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March 5, 2004
Project 8367.001

Mr. Barney M. Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Results of Phase III Soil and Grab Groundwater Investigation
1249 67th Street Property
Emeryville, California

Dear Mr. Chan:

On behalf of Pulte Home Corporation (Pulte), Geomatrix Consultants, Inc. (Geomatrix), has prepared this letter documenting the results of the Phase III soil and grab groundwater investigation performed at the above-referenced property (the site). Pulte is redeveloping the site into high-density multi-family residential housing. Based on Pulte's design plans, the majority of the site will be covered by asphalt concrete, ornamental trees, and housing units on concrete foundations. In areas of landscaping, approximately 0.5 to 2 feet of native soil will be removed and replaced with imported top soil. The scope of work was developed to further assess site conditions based on the results of previous investigations and our review of Pulte's preliminary designs for the housing complex. The work was performed in accordance with our February 19, 2003 Work Plan and the November 12, 2003 Addendum to Work Plan, which were submitted and verbally approved by you. This letter report presents background information, the field sampling program, results of the investigation, and recommendations.

BACKGROUND

Geomatrix performed a Phase I Environmental Site Assessment (ESA) for the site (Figure 1) in October 2002.[1] Based on information reviewed as part of the Phase I, the site was used by Fabco Automotive Corporation (Fabco) since 1918 to develop and manufacture components for heavy-duty commercial trucks and vehicles. Potential on-site environmental concerns identified during the ESA include historical evidence of an unpaved area that likely was used for the storage of equipment and materials, a former paint spraying booth, evidence of a concrete sump, former underground storage tanks (USTs), and an area where cutting/lubricating oils were allowed to drip dry from metal shavings. In addition, the site is located in an industrial area of Emeryville where groundwater underlying the site may be

[1] Geomatrix Consultants, Inc., 2002, Final Environmental Site Assessment, November.

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affected from off-site sources. A review of regulatory agency files of nearby properties indicates that the depth to groundwater is approximately 10 to 15 feet below ground surface (bgs) and flows to the south, southwest toward San Francisco Bay.

Based on the results of the ESA, Geomatrix conducted a limited Phase II soil and grab groundwater investigation in November 2002 to evaluate baseline environmental conditions at the site.[2,3] Results from this investigation indicated first groundwater at depths between 6 and 10 feet bgs and the presence of low concentrations of polynuclear aromatic hydrocarbons (PAHs) in soil and volatile organic compounds (VOCs) in groundwater. To further assess subsurface conditions at the site, Geomatrix conducted a Phase III soil and grab groundwater sampling and analysis program in November and December 2003. A summary of the Phase III sampling activities conducted at the site is presented in the following sections.

FIELD SAMPLING PROGRAM

The Phase III field sampling program consisted of the collection and analysis of grab groundwater samples from six shallow soil boring locations (B-5 and B-9 through B-13) and soil samples from nine targeted boring locations (B-1 through B-9). The site layout and boring locations are shown on Figure 2. The borings were either located beneath the footprint of proposed housing units or in areas designated as courtyards.

Prior to initiating drilling activities, Geomatrix obtained a boring permit from the Alameda County Public Works Agency (ACPW). In addition, Underground Service Alert (USA) was notified 48 hours prior to drilling and Subsurface Locating Service of Petaluma, California, a private utility locator, was contracted to perform an underground utility clearance at each boring location.

Borings were advanced by Precision Sampling, Inc. (Precision), of Richmond, California, a state-licensed contractor, using a hydraulically driven, direct-push drilling rig with an EnviroCore® continuous sampling system on November 24 through 26, 2003. A 1⅝-inch-outside-diameter steel drive casing lined with new, clean, butyrate soil liners was advanced to the desired depth at each boring location. Precision cored through asphalt pavement at four boring locations (B-3 through B-6) to allow access for drilling equipment. R&B Equipment, Inc., of Hayward, California, broke up and set aside concrete pavement at the remaining nine boring locations. Borings were advanced to total depths ranging from 13 to

[2] Geomatrix Consultants, Inc., January 8, 2003. Results of Phase II Soil and Grab Groundwater Investigation.
[3] Geomatrix Consultants, Inc., January 9, 2003. Results of Additional Phase II Grab Groundwater Investigation.

25 feet bgs. A nearly continuous soil core was generated from each boring and logged by a Geomatrix geologist according to the Unified Soil Classification System (USCS), as presented in the American Society of Testing Materials (ASTM) Standard D2488-90. Recovered soil was screened with an organic vapor meter (OVM) equipped with a photoionization detector (PID).

Soil samples were collected for chemical analysis from nine borings (B-1 and B-3 through B-9) at depths of approximately 1.5 to 2 feet bgs (shallow) and 4.5 to 5.5 feet bgs (deeper). Shallow soil samples could not be collected from boring B-2 because of the thickness of the concrete (more than 12 inches) and poor sample recovery. At this boring location, the shallowest soil sample that could be collected was between 4 and 5 feet bgs. Soil samples were collected in new, clean, butyrate liners, which then were sealed with Teflon® sheets, plastic end caps, and silicone tape. Samples were labeled, sealed in plastic bags, and stored in an ice-cooled chest.

Grab groundwater samples were collected by placing a temporary well point constructed of 1-inch-diameter polyvinyl chloride (PVC) casing with 5 feet of screen into the borehole. The drive casing then was retracted from the bottom of the boring to allow groundwater to infiltrate into the temporary well point. Grab groundwater samples were collected from the well casings using new disposable bailers and decanted into sample bottles provided by the analytical laboratory. Sample bottles were labeled, sealed in plastic bags, and stored in an ice-cooled chest. Following the collection of soil and grab groundwater samples, the temporary well casings were removed and each borehole was backfilled with cement grout from the total depth of the borehole to ground surface. The borehole locations were completed with asphalt, where appropriate, to match existing conditions.

Soil and grab groundwater samples were submitted for chemical analysis to Curtis and Tompkins, Inc. (C&T) of Berkeley, California, a state-certified analytical laboratory, under Geomatrix chain-of-custody procedures. Shallow soil samples were analyzed for:

- total petroleum hydrocarbons (TPH) quantified as diesel (TPHd) and as motor oil (TPHmo) using U.S. Environmental Protection Agency (EPA) Method 8015M;
- arsenic and leaking underground fuel tank (LUFT) metals[4] using EPA Method 6010B;
- polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270 selective ion monitoring (SIM); and
- organochlorine pesticides (OCPs) using EPA Method 8081B.

[4] LUFT metals include cadmium, chromium, lead, nickel, and zinc.

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Deeper soil samples and grab groundwater samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260B.

Drilling and sampling equipment were steam cleaned prior to use at each location. Temporary well casings were disposed of as municipal waste. Equipment wash water and soil cuttings were stored in labeled 55-gallon drums at the property pending analytical results.

RESULTS

Stratigraphy

The stratigraphic units observed during drilling are shown on boring logs presented in Attachment A. Native soil encountered across the site is generally similar, predominantly fine-grained consisting sandy lean clay, lean clay with sand, lean clay, and clayey sand with variable amounts of gravel. Based on the soil cores observed during drilling, soil immediately beneath the pavement/aggregate base in borings B-1, B-3 through B-10, and B-13 was observed to dominantly consist of "black," "dark gray," or "very dark gray" lean clay extending to depths between 4 and 7.5 feet bgs; soil recovered from boring locations B-1, B-5, and B-10 also contained variable layers of clayey sand in this interval. Shallow soil cores immediately beneath the concrete foundation from boring B-2 could not be collected because of the thickness of the concrete and poor sample recovery. Soil from borings B-11 and B-12 was observed to be much coarser, mostly consisting of either poorly graded sand or poorly graded gravel with sand. Below approximately 4 to 7.5 feet bgs, soil observed in most borings consisted of "olive gray," "olive brown," or "yellowish brown" sandy lean clay or clayey sand.

OVM readings were measured at 0 parts per million (ppm) in all recovered soil core intervals. Stratigraphy and OVM readings are presented in the boring logs included as Attachment A. Before grab groundwater samples were collected from borings B-5 and B-9 through B-13, depth to groundwater was measured between 12 and 24.5 feet bgs.

Soil Analysis

Soil analytical results are summarized in Tables 1, 2, and 3. A total of 17 soil samples were collected for analysis. Copies of the chain-of-custody records and analytical laboratory reports are presented as Attachment B.

Soil results were compared to the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Environmental Screening Levels (ESLs) for

residential land use[5] and naturally-occurring background concentrations from the Lawrence Berkeley National Laboratory (LBNL)[6]. The ESLs are conservative screening levels that correspond to an acceptable risk level and reflect varying combinations of site characteristics including both residential and industrial land uses. Concentrations of compounds detected below corresponding ESLs can be assumed to not pose a significant threat to human health and the environment. Conversely, exceedance of the corresponding ESL does not necessarily indicate that adverse health effects will occur, but suggests that additional evaluation of potential risks is warranted. Because the site is located in the City of Emeryville where shallow groundwater is unlikely a source of drinking water, residential ESLs where groundwater is not a current or potential source of drinking water were selected as screening criteria.

TPHd was detected at concentrations ranging from 1.1 to 240 milligrams per kilogram (mg/kg). Concentrations of TPHmo ranged from 11 to 350 mg/kg. TPHd and TPHmo were detected at concentrations less than the residential surface soil ESLs.

Arsenic, cadmium, chromium, lead, nickel, and zinc were detected above the sample quantitation limits (SQLs) in at least one soil sample analyzed. Except for arsenic, concentrations of these metals were below residential ESLs. Arsenic was detected at concentrations ranging from 2.5 to 13 mg/kg and is within the range of naturally-occurring background.

Various PAHs were detected in 5 of the 7 soil samples analyzed. Detected concentrations of PAHs ranged from 0.0051 to 0.13 mg/kg. The only detection above the residential ESLs was benzo(a)pyrene at a concentration of 0.039 mg/kg in the 2.5 foot soil sample from boring B-3.

OCPs and VOCs were not detected above the laboratory SQLs in soil samples analyzed.

Grab Groundwater Analysis

Grab groundwater analytical results are presented in Table 4. Chloroform, cis-1,2-dichloroethene, methyl-tert-butyl-ether, and trichloroethene (TCE) were detected in at least one grab groundwater sample at low concentrations. To assess whether the chemicals detected in grab groundwater are present at concentrations of potential concern, the analytical results were compared to ESLs where groundwater is not a current or potential drinking

[5] California Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final – July 2003.

[6] Lawrence Berkeley Laboratory, 1995, University of California, Berkeley, Protocol for Determining Background Concentrations of Metal in Soil at Lawrence Berkeley National Laboratory (LBNL), August.

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water source (Table 4). As presented in Table 4, the concentrations of chemicals detected in grab groundwater are lower than the corresponding ESLs.

ADDITIONAL SITE CHARACTERIZATION

Based on the analytical results collected from the Phase II and Phase III sampling programs, five additional step-out borings (SW-N, SW-E, SW-S, SW-W, and BW) were advanced in the vicinity of borings GMX-1 (Phase II) and B-3 (Phase III) to delineate the extent of PAHs, specifically benzo(a)pyrene, measured in soil samples collected from these borings (Figure 3). Geomatrix demarcated a 5-foot radius around borings GMX-1 and B-3 and outlined a 10 foot by 60 foot rectangular area. Borings were advanced using a hand auger; soil samples were collected in new, clean brass liners, which then were sealed with Teflon® sheets, plastic end caps, and silicone tape. Because benzo(a)pyrene was detected above the ESL in soil samples collected from 2 and 2.5 feet bgs, four soil samples were collected from approximately 2.5 feet bgs to assess the lateral extent and two soil samples were collected from approximately 3 and 4 feet bgs to assess the vertical extent. The 4-foot sample was placed on hold pending results of the 3-foot sample. Samples were labeled, sealed in plastic bags, and stored in an ice-cooled chest. Prior to sampling and between subsequent uses, the hand auger was cleaned before each sample was collected.

Soil samples were submitted for chemical analysis to STL Chromalab, Inc. (STL), of Pleasanton, California, a state-certified analytical laboratory, under Geomatrix chain-of-custody procedures. Soil samples were analyzed for TPHd and TPHmo using EPA Modified Method 8015M and for PAHs using EPA Method 8270 SIM. Copies of the chain-of-custody records and analytical laboratory reports are presented as Attachment B.

Benzo(a)pyrene was detected in 3 of 5 soil samples analyzed at concentrations ranging from 0.005 to 0.015 mg/kg. As presented in Table 5, the concentrations of TPHd, TPHmo, and PAHs, including benzo(a)pyrene, in soil samples collected from these step-out borings are all below the respective ESLs, suggesting that elevated concentrations of benzo(a)pyrene are limited in extent. This is further supported by the arithmetic average of benzo(a)pyrene in soil samples collected in the immediate vicinity of GMX-1 and B-3. Including non-detects at ½ the SQLs and the reported concentrations measured from soil samples collected from borings GMX-1 and B-3, the arithmetic mean of benzo(a)pyrene in this area (i.e., mean of 0.190, 0.039, 0.015, 0.0053, <0.005, <0.005, 0.011 mg/kg) is equivalent to the residential ESL of 0.038 mg/kg. Furthermore, based on Pulte's designs, the area in the vicinity of GMX-1 and B-3 will be covered by either asphalt concrete or housing units; therefore, potential exposures from direct contact with soil are incomplete.

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When the step-out borings were advanced, soil samples also were collected to evaluate the proper handling and disposal of soil if it was deemed necessary to remove soil from the site. A description of the sampling program and analytical results of soil samples are presented in Attachment C. Because the presence of benzo(a)pyrene in soil at concentrations exceeding risk-based levels were limited in extent, no soil was removed and taken off site for disposal.

SUMMARY AND RECOMMENDATIONS

Based on the results of the Phase II and Phase III sampling programs, the following is a summary of site conditions:

- The site is underlain by predominantly fine-grained soil to a depth of at least 20 feet bgs. First groundwater at the site was encountered at approximately 6 to 15 feet bgs. The apparent groundwater flow direction is south, southwest toward San Francisco Bay.

- Based on Pulte's design plans for the multi-family housing complex, the majority of the site will be covered by asphalt concrete, ornamental trees, and/or housing units on concrete foundations. We understand that in areas of landscaping, approximately 0.5 to 2 feet of native soil will be removed and replaced with imported top soil. Therefore, potential exposures via incidental ingestion or dermal contact with native soil by future residents at the site are incomplete.

- Nine (9) soil samples were collected and analyzed for VOCs. VOCs were not detected above the laboratory SQL in soil samples analyzed. Similarly, OCPs were not detected above the SQLs in eight shallow soil samples analyzed.

- During the Phase II and Phase III sampling programs, twenty-one (21) soil samples have been collected from 15 borings located throughout the site and analyzed for TPHd, TPHmo, metals, and PAHs. Metals, except for arsenic, TPHd, and TPHmo were not detected above the residential ESLs in any of the soil samples analyzed. The arithmetic average of detected arsenic in soil collected from the Phase II and Phase III investigations is equivalent to the residential ESL of 5.5 mg/kg, a value which is the mean concentration presented in the LBNL report. The range of concentrations of arsenic detected in on-site soil suggests that the presence of arsenic is likely attributed to naturally-occurring background.

- Benzo(a)pyrene was detected above the residential ESL in shallow soil at 2 and 2.5 feet bgs from borings GMX-1 and B-3, respectively. Additional soil samples were collected from step-out borings located within an approximately 10 by

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60 square-foot area in the immediate vicinity of these two borings. PAHs detected in soil samples collected in the vicinity of borings GMX-1 and B-3 were below the respective residential ESLs. The results indicate that the presence of benzo(a)pyrene at concentrations exceeding the residential ESL is limited in both lateral and vertical extent. This is further supported by the arithmetic average of benzo(a)pyrene in soil samples collected in the immediate vicinity of GMX-1 and B-3. Including non-detects at ½ the SQLs, the arithmetic average is equivalent to the residential ESL of 0.038 mg/kg, suggesting that the presence of PAHs and benzo(a)pyrene in soil at the site does not pose an unacceptable human health risk to future residents at the site, under the conditions evaluated. In addition, based on Pulte's design plans, the area in the vicinity of GMX-1 and B-3 will be covered by either asphalt concrete or housing units; therefore, potential exposures from direct contact with soil are incomplete.

- Fifteen (15) grab groundwater samples were collected across the site and analyzed for VOCs. TCE was detected in 6 grab groundwater samples at concentrations ranging from 1.3 to 62 micrograms per liter (µg/L). VOCs detected in groundwater, including TCE, are below the respective ESLs where groundwater is not a current or potential drinking water resource.

Comparison of analytical data from soil samples collected at the site with the RWQCB's ESLs indicate that the maximum detected concentrations of arsenic and benzo(a)pyrene in soil exceed their respective screening level. However, further review of the data distributions across the site and from adjacent soil samples suggest that no further action is necessary for these residual chemical constituents in soil. Based on the results of the groundwater quality investigations, shallow groundwater has been affected by low concentrations of VOCs. However, the concentrations of VOCs are lower than applicable screening criteria suggesting that no further action is necessary with respect to groundwater at the site. In summary, based on the information collected to date, the presence of chemicals in soil and groundwater at the site does not pose an unacceptable human health risk to future residents, under the conditions evaluated. Therefore, no further action is recommended and the site appears suitable for unrestricted use.

LIMITATIONS

The conclusions presented herein are professional opinions based solely upon the analytical data described in this report. They are intended exclusively for the purpose outlined herein and the Site location and project indicated and for the sole use and benefit of Pulte Home Corporation. Geomatrix makes no warranties or guarantees as to the accuracy or completeness of information compiled by others. The results reported herein are applicable

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RESULTS OF PHASE III SOIL AND GRAB GROUNDWATER INVESTIGATION
1249 67th Street
Emeryville, California

December 1, 2004
Project No. 8367.001

This report was prepared by the staff of Geomatrix Consultants, Inc., and reviewed and approved by the Engineer whose seal and signature appear hereon.

The findings, recommendations, specifications, or professional opinions are presented within the limits described by the client, in accordance with generally accepted professional engineering and geologic practice. No warranty is expressed or implied.

Jennifer L. Patterson, P.E.
Senior Engineer

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to the time the sampling occurred; changes in site conditions may occur. The services performed have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession practicing under similar conditions.

Please do not hesitate to call either of the undersigned if you have any questions or require additional information.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Robert H. Cheung
Senior Toxicologist

Ravi Arulanantham, Ph.D.
Principal

RHC/RA/nji

Attachments: Table 1—Soil Sample Analytical Results for Total Extractable Petroleum Hydrocarbons, Metals, and Pesticides
Table 2—Soil Sample Analytical Results for PAHs
Table 3—Soil Sample Analytical Results for VOCs
Table 4—Grab Groundwater Sample Analytical Results for VOCs
Table 5—Soil Sample Analytical Results from Step-Out Borings for Extractable Hydrocarbons and PAHs
Table 6—Soil Sample Results for Waste Characterization
Figure 1—Site Location Map
Figure 2—Site Layout and Soil and Groundwater Sampling Locations Map
Figure 3—Additional Step-Out Borings
Attachment A—Lithologic Logs and Boring Permit
Attachment B—Analytical Laboratory Reports and Chain-of-Custody Records
Attachment C—Additional Analytical Reports for Soil Samples

cc: Mr. Mike Kim, Pulte Homes
Mr. Dan Carroll, Pulte Homes

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TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS FOR TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS, METALS, AND PESTICIDES[1]

1249 67th Street
Emeryville, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Location	Sample Depth (feet bgs)	TPHd	TPHmo	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Pesticides[4]
B-1	4.5	**240**	**350**	**2.5**	<0.27	**25**	**4.9**	**15**	**20**	ND
B-2[5]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
B-3	2.5	**6.2**	**55**	**13**	**0.5**	**27**	**83**	**25**	**100**	ND
B-4	4.5	**10**	**110**	**3.1**	<0.24	**23**	**8.4**	**16**	**31**	ND
B-5	2.0	**61**	**350**	**4**	<0.25	**25**	**18**	**24**	**33**	ND
B-6	2.0	**5.0**	**38**	**4.4**	<0.23	**24**	**6.4**	**17**	**23**	ND
B-7	2.0	**5.5**	**54**	**6.8**	<0.24	**29**	**24**	**27**	**100**	ND
B-8	4.5	**10**	**83**	**4.3**	**0.27**	**36**	**14**	**37**	**47**	ND
B-9	1.5	**1.1**	**11**	**6.3**	**0.34**	**32**	**5.7**	**38**	**52**	ND
RWQCB ESLs[2]		500	500	5.5	1.7	58	200	150	600	various
Background[3]		NA	NA	19.1	2.7	99.6	16.1	120	106	NA

Notes:

1 Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for total extractable petroleum hydrocarbons quantified as diesel (TPHd) and motor oil (TPHmo) using U.S. Environmental Protection Agency (EPA) Method 8015M, for arsenic and leaking underground fuel tank (LUFT) metals using EPA Method 6010B, and for organochlorine pesticides using EPA Method 8081B.

2 Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water.

3 Lawrence Berkeley National Laboratory Environmental Restoration Program, 1995. 500 samples were taken from 71 locations representing 5 geologic units at LBNL: Colluvium & Fill, Great Valley group, Moraga formation, Orinda formation, and San Pablo group. Concentrations listed are Upper 95% Tolerance Limits of data from 71 locations.

4 Soil samples were analyzed for organochlorine pesticides (OCPs) using EPA Method 8081A. OCPs were not detected (ND) above the laboratory detection limits.

5 Surface soil samples could not be collected because of the thickness of the concrete (more than 12 inches) and poor recovery.

Abbreviations:

feet bgs = feet below ground surface
"<" = indicates constituent was not detected at or above laboratory reporting limit indicated
TPHd = total petroleum hydrocarbons quantified as diesel
TPHmo = total petroleum hydrocarbons quantified as motor oil
NA = Not Applicable
NS = Not Sampled

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TABLE 2

SOIL SAMPLE ANALYTICAL RESULTS FOR POLYNUCLEAR AROMATIC HYDROCARBONS[1]

1249 67th Street
Emeryville, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample Location	Sample Depth (feet bgs)	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluor-anthene	Benzo(k) fluor-anthene	Benzo (g,h,i) perylene	Chrysene	Dibenzo (a,h) anthracene	Fluor-anthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph-thalene	Phenan-threne	Pyrene
B-1	4.5	<25	<25	<25	<25	<25	<25	<25	<25	**34**	<25	<25	**34**	<25	**62**	**55**	<25
B-2 [3]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
B-3	2.5	<5.0	**6.8**	**8.5**	**29**	**39**	**35**	**30**	**23**	**36**	**5.9**	**59**	<5.0	**18**	<5.0	**43**	**67**
B-4	4.5	<5.0	<5.0	<5.0	<5.0	**5.1**	<5.0	**5.2**	<5.0	**5.5**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.7**
B-5	2.0	**68**	**11**	**7.1**	**17**	**27**	**41**	**22**	**17**	**34**	**5.0**	**44**	**130**	**14**	**37**	**59**	**46**
B-6	2.0	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9
B-7	2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.6**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
B-8	4.5	<4.9	<4.9	<4.9	**5.7**	**12**	**11**	**10**	**7.4**	**12**	<4.9	**13**	<4.9	**5.4**	<4.9	**9.8**	**16**
B-9	1.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
RWQCB ESLs[2]		19,000	13,000	2,800	380	38	380	380	27,000	3,800	110	40,000	8,900	380	4,500	11,000	85,000

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for polynuclear aromatic hydrocarbons (PAHs) using U.S. Environmental Protection Agency (EPA) Method 8270C with Selected Ion Monitoring (SIM).

[2] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water source of drinking water.

[3] Surface soil samples could not be collected because of the thickness of the concrete (more than 12 inches) and poor recovery.

Abbreviations:

feet bgs = feet below ground surface
"<" = indicates constituent was not detected at or above laboratory reporting limit indicated
NS = Not Sampled

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TABLE 3

SOIL SAMPLE ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS[1]

1249 67th Street
Emeryville, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Location	Sample Depth (feet bgs)	VOCs
B-1	5.5	All ND
B-2	5.0	All ND
B-3	5.5	All ND
B-4	5.5	All ND
B-5	5.5	All ND
B-6	5.5	All ND
B-7	5.5	All ND
B-8	5.5	All ND
B-9	5.5	All ND
RWQCB ESLs[2]		various

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B. Only those analytes detected are shown; for a complete list of analytes, refer to the laboratory report (Attachment B).

[2] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water.

Abbreviations:

feet bgs = feet below ground surface

"<" = indicates constituent was not detected at or above laboratory reporting limit indicated

ND = Not Detected

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TABLE 4

GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS[1]

1249 67th Street
Emeryville, California

Concentrations reported in micrograms per liter (µg/L)

Boring/ Sample ID	cis-1,2-Dichloroethene	Chloroform	MTBE	Trichloroethene
B-5	<0.5	<0.5	<0.5	<0.5
B-9	**0.6**	<0.5	<0.5	**5.4**
B-10	<0.5	<0.5	<0.5	<0.5
B-11	<0.5	**2.5**	<0.5	<0.5
B-12	<0.5	<0.5	**1.4**	<0.5
B-13	<0.5	<0.5	<0.5	<0.5
RWQCB ESL[2]	590	340	1,800	360

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B. Only those analytes detected are shown; for a complete list of analytes, refer to the laboratory report (Attachment B).

[2] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential ESLs where groundwater is NOT a current or potential source of drinking water.

Abbreviations:

MTBE = methyl tertiary butyl ether

"<" = indicates constituent was not detected at or above laboratory reporting limit indicated

GEOMATRIX

TABLE 5

SOIL SAMPLE ANALYTICAL RESULTS FROM STEP-OUT BORINGS
EXTRACTABLE HYDROCARBONS AND POLYNUCLEAR AROMATIC HYDROCARBONS[1]

1249 67th Street
Emeryville, California

Concentrations reported in micrograms per kilogram (µg/kg) for PAHs or otherwise indicated

Sample Location	Sample Depth (feet bgs)	TPHd (mg/kg)	TPHmo (mg/kg)	Acenaph-thene	Acenaph-thylene	Anthra-cene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluor-anthene	Benzo(k) fluor-anthene	Benzo (g,h,i) perylene	Chrysene	Dibenzo (a,h) anthracene	Fluor-anthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph-thalene	Phenan-threne	Pyrene
SW-S-2.5	2.5	**4.9**	**58**	<5	<5	<5	**11**	**15**	**17**	**8.1**	**20**	**16**	<5	**28**	<5	**13**	**7.4**	**17**	**34**
SW-N-2.5	2.5	**2.9**	**56**	<5	<5	<5	<5	**5.3**	**5.1**	<5	**9.4**	<5	<5	<5	<5	<5	<5	<5	<5
SW-E-2.5	2.5	<1	<50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SW-W-2.5	2.5	**10**	**160**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	**38**	<5	<5	<5	**31**	**49**
BW-3.0	3.0	<1	<50	<5	<5	<5	**7.6**	**11**	**14**	<5	**15**	**12**	<5	**18**	<5	**9.1**	<5	**12**	**23**
RWQCB ESLs[2]		500	500	19,000	13,000	2,800	380	38	380	380	27,000	3,800	110	40,000	8,900	380	4,500	11,000	85,000

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by STL Chromalab, Inc. of Pleasanton, California, for polynuclear aromatic hydrocarbons (PAHs) using U.S. Environmental Protection Agency (EPA) Method 8270C with Selected Ion Monitoring (SIM).

[2] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water source of drinking water.

Abbreviations:

feet bgs = feet below ground surface
mg/kg = milligrams per kilogram
"<" = indicates constituent was not detected at or above laboratory reporting limit indicated

Base map from the U.S. Geological Survey, Oakland West Quadrangle, 7.5 minute series (topographic), 1959 (photo revised 1980).

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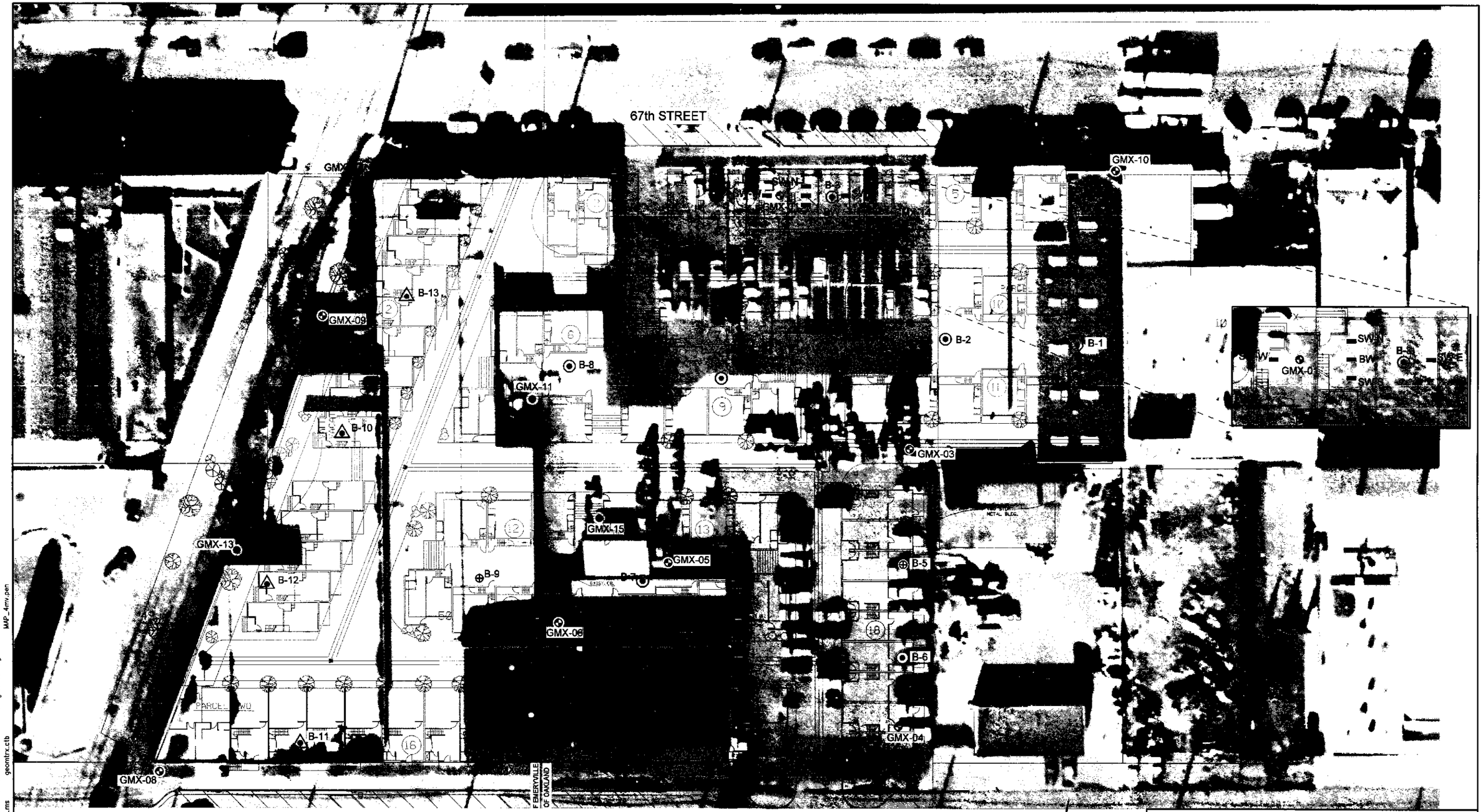
GEOMATRIX

SITE LOCATION MAP
1249 67th Street
Emeryville, California

Project No.
8367.001

Figure
1



EXPLANATION

- Previous soil and groundwater sampling location
- Previous soil sampling location
- Step-out boring location
- Soil and groundwater sampling location
- Soil sampling location
- Groundwater sampling location

Note:
Aerial photograph from Pacific Aerial Surveys; proposed development plans from Pulte Home Corporation.

0 50
SCALE IN FEET

SITE LAYOUT AND SOIL AND GROUNDWATER SAMPLING LOCATIONS MAP
1249 67th Street
Emeryville, California

GEOMATRIX | Project No. 8367.001 | Figure 2

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GEOMATRIX

ATTACHMENT A

Lithologic Logs and Boring Permit

PROJECT: 1249 67TH STREET Emeryville, California		**Boring Log Explanation**			
BORING LOCATION:		ELEVATION AND DATUM:			
DRILLING CONTRACTOR:		DATE STARTED:		DATE FINISHED:	
DRILLING METHOD:		TOTAL DEPTH (ft.):		MEASURING POINT:	
DRILLING EQUIPMENT:		DEPTH TO WATER	FIRST	COMPL.	24 HRS.
SAMPLING METHOD:		LOGGED BY:			
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:			REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1–15	GMX-01-13.0				Notes 1. Soil descriptions are in accordance with the USCS as set forth by ASTM D2488-90 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)." 2. Soil color described according to Munsell Color Chart. 3. Dashed lines separating soil strata represent inferred boundaries between sampled intervals that may be abrupt or gradual transitions. 4. Solid lines represent approximate boundaries observed within sample intervals. 5. OVM = organic vapor meter, reading in volumetric parts per million. 6. Odor, if noted is subjective and not necessarily indicative of specific compounds or concentrations. 7. NA = Not applicable. 8. ND = No data. Interval of recovered soil core collected with split-barrel sampler. Interval of no recovery. Sample collected for chemical analysis and sample identification.	

KEYFORM (REV. 7/99)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-1**
BORING LOCATION: 110' S of 67th St., 25' W of eastern property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/24/03 / DATE FINISHED: 11/24/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-2	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1	B-1-2.0			0	CLAYEY SAND (SC): dark gray (5Y 4/1), moist, 65% fine to coarse sand, 25% low plasticity fines, 10% fine gravel	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4	B-1-4.5			0	LEAN CLAY (CL): dark gray (5Y 4/1), moist, 95% fines, 5% fine sand, medium plasticity, firm	
5	B-1-5.5					
6						
7				0	LEAN CLAY with SAND (CL): olive gray (5Y 5/2), moist, 75% fines, 25% fine sand, medium plasticity, very firm	
8				0	80% fines, 20% fine sand	
9				0		
10				0	SANDY LEAN CLAY to CLAYEY SAND (CL/SC): olive gray (5Y 5/2) mottled with yellowish brown (10YR 5/6), moist, 55% fines, 45% fine to coarse sand, medium plasticity, very firm	
11				0		Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
12				0	CLAYEY SAND (SC): yellowish brown (10YR 5/6), moist, 60% fine to coarse sand, 40% medium plasticity fines	
13					Bottom of boring at 13.0 feet	
14						
15						

OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-3

BORING LOCATION: 34' S of 67th St., 148' W of eastern property boundary

ELEVATION AND DATUM: Not surveyed: datum is ground surface

DRILLING CONTRACTOR: Precision Sampling Incorporated

DATE STARTED: 11/25/03

DATE FINISHED: 11/25/03

DRILLING METHOD: Direct push

TOTAL DEPTH (ft.): 13.0

MEASURING POINT: Ground surface

DRILLING EQUIPMENT: XD-1

DEPTH TO WATER (ft.) FIRST: NA COMPL.: NA

SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]

LOGGED BY: S. Mearon

HAMMER WEIGHT: NA

DROP: NA

RESPONSIBLE PROFESSIONAL: J. Carolan

REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION: NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: Not surveyed	
0					ASPHALTIC CONCRETE	
1				0	LEAN CLAY (CL): black (5Y 2.5/1), moist, 95% fines, 5% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2	B-3-2.5			0		
3						
4				0		
5	B-3-5.5					
6				0		
7					LEAN CLAY with SAND (CL): dark gray (5Y 4/1), moist, 85% fines, 15% fine sand, medium plasticity, firm	
8				0		
9						
10				0	SANDY LEAN CLAY (CL): olive gray (5Y 5/2), moist, 65% fines, 35% fine to coarse sand, trace fine gravel, medium plasticity, hard	
11				0		
12					LEAN CLAY (CL): yellowish brown (10YR 5/6) mottled with olive gray (5Y 5/2), moist, 95% fines, 5% fine sand, medium plasticity, firm	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
13				0		
14					Bottom of boring at 13.0 feet	
15						

OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-4**
BORING LOCATION: 125' S of 67th St., 207' W of eastern property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/24/03 / DATE FINISHED: 11/24/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-2	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: Not surveyed	
0					ASPHALTIC CONCRETE LEAN CLAY (CL): very dark gray (5Y 3/1), moist, 95% fines, 5% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
4	B-4-4.5			0	CLAYEY SAND (SC)	
5	B-4-5.5			0	SANDY LEAN CLAY (CL): olive gray (5Y 5/2), moist, 65% fines, 35% fine to medium sand, medium plasticity, firm	
7				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 80% fines, 20% fine to coarse sand, medium plasticity, firm	
8				0	SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 70% fines, 30% fine to coarse sand	
9				0		
10				0	CLAYEY SAND to SANDY LEAN CLAY (SC/CL): yellowish brown (10YR 5/6), moist, 55% fine to coarse sand, 45% medium plasticity fines	
11				0		Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
12				0	CLAYEY SAND (SC): yellowish brown (10YR 5/6), moist, 85% fine to coarse sand, 15% medium plasticity fines	
13					Bottom of boring at 13.0 feet	
14						
15						

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-5**
BORING LOCATION: 120' N of 66th St., 15' W of eastern property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/24/03 / DATE FINISHED: 11/24/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 19.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-2	DEPTH TO WATER (ft.) FIRST: 13.0 / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					ASPHALTIC CONCRETE	
1				0	CLAYEY SAND (SC): olive gray (5Y 4/2), moist, 65% fine to coarse sand, 25% low plasticity fines, 10% fine gravel	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2	B-5-2.0				LEAN CLAY (CL): very dark gray (5Y 3/1), moist, 95% fines, 5% fine sand, medium plasticity, firm	
3						
4					soft	
				0	dark gray (5Y 4/1), firm	
5	B-5-5.5					
6						
7					LEAN CLAY with SAND (CL): dark gray (5Y 4/1), moist, 75% fines, 20% fine sand, 5% fine gravel, medium plasticity, firm	
				0		
8					LEAN CLAY (CL): olive gray (5Y 5/2), moist, 90% fines, 10% fine sand, medium plasticity, firm	
				0		
9						
				0		
10					SANDY LEAN CLAY to CLAYEY SAND (CL/SC): olive gray (5Y 5/2), moist, 55% fines, 45% fine to coarse sand, medium plasticity, very firm	
				0		
11						Grab groundwater sample B-5 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 14 to 19 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
				0		
12					CLAYEY SAND (SC): yellowish brown (10YR 5/6), moist, 60% fine to coarse sand, 40% medium plasticity fines	
				0		
13					wet, 75% fine to coarse sand, 15% medium plasticity fines, 10% fine gravel	
14					LEAN CLAY with SAND (CL): olive gray (5Y 5/2) mottled with yellowish brown (10YR 5/6), wet, 80% fines, 20% fine sand, medium plasticity, soft	
15						

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-5 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16				0	LEAN CLAY with SAND (CL): cont'd	
17				0	CLAYEY SAND (SC): brown (10YR 4/3), wet, 70% fine to coarse sand, 20% medium plasticity fines, 10% fine gravel	
18				0		
19				0		
					Bottom of boring at 19.0 feet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-6**
BORING LOCATION: 68' N of 66th St., 15' W of eastern property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/25/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					ASPHALTIC CONCRETE	
1				0	LEAN CLAY (CL): black (2.5Y 2.5/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2	B-6-2.0					
3						
4				0	LEAN CLAY with SAND (CL): dark greenish gray (5GY 4/1), moist, 85% fines, 15% fine to coarse sand, medium plasticity, firm	
5	B-6-5.5					
6				0	LEAN CLAY (CL): gray (5Y 5/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	
7				0		
8				0		
9				0		
10				0		
11				0		Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
12				0		
13				0	POORLY GRADED SAND (SP): olive (5Y 4/4), moist, 95% fine to coarse sand, 5% fines Bottom of boring at 13.0 feet	
14						
15						

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-7**
BORING LOCATION: 110'N of 66th St, 216'E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/25/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1				0	LEAN CLAY (CL): very dark gray (5Y 3/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2	B-7-2.0			0		
3						
4				0		
5	B-7-5.5					
6				0	LEAN CLAY with SAND (CL): light olive brown (2.5Y 5/3), moist, 75% fines, 25% fine to medium sand, medium plasticity, firm	
7				0		
8				0	CLAYEY SAND (SC): light olive brown (2.5Y 5/3), moist, 60% fine to coarse sand, 40% medium plasticity fines 80% fine to coarse sand, 20% fines	
9				0	LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 90% fines, 10% fine sand, medium plasticity, firm	
10				0		
11				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 80% fines, 20% fine sand, medium plasticity, firm	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
12				0	CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist, 60% fine to coarse sand, 40% medium plasticity fines	
13					Bottom of boring at 13.0 feet	
14						
15						

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-8**
BORING LOCATION: 119'S of 67th St, 142'E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/25/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: Not surveyed	
0					CONCRETE	
1					LEAN CLAY (CL): dark gray (5Y 4/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4	B-8-4.5			0		
5	B-8-5.5					
6						
7				0	olive gray (5Y 4/2)	
8				0	SANDY LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 65% fines, 35% fine to medium sand, medium plasticity, hard	
9				0	LEAN CLAY with SAND (CL): light olive brown (2.5Y 5/3), moist, 85% fines, 15% fine sand, medium plasticity, firm	
10				0		
11				0		Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
12				0	CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist, 60% fine to coarse sand, 40% medium plasticity fines 80% fine to medium sand, 20% fines	
13				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 85% fines, 15% fine sand, medium plasticity, firm Bottom of boring at 13.0 feet	
14						
15						

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-9**
BORING LOCATION: 109'N of 66th St, 136'E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/25/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1	B-9-1.5				LEAN CLAY with SAND (CL): very dark gray (2.5Y 3/1), moist, 85% fines, 15% fine to coarse sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4				0	light olive brown (2.5Y 5/3)	
5	B-9-5.5					
6				0	LEAN CLAY (CL): very dark gray (2.5Y 3/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	
7				0		
8				0	SANDY LEAN CLAY (CL): dark gray (5Y 4/1), moist, 60% fines, 40% fine to coarse sand, trace fine gravel, medium plasticity, hard	
9				0	LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 90% fines, 10% fine sand, medium plasticity, firm	
10				0	brown (10YR 5/3)	
11				0		Grab groundwater sample B-9 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 11 to 16 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
12				0	CLAYEY SAND (SC): brown (10YR 5/3), moist, 75% fine to coarse sand, 25% low plasticity fines, trace fine gravel	
13				0		
14				0	LEAN CLAY with SAND (CL): brown (10YR 5/3), moist, 75% fines, 25% fine to medium sand, medium plasticity, firm	
15				0		

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-9 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16					LEAN CLAY with SAND (CL): cont'd Bottom of the boring at 16.0 feet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
17						
18						
19						
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OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-10**
BORING LOCATION: 151' S of 67th St., 35' E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/24/03 / DATE FINISHED: 11/24/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-2	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1				0	CLAYEY SAND (SC): very dark gray (5Y 3/1), moist, 85% fine to medium sand, 15% low plasticity fines	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4				0	LEAN CLAY (CL): very dark gray (5Y 3/1), moist, 95% fines, 5% fine sand, medium plasticity, very soft	
5				0	LEAN CLAY with SAND (CL): light olive brown (2.5Y 5/3), moist, 85% fines, 15% fine sand, medium plasticity, hard	
6						
7					80% fines, 20% fine sand	
8				0		
9				0		
10				0	LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 90% fines, 10% fine sand, medium plasticity, hard	
11				0	LEAN CLAY with SAND (CL): yellowish brown (10YR 5/6), moist, 80% fines, 20% fine sand, medium plasticity, hard	Grab groundwater sample B-10 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 11 to 16 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
12				0	CLAYEY SAND (SC): yellowish brown (10YR 5/6), moist, 60% fine to coarse sand, 20% fine gravel, 20% medium plasticity fines	
13				0	LEAN CLAY with SAND (CL): yellowish brown (10YR 5/6), moist, 85% fines, 5% fine sand, medium plasticity, hard	
14				0	LEAN CLAY (CL): see next page for description	
15						

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-10 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16				0	LEAN CLAY (CL): yellowish brown (10YR 5/6), moist, 95% fines, 5% fine sand, medium plasticity, hard	
					Bottom of boring at 16.0 feet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
17						
18						
19						
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PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-11**
BORING LOCATION: 26' N of 66th St., 75' E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/26/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 25.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: 23.0 / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1					POORLY GRADED SAND (SP): very dark gray (2.5Y 3/1), moist, 95% fine to medium sand, 5% fines	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4				0		
5				0		
6					SANDY LEAN CLAY (CL): very dark gray (2.5Y 3/1), moist, 60% fines, 40% fine to coarse sand, medium plasticity, hard	
7				0	LEAN CLAY with SAND (CL): very dark gray (2.5Y 3/1), moist, 85% fines, 15% fine sand, medium plasticity, hard	
8				0		
9					light olive brown (2.5Y 5/3)	
10					brown (10YR 5/3)	
11				0		Grab groundwater sample B-11 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 20 to 25 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
12				0		
13				0	brown (10YR 5/3) mottled with olive gray (5Y 5/2)	
14				0	SANDY LEAN CLAY with GRAVEL to CLAYEY SAND with GRAVEL (CL/GC): brown (10YR 5/3) mottled with olive gray (5Y 5/2), moist, 55% fines, 30% fine to coarse sand, 15% fine to coarse gravel, medium plasticity, hard	
15				0		

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-11 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16					SANDY LEAN CLAY with GRAVEL to CLAYEY SAND with GRAVEL (CL/GC): cont'd	
16				0	LEAN CLAY with SAND (CL): brown (10YR 5/3), moist, 85% fines, 15% fine sand, medium plasticity, firm	
17				0		
18				0		
19						
20						
21						
22						
23					▼ wet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
24						
25					Bottom of boring at 25.0 feet	
26						
27						
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OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-12**
BORING LOCATION: 107' N of 66th St., 29' E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/26/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 19.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: 8.0 / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: Not surveyed	REMARKS
0					CONCRETE	
1				0	POORLY GRADED SAND (SP): light olive brown (2.5Y 4/3), moist, 95% fine to medium sand, 5% fines	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4				0	POORLY GRADED GRAVEL with SAND (GP): very dark grayish brown (2.5Y 3/2), moist, 65% fine gravel, 30% fine to coarse sand, 5% fines	
5						
6						
7				0	LEAN CLAY (CL): dark gray (5Y 4/1), moist, 95% fines, 5% fine sand, medium plasticity, firm	
8				0	SANDY LEAN CLAY to CLAYEY SAND (CL/SC): olive gray (5Y 4/2), wet, 55% fines, 45% fine to coarse sand, medium plasticity, hard	
9						
10					65% fines, 35% fine to coarse sand	
11				0		
12				0	CLAYEY SAND (SC): dark olive brown (2.5Y 3/3), wet, 60% fine to coarse sand, 35% medium plasticity fines, 5% fine gravel	Grab groundwater sample B-12 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 14 to 19 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
13				0		
14				0		
15				0	SANDY LEAN CLAY (CL): see next page for description	

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-12 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16					SANDY LEAN CLAY (CL): olive brown (2.5Y 3/3), wet, 60% fines, 40% fine to coarse sand, medium plasticity, hard	
				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 75% fines, 25% fine to medium sand, medium plasticity, hard	
17					SANDY LEAN CLAY to CLAYEY SAND (CL/SC): olive brown (2.5Y 4/3), wet, 55% fines, 40% fine to coarse sand, 5% fine gravel, medium plasticity, hard	
				0		
18						
				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 75% fines, 25% fine to medium sand, medium plasticity, hard	
19					Bottom of boring at 19.0 feet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
20						
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OAKBOREV (REV. 3/00)

PROJECT: 1249 67TH STREET Emeryville, California	**Log of Boring No. B-13**
BORING LOCATION: 81' S of 67th St., 48' E of western property boundary	ELEVATION AND DATUM: Not surveyed: datum is ground surface
DRILLING CONTRACTOR: Precision Sampling Incorporated	DATE STARTED: 11/25/03 / DATE FINISHED: 11/25/03
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 25.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: XD-1	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Enviro-core sampling system [3' x 1.5"]	LOGGED BY: S. Mearon
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: J. Carolan / REG. NO.: C.HG. 509

Surface Elevation: Not surveyed

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION	REMARKS
0					CONCRETE	
1					LEAN CLAY (CL): very dark gray (5Y 3/1), moist, 90% fines, 10% fine sand, medium plasticity, firm	OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard.
2						
3						
4						
5				0	CLAYEY SAND (SC): yellowish brown (10YR 5/6), moist, 80% fine to coarse sand, 20% medium plasticity fines	
6						
7				0	SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 65% fines, 30% fine to coarse sand, 5% fine gravel, medium plasticity, firm	
8				0		
9						
10				0	CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist, 80% fine to coarse sand, 15% medium plasticity fines, 5% fine gravel	
11				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 85% fines, 15% fine sand, medium plasticity, firm CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist, 80% fine to coarse sand, 15% medium plasticity fines, 5% fine gravel	Grab groundwater sample B-13 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from 20 to 25 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal.
12						
13				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 80% fines, 20% fine sand, medium plasticity, hard	
14				0	SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 65% fines, 35% fine to coarse sand, medium plasticity, hard	
15						

PROJECT: 1249 67TH STREET
Emeryville, California

Log of Boring No. B-13 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16					SANDY LEAN CLAY to CLAYEY SAND (CL/SC): olive brown (2.5Y 4/3), moist, 55% fines, 45% fine to coarse sand, trace fine gravel, medium plasticity, hard	
17				0	LEAN CLAY with SAND (CL): olive brown (2.5Y 4/3), moist, 80% fines, 20% fine sand, medium plasticity, hard	
18				0	LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 90% fines, 10% fine sand, medium plasticity, hard	
19				0		
20				0		
21				0	trace coarse sand	
22				0		
23				0	SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 65% fines, 35% fine to coarse sand, medium plasticity, hard	
24				0	LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 95% fines, 5% fine sand, medium plasticity, firm	
25				0	Bottom of boring at 25.0 feet	Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe.
26						
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32						
33						

OAKBOREV (REV. 3/00)

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1249 67TH STREET
EMERYVILLE, CALIF

CLIENT
Name PULTE HOME CORP
Address 7031 KOLL CTR PKWY 925 249-3232
City PLEASANTON Zip 94566

APPLICANT
Name GEOMATRIX CONSULTANTS Fax 510 663 4141
Address 2101 WEBSTER ST. Phone 510 663 4100
City OAKLAND, CA Zip 94612

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☒
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☒ DIRECT PUSH		

DRILLER'S NAME PRECISION SAMPLING, INC
DRILLER'S LICENSE NO. C-57 636387

WELL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter ____ in. Depth ____ ft.
Surface Seal Depth ____ ft. Owner's Well Number ____

GEOTECHNICAL PROJECTS
Number of Borings 13 Maximum
Hole Diameter 2 in. Depth 20 ft.

STARTING DATE 11/24/03
COMPLETION DATE 11/25/03

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.
APPLICANT'S SIGNATURE Robert Cheung FOR GEOMATRIX DATE 11/18/03
PLEASE PRINT NAME ROBERT CHEUNG FOR GEOMATRIX

FOR OFFICE USE

PERMIT NUMBER WO3-1076
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL (Contamination)
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind, ~~or with compacted cuttings~~

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS Att 1 Attached

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 11/19/03

Rev.9-18-02

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD, CA. 94544-1395
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W03-1076

WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
B#1-GENERAL CONDITIONS: GEOTECHNICAL & CONTAMINATION BOREHOLES

1. Prior to any drilling activities shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that Federal, State, County or to the City and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.

2. Boreholes shall not be left open for a period of more than **24 hours**. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All borcholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permitte, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statues regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where wok is being completed.

4. Permit is valid only for the purpose specified herein **November 24 to November 25, 2003**. No changes in construction procedures, as described on this permit application. Borcholes shall not be converted to monitoring wells, without a permit application process.

5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

6. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

GEOMATRIX

ATTACHMENT B

Analytical Laboratory Reports and Chain-of-Custody Records

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Geomatrix Consultants
2101 Webster Street
12th Floor
Oakland, CA 94612

Date: 17-DEC-03
Lab Job Number: 169122
Project ID: 8367.001
Location:

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **169122**
Client: **Geomatrix Consultants**
Project Name: **8367.001**

Order Date: **11/26/03**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for six water and eighteen soil samples received from the above referenced project. The samples were received cold and intact.

Total Extractable Hydrocarbons: No analytical problems were encountered.

Volatile Organic Compounds: The soil matrix spike recoveries of sample 169229-015 were outside acceptance limits for trichloroethene. The matrix spike duplicate dibromofluoromethane surrogate recovery was also outside acceptance limits. The associated laboratory control sample (LCS) recoveries were acceptable for all target compounds and the spiked sample was not from this site. No other analytical problems were encountered.

Polyaromatic Hydrocarbons: The nitrobenzene-d5 surrogate recovery for sample B-1-4.5 (169122-004) was outside acceptance limits due to matrix interference.

The matrix spike recoveries of sample B-5-2.0 (169122-001) for acenaphthene were not meaningful. The concentration of analyte in the spiked sample rendered the spike amount insignificant. The matrix spike duplicate recovery for pyrene was also outside acceptance limits. The associated LCS recoveries were acceptable for all target compounds. No other analytical problems were encountered.

Organochlorine Pesticides: Both surrogates for samples B-5-2.0 (169122-001) and B-4-4.5 (169122-007) were above acceptance limits. No target compounds were detected in the associated samples, therefore, there is no affect on the quality of the sample results.

The TCMX surrogate recoveries for all remaining samples except B-9-1.5 (169122-014) and the method blank were outside acceptance limits. The associated decachlorobiphenyl surrogate recoveries were acceptable, therefore, there is no affect on the quality of the sample results.

Pesticides (cont.)
The matrix spikes were not analyzed. The spiked sample required a dilution that rendered the spike amounts insignificant. The associated LCS recoveries were acceptable for all target compounds. No other analytical problems were encountered.

Metals: The matrix spike recoveries for zinc were not meaningful. The concentration of analyte in the spiked sample rendered the spike amount insignificant. The associated blank spike recoveries were acceptable. No other analytical problems were encountered.

6912 018392

Chain-of Custody Record

Date: 11/24/03 Page 1 of 2

Project No.: 8367.001

Samplers (Signature:) Sarah Mearon

	Date	Time	Sample Number
-1	11/24/03	1010	B-5-2.0
-2		1018	B-5-5.5
-3		1140	B-1-2.0
-4		1145	B-1-4.5
-5		1147	B-1-5.5
-6		1258	B-2-5.0
-7		1400	B-4-4.5
-8		1402	B-4-5.5
-9	↓	1250	B-5
-10	11/25/03	1110	B-10
-11		1200	B-13
-12		1325	B-8-4.5
-13		1327	B-8-5.5
-14		1355	B-9-1.5
-15	↓	1401	B-9-5.5

ANALYSES

EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260 VOCs	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHS only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	As,Cd,Cr,Ni,Pb,Zn (6010B)	Pesticides (8081B)		HOLD
			X		X		X	X		X	X		
			X										
													X
					X		X	X		X	X		
			X										
			X										
					X		X	X		X	X		
			X										
			X										
			X										
			X		X		X	X		X	X		
			X										
			X										
			X		X		X	X		X	X		
			X										
			X		X		X	X		X	X		
			X										

REMARKS

Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers	Additional Comments
S			X	1	6"x1.5" butyrate liner
S			X	1	
S			X	1	
S			X	1	
S			X	1	
S			X	1	
S			X	1	
S			X	1	
S			X	1	
W		X	X	3	40mL VOAs
W		X	X	3	
W		X	X	3	
S			X	1	6"x1.5" butyrate liner
S			X	1	
S			X	1	
S			X	1	
				21	

Laboratory: Curtis & Tompkins

Turnaround Time: Standard

Results to: Robert Cheung

Total No. of Containers: 21

Relinquished by (Signature): Sarah Mearon	Date: 11/26/03	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:
Printed Name: Sarah Mearon	Time: 1320	Printed Name:	Time:	Printed Name:	Time:
Company: Geomatrix		Company:		Company:	
Received by:	Date: 11/26/03	Received by:	Date:	Received by:	Date:
Printed Name: A. Alvarez	Time: 1320	Printed Name:	Time:	Printed Name:	Time:
Company: C.T		Company:		Company:	

Method of Shipment: dropped off

Laboratory Comments and Log No.:

Received: ☒ Cold ☐ Ambient ☐ On ice ☒ Intact

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

Chain-of Custody Record

Date: 11/25/03 | Page 2 of 2

Project No.: 8367.001

Samplers (Signature:)
Sarah Mearon

	Date	Time	Sample Number
-16	11/25/03	1447	B-7-2.0
-17		1450	B-7-5.5
-18		1547	B-6-2.0
-19		1550	B-6-5.5
-20		1620	B-3-2.5
-21		1630	B-3-5.5
-22	11/26/03	0920	B-9
-23		0930	B-12
-24		1230	B-11

ANALYSES

EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260 VOCs	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHS only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	As, Cd, Cr, Ni, Pb, Zn (6010B)	Pesticides (8081B)
			X		X		X	X		X	X
			X								
					X		X	X		X	X
			X								
					X		X	X		X	X
			X								
			X								
			X								
			X								

REMARKS

Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers	Additional Comments
S			X	1	6"x1.5" butyrate liner
S			X	1	
S			X	1	
S			X	1	
S			X	1	
S			X	1	
W	X	X	X	3	40-mL VOAs
W	X	X	X	3	
W	X	X	X	3	

3m 11/26/03

Laboratory: Curtis & Tompkins

Turnaround Time: standard

Results to: Robert Cheung

Total No. of Containers: 15

Relinquished by (Signature): Sarah Mearon	Date: 11/26/03	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:
Printed Name: Sarah Mearon	Time:	Printed Name:	Time:	Printed Name:	Time:
Company: Geomatrix	1320	Company:		Company:	
Received by:	Date: 11/26/03	Received by:	Date:	Received by:	Date:
Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Company:	1:20	Company:		Company:	

Method of Shipment: dropped off

Laboratory Comments and Log No.:

Received: ☒ On ice ☒ Cold ☐ Ambient ☒ Intact

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 109172 Date Received: 11/26/03 Number of Coolers: 1
Client: GEOMATRIX Project: 8367.001

A. Preliminary Examination Phase
Date Opened: 11/26/03 By (print): PETER P. (sign) [signature]

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: ~~2.9~~ 2°

B. Login Phase
Date Logged In: 11/26/03 By (print): PETER P. (sign) [signature]

1. Describe type of packing in cooler: Soil Cores + VOAs in zip loc bag
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.

Total Extractable Hydrocarbons

Lab #:	169122	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8367.001		
Matrix:	Soil	Batch#:	86593
Units:	mg/Kg	Received:	11/26/03
Basis:	as received	Prepared:	12/02/03
Diln Fac:	1.000		

Field ID: B-5-2.0 | Sampled: 11/24/03
Type: SAMPLE | Analyzed: 12/03/03
Lab ID: 169122-001 | Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	61 H Y	1.0
Motor Oil C24-C36	350	5.0

Surrogate	%REC	Limits
Hexacosane	77	36-141

Field ID: B-1-4.5 | Sampled: 11/24/03
Type: SAMPLE | Analyzed: 12/03/03
Lab ID: 169122-004 | Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	240 H	1.0
Motor Oil C24-C36	350 L	5.0

Surrogate	%REC	Limits
Hexacosane	82	36-141

Field ID: B-4-4.5 | Sampled: 11/24/03
Type: SAMPLE | Analyzed: 12/03/03
Lab ID: 169122-007 | Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	10 H Y	1.0
Motor Oil C24-C36	110	5.0

Surrogate	%REC	Limits
Hexacosane	86	36-141

Field ID: B-8-4.5 | Sampled: 11/25/03
Type: SAMPLE | Analyzed: 12/03/03
Lab ID: 169122-012 | Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	10 H Y	1.0
Motor Oil C24-C36	83	5.0

Surrogate	%REC	Limits
Hexacosane	84	36-141

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

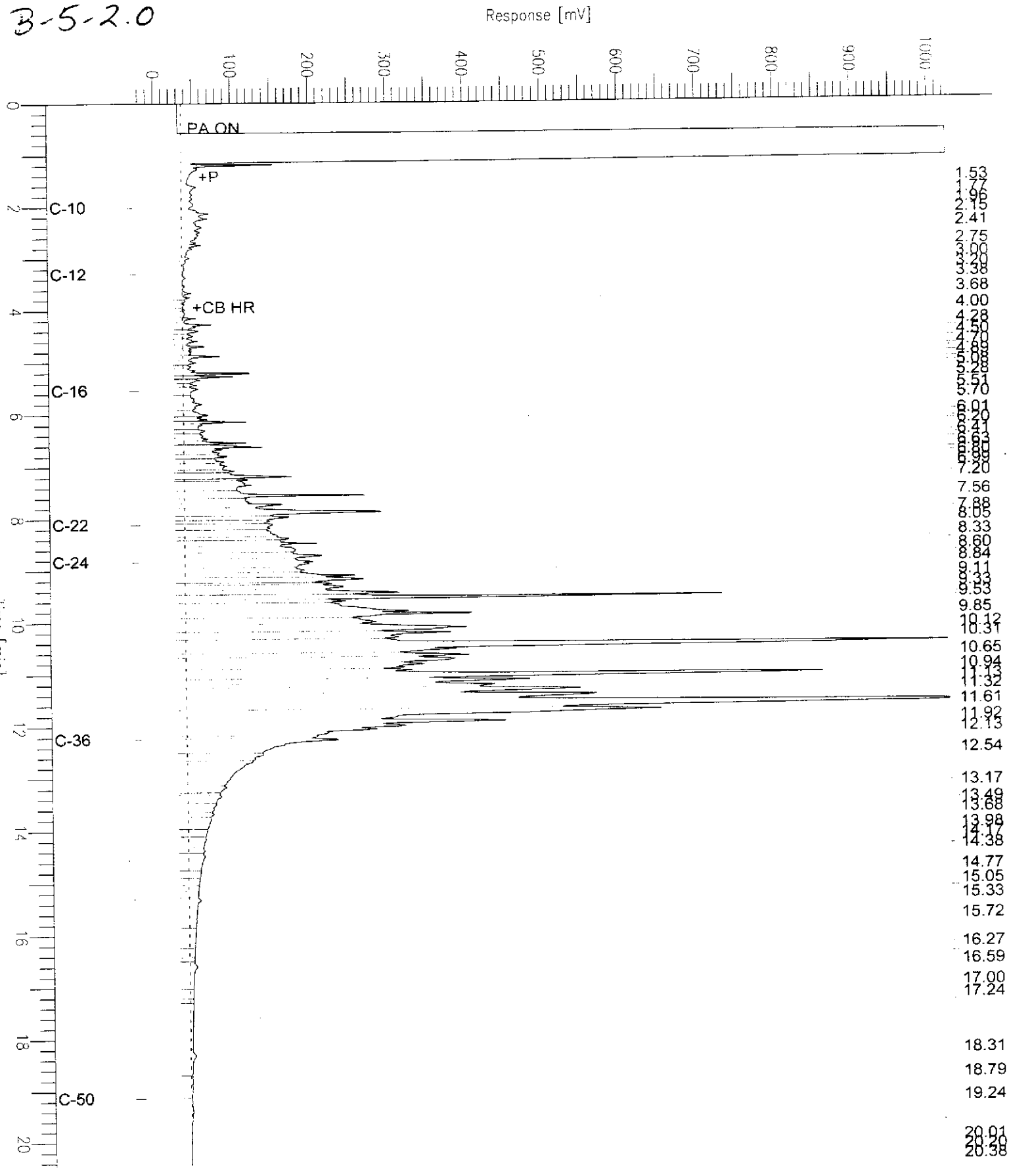
20.0

Chromatogram

Sample Name : 169122-001sg,86593
FileName : G:\GC11\CHA\336A028.RAW
Method : ATEH328S.MTH
Start Time : 0.00 min End Time : 20.46 min
Scale Factor: 0.0 Plot Offset: -20 mV

Sample #: 86593
Date : 12/3/03 08:24 AM
Time of Injection: 12/3/03 01:17 AM
Low Point : -20.43 mV High Point : 1024.00 mV
Plot Scale: 1044.4 mV

B-5-2.0

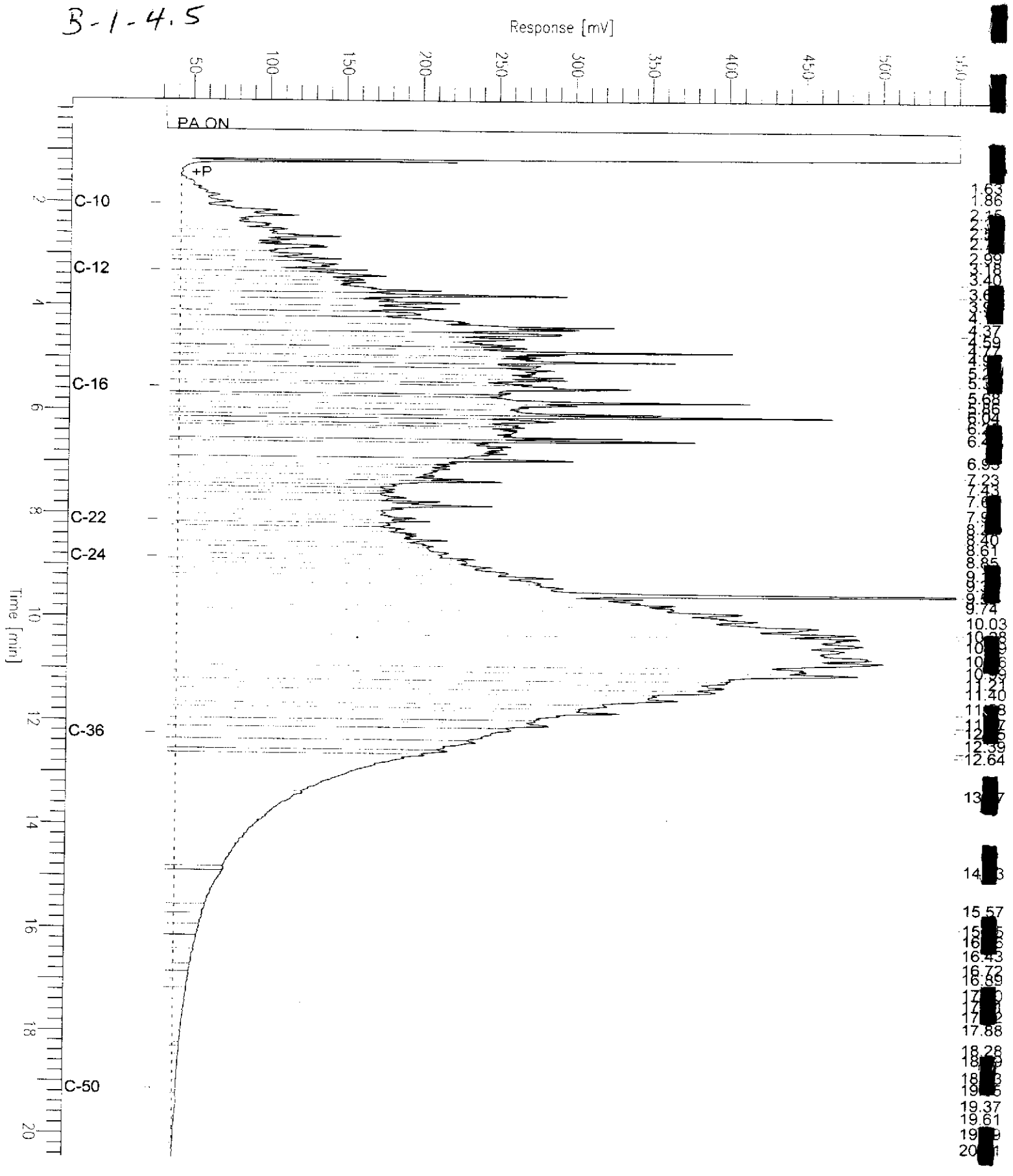


Chromatogram

Sample Name : 169122-004sg,86593
FileName : G:\GC11\CHA\336A029.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 29 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:25 AM
Time of Injection: 12/3/03 01:46 AM
Low Point : 28.57 mV High Point : 550.70 mV
Plot Scale: 522.1 mV

B-1-4.5

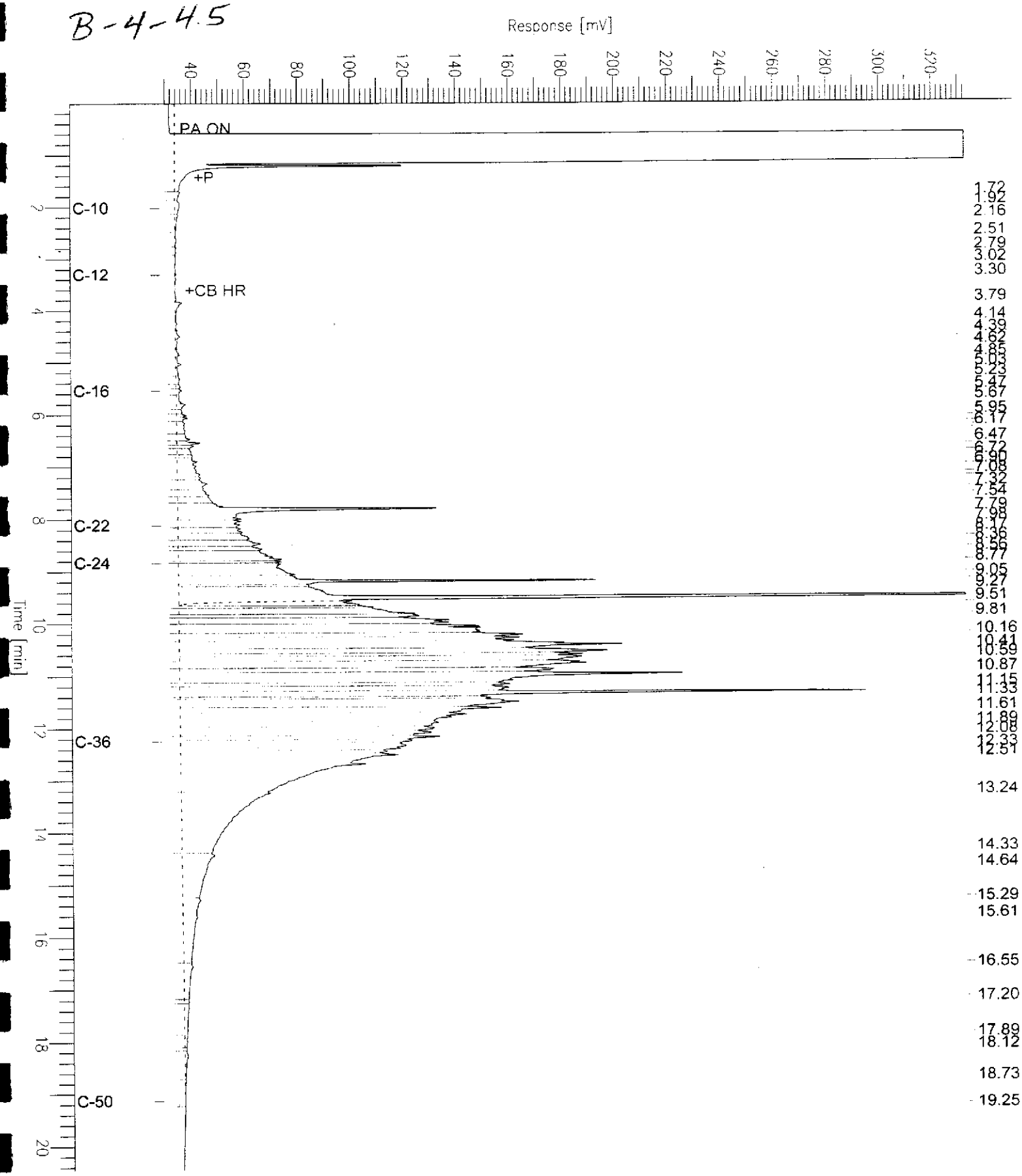


Chromatogram

Sample Name : 169122-007sg,86593
FileName : G:\GC11\CHA\336A027.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #: 86593
Date : 12/3/03 08:24 AM
Time of Injection: 12/3/03 12:49 AM
Low Point : 28.24 mV High Point : 332.57 mV
Plot Scale: 304.3 mV

B-4-4.5

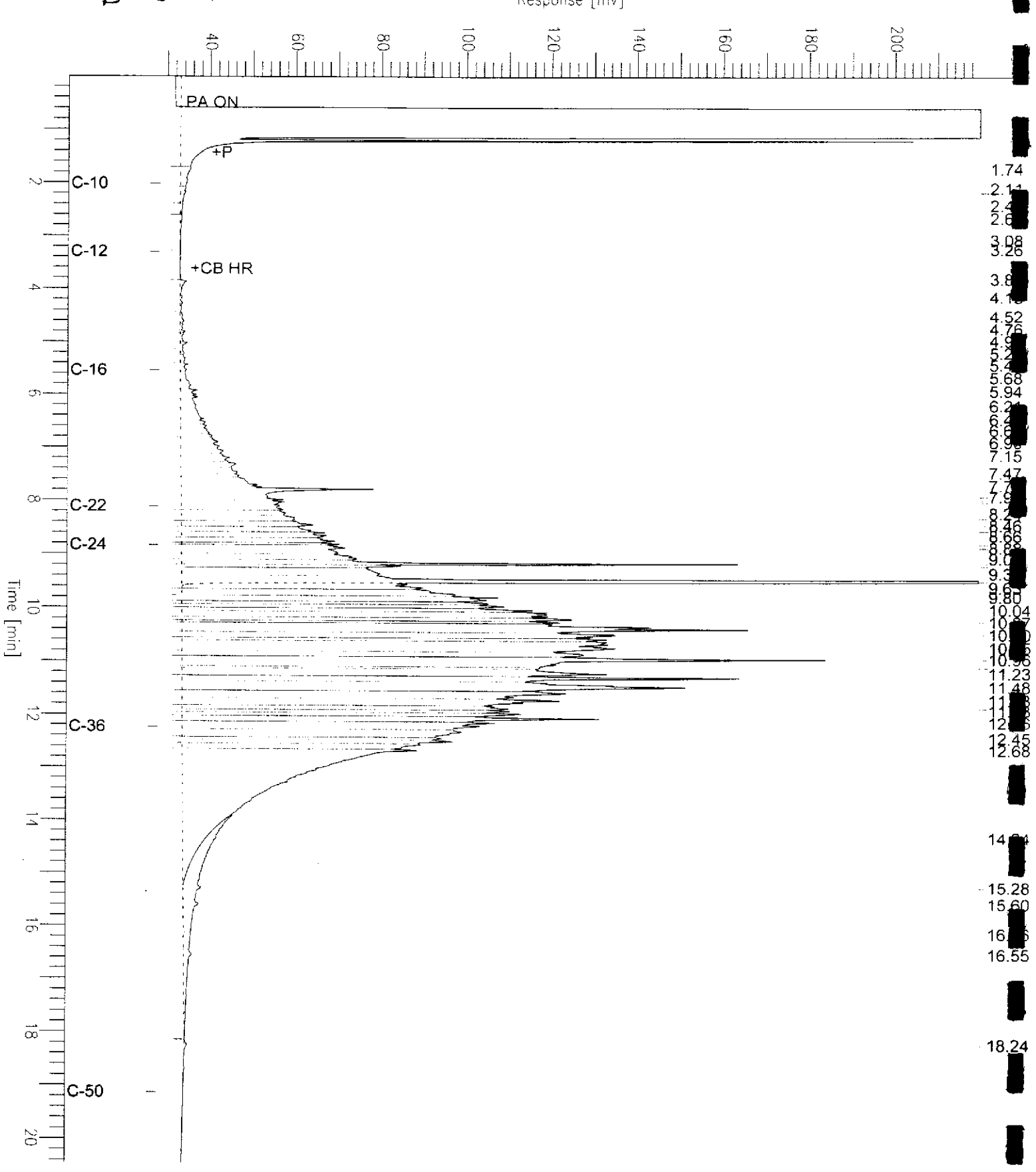


Chromatogram

Sample Name : 169122-012sg,86593
FileName : G:\GC11\CHA\336A026.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:23 AM
Time of Injection: 12/3/03 12:20 AM
Low Point : 28.24 mV High Point : 219.92 mV
Plot Scale: 191.7 mV

B-8-4.5



Curtis & Tompkins, Ltd

Total Extractable Hydrocarbons

Lab #:	169122	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8367.001		
Matrix:	Soil	Batch#:	86593
Units:	mg/Kg	Received:	11/26/03
Basis:	as received	Prepared:	12/02/03
Diln Fac:	1.000		

Field ID: B-9-1.5 Sampled: 11/25/03
Type: SAMPLE Analyzed: 12/02/03
Lab ID: 169122-014 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.1 H Y	1.0
Motor Oil C24-C36	11	5.0

Surrogate	%REC	Limits
Hexacosane	83	36-141

Field ID: B-7-2.0 Sampled: 11/25/03
Type: SAMPLE Analyzed: 12/02/03
Lab ID: 169122-016 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	5.5 H Y	1.0
Motor Oil C24-C36	54	5.0

Surrogate	%REC	Limits
Hexacosane	88	36-141

Field ID: B-6-2.0 Sampled: 11/25/03
Type: SAMPLE Analyzed: 12/02/03
Lab ID: 169122-018 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	5.0 H Y	1.0
Motor Oil C24-C36	38	5.0

Surrogate	%REC	Limits
Hexacosane	88	36-141

Field ID: B-3-2.5 Sampled: 11/25/03
Type: SAMPLE Analyzed: 12/02/03
Lab ID: 169122-020 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	6.2 H Y	1.0
Motor Oil C24-C36	55	5.0

Surrogate	%REC	Limits
Hexacosane	99	36-141

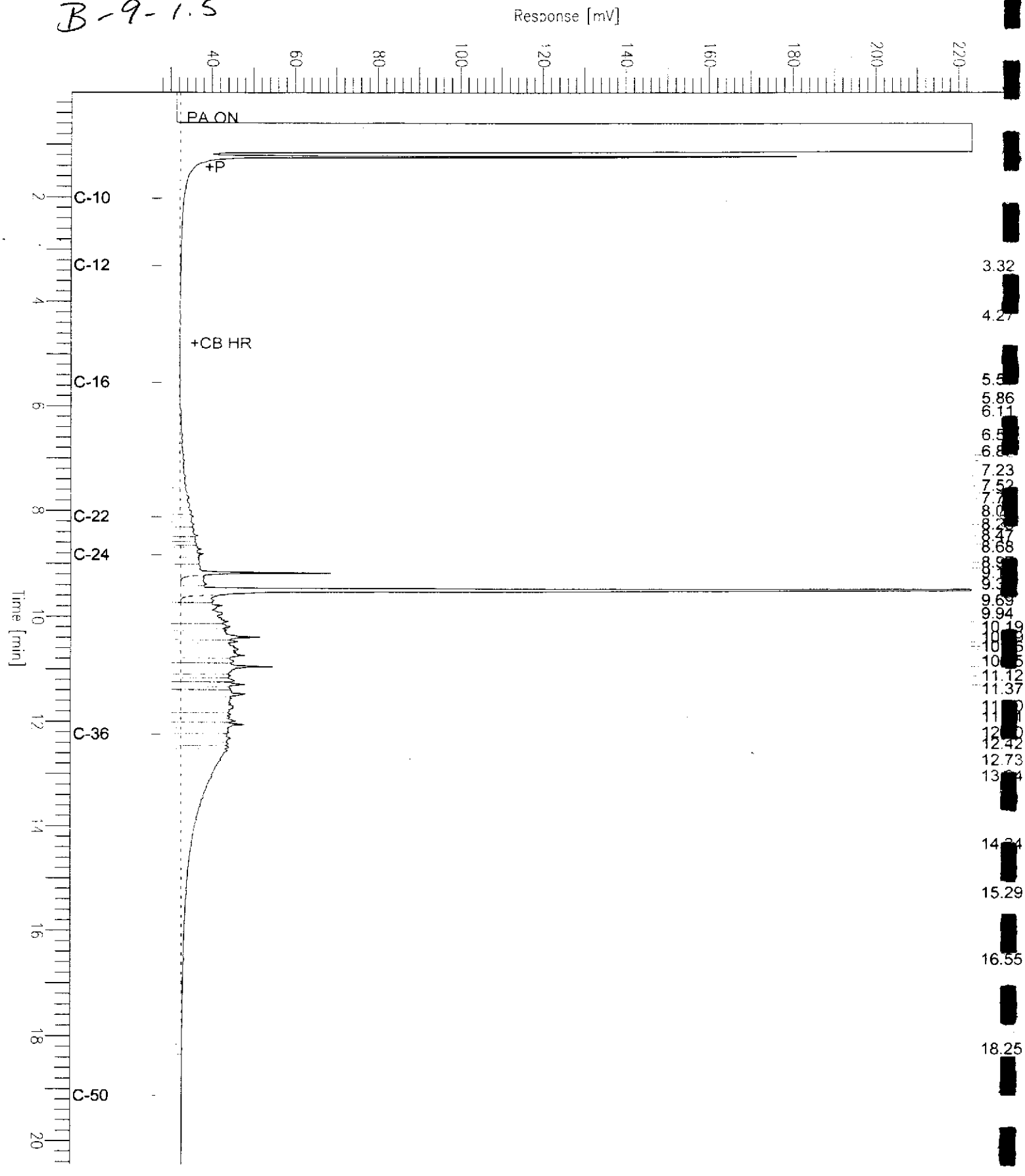
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 169122-014sg,86593
FileName : G:\GC11\CHA\336A019.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:18 AM
Time of Injection: 12/2/03 08:59 PM
Low Point : 27.92 mV High Point : 223.35 mV
Plot Scale: 195.4 mV

B-9-1.5

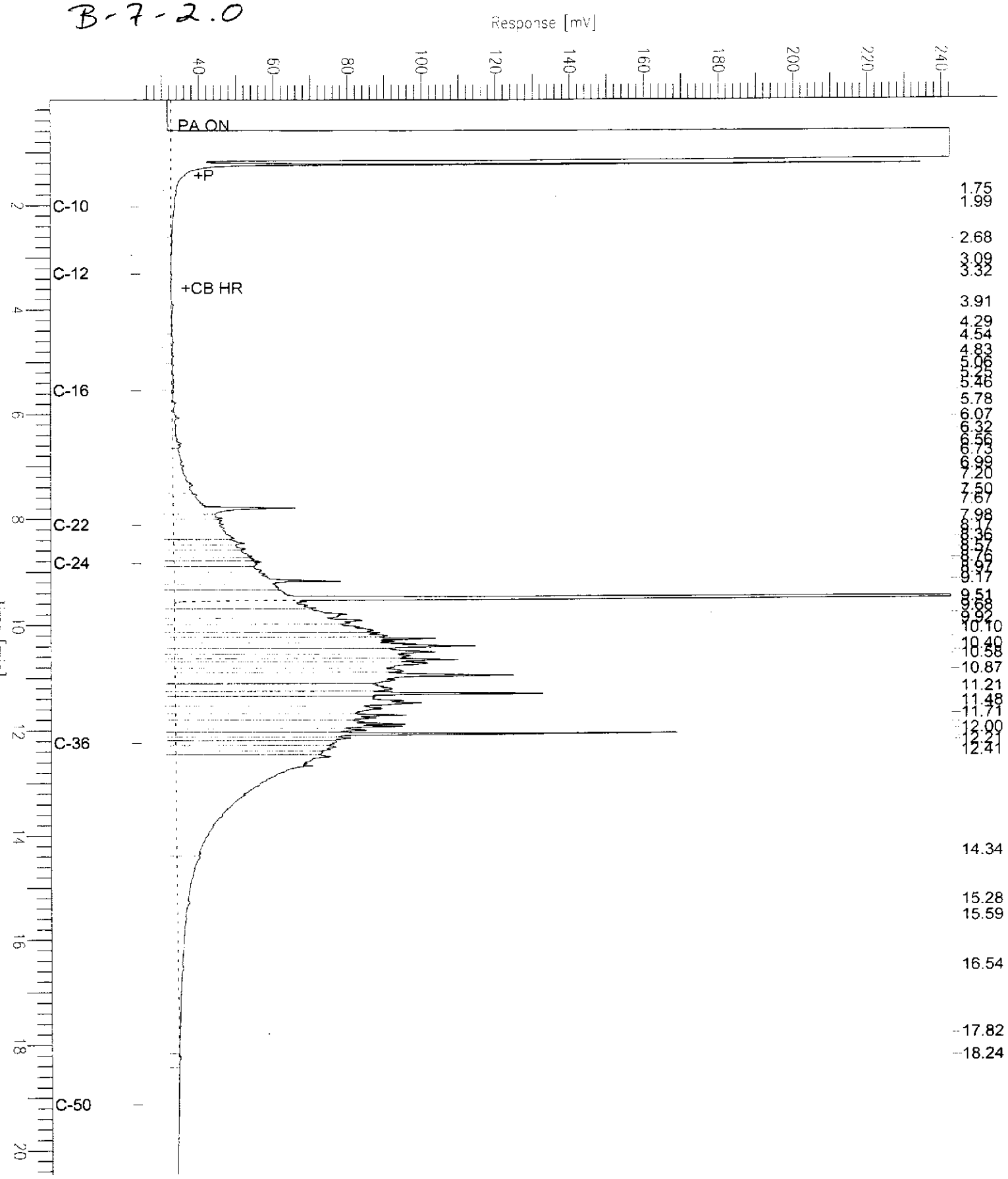


Chromatogram

Sample Name : 169122-016sg,86593
FileName : G:\GC11\CHA\336A021.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:20 AM
Time of Injection: 12/2/03 09:57 PM
Low Point : 24.35 mV High Point : 242.30 mV
Plot Scale: 218.0 mV

B-7-2.0

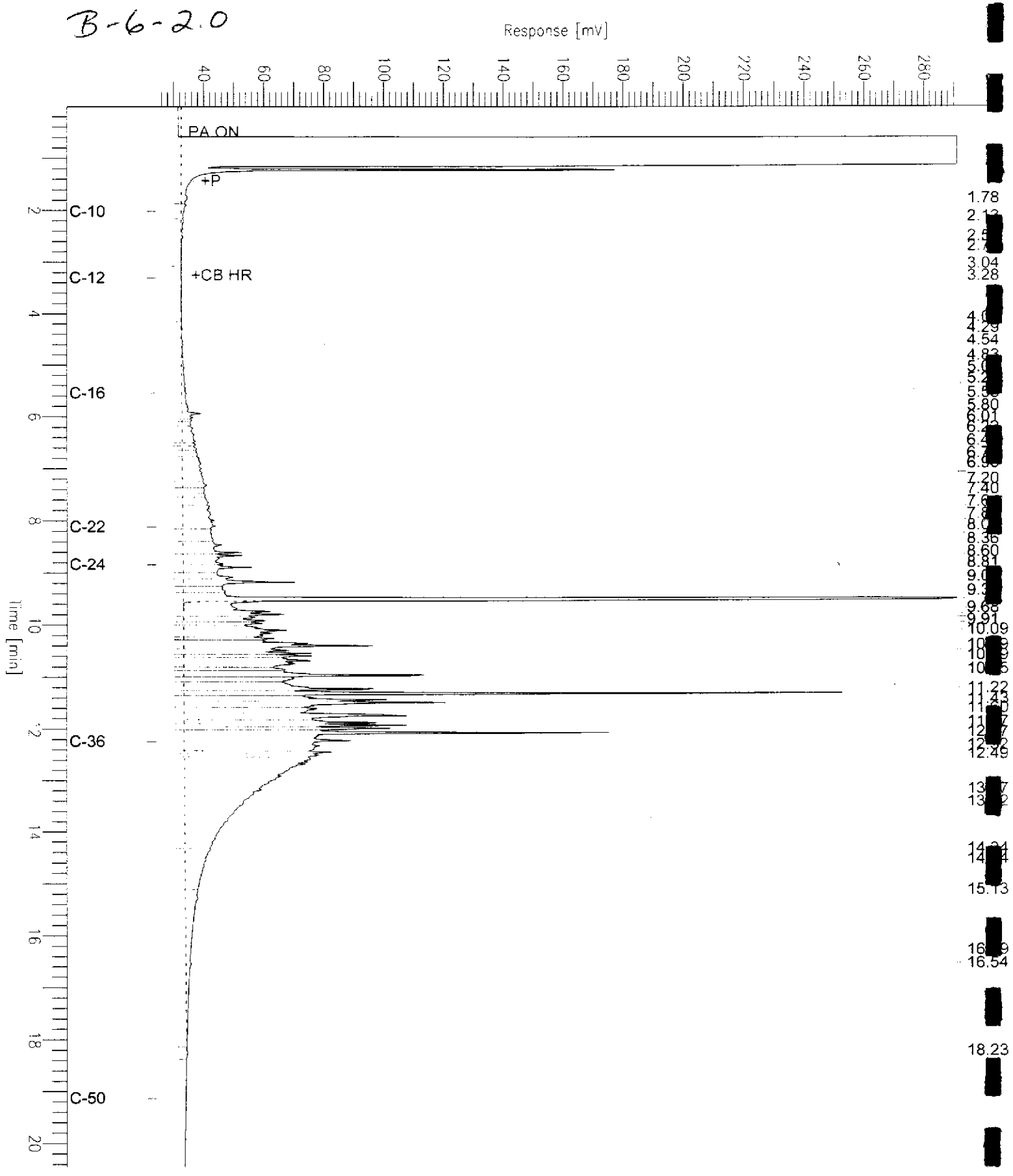


Chromatogram

Sample Name : 169122-018sg,86593
FileName : G:\GC11\CHA\336A020.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:18 AM
Time of Injection: 12/2/03 09:28 PM
Low Point : 24.30 mV High Point : 291.20 mV
Plot Scale: 266.9 mV

B-6-2.0

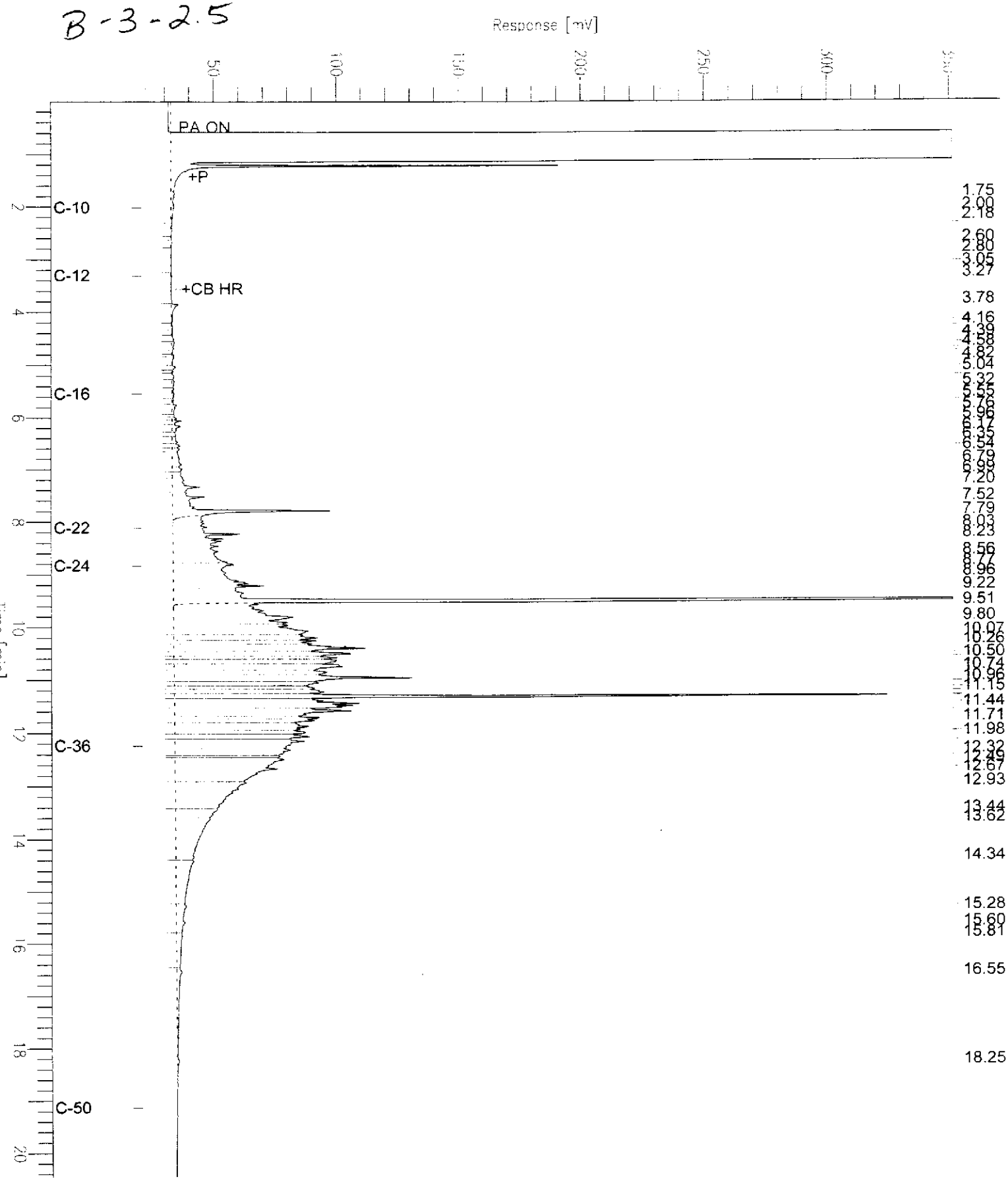


Chromatogram

Sample Name : 169122-020sg,86593
FileName : G:\GC11\CHA\336A022.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 21 mV

Sample #: 86593 Page 1 of 1
Date : 12/3/03 08:21 AM
Time of Injection: 12/2/03 10:25 PM
Low Point : 20.57 mV High Point : 351.34 mV
Plot Scale: 330.8 mV

B-3-2.5



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	169122	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8367.001		
Matrix:	Soil	Batch#:	86593
Units:	mg/Kg	Received:	11/26/03
Basis:	as received	Prepared:	12/02/03
Diln Fac:	1.000		

Type:	BLANK	Analyzed:	12/02/03
Lab ID:	QC233840	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
Hexacosane	96	36-141

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

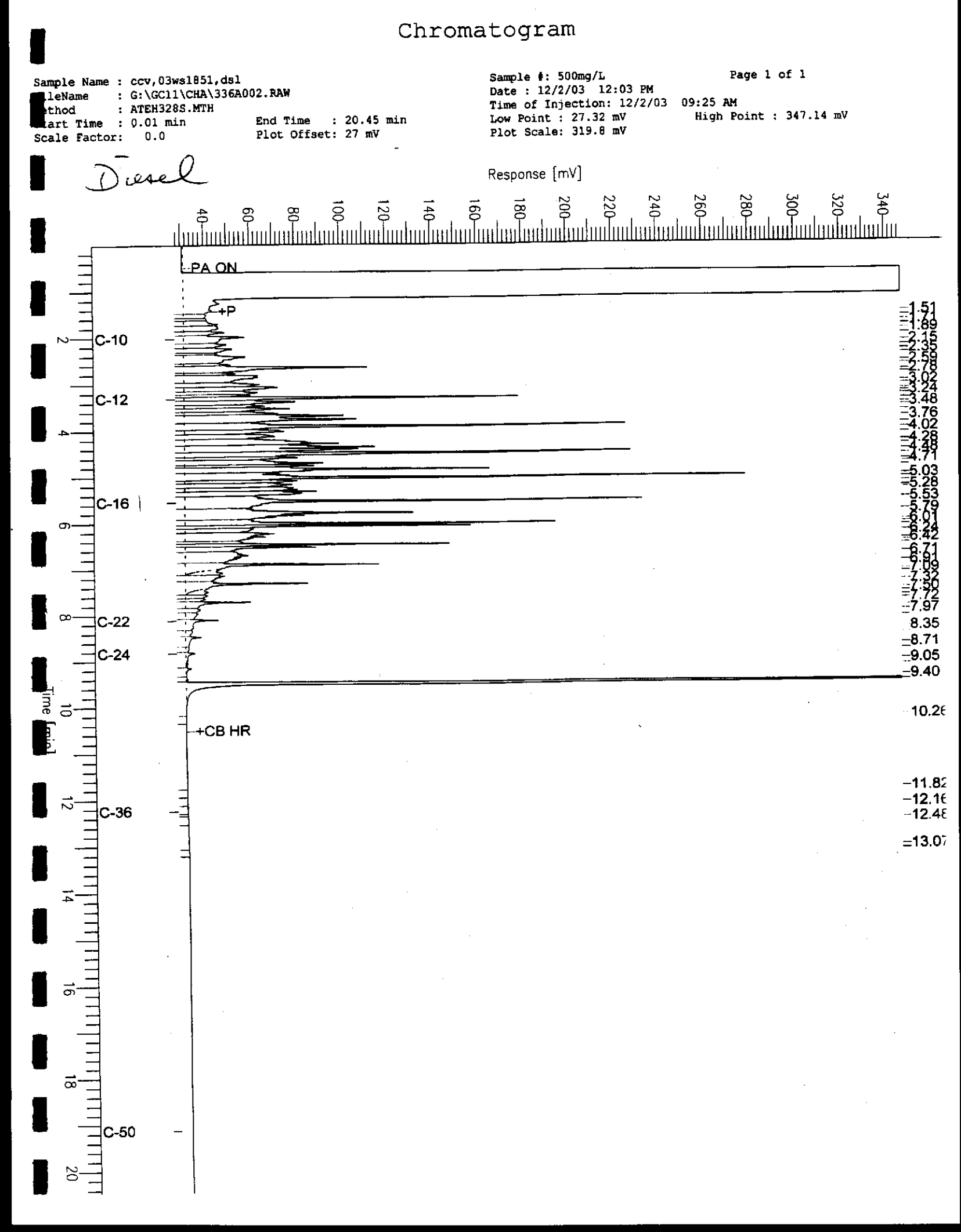
20.0

Chromatogram

Sample Name : ccv,03ws1851,dsl
FileName : G:\GC11\CHA\336A002.RAW
Method : ATEH328S.MTH
Start Time : 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #: 500mg/L Page 1 of 1
Date : 12/2/03 12:03 PM
Time of Injection: 12/2/03 09:25 AM
Low Point : 27.32 mV High Point : 347.14 mV
Plot Scale: 319.8 mV

Diesel

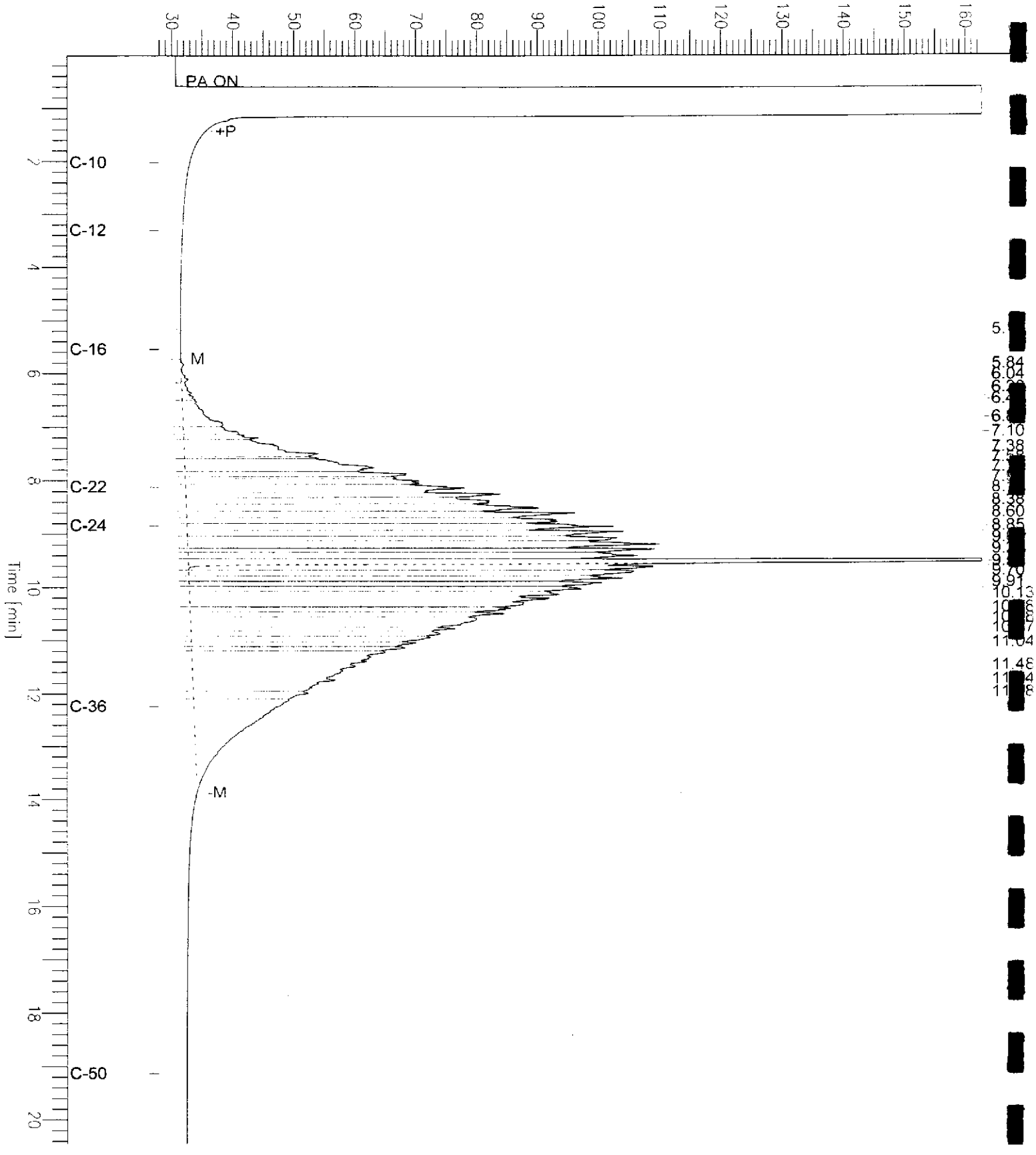


Chromatogram

Sample Name : ccv,03ws1852,mo
FileName : G:\GC11\CHA\336A003.RAW
Method :
Start Time ; 0.01 min End Time : 20.45 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #: 500mg/L Page 1 of 1
Date : 12/17/03 09:46 AM
Time of Injection: 12/2/03 09:54 AM
Low Point : 27.96 mV High Point : 162.68 mV
Plot Scale: 134.7 mV

Motor Oil



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	169122	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8367.001		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC233841	Batch#:	86593
Matrix:	Soil	Prepared:	12/02/03
Units:	mg/Kg	Analyzed:	12/02/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.69	42.42	85	49-129

Surrogate	%REC	Limits
Hexacosane	87	36-141

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	169122	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8367.001		
Field ID:	ZZZZZZZZZZ	Batch#:	86593
MSS Lab ID:	169155-001	Sampled:	11/14/03
Matrix:	Soil	Received:	11/17/03
Units:	mg/Kg	Prepared:	12/02/03
Basis:	as received		

Type:	MS	Analyzed:	12/02/03
Lab ID:	QC233842	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<0.3500	50.12	38.49	77	32-134

Surrogate	%REC	Limits
Hexacosane	82	36-141

Type:	MSD	Cleanup Method:	EPA 3630C
Lab ID:	QC233843		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln Fac	Analyzed
Diesel C10-C24	49.81	44.66	90	32-134	15	48	1.000	12/02/03

Surrogate	%REC	Limits	Diln Fac	Analyzed
Hexacosane	96	36-141	2.000	12/03/03

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-5	Batch#:	86603
Lab ID:	169122-009	Sampled:	11/24/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-5	Batch#:	86603
Lab ID:	169122-009	Sampled:	11/24/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	97	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-10	Batch#:	86603
Lab ID:	169122-010	Sampled:	11/25/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-10	Batch#:	86603
Lab ID:	169122-010	Sampled:	11/25/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	98	77-129
Toluene-d8	96	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-13	Batch#:	86603
Lab ID:	169122-011	Sampled:	11/25/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-13	Batch#:	86603
Lab ID:	169122-011	Sampled:	11/25/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	103	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-9	Batch#:	86603
Lab ID:	169122-022	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	0.6	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	5.4	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

15.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-9	Batch#:	86603
Lab ID:	169122-022	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121
1,2-Dichloroethane-d4	99	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-12	Batch#:	86603
Lab ID:	169122-023	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	1.4	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-12	Batch#:	86603
Lab ID:	169122-023	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-11	Batch#:	86603
Lab ID:	169122-024	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	2.5	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-11	Batch#:	86603
Lab ID:	169122-024	Sampled:	11/26/03
Matrix:	Water	Received:	11/26/03
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	97	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC233882	Batch#:	86603
Matrix:	Water	Analyzed:	12/02/03
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC233882	Batch#:	86603
Matrix:	Water	Analyzed:	12/02/03
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Matrix:	Water	Batch#:	86603
Units:	ug/L	Analyzed:	12/02/03
Diln Fac:	1.000		

Type: BS Lab ID: QC233880

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	41.51	83	73-126
Benzene	50.00	42.82	86	80-120
Trichloroethene	50.00	45.17	90	79-125
Toluene	50.00	44.02	88	80-120
Chlorobenzene	50.00	46.49	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	99	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	92	80-123

Type: BSD Lab ID: QC233881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	43.14	86	73-126	4	20
Benzene	50.00	45.01	90	80-120	5	20
Trichloroethene	50.00	46.44	93	79-125	3	20
Toluene	50.00	45.69	91	80-120	4	20
Chlorobenzene	50.00	48.20	96	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	98	77-129
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-123

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-5-5.5	Diln Fac:	0.9259
Lab ID:	169122-002	Batch#:	86634
Matrix:	Soil	Sampled:	11/24/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	9.3
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Acetone	ND	19
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.3
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.3
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.3
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	ND	4.6

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-5-5.5	Diln Fac:	0.9259
Lab ID:	169122-002	Batch#:	86634
Matrix:	Soil	Sampled:	11/24/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	112	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	117	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-8-5.5	Diln Fac:	1.000
Lab ID:	169122-013	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-8-5.5	Diln Fac:	1.000
Lab ID:	169122-013	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	111	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	105	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-9-5.5	Diln Fac:	0.9434
Lab ID:	169122-015	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	9.4
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Acetone	ND	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.4
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.4
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.4
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	ND	4.7

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-9-5.5	Diln Fac:	0.9434
Lab ID:	169122-015	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-128
1,2-Dichloroethane-d4	111	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	105	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-7-5.5	Basis:	as received
Lab ID:	169122-017	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	9.4	0.9434	86634	12/03/03
Chloromethane	ND	9.4	0.9434	86634	12/03/03
Vinyl Chloride	ND	9.4	0.9434	86634	12/03/03
Bromomethane	ND	9.4	0.9434	86634	12/03/03
Chloroethane	ND	9.4	0.9434	86634	12/03/03
Trichlorofluoromethane	ND	4.7	0.9434	86634	12/03/03
Acetone	ND	19	0.9434	86634	12/03/03
Freon 113	ND	4.7	0.9434	86634	12/03/03
1,1-Dichloroethene	ND	4.7	0.9434	86634	12/03/03
Methylene Chloride	ND	19	0.9434	86634	12/03/03
Carbon Disulfide	ND	4.7	0.9434	86634	12/03/03
MTBE	ND	4.7	0.9434	86634	12/03/03
trans-1,2-Dichloroethene	ND	4.7	0.9434	86634	12/03/03
Vinyl Acetate	ND	47	0.9434	86634	12/03/03
1,1-Dichloroethane	ND	4.7	0.9434	86634	12/03/03
2-Butanone	ND	9.4	0.9434	86634	12/03/03
cis-1,2-Dichloroethene	ND	4.7	0.9434	86634	12/03/03
2,2-Dichloropropane	ND	4.7	0.9434	86634	12/03/03
Chloroform	ND	4.7	0.9434	86634	12/03/03
Bromochloromethane	ND	4.7	0.9434	86634	12/03/03
1,1,1-Trichloroethane	ND	4.7	0.9434	86634	12/03/03
1,1-Dichloropropene	ND	4.7	0.9434	86634	12/03/03
Carbon Tetrachloride	ND	4.7	0.9434	86634	12/03/03
1,2-Dichloroethane	ND	4.7	0.9434	86634	12/03/03
Benzene	ND	4.7	0.9434	86634	12/03/03
Trichloroethene	ND	4.7	0.9434	86634	12/03/03
1,2-Dichloropropane	ND	4.7	0.9434	86634	12/03/03
Bromodichloromethane	ND	4.7	0.9434	86634	12/03/03
Dibromomethane	ND	4.7	0.9434	86634	12/03/03
4-Methyl-2-Pentanone	ND	9.4	0.9434	86634	12/03/03
cis-1,3-Dichloropropene	ND	4.7	0.9434	86634	12/03/03
Toluene	ND	4.7	0.9434	86634	12/03/03
trans-1,3-Dichloropropene	ND	4.7	0.9434	86634	12/03/03
1,1,2-Trichloroethane	ND	4.7	0.9434	86634	12/03/03
2-Hexanone	ND	9.4	0.9434	86634	12/03/03
1,3-Dichloropropane	ND	4.7	0.9434	86634	12/03/03
Tetrachloroethene	ND	4.5	0.9091	86713	12/05/03
Dibromochloromethane	ND	4.7	0.9434	86634	12/03/03

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-7-5.5	Basis:	as received
Lab ID:	169122-017	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
1,2-Dibromoethane	ND	4.7	0.9434	86634	12/03/03
Chlorobenzene	ND	4.7	0.9434	86634	12/03/03
1,1,1,2-Tetrachloroethane	ND	4.7	0.9434	86634	12/03/03
Ethylbenzene	ND	4.7	0.9434	86634	12/03/03
m,p-Xylenes	ND	4.7	0.9434	86634	12/03/03
o-Xylene	ND	4.7	0.9434	86634	12/03/03
Styrene	ND	4.7	0.9434	86634	12/03/03
Bromoform	ND	4.7	0.9434	86634	12/03/03
Isopropylbenzene	ND	4.7	0.9434	86634	12/03/03
1,1,2,2-Tetrachloroethane	ND	4.7	0.9434	86634	12/03/03
1,2,3-Trichloropropane	ND	4.7	0.9434	86634	12/03/03
Propylbenzene	ND	4.7	0.9434	86634	12/03/03
Bromobenzene	ND	4.7	0.9434	86634	12/03/03
1,3,5-Trimethylbenzene	ND	4.7	0.9434	86634	12/03/03
2-Chlorotoluene	ND	4.7	0.9434	86634	12/03/03
4-Chlorotoluene	ND	4.7	0.9434	86634	12/03/03
tert-Butylbenzene	ND	4.7	0.9434	86634	12/03/03
1,2,4-Trimethylbenzene	ND	4.7	0.9434	86634	12/03/03
sec-Butylbenzene	ND	4.7	0.9434	86634	12/03/03
para-Isopropyl Toluene	ND	4.7	0.9434	86634	12/03/03
1,3-Dichlorobenzene	ND	4.7	0.9434	86634	12/03/03
1,4-Dichlorobenzene	ND	4.7	0.9434	86634	12/03/03
n-Butylbenzene	ND	4.7	0.9434	86634	12/03/03
1,2-Dichlorobenzene	ND	4.7	0.9434	86634	12/03/03
1,2-Dibromo-3-Chloropropane	ND	4.7	0.9434	86634	12/03/03
1,2,4-Trichlorobenzene	ND	4.7	0.9434	86634	12/03/03
Hexachlorobutadiene	ND	4.7	0.9434	86634	12/03/03
Naphthalene	ND	4.7	0.9434	86634	12/03/03
1,2,3-Trichlorobenzene	ND	4.7	0.9434	86634	12/03/03

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	104	74-128	0.9434	86634	12/03/03
1,2-Dichloroethane-d4	111	76-130	0.9434	86634	12/03/03
Toluene-d8	101	80-120	0.9434	86634	12/03/03
Bromofluorobenzene	109	76-125	0.9434	86634	12/03/03

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-6-5.5	Diln Fac:	0.9804
Lab ID:	169122-019	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	9.8
Chloromethane	ND	9.8
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Chloroethane	ND	9.8
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-6-5.5	Diln Fac:	0.9804
Lab ID:	169122-019	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	115	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	108	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-3-5.5	Diln Fac:	0.9259
Lab ID:	169122-021	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	9.3
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Acetone	ND	19
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.3
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.3
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.3
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	ND	4.6

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-3-5.5	Diln Fac:	0.9259
Lab ID:	169122-021	Batch#:	86634
Matrix:	Soil	Sampled:	11/25/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-128
1,2-Dichloroethane-d4	113	76-130
Toluene-d8	102	80-120
Bromofluorobenzene	111	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC233993	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86634
Units:	ug/Kg	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC233993	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86634
Units:	ug/Kg	Analyzed:	12/03/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	109	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	113	76-125

ND= Not Detected
RL= Reporting Limit

50.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234090	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86634
Units:	ug/Kg	Analyzed:	12/03/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234090	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86634
Units:	ug/Kg	Analyzed:	12/03/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-128
1,2-Dichloroethane-d4	107	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	114	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234125	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86669
Units:	ug/Kg	Analyzed:	12/04/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234125	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86669
Units:	ug/Kg	Analyzed:	12/04/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	74-128
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	93	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234296	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86713
Units:	ug/Kg	Analyzed:	12/05/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	BLANK	Basis:	as received
Lab ID:	QC234296	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86713
Units:	ug/Kg	Analyzed:	12/05/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	109	76-125

ND= Not Detected
RL= Reporting Limit

52.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	LCS	Basis:	as received
Lab ID:	QC233992	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86634
Units:	ug/Kg	Analyzed:	12/03/03

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	44.41	89	72-125
Benzene	50.00	46.63	93	78-120
Trichloroethene	50.00	50.58	101	76-127
Toluene	50.00	49.42	99	79-120
Chlorobenzene	50.00	47.44	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-128
1,2-Dichloroethane-d4	109	76-130
Toluene-d8	103	80-120
Bromofluorobenzene	109	76-125

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	LCS	Basis:	as received
Lab ID:	QC234124	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86669
Units:	ug/Kg	Analyzed:	12/04/03

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	42.66	85	72-125
Benzene	50.00	46.47	93	78-120
Trichloroethene	50.00	48.58	97	76-127
Toluene	50.00	49.13	98	79-120
Chlorobenzene	50.00	47.28	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	74-128
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	92	76-125

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Type:	LCS	Basis:	as received
Lab ID:	QC234295	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86713
Units:	ug/Kg	Analyzed:	12/05/03

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	58.90	118	72-125
Benzene	50.00	54.42	109	78-120
Trichloroethene	50.00	56.76	114	76-127
Toluene	50.00	53.64	107	79-120
Chlorobenzene	50.00	55.98	112	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	74-128
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	106	76-125

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.9091
MSS Lab ID:	169229-015	Batch#:	86713
Matrix:	Soil	Sampled:	12/03/03
Units:	ug/Kg	Received:	12/04/03
Basis:	as received	Analyzed:	12/05/03

Type: MS Lab ID: QC234345

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.3000	45.45	55.47	122	53-135
Benzene	<0.07300	45.45	45.49	100	55-121
Trichloroethene	<0.2900	45.45	83.01	183 *	46-149
Toluene	<0.1800	45.45	44.18	97	44-129
Chlorobenzene	<0.1400	45.45	45.81	101	48-121

Surrogate	%REC	Limits
Dibromofluoromethane	76	74-128
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	97	80-120
Bromofluorobenzene	108	76-125

Type: MSD Lab ID: QC234346

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	45.45	54.37	120	53-135	2	20
Benzene	45.45	45.22	99	55-121	1	20
Trichloroethene	45.45	80.51	177 *	46-149	3	20
Toluene	45.45	44.91	99	44-129	2	20
Chlorobenzene	45.45	44.92	99	48-121	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	72 *	74-128
1,2-Dichloroethane-d4	103	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	104	76-125

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

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-5-5.5	Diln Fac:	0.9259
MSS Lab ID:	169122-002	Batch#:	86634
Matrix:	Soil	Sampled:	11/24/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/03/03

Type: MS Lab ID: QC234064

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.3100	46.30	43.11	93	53-135
Benzene	<0.07500	46.30	43.61	94	55-121
Trichloroethene	<0.2900	46.30	47.45	102	46-149
Toluene	<0.1800	46.30	44.83	97	44-129
Chlorobenzene	<0.1400	46.30	44.19	95	48-121

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-128
1,2-Dichloroethane-d4	111	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	114	76-125

Type: MSD Lab ID: QC234065

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	46.30	42.64	92	53-135	1	20
Benzene	46.30	44.41	96	55-121	2	20
Trichloroethene	46.30	47.52	103	46-149	0	20
Toluene	46.30	45.88	99	44-129	2	20
Chlorobenzene	46.30	44.89	97	48-121	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	108	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	106	76-125

RPD= Relative Percent Difference

54.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	169122	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8367.001		
Field ID:	B-1-5.5	Diln Fac:	0.9434
MSS Lab ID:	169122-005	Batch#:	86669
Matrix:	Soil	Sampled:	11/24/03
Units:	ug/Kg	Received:	11/26/03
Basis:	as received	Analyzed:	12/04/03

Type: MS Lab ID: QC234219

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1300	47.17	42.41	90	53-135
Benzene	<0.05400	47.17	44.60	95	55-121
Trichloroethene	<0.1000	47.17	45.75	97	46-149
Toluene	<0.1700	47.17	45.25	96	44-129
Chlorobenzene	<0.07300	47.17	44.63	95	48-121

Surrogate	%REC	Limits
Dibromofluoromethane	102	74-128
1,2-Dichloroethane-d4	110	76-130
Toluene-d8	103	80-120
Bromofluorobenzene	90	76-125

Type: MSD Lab ID: QC234220

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	47.17	43.42	92	53-135	2	20
Benzene	47.17	44.61	95	55-121	0	20
Trichloroethene	47.17	45.88	97	46-149	0	20
Toluene	47.17	44.30	94	44-129	2	20
Chlorobenzene	47.17	43.64	93	48-121	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	74-128
1,2-Dichloroethane-d4	110	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	89	76-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-5-2.0	Batch#:	86589
Lab ID:	169122-001	Sampled:	11/24/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	37	5.0
Acenaphthylene	11	5.0
Acenaphthene	68	5.0
Fluorene	130	5.0
Phenanthrene	59	5.0
Anthracene	7.1	5.0
Fluoranthene	44	5.0
Pyrene	46	5.0
Benzo(a)anthracene	17	5.0
Chrysene	34	5.0
Benzo(b)fluoranthene	41	5.0
Benzo(k)fluoranthene	22	5.0
Benzo(a)pyrene	27	5.0
Indeno(1,2,3-cd)pyrene	14	5.0
Dibenz(a,h)anthracene	5.0	5.0
Benzo(g,h,i)perylene	17	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	123	38-131
2-Fluorobiphenyl	91	45-129
Terphenyl-d14	94	41-140

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-1-4.5	Batch#:	86589
Lab ID:	169122-004	Sampled:	11/24/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	5.000		

Analyte	Result	RL
Naphthalene	62	25
Acenaphthylene	ND	25
Acenaphthene	ND	25
Fluorene	34	25
Phenanthrene	55	25
Anthracene	ND	25
Fluoranthene	ND	25
Pyrene	ND	25
Benzo(a)anthracene	ND	25
Chrysene	34	25
Benzo(b)fluoranthene	ND	25
Benzo(k)fluoranthene	ND	25
Benzo(a)pyrene	ND	25
Indeno(1,2,3-cd)pyrene	ND	25
Dibenz(a,h)anthracene	ND	25
Benzo(g,h,i)perylene	ND	25

Surrogate	%REC	Limits
Nitrobenzene-d5	164 *	38-131
2-Fluorobiphenyl	103	45-129
Terphenyl-d14	107	41-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-4-4.5	Batch#:	86589
Lab ID:	169122-007	Sampled:	11/24/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	7.7	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	5.5	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	5.2	5.0
Benzo(a)pyrene	5.1	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	93	38-131
2-Fluorobiphenyl	86	45-129
Terphenyl-d14	91	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-8-4.5	Batch#:	86589
Lab ID:	169122-012	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	4.9
Acenaphthylene	ND	4.9
Acenaphthene	ND	4.9
Fluorene	ND	4.9
Phenanthrene	9.8	4.9
Anthracene	ND	4.9
Fluoranthene	13	4.9
Pyrene	16	4.9
Benzo(a)anthracene	5.7	4.9
Chrysene	12	4.9
Benzo(b)fluoranthene	11	4.9
Benzo(k)fluoranthene	10	4.9
Benzo(a)pyrene	12	4.9
Indeno(1,2,3-cd)pyrene	5.4	4.9
Dibenz(a,h)anthracene	ND	4.9
Benzo(g,h,i)perylene	7.4	4.9

Surrogate	%REC	Limits
Nitrobenzene-d5	101	38-131
2-Fluorobiphenyl	93	45-129
Terphenyl-d14	98	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-9-1.5	Batch#:	86589
Lab ID:	169122-014	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	101	38-131
2-Fluorobiphenyl	94	45-129
Terphenyl-d14	99	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-7-2.0	Batch#:	86589
Lab ID:	169122-016	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	5.6	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	102	38-131
2-Fluorobiphenyl	93	45-129
Terphenyl-d14	104	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-6-2.0	Batch#:	86589
Lab ID:	169122-018	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	4.9
Acenaphthylene	ND	4.9
Acenaphthene	ND	4.9
Fluorene	ND	4.9
Phenanthrene	ND	4.9
Anthracene	ND	4.9
Fluoranthene	ND	4.9
Pyrene	ND	4.9
Benzo(a)anthracene	ND	4.9
Chrysene	ND	4.9
Benzo(b)fluoranthene	ND	4.9
Benzo(k)fluoranthene	ND	4.9
Benzo(a)pyrene	ND	4.9
Indeno(1,2,3-cd)pyrene	ND	4.9
Dibenz(a,h)anthracene	ND	4.9
Benzo(g,h,i)perylene	ND	4.9

Surrogate	%REC	Limits
Nitrobenzene-d5	99	38-131
2-Fluorobiphenyl	93	45-129
Terphenyl-d14	99	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-3-2.5	Batch#:	86589
Lab ID:	169122-020	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	6.8	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	43	5.0
Anthracene	8.5	5.0
Fluoranthene	59	5.0
Pyrene	67	5.0
Benzo(a)anthracene	29	5.0
Chrysene	36	5.0
Benzo(b)fluoranthene	35	5.0
Benzo(k)fluoranthene	30	5.0
Benzo(a)pyrene	39	5.0
Indeno(1,2,3-cd)pyrene	18	5.0
Dibenz(a,h)anthracene	5.9	5.0
Benzo(g,h,i)perylene	23	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	100	38-131
2-Fluorobiphenyl	87	45-129
Terphenyl-d14	96	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC233822	Batch#:	86589
Matrix:	Soil	Prepared:	12/02/03
Units:	ug/Kg	Analyzed:	12/02/03
Basis:	as received		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	85	38-131
2-Fluorobiphenyl	91	45-129
Terphenyl-d14	100	41-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC233823	Batch#:	86589
Matrix:	Soil	Prepared:	12/02/03
Units:	ug/Kg	Analyzed:	12/02/03
Basis:	as received		

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.62	34.46	102	47-124
Pyrene	33.62	36.26	108	44-123

Surrogate	%REC	Limits
Nitrobenzene-d5	100	38-131
2-Fluorobiphenyl	97	45-129
Terphenyl-d14	102	41-140

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Semivolatile Organics by GC/MS SIM

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8270C-SIM
Project#:	8367.001		
Field ID:	B-5-2.0	Batch#:	86589
MSS Lab ID:	169122-001	Sampled:	11/24/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/02/03
Diln Fac:	1.000		

Type: MS Lab ID: QC233824

Analyte	MSS Result	Spiked	Result	%REC	Limits
Acenaphthene	68.15	33.24	47.31	-63 NM	55-122
Pyrene	46.42	33.24	57.47	33	30-134

Surrogate	%REC	Limits
Nitrobenzene-d5	111	38-131
2-Fluorobiphenyl	84	45-129
Terphenyl-d14	96	41-140

Type: MSD Lab ID: QC233825

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	33.66	44.10	-71 NM	55-122	7	26
Pyrene	33.66	42.61	-11 *	30-134	30	32

Surrogate	%REC	Limits
Nitrobenzene-d5	112	38-131
2-Fluorobiphenyl	85	45-129
Terphenyl-d14	90	41-140

*= Value outside of QC limits; see narrative
NM= Not Meaningful
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-4-4.5	Batch#:	86599
Lab ID:	169122-007	Sampled:	11/24/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/10/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	8.6
beta-BHC	ND	8.6
gamma-BHC	ND	8.6
delta-BHC	ND	8.6
Heptachlor	ND	8.6
Aldrin	ND	8.6
Heptachlor epoxide	ND	8.6
Endosulfan I	ND	8.6
Dieldrin	ND	17
4,4'-DDE	ND	17
Endrin	ND	17
Endosulfan II	ND	17
Endosulfan sulfate	ND	17
4,4'-DDD	ND	17
Endrin aldehyde	ND	17
4,4'-DDT	ND	17
alpha-Chlordane	ND	8.6
gamma-Chlordane	ND	8.6
Methoxychlor	ND	86
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	143 *	22-136
Decachlorobiphenyl	153 *	22-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

62.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-8-4.5	Batch#:	86599
Lab ID:	169122-012	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/10/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	8.5
beta-BHC	ND	8.5
gamma-BHC	ND	8.5
delta-BHC	ND	8.5
Heptachlor	ND	8.5
Aldrin	ND	8.5
Heptachlor epoxide	ND	8.5
Endosulfan I	ND	8.5
Dieldrin	ND	16
4,4'-DDE	ND	16
Endrin	ND	16
Endosulfan II	ND	16
Endosulfan sulfate	ND	16
4,4'-DDD	ND	16
Endrin aldehyde	ND	16
4,4'-DDT	ND	16
alpha-Chlordane	ND	8.5
gamma-Chlordane	ND	8.5
Methoxychlor	ND	85
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	141 *	22-136
Decachlorobiphenyl	124	22-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

63.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-9-1.5	Batch#:	86599
Lab ID:	169122-014	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/09/03
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	3.3
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	132	22-136
Decachlorobiphenyl	118	22-140

ND= Not Detected
RL= Reporting Limit

64.0

Curtis & Tompkins, Ltd

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-7-2.0	Batch#:	86599
Lab ID:	169122-016	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/10/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	8.4
beta-BHC	ND	8.4
gamma-BHC	ND	8.4
delta-BHC	ND	8.4
Heptachlor	ND	8.4
Aldrin	ND	8.4
Heptachlor epoxide	ND	8.4
Endosulfan I	ND	8.4
Dieldrin	ND	16
4,4'-DDE	ND	16
Endrin	ND	16
Endosulfan II	ND	16
Endosulfan sulfate	ND	16
4,4'-DDD	ND	16
Endrin aldehyde	ND	16
4,4'-DDT	ND	16
alpha-Chlordane	ND	8.4
gamma-Chlordane	ND	8.4
Methoxychlor	ND	84
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	156 *	22-136
Decachlorobiphenyl	131	22-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

65.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-6-2.0	Batch#:	86599
Lab ID:	169122-018	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/10/03
Diln Fac:	5.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	8.4
beta-BHC	ND	8.4
gamma-BHC	ND	8.4
delta-BHC	ND	8.4
Heptachlor	ND	8.4
Aldrin	ND	8.4
Heptachlor epoxide	ND	8.4
Endosulfan I	ND	8.4
Dieldrin	ND	16
4,4'-DDE	ND	16
Endrin	ND	16
Endosulfan II	ND	16
Endosulfan sulfate	ND	16
4,4'-DDD	ND	16
Endrin aldehyde	ND	16
4,4'-DDT	ND	16
alpha-Chlordane	ND	8.4
gamma-Chlordane	ND	8.4
Methoxychlor	ND	84
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	145 *	22-136
Decachlorobiphenyl	106	22-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

66.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Field ID:	B-3-2.5	Batch#:	86599
Lab ID:	169122-020	Sampled:	11/25/03
Matrix:	Soil	Received:	11/26/03
Units:	ug/Kg	Prepared:	12/02/03
Basis:	as received	Analyzed:	12/09/03
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	3.3
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	146 *	22-136
Decachlorobiphenyl	123	22-140

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

67.0

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC233861	Batch#:	86599
Matrix:	Soil	Prepared:	12/02/03
Units:	ug/Kg	Analyzed:	12/09/03
Basis:	as received		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	3.3
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	130	22-136
Decachlorobiphenyl	129	22-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	169122	Prep:	EPA 3550
Client:	Geomatrix Consultants	Analysis:	EPA 8081A
Project#:	8367.001		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC233862	Batch#:	86599
Matrix:	Soil	Prepared:	12/02/03
Units:	ug/Kg	Analyzed:	12/09/03
Basis:	as received		

Cleanup Method: EPA 3620B

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	16.56	16.50	100	43-124
Heptachlor	16.56	17.72	107	43-137
Aldrin	16.56	17.07	103	47-124
Dieldrin	16.56	15.85	96	48-123
Endrin	16.56	16.77	101	54-146
4,4'-DDT	16.56	17.64	107	40-134

Surrogate	%REC	Limits
TCMX	137 *	22-136
Decachlorobiphenyl	124	22-140

*= Value outside of QC limits; see narrative

Curtis & Tompkins, Ltd.

Arsenic

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Arsenic	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	4.0	0.25	11/24/03
B-1-4.5	SAMPLE	169122-004	2.5	0.27	11/24/03
B-4-4.5	SAMPLE	169122-007	3.1	0.24	11/24/03
B-8-4.5	SAMPLE	169122-012	4.3	0.27	11/25/03
B-9-1.5	SAMPLE	169122-014	6.3	0.24	11/25/03
B-7-2.0	SAMPLE	169122-016	6.8	0.24	11/25/03
B-6-2.0	SAMPLE	169122-018	4.4	0.23	11/25/03
B-3-2.5	SAMPLE	169122-020	13	0.24	11/25/03
	BLANK	QC234105	ND	0.25	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Arsenic

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Arsenic	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	50.00	51.50	103	74-120		
BSD	QC234107	50.00	54.00	108	74-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Arsenic

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Arsenic	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	19.21	49.50	62.87	88	40-126		
MSD	QC234109		54.95	68.68	90	40-126	1	28

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Cadmium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Cadmium	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	ND	0.25	11/24/03
B-1-4.5	SAMPLE	169122-004	ND	0.27	11/24/03
B-4-4.5	SAMPLE	169122-007	ND	0.24	11/24/03
B-8-4.5	SAMPLE	169122-012	0.27	0.27	11/25/03
B-9-1.5	SAMPLE	169122-014	0.34	0.24	11/25/03
B-7-2.0	SAMPLE	169122-016	ND	0.24	11/25/03
B-6-2.0	SAMPLE	169122-018	ND	0.23	11/25/03
B-3-2.5	SAMPLE	169122-020	0.50	0.24	11/25/03
	BLANK	QC234105	ND	0.25	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Cadmium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Cadmium	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	10.00	9.550	96	72-120		
BSD	QC234107	10.00	10.00	100	72-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

Cadmium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Cadmium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	0.4822	9.901	8.614	82	47-120		
MSD	QC234109		10.99	9.451	82	47-120	1	24

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Chromium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Chromium	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	25	0.49	11/24/03
B-1-4.5	SAMPLE	169122-004	25	0.55	11/24/03
B-4-4.5	SAMPLE	169122-007	23	0.49	11/24/03
B-8-4.5	SAMPLE	169122-012	36	0.53	11/25/03
B-9-1.5	SAMPLE	169122-014	32	0.49	11/25/03
B-7-2.0	SAMPLE	169122-016	29	0.49	11/25/03
B-6-2.0	SAMPLE	169122-018	24	0.47	11/25/03
B-3-2.5	SAMPLE	169122-020	27	0.49	11/25/03
	BLANK	QC234105	ND	0.50	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Chromium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Chromium	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	100.0	97.50	98	74-120		
BSD	QC234107	100.0	102.0	102	74-120	5	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Chromium

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Chromium	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	59.90	99.01	144.6	86	35-131		
MSD	QC234109		109.9	152.7	84	35-131	1	29

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

Nickel

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Nickel	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	24	0.98	11/24/03
B-1-4.5	SAMPLE	169122-004	15	1.1	11/24/03
B-4-4.5	SAMPLE	169122-007	16	0.97	11/24/03
B-8-4.5	SAMPLE	169122-012	37	1.1	11/25/03
B-9-1.5	SAMPLE	169122-014	38	0.97	11/25/03
B-7-2.0	SAMPLE	169122-016	27	0.97	11/25/03
B-6-2.0	SAMPLE	169122-018	17	0.93	11/25/03
B-3-2.5	SAMPLE	169122-020	25	0.97	11/25/03
	BLANK	QC234105	ND	1.0	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Nickel

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Nickel	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	25.00	24.05	96	72-120		
BSD	QC234107	25.00	25.10	100	72-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Nickel

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Nickel	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	63.86	24.75	84.16	82	32-136		
MSD	QC234109		27.47	86.81	84	32-136	0	35

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Lead	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	18	0.15	11/24/03
B-1-4.5	SAMPLE	169122-004	4.9	0.16	11/24/03
B-4-4.5	SAMPLE	169122-007	8.4	0.15	11/24/03
B-8-4.5	SAMPLE	169122-012	14	0.16	11/25/03
B-9-1.5	SAMPLE	169122-014	5.7	0.15	11/25/03
B-7-2.0	SAMPLE	169122-016	24	0.15	11/25/03
B-6-2.0	SAMPLE	169122-018	6.4	0.14	11/25/03
B-3-2.5	SAMPLE	169122-020	83	0.15	11/25/03
	BLANK	QC234105	ND	0.15	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	100.0	97.00	97	71-120		
BSD	QC234107	100.0	102.5	103	71-120	6	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	31.63	99.01	112.4	82	23-137		
MSD	QC234109		109.9	124.2	84	23-137	2	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Zinc

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Zinc	Batch#:	86665
Matrix:	Soil	Received:	11/26/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
B-5-2.0	SAMPLE	169122-001	33	0.98	11/24/03
B-1-4.5	SAMPLE	169122-004	20	1.1	11/24/03
B-4-4.5	SAMPLE	169122-007	31	0.97	11/24/03
B-8-4.5	SAMPLE	169122-012	47	1.1	11/25/03
B-9-1.5	SAMPLE	169122-014	52	0.97	11/25/03
B-7-2.0	SAMPLE	169122-016	100	0.97	11/25/03
B-6-2.0	SAMPLE	169122-018	23	0.93	11/25/03
B-3-2.5	SAMPLE	169122-020	100	0.97	11/25/03
	BLANK	QC234105	ND	1.0	

ND= Not Detected
RL= Reporting Limit

38.0

Curtis & Tompkins, Ltd.

Zinc

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Zinc	Diln Fac:	1.000
Matrix:	Soil	Batch#:	86665
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC234106	25.00	24.35	97	68-120		
BSD	QC234107	25.00	24.90	100	68-120	2	20

RPD= Relative Percent Difference

Zinc

Lab #:	169122	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8367.001		
Analyte:	Zinc	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	86665
MSS Lab ID:	169000-003	Sampled:	11/19/03
Matrix:	Soil	Received:	11/20/03
Units:	mg/Kg	Prepared:	12/04/03
Basis:	as received	Analyzed:	12/04/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC234108	102.5	24.75	122.3	80 NM	20-147		
MSD	QC234109		27.47	124.7	81	20-147	0	32

NM= Not Meaningful
RPD= Relative Percent Difference

GEOMATRIX

ATTACHMENT C

Additional Analytical Laboratory Reports for Soil Samples

ATTACHMENT C
ADDITIONAL SOIL SAMPLING

This attachment presents the sampling methodologies and analytical results of additional soil samples collected in the vicinity of borings GMX-1 and B-3 if it was deemed necessary to remove soil off site because of elevated concentrations of benzo(a)pyrene and other polynuclear aromatic hydrocarbons (PAHs). As described in the main body of the report, soil samples were collected from five step-out borings (SW-N, SW-E, SW-S, SW-W, and BW) advanced in the vicinity of borings GMX-1 and B-3 to further characterize the extent of benzo(a)pyrene and PAHs in soil.

For waste characterization purposes, three randomly selected discrete soil samples were collected from borings SW-S, SW-E, and BW, at depths of approximately 1.5 feet bgs and submitted to STL. The soil samples were composited by the laboratory and analyzed for TPHd using EPA Modified Method 8015M; benzene, toluene, ethylbenzene, and xylenes, collectively referred to as BTEX, using EPA Method 8260B; total lead by atomic absorption using EPA Method 7420; and soluble lead using the toxicity characteristic leaching procedure (TCLP) and the Waste Extraction Test (WET) methods. TCLP lead results were compared to a standard of 5 milligrams per liter (mg/L) (Code of Federal Regulations Part 261.24) while the WET lead results were compared to the Soluble Threshold Limit Concentration (STLC) value of 5 mg/L lead in leachate water (California Code of Regulations, Title 22, Section 66261.24). A summary of the analytical results is presented in Table C-1. BTEX compounds were not detected above the laboratory detection limits and TPHd was reported at 16 mg/kg. Total lead was detected at a concentration of 330 mg/kg and soluble lead using the WET procedure was detected at concentration of 41 mg/L. Soluble lead using the TCLP procedure was not detected above the laboratory SQL. Copies of the chain-of-custody records and analytical laboratory reports are presented at the end of this attachment.

As described in the main body of the report, analytical results of soil samples indicate that elevated concentrations of benzo(a)pyrene and PAHs in soil are limited in lateral and vertical extent. The arithmetic average of benzo(a)pyrene of soil samples collected in the vicinity of borings GMX-1 and B-3 is equivalent to the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), Environmental Screening Levels (ESLs) for residential land use,[7] suggesting that the presence of benzo(a)pyrene in soil in the vicinity of GMX-1 and B-3 does not pose an unacceptable human health risk to future residents at the site. It should be noted that the waste characterization results are not used to evaluate potential exposures or estimated health risks. In addition, based on Pulte's design plans, the area in the vicinity of GMX-1 and B-3 will be covered by either asphalt concrete or housing units; therefore, potential exposures from direct contact with soil are incomplete. Based on the information described herein, no soil was removed from the vicinity of borings GMX-1 and B-3 and taken off site for disposal.

[7] California Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final – July 2003.

GEOMATRIX

TABLE C-1

SOIL SAMPLE ANALYTICAL RESULTS FOR WASTE CHARACTERIZATION[1]

1249 67th Street
Emeryville, California

Concentrations reported in milligrams per kilogram (mg/kg) or otherwise indicated

Sample Location	Sample Date	Benzene	Ethyl-benzene	Toluene	Xylenes	Total Lead	TPHd	STLC Lead (mg/L)	TCLP Lead (mg/L)
IDW-121103	12/11/03	<0.005	<0.005	<0.005	<0.005	**330**	**16**	**41**	<0.5

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by STL Chromalab, Inc. of Pleasanton, California, for BTEX using U.S. Environmental Protection Agency (EPA) Method 8260B, total lead by atomic absorption EPA 7420, TPHd by EPA 8015M, and soluble lead.

Abbreviations:

"<" = indicates constituent was not detected at or above laboratory reporting limit indicated

TPHd = Total petroleum hydrocarbons as diesel

STLC = Soluble Threshold Limit Concentration

TCLP = Toxicity Characteristic Leaching Procedure

SEVERN TRENT STL

Submission#: 2003-12-0380

Geomatrix Consultants

December 18, 2003

2101 Webster Street, 12th Floor
Oakland, CA 94612
Attn.: Robert Cheung
Project#: 8367.001

SOIL CONFIRMATION DATA.

Attached is our report for your samples received on 12/11/2003 18:20
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 01/25/2004 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: asalimpour@stl-inc.com

Sincerely,

Afsaneh Salimpour

Afsaneh Salimpour
Project Manager

SEVERN TRENT STL

Submission #: 2003-12-0380

Fuel Oxygenates by 8260B

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
IDW-121103	12/11/2003 15:55	Soil	6

SEVERN TRENT STL

Submission #: 2003-12-0380

Fuel Oxygenates by 8260B

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 5030B
Sample ID: **IDW-121103**
Sampled: 12/11/2003 15:55
Matrix: Soil

Test(s): 8260B
Lab ID: 2003-12-0380 - 6
Extracted: 12/12/2003 11:54
QC Batch#: 2003/12/12-01.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Benzene	ND	5.0	ug/Kg	1.00	12/12/2003 11:54	
Toluene	ND	5.0	ug/Kg	1.00	12/12/2003 11:54	
Ethyl benzene	ND	5.0	ug/Kg	1.00	12/12/2003 11:54	
Total xylenes	ND	5.0	ug/Kg	1.00	12/12/2003 11:54	
Surrogate(s)						
1,2-Dichloroethane-d4	86.0	70-121	%	1.00	12/12/2003 11:54	
Toluene-d8	84.7	81-117	%	1.00	12/12/2003 11:54	

SEVERN TRENT STL

Submission #: 2003-12-0380

Fuel Oxygenates by 8260B

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2003/12/12-01.69-007

Soil

Test(s): 8260B
QC Batch # 2003/12/12-01.69
Date Extracted: 12/12/2003 10:07

Compound	Conc.	RL	Unit	Analyzed	Flag
Benzene	ND	0.0050	mg/Kg	12/12/2003 10:07	
Toluene	ND	0.0050	mg/Kg	12/12/2003 10:07	
Ethyl benzene	ND	0.0050	mg/Kg	12/12/2003 10:07	
Total xylenes	ND	0.0050	mg/Kg	12/12/2003 10:07	
Surrogates(s)					
1,2-Dichloroethane-d4	84.4	70-121	%	12/12/2003 10:07	
Toluene-d8	104.2	81-117	%	12/12/2003 10:07	

Fuel Oxygenates by 8260B

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Soil** **QC Batch # 2003/12/12-01.69**

LCS 2003/12/12-01.69-029 Extracted: 12/12/2003 Analyzed: 12/12/2003 09:29
LCSD 2003/12/12-01.69-048 Extracted: 12/12/2003 Analyzed: 12/12/2003 09:48

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	39.6	45.0	50.0	79.2	90.0	12.8	69-129	20		
Toluene	46.3	48.9	50.0	92.6	97.8	5.5	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	457	445	500	91.4	89.0		70-121			
Toluene-d8	450	483	500	90.0	96.6		81-117			

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Lead by AA

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
IDW-121103	12/11/2003 15:55	Soil	6

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Lead by AA

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3050B	Test(s):	7420
Sample ID:	**IDW-121103**	Lab ID:	2003-12-0380 - 6
Sampled:	12/11/2003 15:55	Extracted:	12/12/2003 05:19
Matrix:	Soil	QC Batch#:	2003/12/12-01.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	330	5.0	mg/Kg	1.00	12/12/2003 09:48	

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Lead by AA

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3050B
Method Blank
MB: 2003/12/12-01.15-046

Soil

Test(s): 7420
QC Batch # 2003/12/12-01.15
Date Extracted: 12/12/2003 05:19

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	5.0	mg/Kg	12/12/2003 09:32	

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Lead by AA

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3050B

Test(s): 7420

Laboratory Control Spike **Soil** **QC Batch # 2003/12/12-01.15**

LCS 2003/12/12-01.15-047 Extracted: 12/12/2003 Analyzed: 12/12/2003 09:32
LCSD 2003/12/12-01.15-048 Extracted: 12/12/2003 Analyzed: 12/12/2003 09:33

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	102	90.9	100	102.0	90.9	11.5	85-115	20		

SEVERN TRENT STL

Submission #: 2003-12-0380

Diesel

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
IDW-121103	12/11/2003 15:55	Soil	6

SEVERN TRENT STL

Submission #: 2003-12-0380

Diesel

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 3550/8015M
Sample ID: **IDW-121103**
Sampled: 12/11/2003 15:55
Matrix: Soil

Test(s): 8015M
Lab ID: 2003-12-0380 - 6
Extracted: 12/11/2003 13:26
QC Batch#: 2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	16	1.0	mg/Kg	1.00	12/12/2003 10:00	ndp
Surrogate(s)						
o-Terphenyl	79.7	60-130	%	1.00	12/12/2003 10:00	

SEVERN TRENT STL

Submission #: 2003-12-0380

Diesel

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550/8015M
Method Blank
MB: 2003/12/11-01.10-003

Soil

Test(s): 8015M
QC Batch # 2003/12/11-01.10
Date Extracted: 12/11/2003 13:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	12/11/2003 19:59	
Surrogates(s)					
o-Terphenyl	79.3	60-130	%	12/11/2003 19:59	

SEVERN TRENT STL

Submission #: 2003-12-0380

Diesel

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550/8015M

Test(s): 8015M

Laboratory Control Spike **Soil** **QC Batch # 2003/12/11-01.10**

LCS 2003/12/11-01.10-001 Extracted: 12/11/2003 Analyzed: 12/11/2003 19:06
LCSD 2003/12/11-01.10-002 Extracted: 12/11/2003 Analyzed: 12/11/2003 19:33

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	27.4	33.7	41.3	66.3	81.2	20.2	60-130	25		
Surrogates(s)										
o-Terphenyl	14.9	16.8	20.0	74.3	84.1		60-130	0		

SEVERN TRENT STL

Submission #: 2003-12-0380

Diesel

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

SEVERN TRENT STL

Submission #: 2003-12-0380

TCLP Metals

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
IDW-121103	12/11/2003 15:55	Soil	6

SEVERN TRENT STL

Submission #: 2003-12-0380

TCLP Metals

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	1311/3010A	Test(s):	6010B
Sample ID:	**IDW-121103**	Lab ID:	2003-12-0380 - 6
Sampled:	12/11/2003 15:55	Extracted:	12/16/2003 05:41
Matrix:	Soil	QC Batch#:	2003/12/16-01.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	ND	0.50	mg/L	1.00	12/16/2003 15:09	

SEVERN TRENT STL

Submission #: 2003-12-0380

TCLP Metals

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 1311/3010A
Method Blank
MB: 2003/12/16-01.15-041

Soil

Test(s): 6010B
QC Batch # 2003/12/16-01.15
Date Extracted: 12/16/2003 05:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	0.50	mg/L	12/16/2003 14:55	

SEVERN TRENT STL

Submission #: 2003-12-0380

TCLP Metals

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 1311/3010A

Test(s): 6010B

Laboratory Control Spike **Soil** **QC Batch # 2003/12/16-01.15**

LCS 2003/12/16-01.15-042 Extracted: 12/16/2003 Analyzed: 12/16/2003 15:00
LCSD 2003/12/16-01.15-043 Extracted: 12/16/2003 Analyzed: 12/16/2003 15:04

Compound	Conc. mg/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	5.01	4.81	5.00	100.2	96.2	4.1	80-120	20		

SEVERN TRENT STL

Submission #: 2003-12-0380

CAM W.E.T. (STLC) Lead

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
IDW-121103	12/11/2003 15:55	Soil	6

SEVERN TRENT STL

Submission #: 2003-12-0380

CAM W.E.T. (STLC) Lead

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 3005A
Test(s): 7420
Sample ID: **IDW-121103**
Lab ID: 2003-12-0380 - 6
Sampled: 12/11/2003 15:55
Extracted: 12/15/2003 05:23
Matrix: Soil
QC Batch#: 2003/12/15-01.15
Analysis Flag: . (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	41	1.0	mg/L	1.00	12/15/2003 08:55	

CAM W.E.T. (STLC) Lead

Geomatrix Consultants

Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3050B

Test(s): 7420

Method Blank

Soil

QC Batch # 2003/12/15-01.15

MB: 2003/12/15-01.15-060

Date Extracted: 12/15/2003 05:23

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	5.0	mg/Kg	12/15/2003 08:53	

CAM W.E.T. (STLC) Lead

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3050B

Test(s): 7420

Laboratory Control Spike **Soil** **QC Batch # 2003/12/15-01.15**

LCS 2003/12/15-01.15-061 Extracted: 12/15/2003 Analyzed: 12/15/2003 08:54

LCSD 2003/12/15-01.15-062 Extracted: 12/15/2003 Analyzed: 12/15/2003 08:54

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Lead	5.27	5.65	5.0	105.4	113.0	7.0	85-115	20		

CAM W.E.T. (STLC) Lead

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3050B

Test(s): 7420

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2003/12/15-01.15**

IDW-121103 >> MS

Lab ID: 2003-12-0380 - 006

MS: 2003/12/15-01.15-064 Extracted: 12/15/2003 Analyzed: 12/15/2003 08:56

Dilution: 1.00

MSD: 2003/12/15-01.15-065 Extracted: 12/15/2003 Analyzed: 12/15/2003 08:57

Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Lead	47.2	48.8	40.7	5.0	130.0	162.0	21.9	85-115	20	msl	msl

CAM W.E.T. (STLC) Lead

Geomatrix Consultants

Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Legend and Notes

Analysis Flag

Result Flag

msl

Analyte MS/MSD recoveries were out of QC limits due to Parent sample target analyte concentration exceeding the spiked amount by greater than 4X.

SEVERN TRENT STL

Submission #: 2003-12-0380

PNA analysis by 8270C/SIM GC/MS

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SW-S-2.5	12/11/2003 15:40	Soil	1
SW-N-2.5	12/11/2003 15:10	Soil	2
SW-E-2.5	12/11/2003 15:25	Soil	3
BW-3.0	12/11/2003 16:00	Soil	4
SW-W-2.5	12/11/2003 14:50	Soil	7

SEVERN TRENT STL

Submission #: 2003-12-0380

PNA analysis by 8270C/SIM GC/MS

Geomatrix Consultants
Attn.: Robert Cheung

2101 Webster Street, 12th Floor
Oakland, CA 94612
Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550B/8270C-SIM	Test(s):	8270C-SIM
Sample ID:	**SW-S-2.5**	Lab ID:	2003-12-0380 - 1
Sampled:	12/11/2003 15:40	Extracted:	12/11/2003 19:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.40

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Naphthalene	7.4	5.0	ug/Kg	1.00	12/12/2003 11:40	
Acenaphthylene	ND	5.0	ug/Kg	1.00	12/12/2003 11:40	
Acenaphthene	ND	5.0	ug/Kg	1.00	12/12/2003 11:40	
Fluorene	ND	5.0	ug/Kg	1.00	12/12/2003 11:40	
Phenanthrene	17	5.0	ug/Kg	1.00	12/12/2003 11:40	
Anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 11:40	
Fluoranthene	28	5.0	ug/Kg	1.00	12/12/2003 11:40	
Pyrene	34	5.0	ug/Kg	1.00	12/12/2003 11:40	
Benzo(a)anthracene	11	5.0	ug/Kg	1.00	12/12/2003 11:40	
Chrysene	16	5.0	ug/Kg	1.00	12/12/2003 11:40	
Benzo(b)fluoranthene	17	5.0	ug/Kg	1.00	12/12/2003 11:40	
Benzo(k)fluoranthene	8.1	5.0	ug/Kg	1.00	12/12/2003 11:40	
Benzo(a)pyrene	15	5.0	ug/Kg	1.00	12/12/2003 11:40	
Indeno(1,2,3-c,d)pyrene	13	5.0	ug/Kg	1.00	12/12/2003 11:40	
Dibenzo(a,h)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 11:40	
Benzo(g,h,i)perylene	20	5.0	ug/Kg	1.00	12/12/2003 11:40	
Surrogate(s)						
2-Fluorobiphenyl	65.0	30-115	%	1.00	12/12/2003 11:40	
p-Terphenyl-d14	65.6	18-137	%	1.00	12/12/2003 11:40	

PNA analysis by 8270C/SIM GC/MS

Geomatrix Consultants
Attn.: Robert Cheung

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Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 3550B/8270C-SIM
Test(s): 8270C-SIM
Sample ID: **SW-N-2.5**
Lab ID: 2003-12-0380 - 2
Sampled: 12/11/2003 15:10
Extracted: 12/11/2003 19:26
Matrix: Soil
QC Batch#: 2003/12/11-01.40

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Naphthalene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Acenaphthylene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Acenaphthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Fluorene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Phenanthrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Pyrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Chrysene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Benzo(b)fluoranthene	5.1	5.0	ug/Kg	1.00	12/12/2003 12:06	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Benzo(a)pyrene	5.3	5.0	ug/Kg	1.00	12/12/2003 12:06	
Indeno(1,2,3-c,d)pyrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Dibenzo(a,h)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:06	
Benzo(g,h,i)perylene	9.4	5.0	ug/Kg	1.00	12/12/2003 12:06	
Surrogate(s)						
2-Fluorobiphenyl	64.1	30-115	%	1.00	12/12/2003 12:06	
p-Terphenyl-d14	65.1	18-137	%	1.00	12/12/2003 12:06	

PNA analysis by 8270C/SIM GC/MS

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550B/8270C-SIM	Test(s):	8270C-SIM
Sample ID:	**SW-E-2.5**	Lab ID:	2003-12-0380 - 3
Sampled:	12/11/2003 15:25	Extracted:	12/11/2003 19:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.40

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Naphthalene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Acenaphthylene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Acenaphthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Fluorene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Phenanthrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Pyrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Benzo(a)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Chrysene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Benzo(a)pyrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Indeno(1,2,3-c,d)pyrene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Dibenzo(a,h)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Benzo(g,h,i)perylene	ND	5.0	ug/Kg	1.00	12/12/2003 12:32	
Surrogate(s)						
2-Fluorobiphenyl	66.8	30-115	%	1.00	12/12/2003 12:32	
p-Terphenyl-d14	65.3	18-137	%	1.00	12/12/2003 12:32	

PNA analysis by 8270C/SIM GC/MS

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 3550B/8270C-SIM
Sample ID: **BW-3.0**
Sampled: 12/11/2003 16:00
Matrix: Soil

Test(s): 8270C-SIM
Lab ID: 2003-12-0380 - 4
Extracted: 12/11/2003 19:26
QC Batch#: 2003/12/11-01.40

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Naphthalene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Acenaphthylene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Acenaphthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Fluorene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Phenanthrene	12	5.0	ug/Kg	1.00	12/12/2003 12:58	
Anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Fluoranthene	18	5.0	ug/Kg	1.00	12/12/2003 12:58	
Pyrene	23	5.0	ug/Kg	1.00	12/12/2003 12:58	
Benzo(a)anthracene	7.6	5.0	ug/Kg	1.00	12/12/2003 12:58	
Chrysene	12	5.0	ug/Kg	1.00	12/12/2003 12:58	
Benzo(b)fluoranthene	14	5.0	ug/Kg	1.00	12/12/2003 12:58	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Benzo(a)pyrene	11	5.0	ug/Kg	1.00	12/12/2003 12:58	
Indeno(1,2,3-c,d)pyrene	9.1	5.0	ug/Kg	1.00	12/12/2003 12:58	
Dibenzo(a,h)anthracene	ND	5.0	ug/Kg	1.00	12/12/2003 12:58	
Benzo(g,h,i)perylene	15	5.0	ug/Kg	1.00	12/12/2003 12:58	
Surrogate(s)						
2-Fluorobiphenyl	67.5	30-115	%	1.00	12/12/2003 12:58	
p-Terphenyl-d14	65.3	18-137	%	1.00	12/12/2003 12:58	

PNA analysis by 8270C/SIM GC/MS

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550B/8270C-SIM	Test(s):	8270C-SIM
Sample ID:	**SW-W-2.5**	Lab ID:	2003-12-0380 - 7
Sampled:	12/11/2003 14:50	Extracted:	12/11/2003 19:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.40

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Naphthalene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Acenaphthylene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Acenaphthene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Fluorene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Phenanthrene	31	25	ug/Kg	5.00	12/12/2003 13:24	
Anthracene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Fluoranthene	38	25	ug/Kg	5.00	12/12/2003 13:24	
Pyrene	49	25	ug/Kg	5.00	12/12/2003 13:24	
Benzo(a)anthracene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Chrysene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Benzo(b)fluoranthene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Benzo(k)fluoranthene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Benzo(a)pyrene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Indeno(1,2,3-c,d)pyrene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Dibenzo(a,h)anthracene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Benzo(g,h,i)perylene	ND	25	ug/Kg	5.00	12/12/2003 13:24	
Surrogate(s)						
2-Fluorobiphenyl	77.1	30-115	%	5.00	12/12/2003 13:24	
p-Terphenyl-d14	72.5	18-137	%	5.00	12/12/2003 13:24	

PNA analysis by 8270C/SIM GC/MS

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Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550B/8270C-SIM

Test(s): 8270C-SIM

Method Blank

Soil

QC Batch # 2003/12/11-01.40

MB: 2003/12/11-01.40-003

Date Extracted: 12/11/2003 19:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Naphthalene	ND	5.0	ug/Kg	12/12/2003 10:22	
Acenaphthylene	ND	5.0	ug/Kg	12/12/2003 10:22	
Acenaphthene	ND	5.0	ug/Kg	12/12/2003 10:22	
Fluorene	ND	5.0	ug/Kg	12/12/2003 10:22	
Phenanthrene	ND	5.0	ug/Kg	12/12/2003 10:22	
Anthracene	ND	5.0	ug/Kg	12/12/2003 10:22	
Fluoranthene	ND	5.0	ug/Kg	12/12/2003 10:22	
Pyrene	ND	5.0	ug/Kg	12/12/2003 10:22	
Benzo(a)anthracene	ND	5.0	ug/Kg	12/12/2003 10:22	
Chrysene	ND	5.0	ug/Kg	12/12/2003 10:22	
Benzo(b)fluoranthene	ND	5.0	ug/Kg	12/12/2003 10:22	
Benzo(k)fluoranthene	ND	5.0	ug/Kg	12/12/2003 10:22	
Benzo(a)pyrene	ND	5.0	ug/Kg	12/12/2003 10:22	
Indeno(1,2,3-c,d)pyrene	ND	5.0	ug/Kg	12/12/2003 10:22	
Dibenzo(a,h)anthracene	ND	5.0	ug/Kg	12/12/2003 10:22	
Benzo(g,h,i)perylene	ND	5.0	ug/Kg	12/12/2003 10:22	
Surrogates(s)					
2-Fluorobiphenyl	62.4	30-115	%	12/12/2003 10:22	
p-Terphenyl-d14	62.6	18-137	%	12/12/2003 10:22	

PNA analysis by 8270C/SIM GC/MS

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Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550B/8270C-SIM

Test(s): 8270C-SIM

Laboratory Control Spike **Soil** **QC Batch # 2003/12/11-01.40**

LCS 2003/12/11-01.40-004 Extracted: 12/11/2003 Analyzed: 12/12/2003 10:48

LCSD 2003/12/11-01.40-005 Extracted: 12/11/2003 Analyzed: 12/12/2003 11:14

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Acenaphthene	215	216	332	64.8	64.9	0.2	50-150	30		
Phenanthrene	198	201	332	59.6	60.4	1.3	50-150	30		
Pyrene	234	253	332	70.5	76.0	7.5	50-150	30		
Chrysene	236	256	332	71.1	76.9	7.8	50-150	30		
Benzo(a)pyrene	213	224	332	64.2	67.3	4.7	50-150	30		
Surrogates(s)										
2-Fluorobiphenyl	6.41	6.44	10	64.1	64.4		30-115			
p-Terphenyl-d14	6.28	6.71	10	62.8	67.1		18-137			

PNA analysis by 8270C/SIM GC/MS

Geomatrix Consultants
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Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550B/8270C-SIM

Test(s): 8270C-SIM

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2003/12/11-01.40**

SW-S-2.5 >> MS

Lab ID: 2003-12-0380 - 001

MS: 2003/12/11-01.40-011 Extracted: 12/11/2003 Analyzed: 12/12/2003 13:50

Dilution: 1.00

MSD: 2003/12/11-01.40-012 Extracted: 12/11/2003 Analyzed: 12/12/2003 14:16

Dilution: 1.00

Compound	Conc. ug/Kg			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Acenaphthene	224	212	ND	331	67.7	65.0	4.1	50-150	30		
Phenanthrene	230	211	17.1	331	64.3	59.5	7.8	50-150	30		
Pyrene	268	249	34.3	331	70.6	65.9	6.9	50-150	30		
Chrysene	261	241	16.3	331	73.9	68.9	7.0	50-150	30		
Benzo(a)pyrene	260	231	14.7	331	74.1	66.3	11.1	50-150	30		
Surrogate(s)											
2-Fluorobiphenyl	7.58	6.76		10	75.8	67.6		30-115			
p-Terphenyl-d14	7.05	6.64		10	70.5	66.4		18-137			

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Extractable Petroleum Hydrocarbons (TEPH)

Geomatrix Consultants

Attn.: Robert Cheung

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Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
SW-S-2.5	12/11/2003 15:40	Soil	1
SW-N-2.5	12/11/2003 15:10	Soil	2
SW-E-2.5	12/11/2003 15:25	Soil	3
BW-3.0	12/11/2003 16:00	Soil	4
SW-W-2.5	12/11/2003 14:50	Soil	7

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Extractable Petroleum Hydrocarbons (TEPH)

Geomatrix Consultants
Attn.: Robert Cheung

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Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	**SW-S-2.5**	Lab ID:	2003-12-0380 - 1
Sampled:	12/11/2003 15:40	Extracted:	12/11/2003 13:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	4.9	1.0	mg/Kg	1.00	12/12/2003 08:49	ndp
Motor Oil	58	50	mg/Kg	1.00	12/12/2003 08:49	
Surrogate(s)						
o-Terphenyl	85.4	60-130	%	1.00	12/12/2003 08:49	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	**SW-N-2.5**	Lab ID:	2003-12-0380 - 2
Sampled:	12/11/2003 15:10	Extracted:	12/11/2003 13:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	2.9	1.0	mg/Kg	1.00	12/12/2003 08:49	ndp
Motor Oil	56	50	mg/Kg	1.00	12/12/2003 08:49	
Surrogate(s)						
o-Terphenyl	87.9	60-130	%	1.00	12/12/2003 08:49	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	**SW-E-2.5**	Lab ID:	2003-12-0380 - 3
Sampled:	12/11/2003 15:25	Extracted:	12/11/2003 13:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	12/12/2003 08:14	
Motor Oil	ND	50	mg/Kg	1.00	12/12/2003 08:14	
Surrogate(s)						
o-Terphenyl	75.0	60-130	%	1.00	12/12/2003 08:14	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s): 3550/8015M

Test(s): 8015M

Sample ID: **BW-3.0**

Lab ID: 2003-12-0380 - 4

Sampled: 12/11/2003 16:00

Extracted: 12/11/2003 13:26

Matrix: Soil

QC Batch#: 2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	12/12/2003 08:40	
Motor Oil	ND	50	mg/Kg	1.00	12/12/2003 08:40	
Surrogate(s)						
o-Terphenyl	77.4	60-130	%	1.00	12/12/2003 08:40	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	**SW-W-2.5**	Lab ID:	2003-12-0380 - 7
Sampled:	12/11/2003 14:50	Extracted:	12/11/2003 13:26
Matrix:	Soil	QC Batch#:	2003/12/11-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	10	1.0	mg/Kg	1.00	12/12/2003 10:52	ndp
Motor Oil	160	50	mg/Kg	1.00	12/12/2003 10:52	
Surrogate(s)						
o-Terphenyl	86.5	60-130	%	1.00	12/12/2003 10:52	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550/8015M

Test(s): 8015M

Method Blank

Soil

QC Batch # 2003/12/11-01.10

MB: 2003/12/11-01.10-003

Date Extracted: 12/11/2003 13:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	12/11/2003 19:59	
Motor Oil	ND	50	mg/Kg	12/11/2003 19:59	
Surrogates(s)					
o-Terphenyl	79.3	60-130	%	12/11/2003 19:59	

Total Extractable Petroleum Hydrocarbons (TEPH)

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Project: 8367.001

Received: 12/11/2003 18:20

Batch QC Report

Prep(s): 3550/8015M

Test(s): 8015M

Laboratory Control Spike **Soil** **QC Batch # 2003/12/11-01.10**

LCS 2003/12/11-01.10-001 Extracted: 12/11/2003 Analyzed: 12/11/2003 19:06

LCSD 2003/12/11-01.10-002 Extracted: 12/11/2003 Analyzed: 12/11/2003 19:33

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	27.4	33.7	41.3	66.3	81.2	20.2	60-130	25		
Surrogates(s)										
o-Terphenyl	14.9	16.8	20.0	74.3	84.1		60-130	0		

SEVERN TRENT STL

Submission #: 2003-12-0380

Total Extractable Petroleum Hydrocarbons (TEPH)

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Phone: (510) 663-4299 Fax: (510) 663-4141

Project: 8367.001

Received: 12/11/2003 18:20

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

0003-12-0580 018420 81080

Chain-of Custody Record

Date: 12/11/03 | Page 1 of 1

Project No.: 8367001

Samplers (Signature:)

Sarah Meaton

Date	Time	Sample Number	EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260 BTEX only	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHS only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	HOLD	Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers	Additional Comments
12/11/03	1540	SW-S-2.5						X		X	X			S			X	1	6"x2" brass sleeve
	1510	SW-N-2.5						X		X	X			S			X	1	
	1525	SW-E-2.5						X		X	X			S			X	1	
	1450	SW-W-2.5						X		X	X			S			X	1	
	1600	BW-3.0						X		X	X			S			X	1	
	1610	BW-4.0										X		S			X	1	
	1555	TDW-121103				X				X			X	S			X	3	Composite before analysis

RUSH

* Must have max detection limit of 38 ppb for PNA analyses

Laboratory: STL San Francisco

Turnaround Time: 24-hour

Results to: Robert Cheung

Total No. of Containers: 9

Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:	Method of Shipment: drop off
Printed Name: ROBERT CHEUNG	Time:	Printed Name:	Time:	Printed Name:	Time:	Laboratory Comments and Log No.:
Company: GEOMATRIX CONSULTANTS	1820	Company:		Company:		
Received by:	Date:	Received by:	Date:	Received by: Nouna K	Date: 12/11/03	
Printed Name:	Time:	Printed Name:	Time:	Printed Name: Nouna K	Time: 1820	
Company:		Company:		Company: STL-SF		

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2003- 12 - 0380

Checklist completed by: (initials) NK Date: 12/11/03

Courier name: ☐ STL San Francisco ☑ Client _____

Custody seals intact on shipping container/samples	Yes___ No___	Not Present ✓
Chain of custody present?	Yes ✓ No___	
Chain of custody signed when relinquished and received?	Yes ✓ No___	
Chain of custody agrees with sample labels?	Yes ✓ No___	
Samples in proper container/bottle?	Yes ✓ No___	
Sample containers intact?	Yes ✓ No___	
Sufficient sample volume for indicated test?	Yes ✓ No___	
All samples received within holding time?	Yes ✓ No___	
Container/Temp Blank temperature in compliance (4^{o} C ± 2)?	Temp: 5.1 °C Yes ✓ No___	
	Ice Present Yes ✓ No___	
Water - VOA vials have zero headspace?	No VOA vials submitted ✓ Yes___ No___	

(if bubble is present, refer to approximate bubble size and itemize in comments as **S** (small ~O), **M** (medium ~ O) or L (large ~ O)

Water - **pH acceptable upon receipt?** ☐ Yes ☐ No Soils

☐ **pH adjusted**– Preservative used: ☐ HNO_3 ☐ HCl ☐ H_2SO_4 ☐ NaOH ☐ ZnOAc –**Lot #(s)** _____

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments:

Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) _____ Date: ____/____/03

Client contacted: ☐ Yes ☐ No

Summary of discussion:

Corrective Action (per PM/Client):