Former Malibu Grand Prix
8000 S. Coliseum Way
Oakland, California

June 23, 1995

Project Number: 8641

June 23, 1995

Barney Chan
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: Soil Remediation Report
Former Malibu Grand Prix
8000 S. Coliseum Way, Oakland

Mr. Chan:

This report, prepared by Smith Environmental Technologies Corporation (Smith Environmental), presents the data collected to date from the soil remediation and groundwater monitoring project at the former Malibu Grand Prix, 8000 S. Coliseum Way, Oakland. This report also presents Smith Environmental's recommendations for the treatment of the soil and continued groundwater monitoring.

1.0 SOIL EXCAVATION

During the weeks of May 8-19, 1995, Smith Environmental Technologies Corporation (Smith Environmental) excavated gasoline contaminated soil at the referenced location pursuant to the approved Soil Remediation Workplan dated April 20, 1994 (see Plate 1 for Site Location Map). Two soil plumes were identified during the site characterization. Both plumes were excavated simultaneously. During the excavation, it became apparent that the soil plumes extended farther than was estimated during the site characterization. Most notably was the soil plume at the former Malibu Castle site on the south side of the property (Plate 2). Since the majority of the contaminated soil plumes were located in areas inaccessible to a drill rig during the site characterization, the extent of the plumes were not completely known until the excavations were completed. It is estimated that approximately 6000 cubic yards of contaminated soil were excavated and stockpiled on site.

2.0 FINDINGS

2.1 Sidewall Soil Sampling

The soil was excavated until groundwater was encountered. Sidewall samples were collected and analyzed by an on site mobile laboratory. A sample was considered clean (i.e. no further action required) if: BTEX (Benzene, Toluene, Ethylbenzene, and Xylene)

components totaled below 1.0 ppm, Total Petroleum Hydrocarbons as gasoline (TPHg) were below 50 ppm, and Total Recoverable Petroleum Hydrocarbons (TRPH) were below 500 ppm. A total of 69 sidewall samples were collected and analyzed to determine the extent of the soil plume. The results of the analyses are presented on Table 1. All laboratory reports are attached. The sidewall locations meeting the "no action" criteria are located on Plates 3 and 4.

2.2 Groundwater Grab Samples

Two groundwater grab samples were collected from each excavation. No hydrocarbon concentrations were detected in the sample from the Castle (South) excavation. The Race Track (North) excavation contained 50.0 ppb benzene, 33 ppb toluene, <1.0 ppb ethylbenzene, 1400 ppb xylene, and 7100 ppb TPHg (see Table 1 and Laboratory Analyses).

2.3 Lead Analysis for Soil and Groundwater

The STLC concentrations for lead in the contaminated soil piles are estimated to average over 9.0 ppm (Table 2). Therefore, water samples were collected from three downgradient wells (MW-11, MW-14, MW-18) and analyzed for soluble lead. The results of the analysis show that the groundwater concentrations for soluble lead were below detection and well below the MCL of 50 ppb (see Laboratory Analysis). Based on the results of this analysis, it is apparent that the lead concentrations found in the soil has not adversely impacted the groundwater and does not pose a significant threat.

3.0 RECOMMENDATIONS

Since the volume of contaminated soil exceeded the estimate, the proposed treatment through bioremediation or off site disposal was no longer economically feasible. The estimated composite TPHg concentration from the excavated soil is estimated to be less than 475 ppm (Table 2).

In a telephone conversation between Smith Environmental and yourself, during the week of June 5, 1995, it was suggested that aeration of the soil would be feasible for the removal of the majority of the contaminants, mainly the BTEX and TPHg constituents. Upon your consultation with the Regional Water Quality Control Board, it was decided that aeration could be permitted if it could be shown that the lead in the soil was not impacting the groundwater to levels exceeding the Maximum Contaminant Level (MCL) for drinking water.

Smith Environmental, therefore, recommends spreading the contaminated soil on site to remove the volatile gasoline constituents from the soil. The soil should be spread to a maximum thickness of eight to ten inches. It is estimated that the soil will occupy a 250,000 square foot area. Due to space restrictions, several areas of the site may be used for aeration. According to Bay Area Air Quality Management regulations, a maximum of 120 cubic yards of soil can be aerated each day, for gasoline contaminated soil less than 500 ppm. It is recommended that all of the contaminated soil be spread to the desired thickness and covered with plastic. Each day, 120 yards of the soil will be uncovered. Periodically, the soil will be tilled to assure complete exposure.



Based on the estimated quantity of soil requiring remediation, the time required to spread and completely aerate the soil will be approximately three to four months. In order to assess the progress of the aeration, Smith Environmental recommends analyzing (1) four part composite sample for every 100 cubic yards. Since the heavy oil and grease components of the soil hydrocarbons are non volatile and relatively non mobile, it is recommended that the clean up criteria be confined to the previously accepted levels for BTEX and TPHg.

After it is determined that the aerated soil meets the clean up criteria, a closure report will be prepared and submitted for your review. After approval of the completion of the soil remediation is received, construction of the Coliseum parking lot could then proceed. The treated soil will be left on site. Since all of the volatile and mobile components of the hydrocarbon contamination will have been removed, and the site will be completely paved with asphalt, the potential for leaching contaminants to the groundwater is not considered significant.

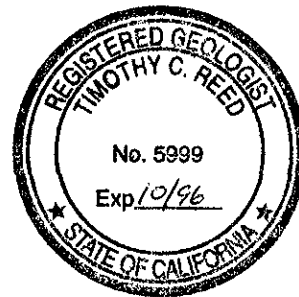
In order to verify that the groundwater plume has not migrated past the downgradient perimeter wells, it is recommend that quarterly groundwater monitoring continue for one year. If the results of the groundwater monitoring do not show an increase in hydrocarbon concentrations, a report requesting final site closure will be submitted. If site closure is granted, it is recommended that the monitoring wells be abandoned in a manner approved by the Alameda County Flood Control District. A final report will then be submitted verifying the well destruction.

Smith Environmental is prepared to begin work at the site within two weeks of your approval. It is expected that the time required to spread the contaminated soil and backfill the excavations will be approximately two weeks.

If you have any questions or require additional information, please contact our Bakersfield office at (805) 835-7700.

Sincerely,
Smith Environmental Technologies Corporation

Timothy C. Reed, R.G.
Technical Services Manager



- Attach:
- Table 1 Sidewall Sample Concentrations
 - Table 2 Composite Sample Analysis (Excavated Soil)
 - Plate 1 Location Map
 - Plate 2 Plot Plan
 - Plate 3 Castle Excavation
 - Plate 4 Race Track Excavation
 - Laboratory Analyses

TABLE 1
Former Malibu Grand Prix
8000 S. Coliseum Way
Oakland, California
Sidewall Sample Laboratory Concentrations (ppm)

Sample #	Benzene	Toluene	E. benzene	Xylene	TPHg	TRPH
S-1	0.083	0.18	0.46	1.7	39	NA
S-2	NA	NA	NA	NA	NA	220
S-3	0.056	ND	ND	1.5	12	52
S-4	0.78	ND	0.99	0.088	60	92
S-5	ND	ND	ND	ND	0.25	16
S-6	1.1	1.1	5.8	1.3	290	1400
S-7	0.3	0.25	0.62	3.3	470	29000
S-8	ND	ND	ND	ND	6.1	110
S-9	0.31	0.28	4.1	5	140	770
S-10	2.3	1.2	70	64	3700	2600
S-11	NA	NA	NA	NA	NA	84
S-12	ND	ND	ND	ND	ND	90
S-13	ND	0.084	ND	ND	8.9	110
S-14	0.84	0.82	1.4	1.8	69	170
S-15	0.21	0.83	0.86	0.27	69	410
S-16	NA	NA	NA	NA	NA	990
S-17	1.5	0.53	12	1.8	640	12000
S-18	0.81	0.43	6.2	2.6	400	630
S-19	1.9	0.7	14	3.6	440	820
S-20	0.92	ND	1.5	2	190	700
S-21	ND	ND	0.87	0.25	33	100
S-22	ND	ND	ND	ND	9.8	1400
S-23	ND	ND	ND	ND	ND	330
S-24	ND	ND	ND	ND	ND	150
S-25	0.22	0.18	0.29	0.54	120	360
S-26	ND	ND	ND	ND	ND	53
S-27	ND	ND	ND	ND	ND	210
S-28	0.063	0.082	ND	ND	17	1900
S-29	0.85	0.068	0.92	1.2	160	400
S-30	ND	ND	ND	ND	11	89
S-31	ND	0.12	0.17	0.74	16	130
S-32	ND	0.063	ND	ND	ND	700
S-33	ND	0.067	ND	ND	ND	240
S-34	0.27	0.2	0.44	1.8	98	700

ok S-36? .22 .059 0.19 .19 28 350

TABLE 1 (Cont.)
Former Malibu Grand Prix
8000 S. Coliseum Way
Oakland, California
Sidewall Sample Laboratory Concentrations (ppm)

Sample #	Benzene	Toluene	E. benzene	Xylene	TPHg	TRPH
S-38	0.24	0.14	0.061	0.3	43	510
S-39	ND	ND	ND	ND	5.4	190
S-40	0.12	0.12	0.46	1.2	37	NA
S-41	ND	0.15	ND	0.2	7.6	630
S-42	ND	ND	ND	ND	ND	77
S-43	ND	ND	0.076	ND	ND	64
S-44	ND	ND	ND	ND	ND	54
S-45	ND	ND	ND	ND	ND	62
S-46	ND	0.056	ND	0.17	ND	550
S-47	0.078	0.38	0.66	3.5	32	NA
S-48	ND	ND	ND	ND	ND	71
S-49	0.41	0.12	0.051	0.25	59	NA
S-50	0.065	0.18	ND	ND	20	31
S-51	0.9	0.48	0.28	4.9	200	NA
S-52	0.66	0.39	1.2	6	120	NA
S-53	ND	ND	0.23	0.17	6.8	500
S-54	0.63	ND	3	13	63	NA
S-55	0.6	0.73	ND	ND	ND	440
S-56	0.75	0.94	ND	ND	13	94
S-57	ND	ND	ND	ND	ND	220
S-58	ND	ND	ND	ND	5.2	61
S-59	ND	ND	ND	ND	ND	51
S-60	0.065	ND	ND	ND	13	620
S-61	ND	ND	ND	ND	10	97
S-62	ND	ND	ND	ND	ND	20
S-63	0.057	ND	0.58	ND	10	21
S-64	0.092	0.23	0.21	0.59	39	130
S-65	ND	ND	ND	ND	ND	8.8
S-66	0.99	2.8	49	0.59	810	810
S-67	ND	ND	ND	ND	ND	17
S-68	ND	ND	ND	ND	ND	140
S-69	ND	ND	ND	ND	ND	16
North Pit	0.05	0.033	ND	1.4	7.1	NA
South Pit	ND	ND	ND	ND	ND	NA

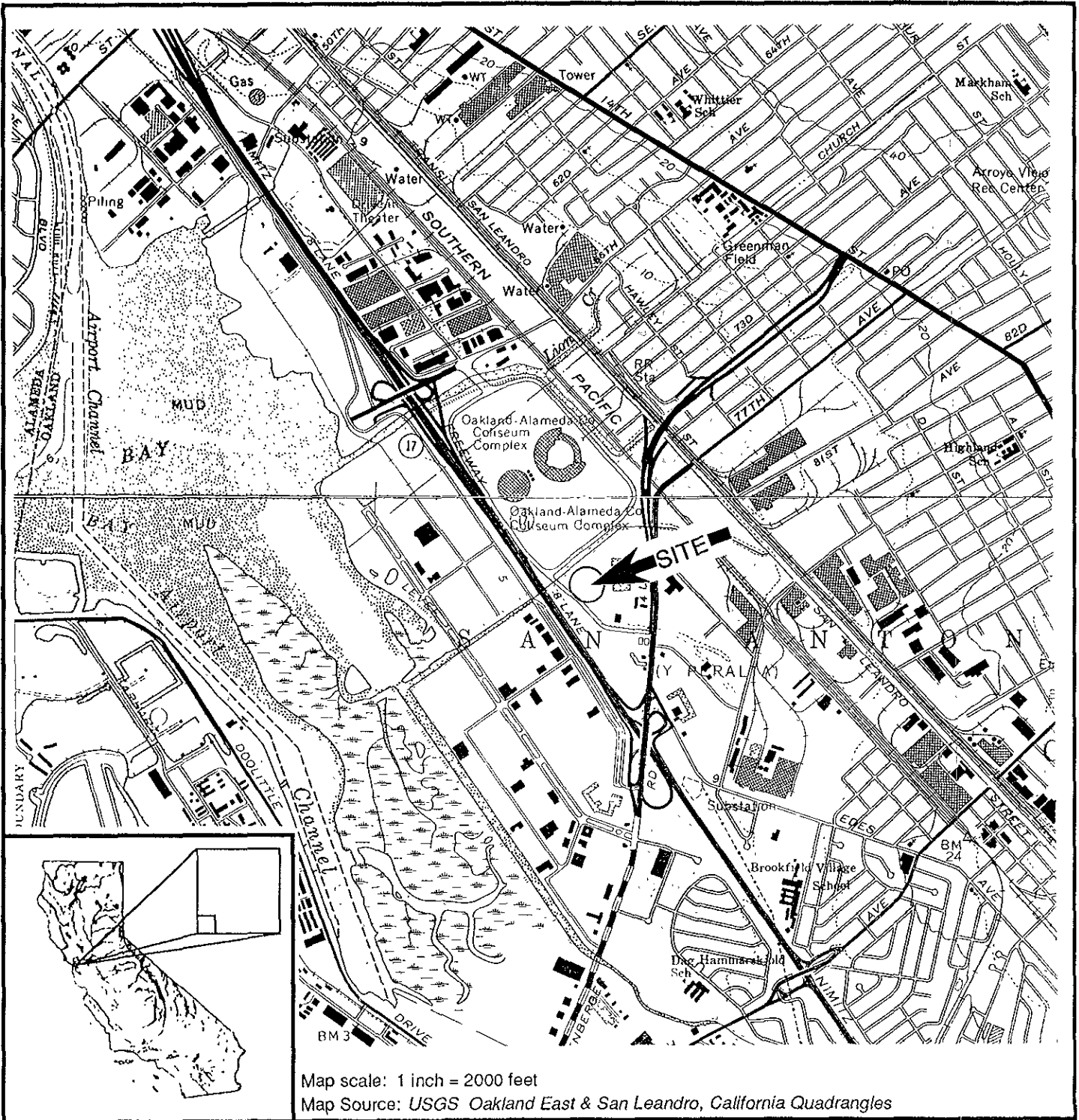
Note: ND = None Detected
NA = Not Analyzed

TABLE 2
Former Malibu Grand Prix
8000 S. Coliseum Way
Oakland, California

Composite Sampling Analysis (Excavated Soil)

Sample #	Benzene ppm	Toluene ppm	E. benzene ppm	Xylene ppm	TPH gas ppm	STLC Pb ppm	Est. cu. yds.	% of Total	Avg. TPH (ppm)	Avg. STLC Pb (ppm)
SP-1	0.065	1.5	4.8	25	540	4	<i>155</i>	2.78%	14.99	0.11
SP-2	0.47	18	42	250	2100	4.1	<i>155</i>	2.78%	58.28	0.11
SP-3	2.8	37	56	250	2100	2.3	<i>155</i>	2.78%	58.28	0.06
SP-4	ND	ND	0.21	160	20	3.6	<i>155</i>	2.78%	0.56	0.10
SP-5	0.58	0.24	7.2	6	360	3.4	<i>155</i>	2.78%	9.99	0.09
SP-6	ND	ND	ND	ND	1	8.7	<i>155</i>	2.78%	0.03	0.24
SP-7	0.63	ND	3.8	84	440	11	<i>155</i>	2.78%	12.21	0.31
SP-8	1.2	3	19	61	910	8.9	<i>155</i>	2.78%	25.26	0.25
SP-9	0.37	2.5	8.9	36	550	12	<i>300</i>	5.37%	29.54	0.64
SP-9B	0.14	0.81	1.8	12	300	11	<i>300</i>	5.37%	16.11	0.59
SP-9C	0.36	4.7	15	82	1100	16	<i>300</i>	5.37%	59.09	0.86
SP-10	0.12	0.62	2.1	6.1	220	8.9	<i>160</i>	2.86%	6.30	0.25
SP-10B	0.22	0.19	3	4.3	160	8.1	<i>160</i>	2.86%	4.58	0.23
SP-10C	0.18	0.48	0.99	4	100	5.6	<i>160</i>	2.86%	2.86	0.16
SP-11					<i>500</i>	5	<i>155</i>	2.78%	13.88	0.14
SP-12	0.31	0.13	0.65	0.58	71	9.4	<i>155</i>	2.78%	1.97	0.26
SP-13	0.6	1.8	6.1	29	320	10	<i>500</i>	8.95%	28.65	0.90
SP-13B	0.26	1.1	5.3	22	470	3.6	<i>500</i>	8.95%	42.08	0.32
SP-13C	0.23	0.51	6	22	300	6.6	<i>500</i>	8.95%	26.86	0.59
SP-13D	0.38	0.14	1.8	1.3	190	8.4	<i>500</i>	8.95%	17.01	0.75
SP-13E	0.25	0.47	1.9	1.9	93	22	<i>500</i>	8.95%	8.33	1.97
SP-14	0.25	0.63	2.4	70	1300	11	<i>155</i>	2.78%	36.08	0.31
							<i>5585</i>	100.00%	<i>472.93</i>	<i>9.25</i>

Note: Values in Italics are estimated



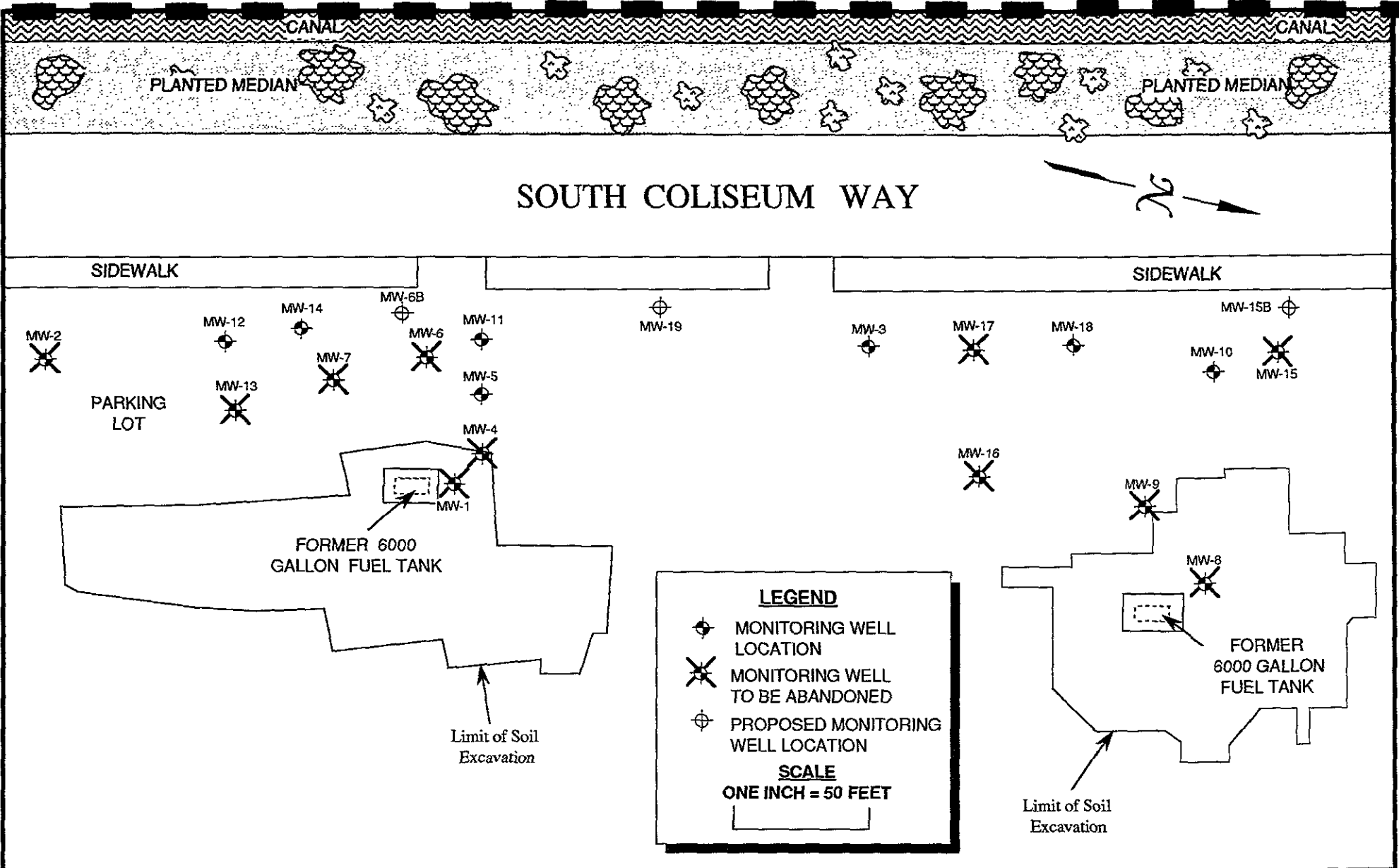
SMITH
 ENVIRONMENTAL TECHNOLOGIES CORPORATION

PROJECT NUMBER: 8594

MALIBU GRAND PRIX
 8000 SOUTH COLISEUM WAY
 OAKLAND, CALIFORNIA

LOCATION MAP

PLATE
 1



SMTH
 ENVIRONMENTAL TECHNOLOGIES CORPORATION
 PROJECT NUMBER: 8641

MALIBU GRAND PRIX
 8000 SOUTH COLISEUM WAY
 OAKLAND, CALIFORNIA
SITE PLAN

PLATE
2

▲ Monitoring Well Location
 ⊕ Sidewall Sample Location

Scale (feet)



SOUTH COLISEUM WAY

MW-11

MW-5

MW-4

MW-1
 Former Tank Location

Former Dispenser Location

MW-6

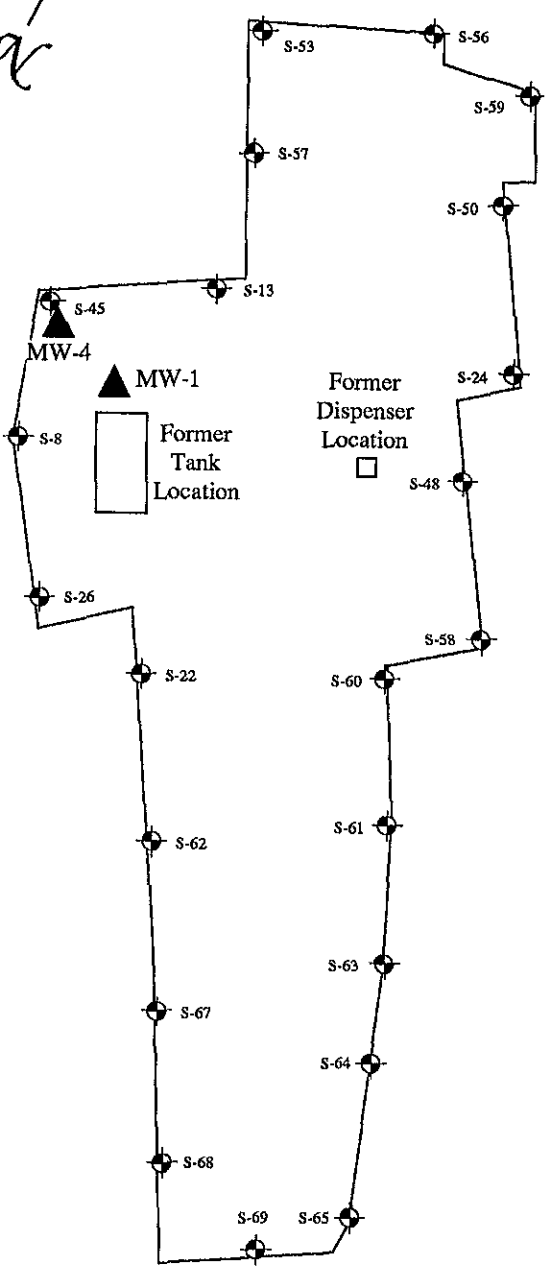
MW-7

MW-14

MW-12

MW-13

MW-2



PROJECT NUMBER: 8641

FORMER MALIBU GRAND PRIX
 8000 SOUTH COLISEUM WAY
 OAKLAND, CALIFORNIA

EXCAVATION OF
 CASTLE SOIL PLUME

PLATE
 3



SOUTH COLISEUM WAY

MW-15

MW-10

MW-8

MW-18

MW-9

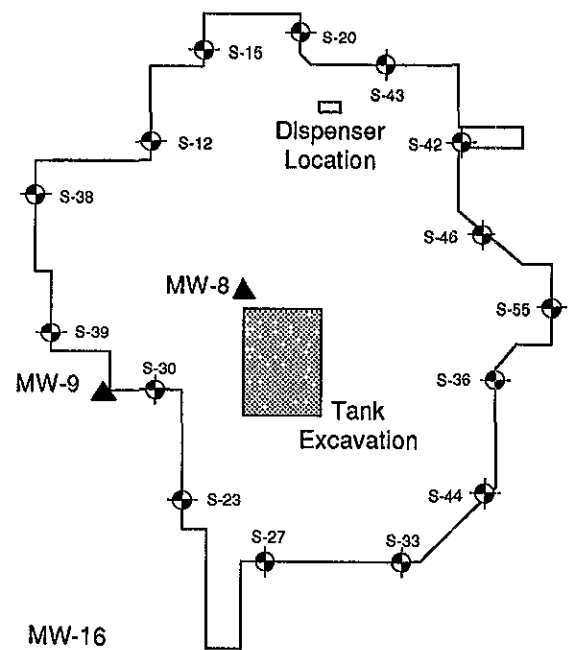
Dispenser Location

Tank Excavation

MW-17

MW-16

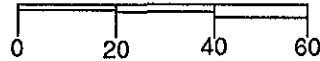
MW-3



LEGEND

- ▲ Monitoring Well Location
- ⊕ Sidewall Sample Location

Scale (feet)



PROJECT NUMBER: 8641

FORMER MALIBU GRAND PRIX
8000 SOUTH COLISEUM WAY
OAKLAND, CALIFORNIA

EXCAVATION OF RACE
TRACK SOIL PLUME

PLATE

4



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wicket Lane
819 Striker Avenue Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Smith - Canonic Environmental
1500 South Union Avenue
Bakersfield, CA 93307

Client Proj. ID: 8641, Malibu Grand Prix

Lab Proj. ID: 9506D31

Sampled: 06/15/95
Received: 06/16/95
Analyzed: see below

Attention: Tim Reed

Reported: 06/21/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9506D31-01 Sample Desc: LIQUID,MW-18				
Lead	mg/L	06/21/95	0.010	N.D.
Lab No: 9506D31-02 Sample Desc: LIQUID,MW-11				
Lead	mg/L	06/21/95	0.010	N.D.
Lab No: 9506D31-03 Sample Desc: LIQUID,MW-14				
Lead	mg/L	06/21/95	0.010	N.D.

Analytes reported as N.D. were not present above the stated limit of detection

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

CANONIE ENVIRONMENTAL CHAIN-OF-CUSTODY RECORD

LAB PROJECT

(See Reverse for Instructions)

NO. _____

PROJECT NAME MALIBU GRAND Prix SAMPLERS JEFFREY D. SALA
 PROJECT NUMBER 8641 Jeffrey D. Sala
 RECORDER Jeffrey D. Sala

SAMPLE CONTAINER DESCRIPTION CODES	SAMPLE DESCRIPTION CODES	TAT CODES
A. 40-ml VOA Vial B. Glass Liter C. Plastic 500-ml D. Plastic Liter E. Brass Tube F. Other _____	A. Ground Water B. Surface Water C. Leachate D. Rinseate E. Soil/Sediment F. Oil G. Waste H. Blank/Spike I. Other _____	1. Standard 2. 48 Hour 3. 24 Hour 4. Other _____

DATE	TIME	SAMPLE ID	Sample Container (Serial No.)	Sample Description (Serial No.)	Unpreserved	IHD	Filter Filtered (Check)	ANALYSIS REQUESTED	TAT Requested (Hour Code)	Maximum Holding Time for Method Temperature	Sample Shown at +C (Check)	No VOA Headspace (Check)	NOTES	LABORATORY USE ONLY		
														NUMBER OF CONTAINERS AND PRESERVATION	ASSIGNED BOTTLE NUMBERS	SAMPLE CONDITION UPON RECEIPT
6/15/95	14:40	MW-18	DA	DA	X			SI/C LEAD	3		X	X		01		
↓	14:55	MW-11	LL	LL	X				3		X	X		02		
↓	15:05	MW-14	LL	LL	X				3		X	X		03		
9506A07																

NOTES / MISCELLANEOUS

* All samples NEED TO BE FILTERED before being ANALYSED

P.O. 33946

Relinquished by (Signature) <u>Jeffrey D. Sala</u>	Received By (Signature) <u>Tim Reed</u>	Date 6/16	Time 10:25
Relinquished By (Signature) <u>Jeffrey D. Sala</u>	Received By (Signature)	Date	Time
Relinquished By (Signature)	Received By (Signature)	Date	Time

Method of Shipment <u>Pick up Courier</u>	Description of Transport Container <u>Cooler</u>	Other Chains-Of-Custody Transported with this Chain (by Serial No.)	Dispatched By (Signature) <u>Jeffrey D. Sala</u>	Date 6/16/95	Time	Received for job By: (Signature) <u>Tim Reed</u>	Date 6/16/95	Time 11:24
--	---	---	---	-----------------	------	---	-----------------	---------------

Send Lab Results to (Name): TIM REED Call for FAX No. _____ (Check Office Below) Verbal Requested: Yes No

- | | | | | | |
|--|--|--|---|---|--|
| <input type="checkbox"/> ATLANTA
TEL (404) 951-0055
FAX (404) 956-9364 | <input type="checkbox"/> DENVER
TEL (303) 790-1747
FAX (303) 799-0186 | <input type="checkbox"/> IRVINE
TEL (714) 757-1755
FAX (714) 757-0960 | <input type="checkbox"/> MT. VIEW
TEL (415) 960-1640
FAX (415) 960-0739 | <input type="checkbox"/> PORTER
TEL (219) 926-8651
FAX (219) 926-7169 | <input checked="" type="checkbox"/> OTHER <u>Bakersfield</u>
TEL <u>(805) 835-7700</u>
FAX _____ |
| <input type="checkbox"/> BOZEMAN
TEL (406) 586-9498
FAX (406) 586-9724 | <input type="checkbox"/> HOUSTON
TEL (713) 556-1666
FAX (713) 556-0666 | <input type="checkbox"/> KING OF PRUSSIA
TEL (215) 337-2551
FAX (215) 337-0560 | <input type="checkbox"/> PLEASANTON
TEL (510) 463-9117
FAX (510) 463-2981 | <input type="checkbox"/> PORTLAND
TEL (503) 241-0282
FAX (503) 241-0486 | <input type="checkbox"/> OTHER _____
TEL _____
FAX _____ |



RECEIVED

JUN 12 1995

orig: job file
cc: Tim R.

781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

06/07/95

Attn: Tim Reed
805/835/7700

MGP - Oakland

Sample #: 5152145201
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 0830
Method: Submitted By Client

I.D.: SP-1 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	4.0 mg/l		0.05 mg/l

Sample #: 5152145202
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 0835
Method: Submitted By Client

I.D.: SP-2 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	4.1 mg/l		0.05 mg/l

Sample #: 5152145203
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 0850
Method: Submitted By Client

I.D.: SP-4 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	3.6 mg/l		0.05 mg/l



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

=====CONSTITUENT===== =====METHOD===== =====RESULT===== =====UNIT===== =====MDL=====

Sample #: 5152145204 Collector: Client
Received: 06/01/95 Sampling Date & Time: 05/11/95, 0910
Type: Soil Method: Submitted By Client

I.D.: SP-3 (Composite)

Extraction Method/Date	DOHS WET	06/05/95	
Analysis Date		06/07/95	
Lead	STLC EPA 6010	2.3 mg/l	0.05 mg/l

Sample #: 5152145205 Collector: Client
Received: 06/01/95 Sampling Date & Time: 05/11/95, 1420
Type: Soil Method: Submitted By Client

I.D.: SP-5 (Composite)

Extraction Method/Date	DOHS WET	06/05/95	
Analysis Date		06/07/95	
Lead	STLC EPA 6010	3.4 mg/l	0.05 mg/l

Sample #: 5152145206 Collector: Client
Received: 06/01/95 Sampling Date & Time: 05/11/95, 1800
Type: Soil Method: Submitted By Client

I.D.: SP-8 (Composite)

Extraction Method/Date	DOHS WET	06/05/95	
Analysis Date		06/07/95	
Lead	STLC EPA 6010	8.9 mg/l	0.05 mg/l

 Sample #: 5152145207 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/12/95, 1800
 Type: Soil Method: Submitted By Client

I.D.: SP-7 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	11	mg/l	0.05 mg/l

 Sample #: 5152145208 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/16/95, 1315
 Type: Soil Method: Submitted By Client

I.D.: SP-9 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	12	mg/l	0.05 mg/l

 Sample #: 5152145209 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/16/95, 1455
 Type: Soil Method: Submitted By Client

I.D.: SP-6 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	8.7	mg/l	0.05 mg/l

 Sample #: 5152145210 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/17/95, 1600
 Type: Soil Method: Submitted By Client

I.D.: SP-10 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	8.9	mg/l	0.05 mg/l

 Sample #: 5152145211 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/17/95, 1710
 Type: Soil Method: Submitted By Client

I.D.: SP-12 (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	9.4	mg/l	0.05 mg/l

 Sample #: 5152145212 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/17/95, 1715
 Type: Soil Method: Submitted By Client

I.D.: SP-13 (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	10	mg/l	0.05 mg/l

 Sample #: 5152145213 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/17/95, 1730
 Type: Soil Method: Submitted By Client

I.D.: SP-14 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	11	mg/l	0.05 mg/l

 Sample #: 5152145214 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/18/95, 0810
 Type: Soil Method: Submitted By Client

I.D.: SP-9B (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	11	mg/l	0.05 mg/l

 Sample #: 5152145215 Collector: Client
 Received: 06/01/95 Sampling Date & Time: 05/18/95, 0815
 Type: Soil Method: Submitted By Client

I.D.: SP-9C (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	16	mg/l	0.05 mg/l

Sample #: 5152145216
 Received: 06/01/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1015
 Method: Submitted By Client

I.D.: SP-10B (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	8.1	mg/l	0.05 mg/l

Sample #: 5152145217
 Received: 06/01/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1550
 Method: Submitted By Client

I.D.: SP-13B (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	3.6	mg/l	0.05 mg/l

Sample #: 5152145218
 Received: 06/01/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1600
 Method: Submitted By Client

I.D.: SP-13C (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	6.6	mg/l	0.05 mg/l



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Sample #: 5152145219
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/19/95, 1100
Method: Submitted By Client

I.D.: SP-10C (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	5.6	mg/l	0.05 mg/l

Sample #: 5152145220
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/19/95, 1245
Method: Submitted By Client

I.D.: SP-13D (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	8.4	mg/l	0.05 mg/l

Sample #: 5152145221
Received: 06/01/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/19/95, 1250
Method: Submitted By Client

I.D.: SP-13E (Composite)

Extraction Method/Date	DOHS WET	06/05/95		
Analysis Date		06/07/95		
Lead	STLC EPA 6010	22	mg/l	0.05 mg/l

Respectfully Submitted,

Frances Fernando, Inorganic Supv.



POSITIVE
LAB SERVICE

781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

June 8, 1995

QUALITY CONTROL DATA
MATRIX SPIKE--STLC

CLIENT: Smith-Environmental
FILE NO: 71928
REPORT NO: 51521452
MATRIX: Soil
METHOD: EPA 6010-STLC
LAB NO: 5152145210
BATCH NO: 51586010-STLC1
DATE ANALYZED: 6/7/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> <u>(mg/kg)</u>	<u>AMOUNT SPIKED</u> <u>(mg/kg)</u>	<u>AMOUNT RECOVERED</u> <u>(mg/kg)</u>	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>
Lead	(Spike)	8.9	20	26	86	70-130

R.P.D. = Relative Percent Difference
ND = None Detected



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June 8, 1995

QUALITY CONTROL DATA
MATRIX SPIKE--STLC

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51521452
MATRIX: Soil
METHOD: EPA 6010-STLC
LAB NO: 5152145216
BATCH NO: 51586010-STLC2
DATE ANALYZED: 6/7/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> <u>(mg/kg)</u>	<u>AMOUNT SPIKED</u> <u>(mg/kg)</u>	<u>AMOUNT RECOVERED</u> <u>(mg/kg)</u>	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>
Lead	(Spike)	8.1	20	24	80	70-130

R.P.D. = Relative Percent Difference
ND = None Detected



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Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland
Mobile Lab #2

Sample #: 5142105301
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/10/95, 1035
Method: Submitted By Client

I.D.: S-1

===== CONSTITUENT =====	===== METHOD =====	== RESULT ==	=== UNIT ===	=== MDL ===
Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	39 mg/kg		5.0 mg/kg
Benzene	EPA 8020	83 ug/kg		50 ug/kg
Toluene	EPA 8020	180 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	460 ug/kg		50 ug/kg
Xylenes	EPA 8020	1700 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	116 Percent		

Sample #: 5142105302
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/10/95, 1135
Method: Submitted By Client

I.D.: S-2

Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	220 mg/kg		5.0 mg/kg

Sample #: 5142105303
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/10/95, 1210
 Method: Submitted By Client

I.D.: S-3

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	=== <u>RESULT</u> ==	=== <u>UNIT</u> ===	=== <u>MDL</u> ===
Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	12 mg/kg		5.0 mg/kg
Benzene	EPA 8020	56 ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	1500 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	103 Percent		
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	52 mg/kg		5.0 mg/kg

 Sample #: 5142105305
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/10/95, 1220
 Method: Submitted By Client

I.D.: S-4

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	=== <u>RESULT</u> ==	=== <u>UNIT</u> ===	=== <u>MDL</u> ===
Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	6.0 mg/kg		0.2 mg/kg
Benzene	EPA 8020	78 ug/kg		5.0 ug/kg
Toluene	EPA 8020	ND ug/kg		5.0 ug/kg
Ethylbenzene	EPA 8020	990 ug/kg		5.0 ug/kg
Xylenes	EPA 8020	88 ug/kg		15 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	102 Percent		
Extraction Method/Date	Freon	05/10/95		



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===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Analysis Date		05/10/95		
TRPH	EPA 418.1	92	mg/kg	5.0 mg/kg

 Sample #: 5142105307 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/10/95, 1227
 Type: Soil Method: Submitted By Client

I.D.: S-5

Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	0.25	mg/kg	0.2 mg/kg
Benzene	EPA 8020	ND	ug/kg	5.0 ug/kg
Toluene	EPA 8020	ND	ug/kg	5.0 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	5.0 ug/kg
Xylenes	EPA 8020	ND	ug/kg	15 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	92	Percent	
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	16	mg/kg	5.0 mg/kg

 Sample #: 5142105309 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/10/95, 1245
 Type: Soil Method: Submitted By Client

I.D.: S-6

Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	290	mg/kg	25 mg/kg
Benzene	EPA 8020	1100	ug/kg	50 ug/kg
Toluene	EPA 8020	1100	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	5800	ug/kg	250 ug/kg

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Xylenes Surrogate Trifluorotoluene	EPA 8020	1300 * 109	ug/kg Percent	150 ug/kg
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	1400	mg/kg	200 mg/kg

Sample #: 5142105311
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/10/95, 1500
 Method: Submitted By Client

I.D.: S-7

Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	470	mg/kg	50 mg/kg
Benzene	EPA 8020	300	ug/kg	50 ug/kg
Toluene	EPA 8020	250	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	620	ug/kg	50 ug/kg
Xylenes	EPA 8020	3300	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	114	Percent	
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	29000	mg/kg	1500 mg/kg

Sample #: 5142105313
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/10/95, 1510
 Method: Submitted By Client

I.D.: S-8

Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	6.1 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	81 Percent		
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	110 mg/kg		5.0 mg/kg

Sample #: 5142105315
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/10/95, 1520
 Method: Submitted By Client

I.D.: S-9

Extraction Method/Date	EPA 5030	05/10/95		
Analysis Date		05/10/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	140 mg/kg		15 mg/kg
Benzene	EPA 8020	310 ug/kg		50 ug/kg
Toluene	EPA 8020	280 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	4100 ug/kg		50 ug/kg
Xylenes	EPA 8020	5000 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	102 Percent		
Extraction Method/Date	Freon	05/10/95		
Analysis Date		05/10/95		
TRPH	EPA 418.1	770 mg/kg		60 mg/kg

Respectfully Submitted,



 Shahid Noori, Organic Supervisor



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421053
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142105307
BATCH NO: 5130418.1-1
DATE ANALYZED 05/10/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE</u> RANGE (%)	<u>R.P.D.</u>
TRPH (Spike)	16	57.7	63.8	83		
TRPH (Dup. Spike)	16	57.7	61.6	79	63-124	5

R.P.D. = Relative Percent Difference

ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421053
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142105313
 Batch No: 51308015/8020-1
 Date Analyzed: 05/10/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1276	85		
Benzene	(DS)	ND	1500	1219	81	70-130	5%
Toluene	(S)	ND	1500	1286	86		
Toluene	(DS)	ND	1500	1233	82	70-120	4%
Ethyl Benzene	(S)	ND	1500	1264	84		
Ethyl Benzene	(DS)	ND	1500	1222	81	60-130	3%
Xylene	(S)	ND	4500	3944	88		
Xylene	(DS)	ND	4500	3787	84	50-130	4%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421053
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142105307
 Batch No: 51308015/8020-2
 Date Analyzed: 05/10/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	100	92	92		
Benzene	(DS)	ND	100	87	87	70-130	5%
Toluene	(S)	ND	100	91	91		
Toluene	(DS)	ND	100	87	87	70-120	5%
Ethyl Benzene	(S)	ND	100	93	93		
Ethyl Benzene	(DS)	ND	100	88	88	60-130	6%
Xylene	(S)	ND	300	279	93		
Xylene	(DS)	ND	300	264	88	50-130	6%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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Los Angeles, CA 90021
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CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE 5/10/95 PAGE 1 OF 1
LOG BOOK NO. 7190 FILE NO. 719.2 LAB NO. 84210531

CLIENT NAME SMITH ENVIRONMENTAL TECHNOLOGIES CORP
PROJECT NAME MGP-OAKLAND PROJECT NO. _____ P.O. NO. _____
ADDRESS: 8000 S. COLISEUM WAY, OAKLAND
PROJECT MANAGER: TIM REED PHONE NO: (805) 835-7700 FAX NO: (805) 837-7717
SAMPLER NAME: TIM REED (Printed) (Signature) T. Reed

ANALYSES REQUESTED:

AIRBILL NO: _____
COOLER TEMP: _____
PRESERVED: _____
QC REPORT LEVEL: _____

TAT (Analytical Turn Around Time) 0 = Same Day, 1 = 24 Hour, 2 = 48 Hour, (Etc) N = NORMAL

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 M GCS	EPA 8020	EPA 418.1	REMARKS:
				WATER	SOIL	SLUDGE	OTHER		#	TYPE				
1	5/10/95	10:35	S-1	/	/	/	/	0	1	G	/	/		
2	5/10/95	11:35	S-2	/	/	/	/	0	1	G	/	/	TRPH = 220 ppm	
3		12:10	S-3	/	/	/	/	0	1	G	/	/	TRPH = 52 ppm	
4		12:20	S-4	/	/	/	/	0	1	G	/	/	TRPH = 92 ppm	
5		12:27	S-5	/	/	/	/	0	1	G	/	/	TRPH = 16 ppm	
6		12:45	S-6	/	/	/	/	0	1	G	/	/	TRPH = 1400 ppm	
7		15:00	S-7	/	/	/	/	0	1	G	/	/	TRPH = 29,000 ppm	
8		15:10	S-8	/	/	/	/	0	1	G	/	/	TRPH = 110 ppm	
9		15:20	S-9	/	/	/	/	0	1	G	/	/	TRPH = 770 ppm	

Relinquished By: (Signature and Printed Name) T. Reed Received By: (Signature and Printed Name) Rick Owen Parker Rick Owen Parker Date 5/10/95 Time _____
Relinquished By: (Signature and Printed Name) _____ Received By: (Signature and Printed Name) _____ Date _____ Time _____
Relinquished By: (Signature and Printed Name) _____ Received By: (Signature and Printed Name) _____ Date _____ Time _____

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested _____ days
By _____ Date _____

SPECIAL INSTRUCTIONS:



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland

Sample #: 5142111201
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 0830
Method: Submitted By Client

I.D.: SP-1 (Composite)

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	540 mg/kg		50 mg/kg
Benzene	EPA 8020	65 ug/kg		50 ug/kg
Toluene	EPA 8020	1500 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	4800 ug/kg		500 ug/kg
Xylenes	EPA 8020	25000 ug/kg		1500 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	105 Percent		

Sample #: 5142111202
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 0835
Method: Submitted By Client

I.D.: SP-2 (Composite)

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	2100 mg/kg		500 mg/kg
Benzene	EPA 8020	470 ug/kg		50 ug/kg
Toluene	EPA 8020	18000 ug/kg		500 ug/kg
Ethylbenzene	EPA 8020	42000 ug/kg		5000 ug/kg
Xylenes	EPA 8020	250000 ug/kg		15000ug/kg

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Surrogate		*		
Trifluorotoluene	EPA 8020	1.03	Percent	

Sample #: 5142111203	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/11/95, 0850
Type: Soil	Method: Submitted By Client

I.D.: SP-4 (Composite)

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	20 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	210 ug/kg		50 ug/kg
Xylenes	EPA 8020	160 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	101	Percent	

Sample #: 5142111204	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/11/95, 0910
Type: Soil	Method: Submitted By Client

I.D.: SP-3 (Composite)

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	2100 mg/kg		100 mg/kg
Benzene	EPA 8020	2800 ug/kg		50 ug/kg
Toluene	EPA 8020	37000 ug/kg		1000 ug/kg
Ethylbenzene	EPA 8020	56000 ug/kg		1000 ug/kg
Xylenes	EPA 8020	250000 ug/kg		9000 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	90	Percent	

Sample #: 5142111205
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/11/95, 1205
 Method: Submitted By Client

I.D.: S-10

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	3700 mg/kg		150 mg/kg
Benzene	EPA 8020	2300 ug/kg		100 ug/kg
Toluene	EPA 8020	1200 ug/kg		100 ug/kg
Ethylbenzene	EPA 8020	70000 ug/kg		3000 ug/kg
Xylenes	EPA 8020	64000 ug/kg		3000 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	120 Percent		
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	2600 mg/kg		100 mg/kg

 Sample #: 5142111207
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/11/95, 1340
 Method: Submitted By Client

I.D.: S-11

Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	84 mg/kg		5.0 mg/kg

Sample #: 5142111208
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1350
 Method: Submitted By Client

I.D.: S-12

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	102	Percent	
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	90	mg/kg	5.0 mg/kg

Sample #: 5142111210
 Received: 05/22/95
 Type: Wipe

Collector: Client
 Sampling Date & Time: 05/11/95, 1420
 Method: Submitted By Client

I.D.: SP-5 (Composite)

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	360	mg/kg	50 mg/kg
Benzene	EPA 8020	580	ug/kg	50 ug/kg
Toluene	EPA 8020	240	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	7200	ug/kg	500 ug/kg
Xylenes	EPA 8020	6000	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	108	Percent	

Sample #: 5142111211
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1445
 Method: Submitted By Client

I.D.: S-13

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	8.9 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	84 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	104 Percent		
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	110 mg/kg		5.0 mg/kg

Sample #: 5142111213
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1545
 Method: Submitted By Client

I.D.: S-14

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	69 mg/kg		5.0 mg/kg
Benzene	EPA 8020	84 ug/kg		50 ug/kg
Toluene	EPA 8020	82 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	1400 ug/kg		50 ug/kg
Xylenes	EPA 8020	1800 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	116 Percent		
Extraction Method/Date	Freon	05/11/95		



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===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Analysis Date		05/11/95		
TRPH	EPA 418.1	170 mg/kg		15 mg/kg

 Sample #: 5142111215
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1610
 Method: Submitted By Client

I.D.: S-15

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	69 mg/kg		5.0 mg/kg
Benzene	EPA 8020	210 ug/kg		50 ug/kg
Toluene	EPA 8020	83 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	86 ug/kg		50 ug/kg
Xylenes	EPA 8020	270 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	117 Percent		
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	410 mg/kg		40 mg/kg

 Sample #: 5142111217
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1630
 Method: Submitted By Client

I.D.: S-16

Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	990 mg/kg		40 mg/kg

Sample #: 5142111219
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1800
 Method: Submitted By Client

I.D.: SP-8 (Composite)

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	910 mg/kg		100 mg/kg
Benzene	EPA 8020	1200 ug/kg		50 ug/kg
Toluene	EPA 8020	3100 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	19000 ug/kg		1000 ug/kg
Xylenes	EPA 8020	61000 ug/kg		3000 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	102 Percent		

Sample #: 5142111220
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/11/95, 1830
 Method: Submitted By Client

I.D.: S-17

Extraction Method/Date	EPA 5030	05/11/95		
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	640 mg/kg		100 mg/kg
Benzene	EPA 8020	1500 ug/kg		50 ug/kg
Toluene	EPA 8020	530 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	12000 ug/kg		1000 ug/kg
Xylenes	EPA 8020	1800 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	99 Percent		
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	12000 mg/kg		400 mg/kg



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Sample #: 5142111222
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/11/95, 1830
Method: Submitted By Client

I.D.: S-18

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Extraction Method/Date	EPA 5030	05/11/95		.
Analysis Date		05/11/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	400 mg/kg		25 mg/kg
Benzene	EPA 8020	810 ug/kg		50 ug/kg
Toluene	EPA 8020	430 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	6200 ug/kg		250 ug/kg
Xylenes	EPA 8020	2600 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	117 Percent		
Extraction Method/Date	Freon	05/11/95		
Analysis Date		05/11/95		
TRPH	EPA 418.1	630 mg/kg		40 mg/kg

Respectfully Submitted,

Shahid Noori, Organic Supervisor



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May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421112
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142111207
BATCH NO: 5131418.1-1
DATE ANALYZED 05/11/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> <u>(mg/kg)</u>	<u>AMOUNT SPIKED</u> <u>(mg/kg)</u>	<u>AMOUNT RECOVERED</u> <u>(mg/kg)</u>	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
TRPH (Spike)	84	57.7	141	98		
TRPH (Dup. Spike)	84	57.7	136	90	63-124	9

R.P.D. = Relative Percent Difference
ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421112
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142111215
 Batch No: 51328015/8020-1
 Date Analyzed: 05/11/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	210	1500	1940	115		
Benzene	(DS)	210	1500	1929	115	70-130	<1%
Toluene	(S)	83	1500	1883	120		
Toluene	(DS)	83	1500	1963	125	70-120	4%
Ethyl Benzene	(S)	86	1500	1830	116		
Ethyl Benzene	(DS)	86	1500	2214	142	60-130	20%
Xylene	(S)	270	4500	5812	123		
Xylene	(DS)	270	4500	6634	141	50-130	14%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421112
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142111208
 Batch No: 51328015/8020-2
 Date Analyzed: 05/11/95

PARAMETER		SAMPLE RESULTS (ug/kg)	AMOUNT SPIKED (ug/kg)	AMOUNT RECOVERED (ug/kg)	% REC	SPIKE RECOVERY ACCEPTANCE	R.P.D.
						RANGE (%)	
Benzene	(S)	ND	1500	1364	91		
Benzene	(DS)	ND	1500	1436	96	70-130	5%
Toluene	(S)	ND	1500	1402	93		
Toluene	(DS)	ND	1500	1481	99	70-120	5%
Ethyl Benzene	(S)	ND	1500	1423	95		
Ethyl Benzene	(DS)	ND	1500	1512	101	60-130	6%
Xylene	(S)	ND	4500	4274	95		
Xylene	(DS)	ND	4500	4536	101	50-130	6%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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Smith Environmental
 File# 71928
 1500 S. Union Avenue
 Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
 805/835/7700

MGP - Oakland
 Mobile Lab #2

Sample #: 5142121501
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/12/95, 0810
 Method: Submitted By Client

I.D.: S-19

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	400 mg/kg		50 mg/kg
Benzene	EPA 8020	1900 ug/kg		50 ug/kg
Toluene	EPA 8020	700 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	14000 ug/kg		500 ug/kg
Xylenes	EPA 8020	3600 ug/kg		1500 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	77 Percent		
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	820 mg/kg		50 mg/kg

Sample #: 5142121503
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/12/95, 0910
 Method: Submitted By Client

I.D.: S-20

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	190 mg/kg		15 mg/kg

=====CONSTITUENT=====	====METHOD=====	==RESULT==	===UNIT===	===MDL===
Benzene	EPA 8020	92	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	1500	ug/kg	50 ug/kg
Xylenes	EPA 8020	2000	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	1.10	Percent	
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	700	mg/kg	40 mg/kg

Sample #: 5142121505
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/12/95, 0915
Method: Submitted By Client

I.D.: S-21

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	33	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	87	ug/kg	50 ug/kg
Xylenes	EPA 8020	250	ug/kg	150 mg/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	108	Percent	
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	100	mg/kg	5.0 mg/kg



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Sample #: 5142121507
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/12/95, 1000
 Method: Submitted By Client

I.D.: S-22

=====CONSTITUENT=====	====METHOD=====	==RESULT==	===UNIT===	===MDL===
Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	9.8 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	99 Percent		
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	1400 mg/kg		70 mg/kg

Sample #: 5142121509
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/12/95, 1030
 Method: Submitted By Client

I.D.: S-23

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	94 Percent		
Extraction Method/Date	Freon	05/12/95		



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===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Analysis Date		05/12/95		
TRPH	EPA 418.1	330	mg/kg	20

 Sample #: 5142121511 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/12/95, 1100
 Type: Soil Method: Submitted By Client

I.D.: S-24

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0
Benzene	EPA 8020	ND	ug/kg	50
Toluene	EPA 8020	ND	ug/kg	50
Ethylbenzene	EPA 8020	ND	ug/kg	50
Xylenes	EPA 8020	ND	ug/kg	150
Surrogate		*		
Trifluorotoluene	EPA 8020	93	Percent	

Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	150	mg/kg	5.0

 Sample #: 5142121513 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/12/95, 1145
 Type: Soil Method: Submitted By Client

I.D.: S-25

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	120	mg/kg	5.0
Benzene	EPA 8020	220	ug/kg	50
Toluene	EPA 8020	180	ug/kg	50
Ethylbenzene	EPA 8020	290	ug/kg	50

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Xylenes	EPA 8020	540	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	124	Percent	
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	360	mg/kg	25 mg/kg

Sample #: 5142121515	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/12/95, 1315
Type: Soil	Method: Submitted By Client

I.D.: SP-7 (Composite)

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	440	mg/kg	40 mg/kg
Benzene	EPA 8020	630	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	3800	ug/kg	50 ug/kg
Xylenes	EPA 8020	8400	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	127	Percent	

Sample #: 5142121516	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/12/95, 1330
Type: Soil	Method: Submitted By Client

I.D.: S-26

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg

=====CONSTITUENT=====	====METHOD=====	==RESULT==	===UNIT===	===MDL===
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	101	Percent	
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	53	mg/kg	5.0 mg/kg

Sample #: 5142121518
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/12/95, 1500
 Method: Submitted By Client

I.D.: S-27

Extraction Method/Date	EPA 5030	05/12/95		
Analysis Date		05/12/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	105	Percent	
Extraction Method/Date	Freon	05/12/95		
Analysis Date		05/12/95		
TRPH	EPA 418.1	210	mg/kg	20 mg/kg

Respectfully Submitted,


 Shahid Noori, Organic Supervisor



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May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421215
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142121516
BATCH NO: 5132418.1-1
DATE ANALYZED 05/12/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE</u> RANGE (%)	<u>R.P.D.</u>
TRPH (Spike)	53	57.7	104	88		
TRPH (Dup. Spike)	53	57.7	108	95	63-124	8

R.P.D. = Relative Percent Difference
ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421215
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142121511
 Batch No: 51328015/8020-1
 Date Analyzed: 05/12/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1338	89		
Benzene	(DS)	ND	1500	1380	92	70-130	3%
Toluene	(S)	ND	1500	1483	99		
Toluene	(DS)	ND	1500	1512	101	70-120	2%
Ethyl Benzene	(S)	ND	1500	1523	102		
Ethyl Benzene	(DS)	ND	1500	1533	102	60-130	1%
Xylene	(S)	ND	4500	4564	101		
Xylene	(DS)	ND	4500	4632	103	50-130	2%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421215
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142121509
 Batch No: 51328015/8020-2
 Date Analyzed: 05/12/95

PARAMETER		SAMPLE RESULTS (ug/kg)	AMOUNT SPIKED (ug/kg)	AMOUNT RECOVERED (ug/kg)	% REC	SPIKE RECOVERY	R. P. D.
						ACCEPTANCE RANGE (%)	
Benzene	(S)	ND	1500	1325	88		
Benzene	(DS)	ND	1500	1310	87	70-130	1%
Toluene	(S)	ND	1500	1459	97		
Toluene	(DS)	ND	1500	1441	96	70-120	1%
Ethyl Benzene	(S)	ND	1500	1523	101		
Ethyl Benzene	(DS)	ND	1500	1507	100	60-130	1%
Xylene	(S)	ND	4500	4627	103		
Xylene	(DS)	ND	4500	4581	102	50-130	1%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



781 East Washington Blvd.,
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CHAIN OF CUSTODY AND ANALYSIS REQUEST

DATE: 5/12/95 PAGE 1 OF 1
LOG BOOK NO. 504 FILE NO. 71928 LAB NO. S142/11501

CLIENT NAME: Smith Environmental Technologies Corp.

PROJECT NAME: MGP. Oakland PROJECT NO. _____ P.O. NO. _____

ADDRESS: 3000 S. Coliseum Way, Oakland CA

PROJECT MANAGER: Tim Reed PHONE NO: (805) 825-7700 FAX NO: (205) 837-7717

SAMPLER NAME: TIM REED (Printed) T. Reed (Signature)

TAT (Analytical Turn Around Time) 0 = Same Day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

ANALYSES REQUESTED:

EPA 8015 G.S	EPA 8070	EPA 418.1																		
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AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

QC REPORT LEVEL: _____

REMARKS: _____

CONTAINER TYPES B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 G.S	EPA 8070	EPA 418.1								SAMPLE CONDITION/ COMMENTS:
				WATER	SOIL	SLUDGE	OTHER		#	TYPE											
25	5/12/95	8:10	S-19		/			0	1	G	/	/	/								TRPH = 820 ppm
26		9:10	S-20		/			0	1	G	/	/	/								TRPH = 700 ppm
27		9:15	S-21		/			0	1	G	/	/	/								TRPH = 100 ppm
28		10:00	S-22		/			0	1	G	/	/	/								TRPH = 1400 ppm
29		10:30	S-23		/			0	1	G	/	/	/								TRPH = 330 ppm
30		11:00	S-24		/			0	1	G	/	/	/								TRPH = 150 ppm
31		11:45	S-25		/			0	1	G	/	/	/								TRPH = 360 ppm
32		13:15	SP-7 (composite)		/			0	4	G	/	/	/								
33		13:30	S-26		/			0	1	G	/	/	/								TRPH = 53 ppm
34		15:00	S-27		/			0	1	G	/	/	/								TRPH = 210 ppm

Relinquished By (Signature and Printed Name) <u>T. Reed</u>	Received By (Signature and Printed Name) <u>Rob Brown, Rachel Burk, Wm. Parker</u>	Date <u>5/12/95</u>	Time <u>16:30</u>
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO

2. Samples will not be stored over 30 days, unless additional storage time is requested

3. Storage time requested _____ days

By _____ Date _____

SPECIAL INSTRUCTIONS:



781 East Washington Blvd., Los Angeles, CA 90021
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Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland
Mobile Lab #2

Sample #: 5142125101
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/15/95, 1150
Method: Submitted By Client

I.D.: S-28

===== =====CONSTITUENT=====	===== =====METHOD=====	===== =====RESULT=====	===== =====UNIT=====	===== =====MDL=====
Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	17 mg/kg		5.0 mg/kg
Benzene	EPA 8020	63 ug/kg		50 ug/kg
Toluene	EPA 8020	82 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	130 Percent		
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	1900 mg/kg		180 mg/kg

Sample #: 5142125103
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/15/95, 1200
Method: Submitted By Client

I.D.: S-29

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	160 mg/kg		15 mg/kg



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====CONSTITUENT=====	====METHOD=====	===RESULT==	===UNIT===	===MDL=====
Benzene	EPA 8020	850	ug/kg	50 ug/kg
Toluene	EPA 8020	68	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	920	ug/kg	50 ug/kg
Xylenes	EPA 8020	1200	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	138	Percent	
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	400	mg/kg	60 mg/kg

Sample #: 5142125105
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/15/95, 1250
 Method: Submitted By Client

I.D.: S-30

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	11	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	95	Percent	
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	89	mg/kg	5.0 mg/kg



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Sample #: 5142125107
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/15/95, 1300
 Method: Submitted By Client

I.D.: S-31

=====CONSTITUENT=====	=====METHOD=====	==RESULT==	===UNIT===	===MDL===
Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	16 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	120 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	170 ug/kg		50 ug/kg
Xylenes	EPA 8020	740 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	94 Percent		
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	130 mg/kg		5.0 mg/kg

Sample #: 5142125109
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/15/95, 1305
 Method: Submitted By Client

I.D.: S-32

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	63 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	92 Percent		
Extraction Method/Date	Freon	05/15/95		

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Analysis Date		05/15/95		
TRPH	EPA 418.1	700	mg/kg	40 mg/kg

 Sample #: 5142125111
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/15/95, 1445
 Method: Submitted By Client

I.D.: S-33

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	67	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	111	Percent	
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	240	mg/kg	20 mg/kg

 Sample #: 5142125113
 Received: 05/22/95
 Type: Water

Collector: Client
 Sampling Date & Time: 05/15/95, 1450
 Method: Submitted By Client

I.D.: North Pit

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	7.1	mg/l	1.2 mg/l
Benzene	EPA 8020	50	ug/l	1.0 ug/l
Toluene	EPA 8020	33	ug/l	1.0 ug/l
Ethylbenzene	EPA 8020	ND	ug/l	1.0 ug/l

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> ====	===== <u>RESULT</u> ==	===== <u>UNIT</u> ====	===== <u>MDL</u> ====
Xylenes	EPA 8020	1400	ug/l	38 ug/l
Surrogate		*		
Trifluorotoluene	EPA 8020	92	Percent	

Sample #: 5142125114
 Received: 05/22/95
 Type: Water

Collector: Client
 Sampling Date & Time: 05/15/95, 1500
 Method: Submitted By Client

I.D.: South Pit

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	ug/l	0.1 mg/l
Benzene	EPA 8020	ND	ug/l	1.0 ug/l
Toluene	EPA 8020	ND	ug/l	1.0 ug/l
Ethylbenzene	EPA 8020	ND	ug/l	1.0 ug/l
Xylenes	EPA 8020	ND	ug/l	3.0 ug/l
Surrogate		*		
Trifluorotoluene	EPA 8020	99	Percent	

Sample #: 5142125115
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/15/95, 1505
 Method: Submitted By Client

I.D.: S-34

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	98	mg/kg	5.0 mg/kg
Benzene	EPA 8020	270	ug/kg	50 ug/kg
Toluene	EPA 8020	200	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	440	ug/kg	50 ug/kg
Xylenes	EPA 8020	1800	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	119	Percent	

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	700 mg/kg		30 mg/kg

Sample #: 5142125117	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/15/95, 1515
Type: Soil	Method: Submitted By Client

I.D.: S-35

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	1900 mg/kg		100 mg/kg
Benzene	EPA 8020	650 ug/kg		50 ug/kg
Toluene	EPA 8020	4500 ug/kg		1000 ug/kg
Ethylbenzene	EPA 8020	55000 ug/kg		1000 ug/kg
Xylenes	EPA 8020	250000 ug/kg		9000 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	93 Percent		
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	770 mg/kg		40 mg/kg

Sample #: 5142125119	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/15/95, 1700
Type: Soil	Method: Submitted By Client

I.D.: S-36

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	28 mg/kg		5.0 mg/kg
Benzene	EPA 8020	220 ug/kg		50 ug/kg

===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> ====	===== <u>MDL</u> =====
Toluene	EPA 8020	59	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	61	ug/kg	50 ug/kg
Xylenes	EPA 8020	190	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	96	Percent	
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	350	mg/kg	30 mg/kg

Sample #: 5142125121	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/15/95, 1715
Type: Soil	Method: Submitted By Client

I.D.: S-37

Extraction Method/Date	EPA 5030	05/15/95		
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	100	mg/kg	5.0 mg/kg
Benzene	EPA 8020	98	ug/kg	50 ug/kg
Toluene	EPA 8020	120	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	2700	ug/kg	50 ug/kg
Xylenes	EPA 8020	3900	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	82	Percent	
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	450	mg/kg	40 mg/kg

Sample #: 5142125123	Collector: Client
Received: 05/22/95	Sampling Date & Time: 05/15/95, 1700
Type: Soil	Method: Submitted By Client

I.D.: S-38

Extraction Method/Date	EPA 5030	05/15/95		
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===== <u>CONSTITUENT</u> =====	===== <u>METHOD</u> =====	===== <u>RESULT</u> ====	===== <u>UNIT</u> =====	===== <u>MDL</u> =====
Analysis Date		05/15/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	43 mg/kg		5.0 mg/kg
Benzene	EPA 8020	240 ug/kg		50 ug/kg
Toluene	EPA 8020	140 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	61 ug/kg		50 ug/kg
Xylenes	EPA 8020	300 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	79 Percent		
Extraction Method/Date	Freon	05/15/95		
Analysis Date		05/15/95		
TRPH	EPA 418.1	510 mg/kg		40 mg/kg

Respectfully Submitted,

Shahid Noori, Organic Supervisor

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

 Client: Smith Environmental
 File No: 71928
 Report No: 51421251
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142125111
 Batch No: 51358015/8020-1
 Date Analyzed: 05/15/95

PARAMETER		SAMPLE RESULTS (ug/kg)	AMOUNT SPIKED (ug/kg)	AMOUNT RECOVERED (ug/kg)	% REC	SPIKE RECOVERY ACCEPTANCE	R. P. D.
						RANGE (%)	
Benzene	(S)	ND	1500	1398	93		
Benzene	(DS)	ND	1500	1304	87	70-130	7%
Toluene	(S)	ND	1500	1548	103		
Toluene	(DS)	ND	1500	1449	97	70-120	7%
Ethyl Benzene	(S)	ND	1500	1568	105		
Ethyl Benzene	(DS)	ND	1500	1474	98	60-130	6%
Xylene	(S)	ND	4500	4811	107		
Xylene	(DS)	ND	4500	4521	100	50-130	6%

 S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421251
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142125105
 Batch No: 51358015/8020-2
 Date Analyzed: 05/15/95

PARAMETER		SAMPLE RESULTS (ug/kg)	AMOUNT SPIKED (ug/kg)	AMOUNT RECOVERED (ug/kg)	% REC	SPIKE RECOVERY	R.P.D.
						ACCEPTANCE RANGE (%)	
Benzene	(S)	ND	1500	1295	86		
Benzene	(DS)	ND	1500	1258	84	70-130	3%
Toluene	(S)	ND	1500	1454	97		
Toluene	(DS)	ND	1500	1401	93	70-120	4%
Ethyl Benzene	(S)	ND	1500	1496	100		
Ethyl Benzene	(DS)	ND	1500	1450	97	60-130	3%
Xylene	(S)	ND	4500	4652	103		
Xylene	(DS)	ND	4500	4455	99	50-130	4%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421251
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142125105
BATCH NO: 5135418.1-1
DATE ANALYZED 05/15/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> <u>(mg/kg)</u>	<u>AMOUNT SPIKED</u> <u>(mg/kg)</u>	<u>AMOUNT RECOVERED</u> <u>(mg/kg)</u>	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
TRPH (Spike)	89	57.7	139	87		
TRPH (Dup. Spike)	89	57.7	136	82	63-124	7

R.P.D. = Relative Percent Difference

ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421251
 Matrix: Water
 Method: EPA 8020/8015M
 Lab No: 5142125114
 Batch No: 51398015/8020-1
 Date Analyzed: 05/19/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/l)	<u>AMOUNT SPIKED</u> (ug/l)	<u>AMOUNT RECOVERED</u> (ug/l)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	60	53	88		
Benzene	(DS)	ND	60	53	88	70-130	<1%
Toluene	(S)	ND	60	54	90		
Toluene	(DS)	ND	60	54	89	70-120	<1%
Ethyl Benzene	(S)	ND	60	54	91		
Ethyl Benzene	(DS)	ND	60	54	91	60-130	<1%
Xylene	(S)	ND	180	163	91		
Xylene	(DS)	ND	180	162	90	50-130	<1%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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CHAIN OF CUSTODY AND ANALYSIS REQUEST

LOG BOOK NO. 5041 DATE: 5-15-95 PAGE 1 OF 2
FILE NO 7720 LAB NO 5142125111

CLIENT NAME: Smith Environmental Technologies Corp.
PROJECT NAME: MGP - Cokland PROJECT NO. _____ P.O. NO. _____
ADDRESS: 7000 E. S. in Van Cokland CA
PROJECT MANAGER: Tim Reed PHONE NO: (805) 835-7700 FAX NO: (805) 837-7717
SAMPLER NAME: TIM REED (Printed) (Signature) [Signature]
TAT (Analytical Turn Around Time) 0 = Same Day, 1 = 24 Hour, 2 = 48 Hour, (Etc.) N = NORMAL

ANALYSES REQUESTED:

AIRBILL NO: _____
COOLER TEMP: _____
PRESERVED: _____
QC REPORT LEVEL: _____

CONTAINER TYPES. B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 801C Gas	EPA 8030	EPA 418.1						REMARKS:
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
35	5/15/95	11:50	S-28	/	/			0	1	G	/	/	/						TRPH = 1900 ppm
36		12:00	S-29	/	/			0	1	G	/	/	/						TRPH = 400 ppm
37		12:50	S-30	/	/			0	1	G	/	/	/						TRPH = 89 ppm
38		13:00	S-31	/	/			0	1	G	/	/	/						TRPH = 130 ppm
39		13:05	S-32	/	/			0	1	G	/	/	/						TRPH = 700 ppm
40		14:45	S-33	/	/			0	1	G	/	/	/						TRPH = 240 ppm
41		14:50	North Pit	/	/				1	V	/	/	/						
42		15:00	South Pit	/	/				1	V	/	/	/						
43		15:15	S-34	/	/			0	1	G	/	/	/						TRPH = 700 ppm
44		15:15	S-35	/	/			0	1	G	/	/	/						TRPH = 770 ppm

Relinquished By (Signature and Printed Name) [Signature] Received By (Signature and Printed Name) Rick Owen Parker Rick Owen Parker Date 5/15/95 Time 16:15
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested _____ days

SPECIAL INSTRUCTIONS:

By _____ Date _____



781 East Washington Blvd.,
Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

CHAIN OF CUSTODY AND ANALYSIS REQUEST

LOG BOOK NO. 5041 DATE 5/15/95 PAGE 2 OF 2
FILE NO. 71928 LAB NO. 514212511

CLIENT NAME: Smith Environmental

PROJECT NAME: MSP - Colton PROJECT NO. _____ P.O. NO. _____

ADDRESS: 8000 S. Congress Way Colton, CA

PROJECT MANAGER: Tim Reed PHONE NO: (805) 835-7700 FAX NO: (805) 837-7717

SAMPLER NAME: Tim Reed (Printed) (Signature) [Signature]

TAT (Analytical Turn Around Time) 0 = Same Day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

ANALYSES REQUESTED:

EPA 8015 G-5	EPA 8020	EPA 821								
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AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

QC REPORT LEVEL: _____

REMARKS:

SAMPLE CONDITION/ COMMENTS:

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 G-5	EPA 8020	EPA 821							
				WATER	SOIL	SLUDGE	OTHER		#	TYPE										
45	5/15/95	17:00	S-36		/			0	1	G	/	/	/							TRPH = 350 ppm
46		17:15	S-37		/			0	1	G	/	/	/							TRPH = 450 ppm
47		17:00	S-38		/			0	1	G	/	/	/							TRPH = 510 ppm

Relinquished By (Signature and Printed Name) <u>[Signature]</u>	Received By (Signature and Printed Name) <u>Rob Owen Parker Rob Owen Parker</u>	Date <u>5/15/95</u>	Time <u>18:15</u>
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time
Relinquished By (Signature and Printed Name)	Received By (Signature and Printed Name)	Date	Time

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO

2. Samples will not be stored over 30 days, unless additional storage time is requested.

3. Storage time requested _____ days

By _____ Date _____

SPECIAL INSTRUCTIONS.



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland
Mobile Lab #2

Sample #: 5142131101
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/16/95, 0815
Method: Submitted By Client

I.D.: S-39

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	5.4 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	107 Percent		
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	190 mg/kg		5.0 mg/kg

Sample #: 5142131103
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/16/95, 0900
Method: Submitted By Client

I.D.: S-40

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	37 mg/kg		5.0 mg/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Benzene	EPA 8020	120	ug/kg	50 ug/kg
Toluene	EPA 8020	120	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	460	ug/kg	50 ug/kg
Xylenes	EPA 8020	1200	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	108	Percent	

Sample #: 5142131104
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/16/95, 0930
 Method: Submitted By Client

I.D.: S-41

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	7.6	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	150	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	200	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	118	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	630	mg/kg	40 mg/kg

Sample #: 5142131106
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/16/95, 0945
 Method: Submitted By Client

I.D.: S-42

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		

CONSTITUENT	METHOD	RESULT	UNIT	MDL
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	111	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	77	mg/kg	5.0 mg/kg

Sample #: 5142131108
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/16/95, 1035
 Method: Submitted By Client

I.D.: S-43

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	101	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	64	mg/kg	5.0 mg/kg

Sample #: 5142131110
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1255
 Method: Submitted By Client

I.D.: S-44

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	111	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	54	mg/kg	5.0 mg/kg

 Sample #: 5142131112
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1315
 Method: Submitted By Client

I.D.: SP-9 (Composite)

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	550	mg/kg	50 mg/kg
Benzene	EPA 8020	370	ug/kg	50 ug/kg
Toluene	EPA 8020	2500	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	8900	ug/kg	50 ug/kg
Xylenes	EPA 8020	36000	ug/kg	1500 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	103	Percent	

Sample #: 5142131113
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1455
 Method: Submitted By Client

I.D.: SP-6 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	105	Percent	

 Sample #: 5142131114
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1515
 Method: Submitted By Client

I.D.: S-45

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	127	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	62	mg/kg	5.0 mg/kg

Sample #: 5142131116
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1550
 Method: Submitted By Client

I.D.: S-46

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	56	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	170	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	108	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	550	mg/kg	40 mg/kg

 Sample #: 5142131118
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1610
 Method: Submitted By Client

I.D.: S-47

Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	32	mg/kg	5.0 mg/kg
Benzene	EPA 8020	78	ug/kg	50 ug/kg
Toluene	EPA 8020	380	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	660	ug/kg	50 ug/kg
Xylenes	EPA 8020	3500	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	101	Percent	

Sample #: 5142131119
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/16/95, 1620
 Method: Submitted By Client

I.D.: S-48

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	105	Percent	
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	71	mg/kg	5.0 mg/kg

Sample #: 5142131121
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/16/95, 1705
 Method: Submitted By Client

I.D.: S-49

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	59	mg/kg	5.0 mg/kg
Benzene	EPA 8020	410	ug/kg	50 ug/kg
Toluene	EPA 8020	120	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	51	ug/kg	50 ug/kg
Xylenes	EPA 8020	250	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	NA	Percent	

Sample #: 5142131122
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1750
 Method: Submitted By Client

I.D.: S-50

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	20 mg/kg		5.0 mg/kg
Benzene	EPA 8020	65 ug/kg		50 ug/kg
Toluene	EPA 8020	180 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	116 Percent		
Extraction Method/Date	Freon	05/16/95		
Analysis Date		05/16/95		
TRPH	EPA 418.1	31 mg/kg		5.0 mg/kg

 Sample #: 5142131124
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/16/95, 1810
 Method: Submitted By Client

I.D.: S-51

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/16/95		
Analysis Date		05/16/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	200 mg/kg		15 mg/kg
Benzene	EPA 8020	900 ug/kg		50 ug/kg
Toluene	EPA 8020	480 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	280 ug/kg		50 ug/kg
Xylenes	EPA 8020	4900 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	136 Percent		

Respectfully Submitted,


 Shahid Noori, Organic Supervisor



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421311
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142131122
BATCH NO: 5136418.1-1
DATE ANALYZED 05/16/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R. P. D.</u>
TRPH	(Spike)	31	57.7	80.4	86		
TRPH	(Dup. Spike)	31	57.7	84.0	92	63-124	7

R.P.D. = Relative Percent Difference
ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421311
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142131106
 Batch No: 51368015/8020-1
 Date Analyzed: 05/16/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1490	99		
Benzene	(DS)	ND	1500	1374	92	70-130	8%
Toluene	(S)	ND	1500	1618	108		
Toluene	(DS)	ND	1500	1482	99	70-120	9%
Ethyl Benzene	(S)	ND	1500	1608	107		
Ethyl Benzene	(DS)	ND	1500	1478	98	60-130	8%
Xylene	(S)	ND	4500	4852	108		
Xylene	(DS)	ND	4500	4465	99	50-130	8%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

 Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421311
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142131101
 Batch No: 51368015/8020-2
 Date Analyzed: 05/16/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1298	87		
Benzene	(DS)	ND	1500	1327	88	70-130	2%
Toluene	(S)	ND	1500	1427	95		
Toluene	(DS)	ND	1500	1472	98	70-120	3%
Ethyl Benzene	(S)	ND	1500	1457	97		
Ethyl Benzene	(DS)	ND	1500	1538	103	60-130	5%
Xylene	(S)	ND	4500	4493	100		
Xylene	(DS)	ND	4500	4621	103	50-130	3%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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CHAIN OF CUSTODY AND ANALYSIS REQUEST

LOG BOOK NO. 5037 DATE 5/16/95 PAGE 1 OF 2
FILE NO. TP2E LAB NO. 514213771

CLIENT NAME: Smith Environmental Technologies Corp.

PROJECT NAME: MGP - Oakland PROJECT NO. _____ P.O. NO. _____

ADDRESS: 8000 S. Coliseum Way, Oakland, CA

PROJECT MANAGER: Tim Reed PHONE NO: (805) 835-7700 FAX NO: (805) 837-7717

SAMPLER NAME: TIM REED (Printed) (Signature) [Signature]

TAT (Analytical Turn Around Time) 0 = Same Day, 1 = 24 Hour, 2 = 48 Hour, (Etc.) N = NORMAL

ANALYSES REQUESTED:

EPA 8015 ACS	EPA 8070	EPA 412.1								
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AIRBILL NO: _____

COOLER TEMP: _____

PRESERVED: _____

QC REPORT LEVEL: _____

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 ACS	EPA 8070	EPA 412.1	REMARKS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE				
48	5/16/95	8:15	S-39	/	/			0	1	G	/	/	/	TEPH = 190 ppm
49		9:00	S-40	/	/			0	1	G	/	/	/	
50		9:30	S-41	/	/			0	1	G	/	/	/	TEPH = 630 ppm
51		9:45	S-42	/	/			0	1	G	/	/	/	TEPH = 77 ppm
52		10:35	S-43	/	/			0	1	G	/	/	/	TEPH = 64 ppm
53		12:55	S-44	/	/			0	1	G	/	/	/	TEPH = 54 ppm
54		13:15	SP-9 (composite)	/	/			0	4	G	/	/	/	
55		14:55	SP-6 (composite)	/	/			0	4	G	/	/	/	
56		15:15	S-45	/	/			0	1	G	/	/	/	TEPH = 62 ppm
57		15:50	S-46	/	/			0	1	G	/	/	/	TEPH = 550 ppm

Relinquished By: (Signature and Printed Name) [Signature] Received By: (Signature and Printed Name) Rich Eisen Technical Services Date 5/16/95 Time 16:10

Relinquished By: (Signature and Printed Name) _____ Received By: (Signature and Printed Name) _____ Date _____ Time _____

Relinquished By: (Signature and Printed Name) _____ Received By: (Signature and Printed Name) _____ Date _____ Time _____

SAMPLE DISPOSITION:

1. Samples returned to client? YES NO

2. Samples will not be stored over 30 days, unless additional storage time is requested

3. Storage time requested _____ days

By _____ Date _____

SPECIAL INSTRUCTIONS: _____



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Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

CHAIN OF CUSTODY AND ANALYSIS REQUEST

LOG BOOK NO 5037 DATE 5/16/95 PAGE 2 OF 2
FILE NO 71912 LAB NO 5/4212/101

CLIENT NAME Smith Environmental Technologies Corp.
PROJECT NAME MGP - Oakland PROJECT NO. _____ P.O. NO. _____
ADDRESS 8000 S. Poliseum Way, Oakland CA
PROJECT MANAGER: Tim Reed PHONE NO: (805) 835-7700 FAX NO: (805) 837-7717
SAMPLER NAME: TIM REED (Printed) (Signature) Tim Reed
TAT (Analytical Turn Around Time) 0 = Same Day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

ANALYSES REQUESTED:

EPA 8015 Gas	EPA 8020	EPA 418.1																		
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AIRBILL NO: _____
COOLER TEMP: _____
PRESERVED: _____
QC REPORT LEVEL: _____

REMARKS:

CONTAINER TYPES. B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 Gas	EPA 8020	EPA 418.1									SAMPLE CONDITION/ COMMENTS:	
				WATER	SOIL	SLUDGE	OTHER		#	TYPE													
58	5/16/95	16:10	S-47		/			0	1	G	/	/											
59		16:20	S-48		/			0	1	G	/	/											TRPH = 71 ppm
60		17:05	S-49		/			0	1	G	/	/											
61		17:50	S-50		/			0	1	G	/	/											TRPH = 31 ppm
62		18:10	S-51		/			0	1	G	/	/											

Relinquished By (Signature and Printed Name) Tim Reed Received By (Signature and Printed Name) Rick Owen Parker Rick Owen Parker Date 5/16/95 Time 17:25
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days
By _____ Date _____

SPECIAL INSTRUCTIONS:



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland
Mobile Lab #2

Sample #: 5142133701
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/17/95, 0815
Method: Submitted By Client

I.D.: S-52

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	120 mg/kg		5.0 mg/kg
Benzene	EPA 8020	660 ug/kg		50 ug/kg
Toluene	EPA 8020	390 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	1200 ug/kg		50 ug/kg
Xylenes	EPA 8020	6000 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	126 Percent		

Sample #: 5142133702
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/17/95, 0930
Method: Submitted By Client

I.D.: S-53

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	6.8 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	230 ug/kg		50 ug/kg
Xylenes	EPA 8020	170 ug/kg		150 ug/kg



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CONSTITUENT	METHOD	RESULT	UNIT	MDL
Surrogate		*		
Trifluorotoluene	EPA 8020	103	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	500	mg/kg	40 mg/kg

 Sample #: 5142133704 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/17/95, 0935
 Type: Soil Method: Submitted By Client

I.D.: S-54

Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	63	mg/kg	5.0 mg/kg
Benzene	EPA 8020	630	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	3000	ug/kg	250 ug/kg
Xylenes	EPA 8020	13000	ug/kg	750 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	101	Percent	

 Sample #: 5142133705 Collector: Client
 Received: 05/22/95 Sampling Date & Time: 05/17/95, 1040
 Type: Soil Method: Submitted By Client

I.D.: S-55

Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	24	mg/kg	5.0 mg/kg
Benzene	EPA 8020	60	ug/kg	50 ug/kg
Toluene	EPA 8020	73	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Xylenes Surrogate Trifluorotoluene	EPA 8020	ND	ug/kg	150 ug/kg
		*		
	EPA 8020	117	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	440	mg/kg	40 mg/kg

Sample #: 5142133707
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1345
 Method: Submitted By Client

I.D.: S-56

Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	13	mg/kg	5.0 mg/kg
Benzene	EPA 8020	75	ug/kg	50 ug/kg
Toluene	EPA 8020	94	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	103	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	94	mg/kg	5.0 mg/kg

Sample #: 5142133709
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1420
 Method: Submitted By Client

I.D.: S-57

Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		

CONSTITUENT	METHOD	RESULT	UNIT	MDL
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	122	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	220	mg/kg	20 mg/kg

Sample #: 5142133711
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1520
 Method: Submitted By Client

I.D.: S-58

Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	5.2	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	100	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	61	mg/kg	5.0 mg/kg

Sample #: 5142133713
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1540
 Method: Submitted By Client

I.D.: S-59

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	119	Percent	
Extraction Method/Date	Freon	05/17/95		
Analysis Date		05/17/95		
TRPH	EPA 418.1	51	mg/kg	5.0 mg/kg

Sample #: 5142133715
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1600
 Method: Submitted By Client

I.D.: SP-10 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	220	mg/kg	25 mg/kg
Benzene	EPA 8020	120	ug/kg	50 ug/kg
Toluene	EPA 8020	620	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	2100	ug/kg	50 ug/kg
Xylenes	EPA 8020	6100	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	119	Percent	

Sample #: 5142133716
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1710
 Method: Submitted By Client

I.D.: SP-12 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/17/95		
Analysis Date		05/17/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	71 mg/kg		5.0 mg/kg
Benzene	EPA 8020	310 ug/kg		50 ug/kg
Toluene	EPA 8020	130 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	650 ug/kg		50 ug/kg
Xylenes	EPA 8020	580 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	139 Percent		

Sample #: 5142133717
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/17/95, 1715
 Method: Submitted By Client

I.D.: SP-13 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	320 mg/kg		25 mg/kg
Benzene	EPA 8020	600 ug/kg		50 ug/kg
Toluene	EPA 8020	1800 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	6100 ug/kg		250 ug/kg
Xylenes	EPA 8020	28000 ug/kg		750 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	119 Percent		

Sample #: 5142133718
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/17/95, 1730
Method: Submitted By Client

I.D.: SP-14 (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	1300	mg/kg	100 mg/kg
Benzene	EPA 8020	250	ug/kg	50 ug/kg
Toluene	EPA 8020	630	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	2400	ug/kg	50 ug/kg
Xylenes	EPA 8020	70000	ug/kg	3000 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	1300	Percent	

Respectfully Submitted,


Shahid Noori, Organic Supervisor



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421337
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142133713
BATCH NO: 5137418.1-1
DATE ANALYZED 05/17/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE</u> RANGE (%)	<u>R.P.D.</u>
TRPH	(Spike)	51	57.7	102	88		
TRPH	(Dup. Spike)	51	57.7	103	91	63-124	2

R.P.D. = Relative Percent Difference
ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421337
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142133702
 Batch No: 51378015/8020-1
 Date Analyzed: 05/17/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1396	93		
Benzene	(DS)	ND	1500	1453	97	70-130	4%
Toluene	(S)	ND	1500	1526	102		
Toluene	(DS)	ND	1500	1557	104	70-120	2%
Ethyl Benzene	(S)	ND	1500	1774	118		
Ethyl Benzene	(DS)	ND	1500	1848	123	60-130	4%
Xylene	(S)	ND	4500	4794	107		
Xylene	(DS)	ND	4500	4983	111	50-130	4%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421337
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142133705
 Batch No: 51378015/8020-2
 Date Analyzed: 05/17/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE</u> RANGE (%)	<u>R.P.D.</u>
Benzene	(S)	60	1500	1517	97		
Benzene	(DS)	60	1500	1480	95	70-130	3%
Toluene	(S)	73	1500	1492	95		
Toluene	(DS)	73	1500	1400	88	70-120	7%
Ethyl Benzene	(S)	ND	1500	1502	100		
Ethyl Benzene	(DS)	ND	1500	1418	95	60-130	6%
Xylene	(S)	ND	4500	4653	103		
Xylene	(DS)	ND	4500	4356	97	50-130	7%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

 Client: Smith Environmental
 File No: 71928
 Report No: 51421337
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142135103
 Batch No: 51388015/8020-1
 Date Analyzed: 05/18/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	65	1500	1519	97		
Benzene	(DS)	65	1500	1439	92	70-130	6%
Toluene	(S)	ND	1500	1616	108		
Toluene	(DS)	ND	1500	1542	103	70-120	5%
Ethyl Benzene	(S)	ND	1500	1646	110		
Ethyl Benzene	(DS)	ND	1500	1556	104	60-130	6%
Xylene	(S)	ND	4500	5048	112		
Xylene	(DS)	ND	4500	4782	106	50-130	5%

 S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

Smith Environmental
File# 71928
1500 S. Union Avenue
Bakersfield, CA 93307

05/23/95

Attn: Tim Reed
805/835/7700

MGP - Oakland
Mobile Lab #2

Sample #: 5142135101
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/18/95, 0810
Method: Submitted By Client

I.D.: SP-9B (Composite)

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	300	mg/kg	25 mg/kg
Benzene	EPA 8020	140	ug/kg	50 ug/kg
Toluene	EPA 8020	810	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	1800	ug/kg	50 ug/kg
Xylenes	EPA 8020	12000	ug/kg	750 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	98	Percent	

Sample #: 5142135102
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/18/95, 0815
Method: Submitted By Client

I.D.: SP-9C (Composite)

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	1100	mg/kg	100 mg/kg
Benzene	EPA 8020	360	ug/kg	50 ug/kg
Toluene	EPA 8020	4700	ug/kg	1000 ug/kg
Ethylbenzene	EPA 8020	15000	ug/kg	1000 ug/kg
Xylenes	EPA 8020	82000	ug/kg	3000 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Surrogate		*		
Trifluorotoluene	EPA 8020	98	Percent	

Sample #: 5142135103
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/18/95, 0830
Method: Submitted By Client

I.D.: S-60

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	13 mg/kg		5.0 mg/kg
Benzene	EPA 8020	65 ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	120	Percent	

Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	620 mg/kg		30 mg/kg

Sample #: 5142135105
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/18/95, 1015
Method: Submitted By Client

I.D.: SP-10B (Composite)

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	160 mg/kg		15 mg/kg
Benzene	EPA 8020	220 ug/kg		50 ug/kg
Toluene	EPA 8020	190 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	3000 ug/kg		50 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Xylenes Surrogate	EPA 8020	4300	ug/kg	150 ug/kg
Trifluorotoluene	EPA 8020	114	Percent	

Sample #: 5142135107
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1315
 Method: Submitted By Client

I.D.: SP-61

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	10 mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes Surrogate	EPA 8020	ND ug/kg		150 ug/kg
Trifluorotoluene	EPA 8020	103	Percent	

Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	97 mg/kg		5.0 mg/kg

Sample #: 5142135109
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1435
 Method: Submitted By Client

I.D.: SP-62

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	86	Percent	
Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	20	mg/kg	5.0 mg/kg

Sample #: 5142135111
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1550
 Method: Submitted By Client

I.D.: SP-13B (Composite)

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	470	mg/kg	75 mg/kg
Benzene	EPA 8020	260	ug/kg	50 ug/kg
Toluene	EPA 8020	1100	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	5300	ug/kg	750 ug/kg
Xylenes	EPA 8020	22000	ug/kg	2300 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	97	Percent	

Sample #: 5142135112
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1600
 Method: Submitted By Client

I.D.: SP-13C (Composite)

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	300	mg/kg	25 mg/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Benzene	EPA 8020	230	ug/kg	50 ug/kg
Toluene	EPA 8020	51	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	6000	ug/kg	250 ug/kg
Xylenes	EPA 8020	22000	ug/kg	750 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	120	Percent	

Sample #: 5142135113
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1615
 Method: Submitted By Client

I.D.: S-63

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	10	mg/kg	5.0 mg/kg
Benzene	EPA 8020	57	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	58	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	123	Percent	

Sample #: 5142135114
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/18/95, 1700
 Method: Submitted By Client

I.D.: S-64

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	39	mg/kg	5.0 mg/kg
Benzene	EPA 8020	92	ug/kg	50 ug/kg
Toluene	EPA 8020	230	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	210	ug/kg	50 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Xylenes	EPA 8020	590	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	107	Percent	
Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	130	mg/kg	5.0 mg/kg

Sample #: 5142135116
Received: 05/22/95
Type: Soil

Collector: Client
Sampling Date & Time: 05/18/95, 1710
Method: Submitted By Client

I.D.: S-65

Extraction Method/Date	EPA 5030	05/18/95		
Analysis Date		05/18/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	100	Percent	
Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	8.8	mg/kg	5.0 mg/kg

Respectfully Submitted,



Shahid Noori, Organic Supervisor



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May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421351
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142135109
BATCH NO: 5138418.1-1
DATE ANALYZED 05/18/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R.P.D.</u>
TRPH (Spike)	20	57.7	68.0	84		
TRPH (Dup. Spike)	20	57.7	70.4	87	63-124	4

R.P.D. = Relative Percent Difference
ND = None Detected

May 23, 1995

 Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421351
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142135103
 Batch No: 51388015/8020-1
 Date Analyzed: 05/18/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R. P. D.</u>
Benzene	(S)	65	1500	1519	97		
Benzene	(DS)	65	1500	1439	92	70-130	6%
Toluene	(S)	ND	1500	1616	108		
Toluene	(DS)	ND	1500	1542	103	70-120	5%
Ethyl Benzene	(S)	ND	1500	1646	110		
Ethyl Benzene	(DS)	ND	1500	1556	104	60-130	6%
Xylene	(S)	ND	4500	5048	112		
Xylene	(DS)	ND	4500	4782	106	50-130	5%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected

May 23, 1995

Quality Control Report
Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421351
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142135109
 Batch No: 51388015/8020-2
 Date Analyzed: 05/18/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE(%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1257	84		
Benzene	(DS)	ND	1500	1327	88	70-130	5%
Toluene	(S)	ND	1500	1397	93		
Toluene	(DS)	ND	1500	1460	97	70-120	4%
Ethyl Benzene	(S)	ND	1500	1455	97		
Ethyl Benzene	(DS)	ND	1500	1521	101	60-130	4%
Xylene	(S)	ND	4500	4437	99		
Xylene	(DS)	ND	4500	4627	103	50-130	4%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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CHAIN OF CUSTODY AND ANALYSIS REQUEST

LOG BOOK NO. 5039 DATE 5/18/95 PAGE 1 OF 2
FILE NO. 71712 LAB NO. 5142135111

CLIENT NAME: Smith Environmental Technologies Corp.
PROJECT NAME: MGP - Oakland PROJECT NO. _____ P.O. NO. _____
ADDRESS: 8000 S. Coliseum Way, Oakland
PROJECT MANAGER: Tim Reed PHONE NO: (865) 835-7700 FAX NO: (865) 827-7717
SAMPLER NAME: TIM REED (Printed) (Signature) [Signature]
TAT (Analytical Turn Around Time) 0 = Same Day; 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL

ANALYSES REQUESTED:

AIRBILL NO: _____
COOLER TEMP: _____
PRESERVED: _____
QC REPORT LEVEL: _____
REMARKS: _____
SAMPLE CONDITION/COMMENTS: _____

CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		EPA 8015 G's	EPA 8020	EPA 418.1						
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
75	5/18/95	08:10	SP-9R (composite)		/			0	4	G	/	/							
76		08:15	SP-9C (composite)		/			0	4	G	/	/							
77		08:30	S-60		/			0	1	G	/	/							TRPH = 2.26 ppm
78		10:15	SP-10B (composite)		/			0	4	G	/	/							
79		13:15	S-61		/			0	1	G	/	/							TRPH = 97 ppm
80		14:35	S-62		/			0	1	G	/	/							TRPH = 20 ppm
81		15:50	SP-13B (composite)		/			0	4	G	/	/							
82		16:00	SP-13C (composite)		/			0	4	G	/	/							
83		16:15	S-63		/			0	1	G	/	/							
84		17:00	S-64		/			0	1	G	/	/							TRPH = 130 ppm

Relinquished By (Signature and Printed Name) [Signature] Received By (Signature and Printed Name) Rick Owen Pacific P. Owen Partner Date 5/18/95 Time 17:15
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____
Relinquished By (Signature and Printed Name) _____ Received By (Signature and Printed Name) _____ Date _____ Time _____

SAMPLE DISPOSITION:
1. Samples returned to client? YES NO
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: _____ days
By _____ Date _____

SPECIAL INSTRUCTIONS:

Smith Environmental
 File# 71928
 1500 S. Union Avenue
 Bakersfield, CA 93307

05/23/95

 Attn: Tim Reed
 805/835/7700

 MGP - Oakland
 Mobile Lab #2

 Sample #: 5142141901
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/19/95, 0830
 Method: Submitted By Client

I.D.: S-66

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	810 mg/kg		100 mg/kg
Benzene	EPA 8020	990 ug/kg		50 ug/kg
Toluene	EPA 8020	2800 ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	49000 ug/kg		1000 ug/kg
Xylenes	EPA 8020	590 ug/kg		150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	113 Percent		

 Sample #: 5142141902
 Received: 05/22/95
 Type: Soil

 Collector: Client
 Sampling Date & Time: 05/19/95, 1050
 Method: Submitted By Client

I.D.: S-67

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND mg/kg		5.0 mg/kg
Benzene	EPA 8020	ND ug/kg		50 ug/kg
Toluene	EPA 8020	ND ug/kg		50 ug/kg
Ethylbenzene	EPA 8020	ND ug/kg		50 ug/kg
Xylenes	EPA 8020	ND ug/kg		150 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Surrogate		*		
Trifluorotoluene	EPA 8020	142	Percent	
Extraction Method/Date	Freon	05/18/95		
Analysis Date		05/18/95		
TRPH	EPA 418.1	17	mg/kg	5.0 mg/kg

Sample #: 5142141904
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/19/95, 1100
 Method: Submitted By Client

I.D.: SP-10C (Composite)

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	100	mg/kg	5.0 mg/kg
Benzene	EPA 8020	180	ug/kg	50 ug/kg
Toluene	EPA 8020	480	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	990	ug/kg	50 ug/kg
Xylenes	EPA 8020	4000	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	134	Percent	

Sample #: 5142141905
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/19/95, 1245
 Method: Submitted By Client

I.D.: SP-13D (Composite)

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	190	mg/kg	15 mg/kg
Benzene	EPA 8020	380	ug/kg	50 ug/kg
Toluene	EPA 8020	140	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	1800	ug/kg	50 ug/kg

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Xylenes	EPA 8020	1300	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	118	Percent	

Sample #: 5142141906
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/19/95, 1250
 Method: Submitted By Client

I.D.: SP-13E (Composite)

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	93	mg/kg	5.0 mg/kg
Benzene	EPA 8020	250	ug/kg	50 ug/kg
Toluene	EPA 8020	470	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	1900	ug/kg	50 ug/kg
Xylenes	EPA 8020	1900	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	117	Percent	

Sample #: 5142141907
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/19/95, 1350
 Method: Submitted By Client

I.D.: S-68

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	98	Percent	

CONSTITUENT	METHOD	RESULT	UNIT	MDL
Extraction Method/Date	Freon	05/19/95		
Analysis Date		05/19/95		
TRPH	EPA 418.1	140	mg/kg	5.0 mg/kg

Sample #: 5142141909
 Received: 05/22/95
 Type: Soil

Collector: Client
 Sampling Date & Time: 05/19/95, 1515
 Method: Submitted By Client

I.D.: S-69

Extraction Method/Date	EPA 5030	05/19/95		
Analysis Date		05/19/95		
EPA 8015M/8020, Combination		*		
TPH-Gasoline	EPA 8015M	ND	mg/kg	5.0 mg/kg
Benzene	EPA 8020	ND	ug/kg	50 ug/kg
Toluene	EPA 8020	ND	ug/kg	50 ug/kg
Ethylbenzene	EPA 8020	ND	ug/kg	50 ug/kg
Xylenes	EPA 8020	ND	ug/kg	150 ug/kg
Surrogate		*		
Trifluorotoluene	EPA 8020	103	Percent	

Extraction Method/Date	Freon	05/19/95		
Analysis Date		05/19/95		
TRPH	EPA 418.1	16	mg/kg	5.0 mg/kg

Respectfully Submitted,


 Shahid Noori, Organic Supervisor

May 23, 1995

Quality Control Report
 Matrix Spike, Duplicate Spike

Client: Smith Environmental
 File No: 71928
 Report No: 51421419
 Matrix: Soil
 Method: EPA 8020/8015M
 Lab No: 5142141909
 Batch No: 51398015/8020-2
 Date Analyzed: 05/19/95

<u>PARAMETER</u>		<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>AMOUNT RECOVERED</u> (ug/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
Benzene	(S)	ND	1500	1320	88		
Benzene	(DS)	ND	1500	1298	87	70-130	2%
Toluene	(S)	ND	1500	1362	91		
Toluene	(DS)	ND	1500	1339	89	70-120	2%
Ethyl Benzene	(S)	ND	1500	1393	93		
Ethyl Benzene	(DS)	ND	1500	1375	92	60-130	1%
Xylene	(S)	ND	4500	4146	92		
Xylene	(DS)	ND	4500	4116	91	50-130	1%

S = Spike
 DS = Duplicate Spike
 R.P.D. = Relative Percent Difference
 ND = None Detected



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May 23, 1995

QUALITY CONTROL DATA
MATRIX SPIKE, DUPLICATE SPIKE

CLIENT: Smith Environmental
FILE NO: 71928
REPORT NO: 51421419
MATRIX: Soil
METHOD: EPA 418.1
LAB NO: 5142141902
BATCH NO: 5139418.1-1
DATE ANALYZED 05/19/95

<u>PARAMETER</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>AMOUNT RECOVERED</u> (mg/kg)	<u>% REC</u>	<u>SPIKE RECOVERY ACCEPTANCE RANGE (%)</u>	<u>R.P.D.</u>
TRPH (Spike)	17	57.7	69.2	91		
TRPH (Dup. Spike)	17	57.7	76.0	102	63-124	12

R.P.D. = Relative Percent Difference

ND = None Detected

