HFH Ltd.

June 1, 2007

Mr. Steven Plunkett
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Results of Groundwater Investigation
Fuel Leak Case No. RO0000050
Thoroughbred Building
1397 55th Street
Emeryville, California

Dear Mr. Plunkett,

This letter transmits the Results of Groundwater Investigation prepared by Geomatrix Consultants, Inc., on behalf of HFH, Ltd. for the property located at 1397 55th Street in Emeryville, California. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document are true and correct to the best of my knowledge.

Sincerely,
HFH, Ltd.

Andrew Getz

6450 Hollis Street, Emeryville, California 94608 ~ (510) 652-4191 ~ fax: (510) 652-9661
8818 South Sepulveda Boulevard, Los Angeles, California 90045 ~ (310) 568-8585 ~ fax: (310) 568-0358

Geomatrix

June 1, 2007
Project No. 3356.000

Mr. Steven Plunkett
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Results of Groundwater Investigation
Fuel Leak Case No. RO0000050
Thoroughbred Building
1397 55th Street
Emeryville, California

Dear Mr. Plunkett:

This letter presents the results of the recent groundwater sampling conducted by Geomatrix Consultants, Inc. (Geomatrix), at 1397 55th Street in Emeryville, California (the site). This work was conducted in accordance with the Work Plan for Groundwater Investigation, submitted to Alameda County Environmental Health on January 18, 2007, and discussions between Geomatrix and ACEH regarding sampling methodologies and locations.

BACKGROUND

The former underground storage tank (UST) was installed in the early 1940s and contained kerosene. Reportedly, the tank was last used in the late 1950s and was empty until its removal in 1997. During tank removal, multiple holes were observed on all sides of the tank. Under the direction of ACEH personnel, three soil samples were collected from beneath the former UST. At the request of ACEH, only two samples (EX-2 and EX-3) were analyzed. Total petroleum hydrocarbons quantified as kerosene (TPHk) was reported in excavation samples EX-2 and EX-3 at concentrations of 4,400 and 310 milligrams per kilogram (mg/kg), respectively. Ethylbenzene and xylenes were detected in EX-2 and EX-3 at concentrations up to 5.6 mg/kg. Total petroleum hydrocarbons quantified as diesel (TPHd), benzene, and toluene were not detected in either excavation sample above the laboratory reporting limits. After the soil samples were collected, groundwater entered the excavation at a depth of approximately 8.5 feet below ground surface (bgs). Less than 5 gallons of groundwater entered the excavation and no product or sheen was observed on the water. The former UST excavation was subsequently backfilled with approximately 20 cubic yards of sand. The sand was compacted and a concrete sidewalk was poured over the former UST area.

GROUNDWATER INVESTIGATION

Prior to initiating subsurface investigation activities, Geomatrix marked boring locations, obtained necessary permits, and prepared a site-specific health and safety plan. Geomatrix notified Underground Service Alert 48 hours prior to drilling and contracted with a private utility locator to clear individual boring locations prior to drilling.

On May 18, 2007, one soil boring and two Hydropunch borings were advanced within the vicinity of the former UST at the corner of 55th Street and Doyle Street (Figure 1). Borings were advanced by a licensed drilling contractor using a hydraulic direct-push drilling rig equipped with a dual-tube continuous sampling system, or with a Hydropunch groundwater sampling system. The soil boring located downgradient of the former UST (GW-02) was advanced to 30 feet bgs. Soil was logged by a Geomatrix field geologist in accordance with the ASTM International Standard D2488 and the Uniform Soil Classification System. Odors, discoloration, staining, and sheens were noted, if observed.

A temporary well point was then placed in borehole GW-02 and the drive casing was retracted approximately 5 feet to expose the well screen. The temporary well point consisted of ¾-inch-diameter Schedule 40 polyvinyl chloride (PVC) casing with 5 feet of factory-slotted well screen. Grab groundwater sample (GW-02-30) was collected from between 25 and 30 feet bgs from this boring. In an attempt to collect a shallow grab groundwater sample from the first observed depth of groundwater (approximately 14 feet bgs), a companion Hydropunch boring was advanced to 16 feet bgs, and retracted approximately 5 feet to expose the screen. Over the course of 4 hours, an attempt was made to collect a grab groundwater sample; however, a sufficient volume of water did not enter the boring.

In the location of the former UST, Hydropunch boring GW-01 was advanced to approximately 20 feet bgs, the casing was retracted 5 feet to expose the screen, and grab groundwater sample GW-01-20 was collected. The Hydropunch tooling was removed from the hole, a sacrificial, stainless-steel tip was placed on the end of the tooling, and the Hydropunch was advanced to approximately 35 feet bgs. As before, the casing was retracted 5 feet to expose the screen and grab groundwater sample GW-01-35 was collected. A blind, duplicate sample was collected at the same time as the grab groundwater sample (GW-01-35) from boring GW-01 from 35 feet bgs. The duplicate sample was labeled as GW-11-35.

The grab groundwater samples were collected using new, disposable bailers. Grab groundwater samples were decanted into laboratory-supplied containers, labeled, placed in an ice-chilled cooler, and transported to Curtis and Tompkins, a California Department of Health-certified laboratory, in accordance with Geomatrix chain-of-custody protocols.

RESULTS

Geomatrix personnel described the site lithology based on the soil core generated during drilling of soil boring GW-02. Concrete was encountered from ground surface to approximately 0.5 feet bgs. Below the concrete, fine-grained soils consisting of lean clay and sandy lean clay were interbedded with coarse-grained soils consisting of clayey sand and clayey sand with gravel. No odors, discoloration, staining, or sheens were observed while logging the soil core. Groundwater was first encountered in the boring at approximately 14 feet bgs.

Each sample was analyzed for the following constituents:

- total petroleum hydrocarbons quantified as gasoline (TPHg), TPHd, and TPHk;
- benzene, toluene, ethylbenzene, and xylenes (BTEX);
- methyl tert-butyl ether (MTBE), tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and tert-amyl ether (TAME); and
- 1,2-dichloroethane, and 1,2-dibromoethane.

No analytes were detected above the laboratory's reporting limit in all grab groundwater samples. Analytical results are summarized in Table 1. The laboratory analytical report is included as Attachment 1.

DEVIATIONS FROM AGREED-UPON WORK SCOPE

During discussions regarding the Work Plan, ACEH requested that a soil sample be collected at the soil/groundwater interface from each boring. Collection of soil samples was inadvertently overlooked during groundwater sampling activities. However, groundwater analytical results indicate that soil impacts, if present, do not present a source of constituents to groundwater. Additionally, no odor or staining were observed during logging of soil boring GW-02. Soil around the UST was excavated during removal and volatile constituents were not present in confirmation samples at concentrations above the Regional Water Quality Control Board's environmental screening levels (ESLs) for vapor intrusion. Therefore, residual petroleum hydrocarbons, if present, in soil do not pose a risk to human health and we request that the collection of soil samples not be required.

CONCLUSIONS

Based on the laboratory analytical results and field observation, the shallow and deeper groundwater in the vicinity of the former UST does not appear to be impacted. Surface conditions at the site are such that there is no possibility of human contact with soil or groundwater (i.e. paved street, sidewalk, and building). Additionally, residual petroleum hydrocarbons in soil, if present, do not pose a risk to human health. Therefore, we request this case be considered for no further action status.

Please feel free to call either of the undersigned if you have any comments or questions.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

Paisha Jorgensen, PG #7806
Project Geologist

Jennifer L. Patterson, PE #59161
Senior Engineer

PBJ/JP/kg

Enclosure: Table 1 – Grab Groundwater Sample Analytical Results
Figure 1 – Grab Groundwater Sampling Locations
Attachment 1 – Analytical Laboratory Report

Table

Geomatrix

TABLE 1

GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS[1]

Thoroughbred Building
1397 55th Street
Emeryville, California

Concentrations reported in microgram per liter (µg/l)

SAMPLE ID	DATE	TPHd	TPHk	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB
GW-01-20	5/18/2007	<56	<56	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50
GW-01-35	5/18/2007	<50/<50[2]	<50/<50	<50/<50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<10/<10	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50
GW-02-30	5/18/2007	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50

Notes:

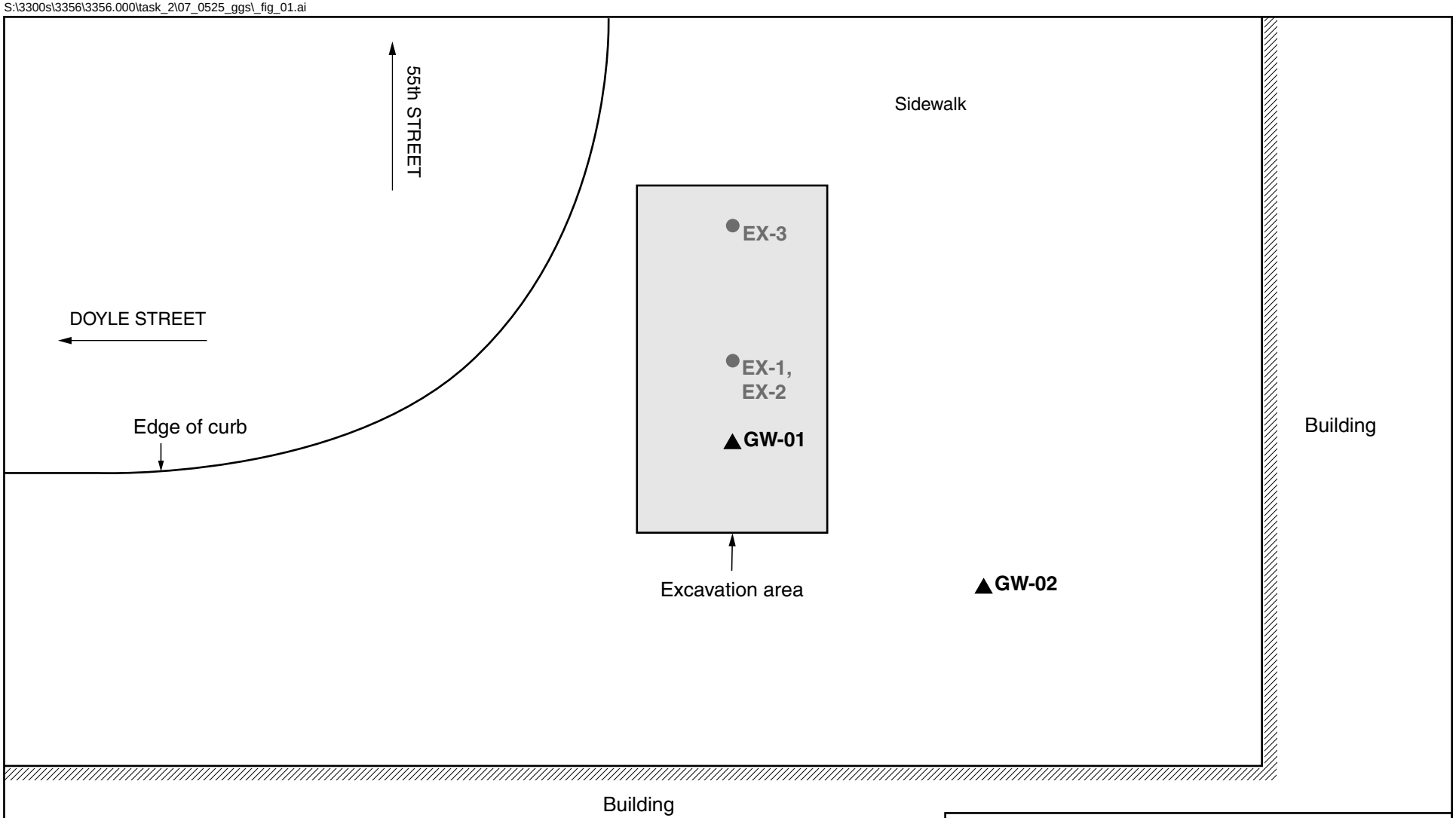
1. Grab groundwater samples were collected by Geomatrix Consultants, Inc., of Oakland, California, and analyzed by Curtis & Tompkins, of Berkeley, California for TPHd and TPHk using EPA Method 8015B following silica gel prepartation; and TPHg, benzene, toluene, ethylbenzene, total xylenes, MTBE, TBA, DIPE, ETBE, TAME, 1,2-DCA, and EDB using EPA Method 8260B.
2. / = Indicates blind duplicate sample collected from boring. Blind duplicate sample results are shown with the grab groundwater sample results.
3. < = Analyte not detected above laboratory reporting limit.

Abbreviations:

TPHd = total petroleum hydrocarbons quantified as diesel
TPHk = total petroleum hydrocarbons quantified as kerosene
TPHg = total petroleum hydrocarbons quantified as gasoline
1,2-DCA = 1,2-dichloroethane
DIPE = di-isopropyl ether
EDB = 1,2-dibromoethane
ETBE = ethyl tert-butyl ether
MTBE = methyl tert-butyl ether
TAME = tert-amyl methyl ether
TBA = tert-butyl alcohol

Figure

S:\3300s\3356\3356.000\task_2\07_0525_ggs_fig_01.ai



EXPLANATION

GW-01 ▲ Grab groundwater sample location

EX-3 ● Excavation bottom soil sample location, 1997

0 5 Feet

GRAB GROUNDWATER SAMPLING LOCATIONS
Thoroughbred Building
1397 55th Street
Emeryville, California

By: PBJ	Date: 6/1/07	Project No. 3356.000
Geomatrix		Figure 1

Geomatrix

Attachment A
Analytical Laboratory Report

194900

OAK 11326

CHAIN-OF-CUSTODY RECORD

DATE: 5/18/07 PAGE 1 OF 1

PROJECT NAME: Thoroughbred Building

PROJECT NUMBER: 3356.000

RESULTS TO: Raisha Jorgensen

TURNAROUND TIME: ~~Standard~~ 3-Day

SAMPLE SHIPMENT METHOD: Drop off

LABORATORY NAME: Curtis & Tompkins

LABORATORY ADDRESS:

LABORATORY CONTACT: Robert Butler

LABORATORY PHONE NUMBER: 510-486-0900

CLIENT INFORMATION: HFH, Ltd.

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED YES (NO)

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	TPH diesel/kerosene by 8015M	MTBE 8260 + EDB by 8260	TPH gas/BTEX by 8260	TPH motor oil RCRA 8 metals	Silica gel cleanup	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
5/18/07	1200	TDW-1	X		X	X	X	6" Stainless sleeve	S	-	DP	Y	-	1	
	1240	GW-02-30	X	X MA			X	1L Amber ~~unpres~~	W	-	~~HCL~~	Y	Y	2	MS/MSD
	1240	GW-02-30		X				40 ml VOA	W	-	HCL	Y	Y	6	MS/MSD
	1510	GW-01-20	X				X	1L Amber	W	-	-	Y	-	1	
	1510	GW-01-20		X				40 ml VOA	W	-	HCL	Y	-	3	
	1600	GW-01-35	X				X	1L Amber	W	-	-	Y	-	1	
	1600	GW-01-35		X				40 ml VOA	W	-	HCL	Y	-	3	
	1630	GW-11-35	X				X	1L Amber	W	-	-	Y	-	1	
	1630	GW-11-35		X				40 ml VOA	W	-	HCL	Y	-	3	
		Trip Blank						#40 ml VOA						2	HOLD

TOTAL NUMBER OF CONTAINERS: 23

SAMPLING COMMENTS:

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	5/18/07	17:15	SIGNATURE:	5/18/07	17:15
PRINTED NAME: Raisha Jorgensen			PRINTED NAME:		
COMPANY: Geomatrix			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100 Fax 510.663.4141

Geomatrix

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 194900 Date Received: 5/18/07 Number of Coolers: 1
Client: Geomatrix Project: Thoroughbred Building

A. Preliminary Examination Phase
Date Opened: 5/18/07 By (print): Patricia P (sign)

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES (NO)
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO N/A
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... (YES) NO
7. Was project identifiable from custody papers? ..... (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... YES (NO)
   Type of ice: Wet Temperature: 7.1°

B. Login Phase
Date Logged In: 5/18/07 By (print): Patricia R (sign)

1. Describe type of packing in cooler: zip lock bags
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... (YES) NO
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... (YES) NO
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD		
Field ID:	IDW-1	Batch#:	125440
Matrix:	Soil	Sampled:	05/18/07
Basis:	as received	Received:	05/18/07
Diln Fac:	1.000	Analyzed:	05/21/07

Type: SAMPLE Lab ID: 194900-001

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.98	mg/Kg	EPA 8015B
Benzene	ND	4.9	ug/Kg	EPA 8021B
Toluene	ND	4.9	ug/Kg	EPA 8021B
Ethylbenzene	ND	4.9	ug/Kg	EPA 8021B
m,p-Xylenes	ND	4.9	ug/Kg	EPA 8021B
o-Xylene	ND	4.9	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	70-132	EPA 8015B
Bromofluorobenzene (FID)	95	66-138	EPA 8015B
Trifluorotoluene (PID)	97	63-142	EPA 8021B
Bromofluorobenzene (PID)	95	70-129	EPA 8021B

Type: BLANK Lab ID: QC388796

Analyte	Result	RL	Units	Analysis
Gasoline C7-C12	ND	0.20	mg/Kg	EPA 8015B
Benzene	ND	1.0	ug/Kg	EPA 8021B
Toluene	ND	1.0	ug/Kg	EPA 8021B
Ethylbenzene	ND	1.0	ug/Kg	EPA 8021B
m,p-Xylenes	ND	1.0	ug/Kg	EPA 8021B
o-Xylene	ND	1.0	ug/Kg	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	70-132	EPA 8015B
Bromofluorobenzene (FID)	98	66-138	EPA 8015B
Trifluorotoluene (PID)	98	63-142	EPA 8021B
Bromofluorobenzene (PID)	98	70-129	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Basis:	as received
Lab ID:	QC388797	Diln Fac:	1.000
Matrix:	Soil	Batch#:	125440
Units:	mg/Kg	Analyzed:	05/21/07

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.976	100	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	70-132
Bromofluorobenzene (FID)	116	66-138

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	194868-022	Batch#:	125440
Matrix:	Soil	Sampled:	05/16/07
Units:	mg/Kg	Received:	05/17/07
Basis:	as received	Analyzed:	05/21/07

Type: MS Lab ID: QC388798

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.02647	2.198	1.371	61	36-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	70-132
Bromofluorobenzene (FID)	106	66-138

Type: MSD Lab ID: QC388799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.923	1.126	57	36-120	6	29

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	70-132
Bromofluorobenzene (FID)	122	66-138

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8021B
Type:	LCS	Basis:	as received
Lab ID:	QC388808	Diln Fac:	1.000
Matrix:	Soil	Batch#:	125440
Units:	ug/Kg	Analyzed:	05/21/07

Analyte	Spiked	Result	%REC	Limits
Benzene	100.0	91.56	92	80-120
Toluene	100.0	92.19	92	80-120
Ethylbenzene	100.0	94.85	95	80-120
m,p-Xylenes	100.0	95.01	95	80-120
o-Xylene	100.0	95.62	96	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	95	63-142
Bromofluorobenzene (PID)	95	70-129

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/18/07
Units:	ug/L	Received:	05/18/07
Diln Fac:	1.000	Prepared:	05/19/07
Batch#:	125405		

Field ID: GW-02-30 Analyzed: 05/22/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 194900-002

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	111	61-134

Field ID: GW-01-20 Analyzed: 05/22/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 194900-003

Analyte	Result	RL
Kerosene C10-C16	ND	56
Diesel C10-C24	ND	56

Surrogate	%REC	Limits
Hexacosane	103	61-134

Field ID: GW-01-35 Analyzed: 05/23/07
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 194900-004

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	94	61-134

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/18/07
Units:	ug/L	Received:	05/18/07
Diln Fac:	1.000	Prepared:	05/19/07
Batch#:	125405		

Field ID:	GW-11-35	Analyzed:	05/23/07
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	194900-005		

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	96	61-134

Type:	BLANK	Analyzed:	05/22/07
Lab ID:	QC388657	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	104	61-134

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388658	Batch#:	125405
Matrix:	Water	Prepared:	05/19/07
Units:	ug/L	Analyzed:	05/22/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,828	73	58-130

Surrogate	%REC	Limits
Hexacosane	87	61-134

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	GW-02-30	Batch#:	125405
MSS Lab ID:	194900-002	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Prepared:	05/19/07
Diln Fac:	1.000	Analyzed:	05/22/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC388659

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	33.24	2,500	2,080	82	57-134

Surrogate	%REC	Limits
Hexacosane	104	61-134

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC388660

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,068	81	57-134	1	32

Surrogate	%REC	Limits
Hexacosane	102	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	IDW-1	Batch#:	125401
Matrix:	Soil	Sampled:	05/18/07
Units:	mg/Kg	Received:	05/18/07
Basis:	as received	Prepared:	05/19/07
Diln Fac:	1.000	Analyzed:	05/21/07

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 194900-001

Analyte	Result	RL
Kerosene C10-C16	ND	1.0
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	87	40-127

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC388643

Analyte	Result	RL
Kerosene C10-C16	ND	1.0
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	89	40-127

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388644	Batch#:	125401
Matrix:	Soil	Prepared:	05/19/07
Units:	mg/Kg	Analyzed:	05/21/07
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.59	41.06	83	58-127

Surrogate	%REC	Limits
Hexacosane	79	40-127

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	125401
MSS Lab ID:	194793-002	Sampled:	04/19/07
Matrix:	Soil	Received:	05/14/07
Units:	mg/Kg	Prepared:	05/19/07
Basis:	as received	Analyzed:	05/21/07
Diln Fac:	1.000		

Type: MS Lab ID: QC388645

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	6.138	49.77	38.38	65	29-147

Surrogate	%REC	Limits
Hexacosane	61	40-127

Type: MSD Lab ID: QC388646

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.62	52.70	94	29-147	32	46

Surrogate	%REC	Limits
Hexacosane	76	40-127

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GW-02-30	Batch#:	125418
Lab ID:	194900-002	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GW-01-20	Batch#:	125418
Lab ID:	194900-003	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	92	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GW-01-35	Batch#:	125418
Lab ID:	194900-004	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	93	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GW-11-35	Batch#:	125418
Lab ID:	194900-005	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	94	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC388704	Batch#:	125418
Matrix:	Water	Analyzed:	05/21/07
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	92	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	125418
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Type: BS Lab ID: QC388705

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	129.5	104	68-132
Isopropyl Ether (DIPE)	25.00	26.89	108	65-120
Ethyl tert-Butyl Ether (ETBE)	25.00	27.01	108	75-124
Methyl tert-Amyl Ether (TAME)	25.00	26.52	106	77-120
MTBE	25.00	25.07	100	71-120
1,2-Dichloroethane	25.00	22.80	91	79-121
Benzene	25.00	26.00	104	80-120
Toluene	25.00	26.49	106	80-120
1,2-Dibromoethane	25.00	24.59	98	80-120
Ethylbenzene	25.00	27.91	112	80-124
m,p-Xylenes	50.00	56.42	113	80-127
o-Xylene	25.00	26.89	108	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	92	79-134
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-122

Type: BSD Lab ID: QC388706

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	138.3	111	68-132	7	20
Isopropyl Ether (DIPE)	25.00	26.57	106	65-120	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.44	106	75-124	2	20
Methyl tert-Amyl Ether (TAME)	25.00	24.77	99	77-120	7	20
MTBE	25.00	25.39	102	71-120	1	20
1,2-Dichloroethane	25.00	23.68	95	79-121	4	20
Benzene	25.00	26.26	105	80-120	1	20
Toluene	25.00	26.40	106	80-120	0	20
1,2-Dibromoethane	25.00	25.19	101	80-120	2	20
Ethylbenzene	25.00	27.40	110	80-124	2	20
m,p-Xylenes	50.00	56.66	113	80-127	0	20
o-Xylene	25.00	26.89	108	80-124	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	93	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388707	Batch#:	125418
Matrix:	Water	Analyzed:	05/21/07
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,889	94	80-121

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	93	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-122

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	GW-02-30	Batch#:	125418
MSS Lab ID:	194900-002	Sampled:	05/18/07
Matrix:	Water	Received:	05/18/07
Units:	ug/L	Analyzed:	05/21/07
Diln Fac:	1.000		

Type: MS Lab ID: QC388739

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	7.548	2,000	1,976	98	70-131

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	93	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

Type: MSD Lab ID: QC388740

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,924	96	70-131	3	30

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	91	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

RCRA Metals

Lab #:	194900	Project#:	STANDARD
Client:	Geomatrix Consultants	Location:	Thoroughbred Building
Field ID:	IDW-1	Diln Fac:	1.000
Lab ID:	194900-001	Sampled:	05/18/07
Matrix:	Soil	Received:	05/18/07
Units:	mg/Kg	Prepared:	05/22/07
Basis:	as received		

Analyte	Result	RL	Batch#	Analyzed	Prep	Analysis
Arsenic	9.5	0.25	125496	05/23/07	EPA 3050B	EPA 6010B
Barium	110	0.25	125496	05/23/07	EPA 3050B	EPA 6010B
Cadmium	ND	0.25	125496	05/23/07	EPA 3050B	EPA 6010B
Chromium	33	0.25	125496	05/23/07	EPA 3050B	EPA 6010B
Lead	7.1	0.15	125496	05/23/07	EPA 3050B	EPA 6010B
Mercury	0.050	0.020	125499	05/22/07	METHOD	EPA 7471A
Selenium	ND	0.50	125496	05/23/07	EPA 3050B	EPA 6010B
Silver	ND	0.25	125496	05/23/07	EPA 3050B	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC389030	Batch#:	125496
Matrix:	Soil	Prepared:	05/22/07
Units:	mg/Kg	Analyzed:	05/23/07
Basis:	as received		

Analyte	Result	RL
Arsenic	ND	0.25
Barium	ND	0.25
Cadmium	ND	0.25
Chromium	ND	0.25
Lead	ND	0.15
Selenium	ND	0.50
Silver	ND	0.25

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	125496
Units:	mg/Kg	Prepared:	05/22/07
Basis:	as received	Analyzed:	05/23/07
Diln Fac:	1.000		

Type: BS Lab ID: QC389031

Analyte	Spiked	Result	%REC	Limits
Arsenic	50.00	49.55	99	80-120
Barium	100.0	98.86	99	80-120
Cadmium	10.00	10.33	103	80-120
Chromium	100.0	100.3	100	80-120
Lead	100.0	98.26	98	80-120
Selenium	50.00	49.84	100	80-120
Silver	10.00	9.490	95	80-120

Type: BSD Lab ID: QC389032

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	50.00	49.98	100	80-120	1	20
Barium	100.0	98.68	99	80-120	0	20
Cadmium	10.00	10.16	102	80-120	2	20
Chromium	100.0	98.11	98	80-120	2	20
Lead	100.0	97.72	98	80-120	1	20
Selenium	50.00	50.24	100	80-120	1	20
Silver	10.00	9.433	94	80-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	EPA 3050B
Project#:	STANDARD	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	125496
MSS Lab ID:	194908-018	Sampled:	05/18/07
Matrix:	Soil	Received:	05/18/07
Units:	mg/Kg	Prepared:	05/22/07
Basis:	as received	Analyzed:	05/23/07
Diln Fac:	1.000		

Type: MS Lab ID: QC389033

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	12.58	48.54	52.11	81	72-120
Barium	42.38	97.09	126.1	86	49-138
Cadmium	0.3716	9.709	8.883	88	72-120
Chromium	52.53	97.09	141.7	92	63-122
Lead	50.66	97.09	122.1	74	55-122
Selenium	0.5954	48.54	42.35	86	73-120
Silver	0.3807	9.709	9.051	89	53-120

Type: MSD Lab ID: QC389034

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	46.30	55.24	92	72-120	10	20
Barium	92.59	130.7	95	49-138	7	23
Cadmium	9.259	8.576	89	72-120	1	20
Chromium	92.59	134.2	88	63-122	2	20
Lead	92.59	132.9	89	55-122	12	26
Selenium	46.30	40.86	87	73-120	1	20
Silver	9.259	8.574	88	53-120	1	22

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC389049	Batch#:	125499
Matrix:	Soil	Prepared:	05/22/07
Units:	mg/Kg	Analyzed:	05/22/07

Result	RL
ND	0.020

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	125499
Units:	mg/Kg	Prepared:	05/22/07
Basis:	as received	Analyzed:	05/22/07

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC389050	0.5000	0.5440	109	80-120		
BSD	QC389051	0.5000	0.5210	104	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

RCRA Metals

Lab #:	194900	Location:	Thoroughbred Building
Client:	Geomatrix Consultants	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	125499
MSS Lab ID:	194864-001	Sampled:	05/16/07
Matrix:	Miscell.	Received:	05/17/07
Units:	mg/Kg	Prepared:	05/22/07
Basis:	as received	Analyzed:	05/22/07

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC389053	0.6298	0.4902	0.7284	20 *	67-143		
MSD	QC389054		0.4808	0.7606	27 *	67-143	5	23

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference