

October 30, 2006

**PHASE II
SUBSURFACE INVESTIGATION**

343 South Highway 101
Solana Beach, California 92075

AEI Project Number 262387

Prepared For



MR. BRIAN O'ROURKE
COMERICA BANK
9777 Wilshire Boulevard, 4th Floor
Beverly Hills, California 90212

Prepared By

AEI CONSULTANTS
2447 Pacific Coast Highway, Suite 101
Hermosa Beach, California 90254
(310) 798-4255

AEI



October 30, 2006

Mr. Brian O'Rourke
Comerica Bank
9777 Wilshire Boulevard, 4th Floor
Beverly Hills, California 90212

Subject: Phase II Subsurface Investigation
343 South Highway 101
Solana Beach, California 92075
AEI Project Number 262387

Dear Mr. O'Rourke:

The following letter report describes the activities and results of the Phase II Subsurface Investigation (Phase II) conducted by AEI Consultants (AEI) at the above-referenced property. The purpose of the investigation was to determine whether or not a release had occurred from former on-site gasoline station operations. Authorization to conduct the investigation and prepare this Report was given by Comerica Bank through a signed copy of AEI Proposal Number 2006-21322.

I Property Description

The subject property is located on the north side of Dahlia Drive and the west side of South Highway 101 in a mixed commercial and residential area of Solana Beach. The immediately surrounding properties consist of the Avocado Trailer Park to the north and a commercial property to the west. Please see Figure 1 for a site vicinity map.

The subject property is approximately 11,800 square feet in size and is developed with a one-story commercial building that totals approximately 1,500 square feet. In addition to the building, the subject property is improved with asphalt- and concrete-paved parking areas. Please see Figure 2 for a site plan.

II Project History

According to historical records, a gasoline station previously occupied the subject property. The gasoline station maintained one 12,000-gallon underground storage tank (UST); two 8,000-gallon gasoline USTs; and one 500-gallon waste oil UST, which were removed in February 1988. Please see Figure 2 for a map indicating the locations of the former gasoline station features as determined by historical records.

Impacted soil was encountered beneath the waste oil UST, which was subsequently excavated in March 1988. Based on field-screening results, no soil samples were collected in the vicinity of gasoline USTs. In addition, no records were available indicating that samples were collected in the vicinity of the former product dispenser islands and analyzed to determine if a release had occurred to the subsurface.

To assess potential impacts to the subsurface from former on-site gasoline station activities, AEI conducted a Phase II.

III Investigative Scope

The scope of the Phase II included a total of five soil borings and six soil vapor probes advanced throughout the subject property.

Site-Specific Health and Safety Plan

A site-specific Health and Safety Plan was reviewed and signed by all persons involved with the investigation prior to the commencement of any drilling activities conducted at the subject property. Please see Appendix A for a copy of the signed Health and Safety Plan.

Drilling Equipment and Duration of Subsurface Investigation

All borings were advanced on October 19, 2006 with a direct-push, truck-mounted Geoprobe 5400 rig. All casings, rods, and sampling equipment were decontaminated between boreholes to prevent cross-contamination.

Soil Boring/Sampling Locations

Soil boring AEI-B1 was advanced in the vicinity of the two former 8,000-gallon gasoline USTs. Soil boring AEI-B2 was advanced in the vicinity of the former 12,000-gallon gasoline UST. Soil borings AEI-B3 and AEI-B4 were advanced in the former locations of the east and west dispensers, respectively. Soil boring AEI-B5 was advanced in the former location of the 500-gallon waste oil UST.

Please see Figure 3 for a map indicating boring locations.

Soil Sampling Depths

Soil borings AEI-B1, AEI-B2, and AEI-B5 were advanced to a terminal depth of 20 feet below ground surface (bgs) with soil samples collected at 5, 10, 15, and 20 feet bgs. Soil borings AEI-B3 and AEI-B4 were advanced to a terminal depth of 10 feet bgs with soil samples collected at 5 and 10 feet bgs.

Soil Sampling Methods

Soil samples were collected in acetate tubes using the Geoprobe rig. Each sample was examined for lithological classification and field-screened with a photoionization detector (PID) and by visual and olfactory means. Please see Appendix B for boring logs from this investigation.

Samples were collected from the acetate tubes via Environmental Protection Agency (EPA) Method 5035 protocol using disposable plastic syringes and 40-milliliter (mL) volatile organics analysis (VOA) containers with sodium bisulfate (NaHSO₄) preservative. Following EPA Method 5035 sample collection, the acetate tubes were sealed on both ends with Teflon tape and plastic caps. All soil samples were labeled for identification and stored in an iced cooler.

All soil borings were backfilled with hydrated bentonite chips and capped with asphalt or concrete upon completion of soil sampling.

Soil Sample Laboratory Analysis

A total of 16 soil samples were collected on October 19, 2006. The samples were transported under proper chain-of-custody protocol to Alpha Scientific Corporation (ASC), a state-certified laboratory [Environmental Laboratory Accreditation Program (ELAP) Number 2633] in the City of Cerritos, California, for analysis on October 19, 2006. Ten soil samples were analyzed for carbon chain total petroleum hydrocarbons (TPH-cc) via EPA Method 8015M and for volatile organic compounds (VOCs) via EPA Method 8260B. Two soil samples were analyzed for California Administrative Manual (CAM) 17 Metals via EPA Method 6010B and 7470A.

Soil Vapor Probe Sampling Locations

Soil vapor probe AEI-SV1 was advanced in the area between the two former 8,000-gallon USTs and the eastern dispenser location. Soil vapor probe AEI-SV2 was advanced between the two former 8,000-gallon USTs and the western dispenser location. Soil vapor probes AEI-SV3 through AEI-SV6 were advanced on the southeast corner, south side, northeast corner, and north side of the subject property building, respectively.

Please see Figure 3 for a map indicating soil vapor probe locations.

Soil Vapor Probe Installation

Soil vapor probes were installed at each soil vapor sampling location by advancing 1.25-inch diameter Geoprobe rods to 5 feet bgs. The rods were withdrawn from the borehole and 1/8-inch diameter polyethylene tubing with a screened interval at the terminal depth was inserted into the borehole to the desired depth. Approximately 1 foot of sand was poured at the terminus of the soil vapor probe and approximately 1 foot of dry granular bentonite was poured on top of the sand pack. Hydrated granular bentonite was used to backfill the remaining annular borehole space to the ground surface. The probe was capped and labeled for identification after installation.

Soil Vapor Probe Sampling

Soil vapor samples were collected in general accordance with the February 25, 1997, Los Angeles Regional Water Quality Control Board (LARWQCB) "Interim Guidance for Active Soil Gas Investigation" and the January 28, 2003, Department of Toxic Substances Control (DTSC) and LARWQCB "Advisory – Active Soil Gas Investigations."

In general, the subsurface was allowed a minimum of 24 hours to equilibrate before the soil vapor probes were sampled. Before sampling took place, a leak-check test was performed on the sampling train and the sampling containers. After the sampling train and sampling containers were found to be leak-proof, approximately seven to ten soil vapor probe volumes were purged at a rate of 150 – 200 milliliters per minute before soil vapor samples were collected in glass sampling bulbs.

During sampling, a leak-check compound was placed near and around the sampling train in order to detect intrusion of ambient air. The leak-check compound was not detected during analysis, which indicated that there was no intrusion of ambient air during sampling.

After sampling, surrogate compounds were added to the sampling bulbs in order to determine whether or not the sampling bulbs had leaked before the containers were analyzed. All surrogate compounds had greater than 75% recovery, which indicated that the sampling bulbs did not leak before analysis. Please see Appendix C for additional information regarding soil vapor sampling methodology.

The soil vapor probes were removed, backfilled with hydrated bentonite clay, and capped with concrete upon completion of soil vapor analysis.

Soil Vapor Sample Laboratory Analysis

Soil vapor samples were collected on October 20, 2006, and analyzed by HydroGeoSpectrum (HGS), for volatile organic compounds (VOCs) via gas chromatography/mass spectroscopy (GC/MS).

Please see Table 1, below, for a summary of the borings and sampling schedule.

Table 1: Boring Locations and Sampling Schedule

Boring Identification	Location	Terminal Depth (feet bgs)	Matrix Sampled	Depths Sampled* (feet bgs)	Target Contaminants
AEI-B1	Former location of two 8,000-gallon gasoline USTs	20	Soil	5, 10, 15, 20	TPH-cc, VOCs
AEI-B2	Former location of 12,000-gallon gasoline UST	20	Soil	5, 10, 15, 20	TPH-cc, VOCs
AEI-B3	Former location of eastern dispenser	10	Soil	5, 10	TPH-cc, VOCs
AEI-B4	Former location of western dispenser	10	Soil	5, 10	TPH-cc, VOCs
AEI-B5	Former location of 500-gallon waste oil UST	20	Soil	5, 10, 15, 20	TPH-cc, VOCs, CAM 17 Metals
AEI-SV1	Between the former 8,000-gallon USTs and the western dispenser	5	Soil Vapor	5	VOCs
AEI-SV2	Between the former 8,000-gallon USTs and the eastern dispenser	5	Soil Vapor	5	VOCs
AEI-SV3	Southeast corner of the subject property building	5	Soil Vapor	5	VOCs
AEI-SV4	South side of the subject property building	5	Soil Vapor	5	VOCs
AEI-SV5	Northeast corner of the subject property building	5	Soil Vapor	5	VOCs
AEI-SV6	North side of the subject property building	5	Soil Vapor	5	VOCs

Notes:

*Depths in **bold** laboratory analyzed for listed target contaminants

bgs = below ground surface

UST = underground storage tank

TPH-cc = carbon chain total petroleum hydrocarbons

VOCs = volatile organic compounds

CAM = California Administrative Manual

IV Lithology and Hydrogeology

According to the United States Department of Agriculture Soil Survey for San Diego Area, the subject property is underlain by soils of the Marina-Chesterton Association. The series consists of somewhat excessively drained to moderately well drained loamy coarse sands and fine sandy loams that have a subsoil of sandy clay over hardpan; 2 to 15 percent slopes. This associated is made up of soils that developed in ferruginous, windworked, weakly, consolidated sand. It occurs on broad rolling ridges parallel to the coast. The elevation ranges from sea level to 400 feet. Marina soils make up about 45 percent of the association, and Chesterton soils about 35 percent. Marina soils are somewhat excessively drained. They have a surface layer of dark yellowish-brown loamy coarse sand and a subsoil if strong-brown loamy coarse sand. Chesterton soils are moderately well drained. They have a surface layer of brown fine sandy loam, a subsoil of mottled red, brown, and gray sandy clay, and then an iron-silica cemented hardpan.

On-site soil borings indicate that the top 20 feet of soil generally consists of white to medium brown fine- to medium-grained sand. These soils were found to be generally dense, moist, and have no discernable odor or discoloration.

Based on a review of the United States Geological Survey (USGS) Del Mar OEW Quadrangle Topographic Map, the subject property is situated 70 feet above mean sea level (amsl), and the local topography is sloping to the west. The nearest surface water is the Pacific Ocean, located 0.16 mile west of the subject property. Based on topographic map interpretation and site observations, the inferred flow direction of groundwater at the subject property is to the west.

A search on the Geographic Environmental Information Management System (GEIMS) accessed through the GeoTracker Web Interface showed that the closest monitoring well to the subject property is part of a monitoring well network for a Leaking Underground Storage Tank (LUST) site located on Via De La Valle in the City of Del Mar, California. The well is approximately 1.1 miles southeast of the subject property. The LUST site was identified as Del Mar Texaco and is under the guidance of the San Diego Regional Water Quality Control Board (SDRWQCB) as case number 9UT2802. There are seven monitoring wells located on-site with depths to groundwater between 16.72 and 20.21 feet bgs, an average of 19 feet bgs. The average surface elevation of the wells is approximately 21 feet amsl, approximately 49 feet below the surface elevation of the subject property. The wells were last gauged on March 2, 2006. No groundwater was encountered during this investigation.

V Results of Analytical Laboratory Tests

ASC reported the results of the soil sample laboratory analyses on October 23, 2006. Please see Table 2 for a summary of the soil sample TPH-cc analysis results. Please see Table 3 for a summary of the soil sample VOC analysis results. Please see Table 4 for a summary of the soil sample CAM 17 Metals analysis results.

Table 2: Soil Sample TPH-cc Laboratory Results (mg/kg)

Sample Identification	TPH-g	TPH-d	TPH-o
AEI-B1-5'	ND	ND	ND
AEI-B1-20'	ND	ND	ND
AEI-B2-5'	ND	ND	ND
AEI-B2-20'	ND	ND	ND
AEI-B3-5'	ND	ND	ND
AEI-B3-10'	ND	ND	ND
AEI-B4-5'	ND	ND	ND
AEI-B4-10'	ND	ND	ND
AEI-B5-5'	ND	ND	ND
AEI-B5-20'	ND	ND	ND

Notes:

TPH-cc = carbon chain total petroleum hydrocarbons

mg/kg = milligrams per kilogram

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-o = total petroleum hydrocarbons as oil

ND = not detected above laboratory reporting limits (refer to laboratory report for detection limits)

Table 3: Soil Sample VOCs Laboratory Results ($\mu\text{g}/\text{kg}$)

Sample Identification	B	T	E	X	MTBE	All Other VOCs
AEI-B1-5'	ND	ND	ND	ND	ND	ND
AEI-B1-20'	ND	ND	ND	ND	ND	ND
AEI-B2-5'	ND	ND	ND	ND	ND	ND
AEI-B2-20'	ND	ND	ND	ND	ND	ND
AEI-B3-5'	ND	ND	ND	ND	ND	ND
AEI-B3-10'	ND	ND	ND	ND	ND	ND
AEI-B4-5'	ND	ND	ND	ND	ND	ND
AEI-B4-10'	ND	ND	ND	ND	ND	ND
AEI-B5-5'	ND	ND	ND	ND	ND	ND
AEI-B5-20'	ND	ND	ND	ND	ND	ND

Notes:

VOCs = volatile organic compounds

$\mu\text{g}/\text{kg}$ = micrograms per kilogram

B = benzene

T = toluene

E = ethylbenzene

X = xylenes

MTBE = methyl tertiary butyl ether

ND = not detected above laboratory reporting limits (refer to laboratory report for detection limits)

Table 4: Soil Sample CAM 17 Metals Laboratory Results (mg/kg)

Element	Sample Identification		Background Concentrations*
	AEI-B5-5'	AEI-B5-20'	
Antimony (Sb)	ND	ND	0.60
Arsenic (As)	1.2	ND	3.5
Barium (Ba)	28	7.2	509
Beryllium (Be)	ND	ND	1.28
Cadmium (Cd)	ND	ND	0.36
Chromium (Cr)	ND	ND	122
Cobalt (Co)	5.3	ND	14.9
Copper (Cu)	2.2	3.0	28.7
Lead (Pb)	ND	ND	23.9
Mercury (Hg)	ND	ND	0.26
Molybdenum (Mo)	ND	ND	1.3
Nickel (Ni)	2.8	ND	57
Selenium (Se)	ND	ND	0.058
Silver (Ag)	ND	ND	0.80
Thallium (Tl)	ND	ND	0.56
Vanadium (V)	49	5.9	112
Zinc (Zn)	18	9.8	149

Notes:

CAM = California Administrative Manual

*From Kearney Foundation of Soil Science March 1996 report *Background Concentrations of Trace and Major Elements in California Soils*

mg/kg = milligrams per kilogram

ND = not detected above laboratory reporting limits (refer to laboratory report for detection limits)

HGS reported the results of the soil vapor sample laboratory analyses on October 21, 2006. Please see Table 5, shown on the next page, for a summary of the soil vapor sample analysis results.

Table 5: Soil Vapor Sample Laboratory Results ($\mu\text{g/L}$)

Sample Identification	All VOCs
AEI-SV1	ND
AEI-SV2	ND
AEI-SV3	ND
AEI-SV5	ND
AEI-SV6	ND

Notes:

$\mu\text{g/L}$ = micrograms per liter

VOCs = volatile organic compounds

ND = not detected above laboratory reporting limits (refer to laboratory report for detection limits)

Please see Appendix C for a copy of the laboratory results and chain-of-custody documentation for this investigation.

VI Discussion

Total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), and total petroleum hydrocarbons as oil (TPH-o) were not detected in any analyzed soil samples.

No VOCs were detected in any of the soil samples analyzed.

All of the analyzed soil samples had essentially background concentrations of CAM 17 Metals as compared to the March 1996 findings of the Kearney Foundation for California soils. The metals identified in the soil samples should be considered as normal concentrations that naturally exist in California soils.

No VOCs were detected in any of the soil vapor samples collected.

VII Conclusions

During this investigation, AEI advanced five soil borings and six soil vapor probes throughout the subject property. Ten soil samples were analyzed for TPH-cc via EPA Method 8015M and for VOCs via EPA Method 8260B. Two soil samples were analyzed for CAM 17 Metals via EPA Method 6010B/7470A. Six soil vapor samples were analyzed for VOCs via GC/MS. Groundwater was not encountered during this investigation.

No evidence of a significant release from former on-site gasoline station operations was detected during this investigation. AEI recommends no further investigation at this time.

VIII Report Limitations

This report presents a summary of work completed by AEI, and has been prepared for Comerica Bank as it pertains to the property located at 343 South Highway 101 in the City of Solana Beach, California. Neither this report, nor any of the information contained herein shall be used or relied upon by any other person or entity other than Comerica Bank.

The completed work includes observations and descriptions of site conditions encountered. Where appropriate, the report includes analytical results for samples taken during the course of the work. All conclusions and/or recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.


The number and location of samples were chosen to provide the required information, but it cannot be assumed that they are representative of areas not sampled. The variations that may exist between sampling points cannot be anticipated, nor could they be entirely accounted for, in spite of exhaustive additional testing.


This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation. All specified work has been performed in accordance with generally accepted practices in geotechnical environmental engineering, engineering geology, and hydrogeology. No other warranty, either expressed or implied, is made.

If you have any questions regarding this investigation, please do not hesitate to contact the undersigned at (310) 798-4255.

Sincerely,

AEI CONSULTANTS


Agatha Mondala, PE
Project Manager


Joseph P. Derhake, PE
Principal

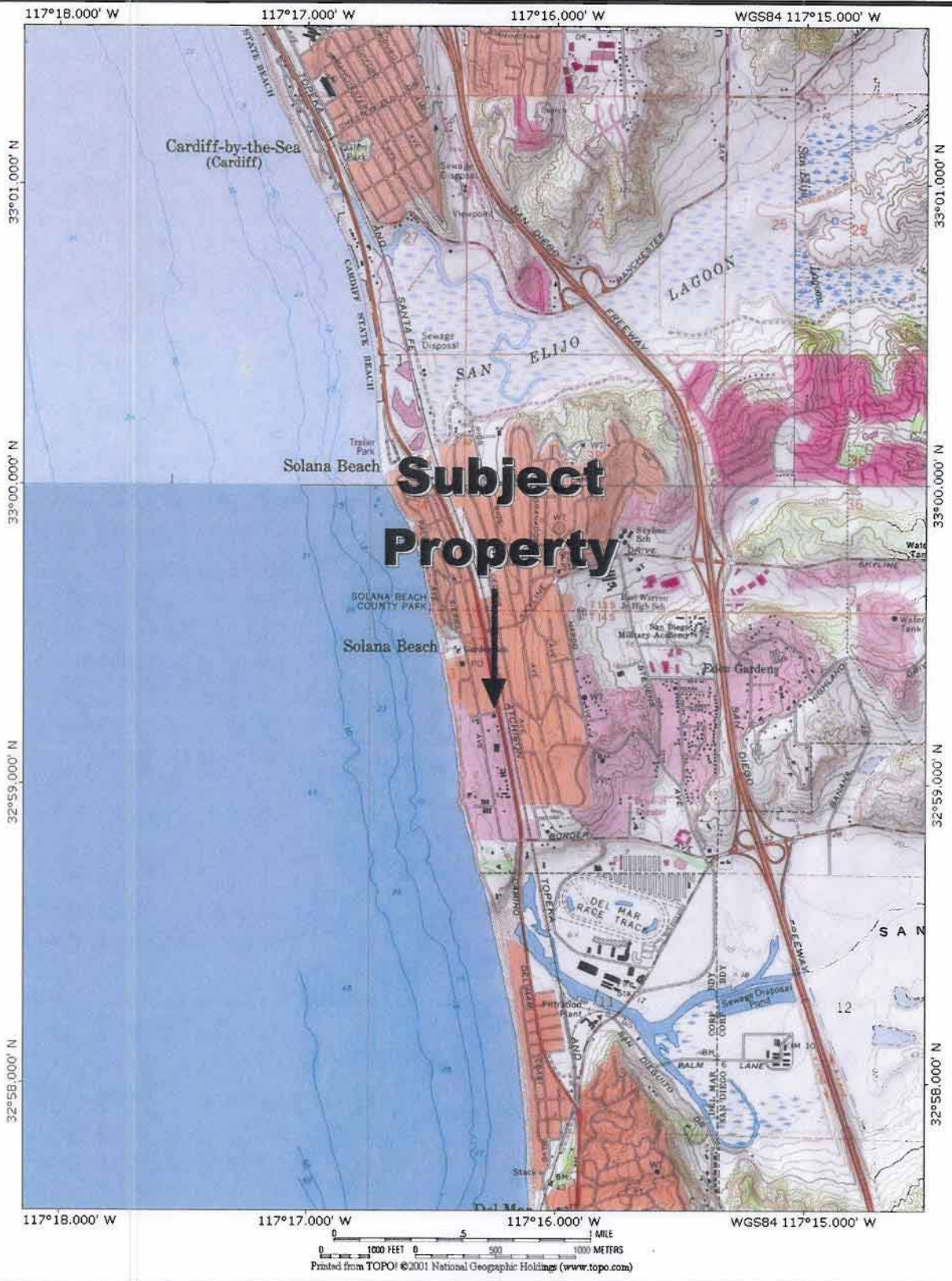


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343 South Highway 101
Solana Beach, California 92075
AEI Project Number 262387
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Figures: 1. Site Vicinity Map
 2. Site Plan
 3. Soil Boring Locations

Appendices: A. Health and Safety Plan
 B. Boring Logs
 C. Laboratory Results
 D. Comerica Consultants Checklist

Figures



USGS TOPOGRAPHIC MAP
 DEL MAR OEW QUADRANGLE
 Created 1975, Revised 1975

AEI CONSULTANTS

2447 Pacific Coast Highway, Suite 101, Hermosa Beach, CA

October 2006

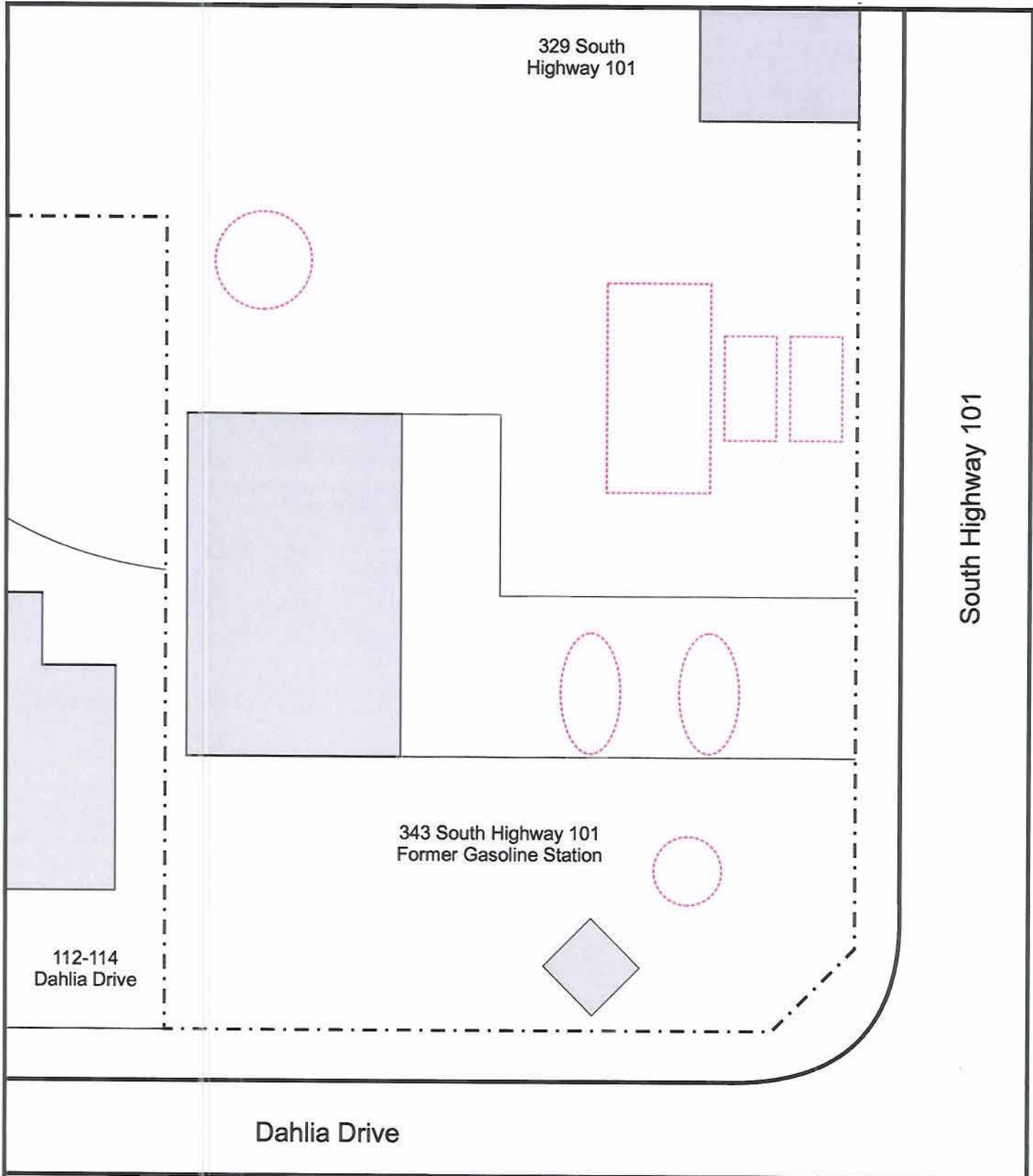
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Figure 1



Site Vicinity Map

329 South Highway 101
 Solana Beach, California 92075

Project # 262387



LEGEND

-  Subject Property Line
-  Former Gasoline Station USTs and Dispenser Locations

AEI CONSULTANTS

2447 Pacific Coast Highway, Suite 101, Hermosa Beach, CA

October 2006

Approximate Scale

Drawn by: AM

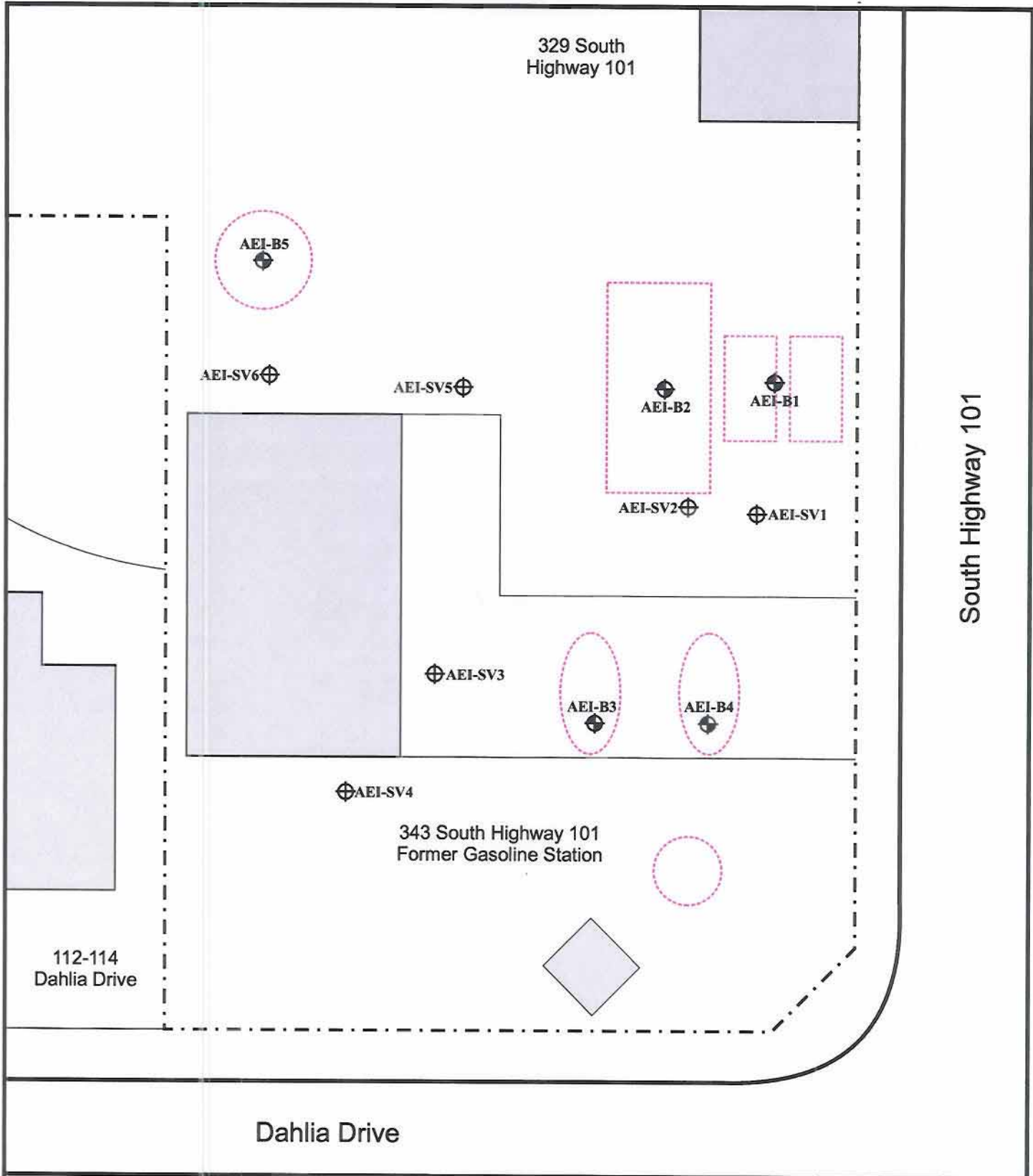
1" = 20'

Figure 2

Site Plan

329 South Highway 101
Solana Beach, California 92075

Project # 262387



South Highway 101

329 South Highway 101

AEI-B5

AEI-SV6

AEI-SV5

AEI-B2

AEI-B1

AEI-SV2

AEI-SV1

AEI-SV3

AEI-B3

AEI-B4

AEI-SV4





343 South Highway 101
Former Gasoline Station

112-114
Dahlia Drive

Dahlia Drive

LEGEND



-  Subject Property Line
-  Former Gasoline Station USTs and Dispenser Locations
-  AEI-B5 Soil Boring Locations
-  AEI-SV6 Soil Vapor Probe

AEI CONSULTANTS

2447 Pacific Coast Highway, Suite 101, Hermosa Beach, CA
 October 2006 Approximate Scale
 Drawn by: AM 1" = 20' Figure 3

Boring Locations

329 South Highway 101
 Solana Beach, California 92075 Project # 262387

Appendix A:
Health and Safety Plan

HEALTH AND SAFETY PLAN

Prepared for:

Phase II Subsurface Investigation
at
343 South Highway 101
Solana Beach, California 92075

A. INTRODUCTION

This Health and Safety Plan is written for the Phase II Subsurface Investigation being conducted at 343 South Highway 101 in the City of Solana Beach, California. All job site personnel will follow CAL OSHA safe operating practices as outlined in 29 CFR 1910 and 1926, as well as established guidelines set forth by AEI or their respective companies.

B. WORK DESCRIPTION

Site Manager: Agatha Mondala
310-798-4255

Project Safety Manager: Joseph Derhake
310-798-4255

Address: 343 South Highway 101
Solana Beach, California 92075

All of the samples collected will be analyzed by a state certified laboratory, and the entire project will be performed under the responsible charge of a registered professional civil engineer.

C. SITE/WASTE CHARACTERISTICS

Hazard Level: Serious:
Low: XXX
Moderate:
Unknown:

Waste Type: Solid: XXX
Sludge:
Liquid:
Gas: XXX

Hazard Characteristics: Toxic

D. HAZARD EVALUATION

Potential hazards include skin and eye contact or inhalation exposure to potentially toxic concentrations of hazardous chemicals. The potential toxic compounds that may exist at the site are listed below with descriptions of specific health effects of each. The list includes the primary potential toxic constituents that may be found at sites previously handling petroleum hydrocarbons.

1. Benzene

- a. Colorless to light yellow, flammable liquid with an aromatic odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Exposure may irritate eyes, nose and respiratory system and may cause acute restlessness, convulsions, nausea, or depression. Benzene is carcinogenic.*
- d. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

2. Toluene

- a. Colorless liquid with a sweet, pungent, benzene like odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headaches, dilated pupils, lacrimation, nervousness, insomnia, paresthesia, and dermatitis.
- d. Permissible exposure level for a time-weighted average over an eight-hour period is 100 ppm.

3. Xylene

- a. Colorless liquid with an aromatic odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Exposure may irritate eyes nose and throat and may cause dizziness, excitement, drowsiness, incoordination, corneal vacuolization, anorexia, nausea, vomiting, and dermatitis.
- d. Permissible exposure level for a time-weighted average over an eight-hour period is 100 ppm.

4. Ethylbenzene

- a. Colorless liquid with an aromatic odor.
- b. Toxic hazard by **inhalation, ingestion, and skin and/or eye contact**. Ethylbenzene is carcinogenic.*
- c. Exposure may irritate eyes and mucous membrane and may cause headaches, dermatitis, narcosis and loss of consciousness.
- d. Permissible exposure level for a time-weighted average over an eight-hour period is 100 ppm.

5. Lead

- a. A heavy ductile soft gray metal.
- b. Toxic hazard by **inhalation, ingestion, and skin and/or eye contact**.
- c. Exposure may cause weakness, nausea, lassitude, diarrhea, insomnia, anorexia, inflamed mucous membranes and abdominal pains. Lead is carcinogenic.*
- d. Permissible exposure level for a time-weighted average over an eight-hour period is 0.05 ppb (in vapor).

6. Gasoline

- a. Colorless liquid with a strong aromatic odor. Highly volatile and extremely flammable.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Inhalation of vapors can cause depression of the central nervous system with symptoms such as headache, dizziness, nausea and loss of coordination. Skin contact can cause defatting of the skin, skin irritation and dermatitis. Benzene is a major constituent of gasoline.
- d. Permissible exposure level for a time-weighted average over an eight-hour period is 300 ppm.

7. MTBE

- a. Colorless liquids with aromatic odor
- b. Toxic hazard by **inhalation, absorption, ingestion and skin and/or eye contact**.
- c. Exposure may irritate eyes, nose and respiratory system and may cause acute restlessness, convulsions, nausea, or depression. MTBE is carcinogenic.*
- d. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

8. Tetrachloroethylene (PCE)

- a. Colorless liquid with a mild, chloroform-like odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Exposure may irritate eyes, nose, throat; create nausea, dizziness, flush face and neck; ingestion may cause liver damage; carcinogenic*
- d. Permissible exposure level (PEL) for a time-weighted average (TWA) over an eight-hour period is 25.0 ppm.

9. Trichloroethylene (TCE)

- a. Colorless liquid with a sweet, chloroform-like odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact**.
- c. Exposure may irritate nose and eyes and may cause depression of the Central Nervous System; carcinogenic*.
- d. Permissible exposure level (PEL) for a time-weighted average (TWA) over an eight-hour period is 10.0 ppm.

10. Cis-1,2 Dichloroethene (Cis-1,2-DCE)

- a. Colorless liquid with a chloroform-like odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact.**
- c. Exposure may irritate nose and eyes and may cause depression of the Central Nervous System; carcinogenic*.
- d. Permissible exposure level (PEL) for a time-weighted average (TWA) over an eight-hour period is 10.0 ppm.

11. Trans-1,2 Dichloroethene

- a. Colorless liquid with a chloroform-like odor.
- b. Toxic hazard by **inhalation, adsorption, ingestion and skin and/or eye contact.**
- c. Exposure may irritate nose and eyes and may cause depression of the Central Nervous System; carcinogenic*.
- d. Permissible exposure level (PEL) for a time-weighted average (TWA) over an eight-hour period is 10.0 ppm.

All of the chemical hazards discussed above are primarily inhalation hazards. Work exposure will be monitored by the air-monitoring program, as discussed in Section F.

* **Known to the State of California to cause cancer.**

E. **PERSONAL PROTECTIVE CLOTHING**

Based on evaluation of potential hazards, level "D" protective clothing has been designated as the appropriate protection for this project. The level of protective clothing will be upgraded if the organic vapor levels in the operator's breathing zone exceed 5 ppm above background levels continuously for more than five minutes, or if any single reading exceeds 25 ppm. If this occurs then level C protection will be used. If the organic concentration in the operator's breathing zone exceeds 200 ppm for 5 minutes and/or the organic vapor concentration two feet above the excavation exceeds 1,000 ppm or 10% of the lower explosive limit, then the equipment will be shut down and the site evacuated. If organic vapor concentrations exceed 200 ppm and work continues then level B protection will be required.

"EPA Standard Operating Safety Guidelines" defines the levels of protective clothing as follows:

LEVEL A:

Fully encapsulating suit / SCBA / Hard hat / Steel toe boots / Safety gloves.

LEVEL B:

Splash resistant suit / SCBA / Hard Hat / Steel toe boots / Safety gloves.

LEVEL C:

Half face respirator / Hard hat / Safety glasses / Steel toe boots / Coveralls / Gloves.

LEVEL D:

Coveralls / Hardhat / Safety Glasses / Steel toe boots / Gloves.

If air-purifying respirators are authorized, organic vapor w-filter is the appropriate canister for use with the involved substances and concentrations. A competent individual has determined that all criteria for using this type of respiratory protection have been met.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE COMPANY SAFETY OFFICER, J.P. DERHAKE.

A FIRST AID KIT AND A 40 POUND BC FIRE EXTINGUISHER WILL BE AVAILABLE ON SITE.

EMERGENCY SERVICES ARE AVAILABLE BY DIALING 911 ON THE TELEPHONE LOCATED IN THE SITE MANAGER'S VEHICLE. THIS VEHICLE WILL BE ON SITE AT ALL TIMES.

F. MONITORING INSTRUMENTS

A photoionization detector will be used to monitor ambient air contaminant concentration. The photoionization detector will be calibrated prior to the start of on-site activities by trained personnel. Readings will be taken at the discretion of the Site Manager based on on-site observations.

G. WORKER SAFETY

There will be a 3-foot boundary surrounding the work area. The area within this boundary is considered an exclusion zone and only qualified personnel will be allowed to enter. All personnel arriving or departing the site should log in before entering the exclusion zone. All activities on site must be cleared through the Site Manager. Agatha Mondala has been designated to coordinate access control and security on site. Joseph Derhake is the designated Project Safety Officer. All work will strictly follow OSHA guidelines. In the event of an emergency, the Site Manager must be notified. All emergency activities will be coordinated through the Project Safety Manager and local emergency personnel. Any injury must be promptly reported to arrange proper medical care.

H. EMERGENCY INSTRUCTIONS

In the event of an emergency, all on-site activities shall cease. If practical, all on-site equipment shall be shut down. All personnel are required to immediately report to the site manager for instructions. If complete site evacuation is necessary, all personnel shall meet at the reconnoiter spot, identified as the **SOUTHEASTER CORNER OF THE PROPERTY AT THE INTERSECTION OF SOUTH HIGHWAY 101 AND DAHLIA DRIVE**. If necessary, local authorities and medical response agencies shall be notified. Work will commence again at the discretion of the Project Safety Manager and/or local authorities.

I. EMERGENCY HOSPITAL

The closest hospital with an emergency room is:

Script Memorial Hospital
354 Santa Fe Drive
Encinitas, California 92024
(760) 633-6501

Distance: 6.3 miles

Approximate Travel Time: 6 mins

1. Start at **343 S HIGHWAY 101, SOLANA BEACH** on **OLD HWY 101** going toward **DAHLIA DR** - go **0.6 mi**
2. Turn **L** on **VIA DE LA VALLE** - go **1.0 mi**
3. Take ramp onto **I-5 NORTH** toward **LOS ANGELES** - go **4.3 mi**
4. Take the **SANTA FE DR** exit toward **ENCINITAS** - go **0.2 mi**
5. Turn **L** on **SANTA FE DR** - go **0.2 mi**
6. Arrive at **354 SANTA FE DR, ENCINITAS**, on the **R**



J. READ AND SIGN

The work party was briefed on the contents of this plan on 10/19 at Bam. All site personnel have read the above plan and are familiar with its provisions.

NAME:

SIGNATURE:

COMPANY NAME:

ROB GIBERSON



HGS

Alex Smith



HGS

Frank Seloo

Frank Seloo 10/19/06

AEI

Agatha Mondala



AEI

Appendix B:

Boring Logs



AEI Consultants
 2447 Pacific Coast Hwy, Suite 101
 Hermosa Beach, CA 90254
 Telephone: (310) 798-4255
 Fax: (310) 798-2841

BORING NUMBER AEI-B1
 PAGE 1 OF 1

PROJECT NUMBER/NAME Solana Beach / 262387
PROJECT ADDRESS 343 South Highway 101, Solana Beach **CLIENT** Comerica Bank
DRILLING DATE 10/19/06 **TOTAL DEPTH** 20 Feet **GROUND ELEVATION** approximately 70 feet amsl
CONTRACTOR HydroGeoSpectrum **DEPTH TO FIRST GROUNDWATER:** Not encountered **DEPTH TO STATIC GROUNDWATER:** Not encountered
METHOD Direct-push, Limited-access Geoprobe rig - Acetate / 5035
LOGGED BY A. Mondala **CHECKED BY** J. Derhake **NOTES** Backfilled with hydrated bentonite chips, capped
BORING LOCATION Former location of two 8,000-gallon gasoline USTs

DEPTH (ft)	SAMPLE TYPE NUMBER	PID (ppm)	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES
0					Asphalt paving at surface	
5	AEI-B1-5	0	SP	X	Medium brown, fine to medium SAND, medium dense, moist	No odor or discoloration
10	AEI-B1-10	0	SP	X	Medium brown, fine to medium SAND, medium dense, moist	No odor or discoloration
15	AEI-B1-15	0	SP	X	Light brown/white, fine SAND, medium dense, moist	No odor or discoloration
20	AEI-B1-20	0	SP	X	Light brown/white, fine to medium SAND, trace gravel, medium dense, moist	No odor or discoloration
Bottom of hole at 20.0 feet.						

AEI 4-5-06 262387 BORING LOGS.GPJ GINT US.GDT 10/24/06



AEI Consultants
 2447 Pacific Coast Hwy, Suite 101
 Hermosa Beach, CA 90254
 Telephone: (310) 798-4255
 Fax: (310) 798-2841

BORING NUMBER AEI-B2

PROJECT NUMBER/NAME Solana Beach / 262387

PROJECT ADDRESS 343 South Highway 101, Solana Beach **CLIENT** Comerica Bank

DRILLING DATE 10/19/06 **TOTAL DEPTH** 20 Feet **GROUND ELEVATION** approximately 70 feet amsl

CONTRACTOR HydroGecSpectrum **DEPTH TO FIRST GROUNDWATER:** Not encountered **DEPTH TO STATIC GROUNDWATER:** Not encountered

METHOD Direct-push, Limited-access Geoprobe rig - Acetate / 5035

LOGGED BY A. Mondala **CHECKED BY** J. Derhake **NOTES** Backfilled with hydrated bentonite chips, capped

BORING LOCATION Former location of 12,000-gallon gasoline UST

DEPTH (ft)	SAMPLE TYPE NUMBER	PID (ppm)	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES
0					Asphalt paving at surface	
5	AEI-B2-5	0	SP	X	Medium brown, fine to medium SAND, medium dense, moist	No odor or discoloration
10	AEI-B2-10	0	SP	X	Medium brown, fine to medium SAND, medium dense, moist	No odor or discoloration
15	AEI-B2-15	0	SP	X	Light brown/white, fine SAND, medium dense, moist	No odor or discoloration
20	AEI-B2-20	0	SP	X	Light brown/white, fine to medium SAND, medium dense, moist Bottom of hole at 20.0 feet.	No odor or discoloration

AEI 4-5-06 262387 BORING LOGS.GPJ GINT US.GDT 10/24/06



AEI Consultants
 2447 Pacific Coast Hwy, Suite 101
 Hermosa Beach, CA 90254
 Telephone: (310) 798-4255
 Fax: (310) 798-2841

BORING NUMBER AEI-B3

PAGE 1 OF 1

PROJECT NUMBER/NAME Solana Beach / 262387

PROJECT ADDRESS 343 South Highway 101, Solana Beach **CLIENT** Comerica Bank

DRILLING DATE 10/19/06 **TOTAL DEPTH** 10 Feet **GROUND ELEVATION** approximately 70 feet amsl

CONTRACTOR HydroGeoSpectrum **DEPTH TO FIRST GROUNDWATER:** Not encountered **DEPTH TO STATIC GROUNDWATER:** Not encountered

METHOD Direct-push, Limited-access Geoprobe rig - Acetate / 5035

LOGGED BY A. Mondala **CHECKED BY** J. Derhake **NOTES** Backfilled with hydrated bentonite chips, capped

BORING LOCATION Former location of eastern dispenser location

DEPTH (ft)	SAMPLE TYPE NUMBER	PID (ppm)	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES
0					Concrete paving at surface	
5	AEI-B3-5	0	SP		Medium brown, fine to medium SAND, medium dense, moist	No odor or discoloration
10	AEI-B3-10	0	SP		Light brown, fine to medium SAND, medium dense, moist Bottom of hole at 10.0 feet.	No odor or discoloration



AEI Consultants
 2447 Pacific Coast Hwy, Suite 101
 Hermosa Beach, CA 90254
 Telephone: (310) 798-4255
 Fax: (310) 798-2841

BORING NUMBER AEI-B4

PAGE 1 OF 1

PROJECT NUMBER/NAME Solana Beach / 262387

PROJECT ADDRESS 343 South Highway 101, Solana Beach CLIENT Comerica Bank

DRILLING DATE 10/19/06 TOTAL DEPTH 10 Feet GROUND ELEVATION approximately 70 feet amsl

CONTRACTOR HydroGeoSpectrum DEPTH TO FIRST GROUNDWATER: Not encountered DEPTH TO STATIC GROUNDWATER: Not encountered

METHOD Direct-push, Limited-access Geoprobe rig - Acetate / 5035

LOGGED BY A. Mondala CHECKED BY J. Derhake NOTES Backfilled with hydrated bentonite chips, capped

BORING LOCATION Former location of western dispenser location

DEPTH (ft)	SAMPLE TYPE NUMBER	PID (ppm)	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES
0					Concrete paving at surface	
5	AEI-B4-5	0	SP		Medium brown, fine to medium SAND, dense, moist	No odor or discoloration
10	AEI-B4-10	0	SP		Light brown, fine to medium SAND, medium dense, moist Bottom of hole at 10.0 feet.	No odor or discoloration

AEI-4-5-06 262387 BORING LOGS.GPJ GINT US.GDT 10/24/06



AEI Consultants
 2447 Pacific Coast Hwy, Suite 101
 Hermosa Beach, CA 90254
 Telephone: (310) 798-4255
 Fax: (310) 798-2841

BORING NUMBER AEI-B5

PAGE 1 OF 1

PROJECT NUMBER/NAME Solana Beach / 262387

PROJECT ADDRESS 343 South Highway 101, Solana Beach **CLIENT** Comerica Bank

DRILLING DATE 10/19/06 **TOTAL DEPTH** 20 Feet **GROUND ELEVATION** approximately 70 feet amsl

CONTRACTOR HydroGeoSpectrum **DEPTH TO FIRST GROUNDWATER:** Not encountered **DEPTH TO STATIC GROUNDWATER:** Not encountered

METHOD Direct-push, Limited-access Geoprobe rig - Acetate / 5035

LOGGED BY A. Mondala **CHECKED BY** J. Derhake **NOTES** Backfilled with hydrated bentonite chips, capped

BORING LOCATION Former location of 500-gallon waste oil UST

DEPTH (ft)	SAMPLE TYPE NUMBER	PID (ppm)	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES
0					Asphalt paving at surface	
5	AEI-B5-5	0	SP	X	Light brown, fine to medium SAND, medium dense, moist	No odor or discoloration
10	AEI-B5-10	0	SP	X	Light gray, fine to medium SAND, medium dense, moist	No odor or discoloration
15	AEI-B5-15	0	SP	X	Light gray, fine to medium SAND, medium dense, moist	No odor or discoloration
20	AEI-B5-20	0	SP	X	Light brown/white, fine to medium SAND, medium dense, moist Bottom of hole at 20.0 feet.	No odor or discoloration

AEI 4-5-06 262387 BORING LOGS.GPJ GINT US.GDT 10/24/06

Appendix C:
Laboratory Results



Alpha Scientific Corporation
Environmental Laboratories

10-23-2006

Ms. Agatha Mondala
AEI Consultants
2447 Pacific Coast Hwy., Suite 101
Hermosa Beach, CA 90254

Project: 262387
Project Site: Solana Beach
Sample Date: 10-19-2006
Lab Job No.: AI610085

Dear Ms. Mondala:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 10-19-2006 and analyzed by the following EPA methods:

EPA 8015M (Total Petroleum Hydrocarbons)
EPA 8260B (VOCs & Oxygenates by GC/MS)
EPA 6010B/7471A for CAM Metals

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.



Alpha Scientific Corporation
Environmental Laboratories

Client: AEI Consultants
 Project: 262387
 Project Site: Solana Beach
 Matrix: Soil
 Prepared Method for TPH-g: EPA5035
 Batch No. for TPH-g: CMJ20-GS1
 Batch No. for TPH-d: EJ19-DS1

Lab Job No.: AI610085
 Date Sampled: 10-19-2006
 Date Received: 10-19-2006
 Date Prepared: 10-20-2006
 Date Analyzed: 10-20-2006
 Date Analyzed: 10-20-2006
 Date Reported: 10-23-2006

EPA 8015M (Total Petroleum Hydrocarbons)
Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	C4-C12 (Gasoline Range)*	C13-C23 (Diesel Range)	C24-C40 (Oil Range)
Method Detection Limit		0.5	5	50
Method Blank		ND	ND	ND
Method Blank		ND	ND	ND
AEI-B1-5'	AI610085-1	ND	ND	ND
AEI-B1-20'	AI610085-2	ND	ND	ND
AEI-B2-5'	AI610085-3	ND	ND	ND
AEI-B2-20'	AI610085-4	ND	ND	ND
AEI-B3-5'	AI610085-5	ND	ND	ND
AEI-B3-10'	AI610085-6	ND	ND	ND
AEI-B4-5'	AI610085-7	ND	ND	ND
AEI-B4-10'	AI610085-8	ND	ND	ND
AEI-B5-5'	AI610085-9	ND	ND	ND
AEI-B5-20'	AI610085-10	ND	ND	ND

* Gasoline Range TPH results were obtained from Purge & Trap analysis.
 ND: Not Detected (below RL).



Alpha Scientific Corporation

Environmental Laboratories

Client: AEI Consultants
Project: 262387

Lab Job No.: AI610085
Matrix: Soil

Date Reported: 10-23-2006
Date Sampled: 10-19-2006

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/kg(ppb)

DATE ANALYZED	10-20	10-20-06	10-20-06	10-20-06	10-20-06	10-20-06
PREP. METHOD	5035	5035	5035	5035	5035	5035
DILUTION FACTOR	1	1	1	1	1	1
LAB SAMPLE I.D.		AI610085-1	AI610085-2	AI610085-3	AI610085-4	AI610085-5
CLIENT SAMPLE I.D.		AEI-B1-5'	AEI-B1-20'	AEI-B2-5'	AEI-B2-20'	AEI-B3-5'
COMPOUND	MDL	MB				
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND
Iodomethane	5	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	ND	ND	ND	ND	ND
Benzene	2	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND



Alpha Scientific Corporation
Environmental Laboratories

Client: AEI Consultants
Project: 262387

Lab Job No.: AI61008
Matrix: Soil

Date Reported: 10-23-2006
Date Sampled: 10-19-2006

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	MB	AEI-B1-5'	AEI-B1-20'	AEI-B2-5'	AEI-B2-20'	AEI-B3-5'
Toluene	2	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	2	ND	ND	ND	ND	ND	ND
Total Xylenes	2	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND
Carbon disulfide	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	50	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND
MTBE	5	ND	ND	ND	ND	ND	ND
ETBE	5	ND	ND	ND	ND	ND	ND
DIPE	5	ND	ND	ND	ND	ND	ND
TAME	5	ND	ND	ND	ND	ND	ND
TBA	50	ND	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; ND=Not Detected (below DF × MDL); J=trace concentration.

* Obtained from a higher dilution analysis.



Alpha Scientific Corporation

Environmental Laboratories

Client: AEI Consultants
Project: 262387

Lab Job No.: AI610085
Matrix: Soil

Date Reported: 10-23-2006
Date Sampled: 10-19-2006

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/kg(ppb)

DATE ANALYZED		10-20	10-20-06	10-20-06	10-20-06	10-20-06	10-20-06
PREP. METHOD		5035	5035	5035	5035	5035	5035
DILUTION FACTOR		1	1	1	1	1	1
LAB SAMPLE I.D.			AI610085-6	AI610085-7	AI610085-8	AI610085-9	AI610085-10
CLIENT SAMPLE I.D.			AEI-B3-10'	AEI-B4-5'	AEI-B4-10'	AEI-B5-5'	AEI-B5-20'
COMPOUND	MDL	MB					
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Iodomethane	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	ND	ND	ND	ND	ND	ND
Benzene	2	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND



Alpha Scientific Corporation

Environmental Laboratories

Client: AEI Consultants
Project: 262387

Lab Job No.: AI610085
Matrix: Soil

Date Reported: 10-23-2006
Date Sampled: 10-19-2006

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	MB	AEI-B3-10'	AEI-B4-5'	AEI-B4-10'	AEI-B5-5'	AEI-B5-20'
Toluene	2	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	2	ND	ND	ND	ND	ND	ND
Total Xylenes	2	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND
Carbon disulfide	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	50	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND
MTBE	5	ND	ND	ND	ND	ND	ND
ETBE	5	ND	ND	ND	ND	ND	ND
DIPE	5	ND	ND	ND	ND	ND	ND
TAME	5	ND	ND	ND	ND	ND	ND
TBA	50	ND	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; ND=Not Detected (below DF × MDL); J=trace concentration.
* Obtained from a higher dilution analysis.



Alpha Scientific Corporation
Environmental Laboratories

Client: AEI Consultants
Project: 262387
Project Site: Solana Beach
Matrix: Soil
Digestion Method: EPA 3050B
Batch No.: 1023-MS1

Lab Job No.: AI610085
Date Sampled: 10-19-2006
Date Received: 10-19-2006
Date Digested: 10-20-2006
Date Analyzed: 10-23-2006
Date Reported: 10-23-2006

EPA 6010B/7471A for Cam Metals (TTLC)
Reporting Units: mg/kg (ppm)

Element	EPA	Method Blank	AI610085-9	AI610085-10	Reporting Limit
	Method		AEI-B5-5'	AEI-B5-20'	
Antimony (Sb)	6010B	ND	ND	ND	2
Arsenic (As)	6010B	ND	1.2	ND	0.5
Barium (Ba)	6010B	ND	28	7.2	2
Beryllium (Be)	6010B	ND	ND	ND	2
Cadmium (Cd)	6010B	ND	ND	ND	2
Chromium (Cr)	6010B	ND	ND	ND	2
Cobalt (Co)	6010B	ND	5.3	ND	2
Copper (Cu)	6010B	ND	2.2	3.0	2
Lead (Pb)	6010B	ND	ND	ND	2
Mercury (Hg)	7471A	ND	ND	ND	0.05
Molybdenum (Mo)	6010B	ND	ND	ND	2
Nickel (Ni)	6010B	ND	2.8	ND	2
Selenium (Se)	6010B	ND	ND	ND	0.5
Silver (Ag)	6010B	ND	ND	ND	2
Thallium (Tl)	6010B	ND	ND	ND	2
Vanadium (V)	6010B	ND	49	5.9	2
Zinc (Zn)	6010B	ND	18	9.8	1

ND: Not Detected (at the specified limit).

PQL: Practical Quantitation Limit.



10-23-2006

**EPA 8015M (TPH)
Batch QA/QC Report**

Client: AEI Consultants
Project: 262387
Matrix: Soil
Batch No: EJ19-DS1

Lab Job No.: AI610085
Lab Sample ID: AI610085-1
Date Analyzed: 10-19-2006

**I. MS/MSD Report
Unit: ppm**

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-d	ND	200	211	213	105.5	106.5	0.9	30	70-130

**II. LCS Result
Unit: ppm**

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-d	204	200	102.0	80-120

ND: Not Detected (at the specified limit).



10-23-2006

**EPA 8015M (TPH)
Batch QA/QC Report**

Client: AEI Consultants
Project: 262387
Matrix: Soil
Batch No: CMJ20-GS1

Lab Job No.: AI610085
Lab Sample ID: AI610085-1
Date Analyzed: 10-20-2006

**I. MS/MSD Report
Unit: ppb**

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	774	751	77.4	75.1	3.0	30	70-130

**II. LCS Result
Unit: ppb**

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-g	1,050	1,000	105.0	80-120

ND: Not Detected (at the specified limit)



10-23-2006

**EPA 8260B
Batch QA/QC Report**

Client: AEI Consultants
Project: 262387
Matrix: Soil
Batch No: 1020-VOCS1

Lab Job No.: AI610085
Lab Sample ID: AI610085-1
Date Analyzed: 10-20-2006

**I. MS/MSD Report
Unit: ppb**

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	18.0	15.8	90.0	79.0	13.0	30	70-130
Benzene	ND	20	22.0	18.1	110.0	90.5	19.5	30	70-130
Trichloro-ethene	ND	20	19.3	16.1	96.5	80.5	18.1	30	70-130
Toluene	ND	20	20.6	16.7	103.0	83.5	20.9	30	70-130
Chlorobenzene	ND	20	22.7	19.8	113.5	99.0	13.6	30	70-130

**II. LCS Result
Unit: ppb**

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	20.0	20.0	100.0	80-120
Benzene	21.1	20.0	105.5	80-120
Trichloro-ethene	19.	20.0	95.0	80-120
Toluene	19.8	20.0	99.0	80-120
Chlorobenzene	22.9	20.0	114.5	80-120

ND: Not Detected.



10-23-2006

EPA 6010B/7471A for CAM Metals
Batch QA/QC Report

Client: AEI Consultants
Project: 262387
Matrix: Soil
Batch No: 1023-MS1

Lab Job No.: AI610085

Lab Sample ID: LCS
Date Analyzed: 10-23-2006

LCS/LCSD Report

Analyte	Sample Conc.	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept. Limit	%Rec Accept. Limit
Antimony (Sb)	ND	84.0	91.0	8.0	30	70-130
Arsenic (As)	ND	90.0	95.0	5.4	30	70-130
Barium (Ba)	ND	92.0	92.0	0.0	30	70-130
Beryllium (Be)	ND	91.0	93.0	2.2	30	70-130
Cadmium (Cd)	ND	103.0	103.0	0.0	30	70-130
Chromium (Cr)	ND	94.0	98.0	4.2	30	70-130
Cobalt (Co)	ND	94.0	96.0	2.1	30	70-130
Copper (Cu)	ND	96.0	96.0	0.0	30	70-130
Lead (Pb)	ND	100.0	102.0	2.0	30	70-130
Mercury (Hg)	ND	105.0	110.0	4.7	30	70-130
Molybdenum (Mo)	ND	84.0	87.0	3.5	30	70-130
Nickel (Ni)	ND	102.0	102.0	0.0	30	70-130
Selenium (Se)	ND	106.0	105.0	0.9	30	70-130
Silver (Ag)	ND	88.0	95.0	7.7	30	70-130
Thallium (Tl)	ND	85.0	91.0	6.8	30	70-130
Vanadium (V)	ND	100.0	95.0	5.1	30	70-130
Zinc (Zn)	ND	105.0	104.0	1.0	30	70-130

ND: Not Detected

October 21, 2006



Agatha Mondala
AEI Consultants
2447 Pacific Coast Highway Suite 101
Hermosa Beach, Ca 90254

Dear Agatha:

Enclosed please find the report on the soil vapor sampling and analysis performed at 343 Highway 101 in Solana Beach, Ca on October 19-20, 2006. The report consists of one bound and one unbound copy with the following sections:

- Technical approach with results and discussion.
- Data quantitation sheets in LARWQCB format.
- QA/QC in LARWQCB format.
- Chromatograms (unbound copy only).

If you have any questions or additional requirements, please do not hesitate to call. It was a pleasure working with you, and I look forward to future projects.

Sincerely,

A handwritten signature in black ink, appearing to read "Raphe Pavlick".

Raphe Pavlick
Director

SOIL VAPOR TECHNICAL APPROACH

Soil samples were taken into polyacetate liners using Geoprobe patented continuous coring techniques utilizing the *MeisterProbe* hydraulic installation system (a modified version of *Geoprobe*). Vapor probes were installed into open holes created by hand-augers or slam-bars (slide-hammers). Polyethylene tubing (1/4 inch) equipped with an *anchor* is inserted through the tubing into the open annulus. A small amount of coarse sand is allowed to flow so as to form a permeable sand pack at depth. At this point the hole is then grouted to the surface. The polyethylene tubing is connected to the sampling train, and soil vapor sampling is initiated. The tubing exiting the surface of the ground is connected to a glass sampling bulb fitted with Teflon stopcocks and a viton rubber sampling port. This bulb is connected in turn to a vacuum gauge, flowmeter, and portable sampling pump. Initially both stopcocks are closed, and the absence of flow and the presence of a slight vacuum is noted. This demonstrates that the sampling train on the far end of the bulb is leak-tight. Then the first stopcock (pump end) is opened; the absence of flow demonstrates that the sampling bulb itself is leak-tight. The ground end of the bulb is then opened, and a flow of 150-200 ml/min is maintained for seven to ten purge volumes. During the sampling a leak-check compound such as isobutane is placed near and around the sample train. Any trace of this compound detected in the sample indicates the intrusion of ambient air into the sampling train, invalidating the results of that sample. No such leaks were detected with any of the samples. The stopcocks were then closed (pump end first), and the sample retained in the container. Approximately 25 NG each of deuterio-chloroform, deuterio-methylene chloride, deuterio-acetone, deuterio-toluene and deuterio-benzene were added through the septum into the bulb. The recovery of these isotopically-labeled surrogate compounds demonstrates that the bulbs have remained leak-free up until the actual analysis. A recovery of 90% for the deuterated-benzene, deuterio-methylene chloride, deuterated toluene and the deuterated chloroform is desirable; a recovery of less than 75% requires reinjection, resampling or may *qualify* the sample results. The deuterated acetone is added as a measure of water vapor in the sampling and analysis systems; a recovery of greater than 70% is acceptable, although levels of the water-soluble compounds (ketones) may be affected. In the event that water-soluble related compounds are detected, the deuterated acetone may be used as an internal standard for quantitation. All recoveries during this project were within acceptable range. These bulbs were then delivered to the mobile laboratory for analysis by GCMS.

The analyses of the soil vapor samples proceeded as follows. A 1 ml aliquot of soil vapor was withdrawn from each bulb and injected into a Hewlett-Packard model 6890 gas chromatograph interfaced to a Hewlett-Packard model 5973 mass spectrometer. Chromatography was performed in such a way that the combination of retention times and mass fragmentation allowed for the complete separation of all the target compounds. The mass spec was operated in *full scan* mode between 35 and 350 amu. This allows for the identification of any volatile organic species that may be present in the soil vapor.

The following laboratory QA/QC was performed. Initial five-point calibrations were run on July 28, 2006. A laboratory control standard (LCS) from *Absolute Standards* 8240 mix was run at the end of the same day. The daily standard, run on the sampling days, was made from *Ultra* lot CA2337a. The initial calibration was also run on this standard stock. The surrogate calibration curve was run on Aldrich certified material. All results were within the LAWQCB and HGS requirements.

Three notable additions to the LAWQCB requirements were deemed necessary:

- Five isotopically-labeled surrogates, D2-Methylene Chloride, D6-Benzene, D6-Acetone, D8-Toluene and D-Chloroform, were added to the collection vessel, a 125-ml glass bulb fitted with Teflon stopcocks and a viton rubber septum, to measure recovery percentages. The benzene, toluene, methylene chloride and chloroform surrogates are used to verify the recovery of the BTEX and chlorinated hydrocarbons respectively; a recovery of at least 90% is desired; less than 75% would necessitate reanalysis or resampling, or would *qualify* those data... The deuterated acetone provides a measure of the possible presence of water vapor in the sample and general condition of the chromatographic system in terms of hydration; a recovery of 70% of the acetone surrogate indicates acceptability of the complete sampling and analysis procedure; below this level, water vapor presence in the sampling line should be investigated or chromatographic dehydration procedures should be considered. If ketones, alcohols, or other water soluble compounds are being targeted, the acetone surrogate may serve as an internal standard for their quantitation.
- Pentane, isobutane, isopropanol or other vapor was used to surround the sampling train at the surface to identify possible ambient intrusion into the sampling train or down the outside surface of the sampling tubing connected to the subsurface. In the event a leak-check compound is detected in the sample, a different leak-detecting compound will be used for a repeat sample to eliminate the possibility that the first compound is actually present in the soil vapor itself.
- A minimum of 24 hours is allowed to allow the soil vapor in the subsurface to equilibrate to pre-drilling 'natural' composition. An auger rig would require 2-4 weeks.

RESULTS AND DISCUSSION

No volatile organic compounds (VOC's) were detected in any of the samples.

Target compounds include those listed on the initial calibration form.

Because of differences in rounding philosophies between the Water Board forms (Quattro-Pro) and the spreadsheet (Excel), there may occasionally be a difference in the decimal point of a value. This is not considered significant and should not be a cause of concern.

All QA/QC requirements of *HydroGeoSpectrum* and LARWQCB have been met.

HydroGeoSpectrum does not accept any responsibility for other interpretation or utilization of these results.

DATA

SOIL GAS SAMPLE RESULTS

SITE NAME: SanDiego/AEI LAB NAME: HydroGeoSpectrum (HGS) DATE: 20 OCT 2006
 ANALYST: Raphe Pavlick COLLECTOR: Raphe Pavlick INSTRUMENT ID 2415A8201
 NORMAL INJECTION VOLUME 1 ml

Sample ID: SV2 SV1 SV3 SV5
 WOB1517-08248 WOB1518-08249 WOB1519-08250 WOB1520-08251
 5 5 5 5
 Sampling Depth (ft) 1650 1650 1650 1650
 Purge Volume (ml) NO NO NO NO
 Vacuum 1216 1216 1221 A 1226
 Sampling Time 1508 1521 1535 1555
 Injection Time 1ml 1ml 1ml 1ml
 Injection Volume 1 1 1 1
 Dilution Factor

COMPOUND	DETECTOR	RT	AREA	CONC	RT	AREA	CONC	RT	AREA	CONC	RT	AREA	CONC
Deutero-chloroform	MS	8.01	94379	112%	7.98	96998	115%	7.96	93682	111%	8.04	94102	112%
D6-BENZENE	MS	8.42	214267	88%	8.41	230802	95%	8.41	207018	85%	8.44	208682	86%
D6-ACETONE	MS	6.97	66148	87%	6.93	83978	110%	6.93	74048	97%	6.98	68060	89%
D2-Dichloromethane	MS	6.82	71668	104%	5.84	67038	97%	5.77	67598	98%	6.99	57879	84%
D8-TOLUENE	MS	9.55	182431	100%	9.55	189179	104%	9.55	175983	97%	9.56	174846	96%

Total Number of Peaks by GCMS: 0 + Surrogates 0 + Surrogates 0 + Surrogates

Unidentified peaks and/or other analytical remarks: UNITS: mcg/L

SOIL GAS SAMPLE RESULTS

SITE NAME: SanDiego/AEI
 ANALYST: Raphe Pavlick
 NORMAL INJECTION VOLUME 1 ml
 LAB NAME: HydroGeoSpectrum (HGS)
 COLLECTOR: Raphe Pavlick
 DATE: 20 OCT 2006
 INSTRUMENT ID 2415A8201

Sample ID: SV6 SV4
 WOB1521-08252 WOB1522-08253
 Sampling Depth (ft) 5
 Purge Volume (ml) 1650
 Vacuum NO
 Sampling Time 1231
 Injection Time 1609
 Injection Volume 1ml
 Dilution Factor 1

COMPOUND	DETECTOR	RT	AREA	CONC	RT	AREA	CONC	RT	AREA	CONC
Deutero-chloroform	MS	7.97	94674	112%	NONE DETECTED	NONE DETECTED				
D6-BENZENE	MS	8.41	219687	90%	7.98	99362	118%			
D6-ACETONE	MS	6.92	73641	96%	8.41	216897	89%			
D2-Dichloromethane	MS	5.95	70716	103%	6.93	73187	96%			
D8-TOLUENE	MS	9.54	181461	100%	5.88	72920	106%			
					9.55	170843	94%			

Total Number of Peaks by GCMS: 0 + Surrogates 0 + Surrogates

Unidentified peaks and/or other analytical remarks: UNITS: mcg/L

QA/QC

INITIAL CALIBRATION BY FULL SCAN MASS SPEC

LAB NAME: HydroGeoSpectrum DATE: July 28, 2006

ANALYST: Raphe Pavlick STD LOT#: ULTRA CA2337 INSTRUMENT ID: 2415A8201-2

Calibration Files

500 =WOB0881.D 1000 =WOB0880.D 20 =WOB0883.D
 100 =WOB0882.D 5 =WOB0884.D

Compound	500	1000	20	100	5	Avg	%RSD
1) Vinyl Chloride	2.340	1.948	3.090	3.243	2.713	2.667	E3 19.99
2) Bromomethane	3.860	3.674	5.503	3.966	5.742	4.549	E2 21.74
3) Chloroethane	0.779	0.634	0.963	1.010	0.757	0.829	E3 18.73
4) 1,1-Dichloroethene	4.415	4.644	3.853	4.844	6.404	4.832	E3 19.74
6) Methylene Chloride	3.760	3.037	3.948	4.227	4.878	3.970	E3 16.93
7) 1,2-Dichloroethene (c	7.442	6.183	8.466	9.651	8.006	7.950	E3 16.09
8) 1,1-Dichloroethane	6.749	5.055	5.240	7.685	7.267	6.399	E3 18.62
9) Chloroform	2.645	3.004	2.649	3.654	2.767	2.944	E3 14.37
0) 1,2-Dichloroethane	2.305	2.215	1.923	2.396	1.945	2.157	E3 9.88
12) 1,1,1-Trichloroethane	4.007	3.241	4.304	2.928	4.084	3.713	E3 16.00
13) Carbon Tetrachloride	2.024	2.823	3.018	2.225	2.657	2.549	E3 16.26
4) Benzene	0.737	0.677	1.057	0.923	0.904	0.859	E4 17.74
15) Trichloroethene	3.312	3.405	4.763	4.934	4.750	4.233	E3 18.94
16) 1,2-Dichloropropane	6.809	5.017	5.159	7.492	7.076	6.311	E3 18.12
7) Bromodichloromethane	2.645	3.004	2.637	3.656	2.819	2.952	E3 14.28
8) cis-1,3-Dichloroprope	2.954	3.356	2.226	3.647	2.599	2.956	E3 19.27
19) trans-1,3-Dichloropro	2.951	3.380	2.224	3.849	2.926	3.066	E3 19.65
20) 1,1,2-Trichloroethane	2.567	2.534	3.844	3.714	3.320	3.196	E3 19.40
1) Dibromochloromethane	2.325	2.792	3.609	3.532	3.357	3.123	E3 17.57
2) Bromoform	2.144	2.439	1.900	2.071		2.139	E3 10.51
24) Toluene	6.837	6.211	8.918	9.109	7.910	7.797	E3 16.26
5) Tetrachloroethene	2.683	2.513	3.751	3.871	3.730	3.310	E3 19.78
7) Chlorobenzene	0.959	0.859	1.169	1.182	1.111	1.056	E4 13.38
28) Ethylbenzene	4.840	4.517	6.279	6.191	5.385	5.442	E3 14.47
29) Xylene (total)	1.653	1.599	2.223	2.169	1.988	1.926	E4 14.98
0) Styrene	1.023	0.993	1.226	1.287	1.067	1.119	E4 11.62
1) 1,1,1,2-Tetrachloroet	3.022	2.247	2.958	3.487	3.139	2.971	E3 15.26
32) 1,1,2,2-Tetrachloroet	2.953	3.025	2.613	3.627	2.427	2.929	E3 15.72
3) FREON-11	9.197	4.715	6.490	6.362	7.520	6.857	E2 24.06
4) S Deutero-chloroform	8.231	8.731	8.329			8.430	E2 3.14
35) FREON-12	2.260	1.368	3.091	3.089	2.307	2.423	E3 29.48
36) FREON-113	3.011	3.187	4.227	5.770	5.527	4.345	E3 29.49
8) G HYDROCARBONS	8.235	7.649	8.152			8.012	E3 3.96
9) s D6-BENZENE	2.735	2.831	2.687			2.751	E3 2.67
41) S D6-ACETONE	8.392	9.287	7.878			8.519	E2 8.37
2) S D2-Dichloromethane	6.089	6.488	8.053			6.877	E2 15.10
3) Freon-22	2.372	2.002	3.918	3.508	2.720	2.904	E3 27.35
44) Freon-141B	8.262	8.765	5.986	8.368	7.398	7.756	E3 14.28
53) S D8-TOLUENE	2.207	2.250	2.002			2.153	E3 6.15

Evaluate Initial LCS Report

Data File : C:\HPCHEM\1\DATA\WOB0886.D
 Acq On : 28 Jul 2006 11:25 am
 Sample : LCS 50 ng
 Misc : INITIAL 28JULY06
 MS Integration Params: rteint.p

Vial: 1
 Operator: Raphe HGS
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\N072806.M (RTE Integrator)
 Title : FULL SCAN
 Last Update : Mon Aug 07 15:48:52 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	AccRge
1 Vinyl Chloride	2.667	3.007	E3 -12.7	20
2 Bromomethane	454.879	428.580	5.8	20
3 Chloroethane	828.508	951.280	-14.8	20
4 1,1-Dichloroethene	4.832	4.230	E3 12.5	15
6 Methylene Chloride	3.970	3.698	E3 6.9	15
7 1,2-Dichloroethene (cis)	7.950	6.952	E3 12.6	15
8 1,1-Dichloroethane	6.399	6.867	E3 -7.3	15
9 Chloroform	2.944	2.621	E3 11.0	15
10 1,2-Dichloroethane	2.157	2.365	E3 -9.6	15
12 1,1,1-Trichloroethane	3.713	4.219	E3 -13.6	15
13 Carbon Tetrachloride	2.549	2.585	E3 -1.4	15
14 Benzene	8.595	9.459	E3 -10.1	15
15 Trichloroethene	4.233	4.469	E3 -5.6	15
16 1,2-Dichloropropane	6.311	6.867	E3 -8.8	15
17 Bromodichloromethane	2.952	2.573	E3 12.8	15
18 cis-1,3-Dichloropropene	2.956	2.569	E3 13.1	15
19 trans-1,3-Dichloropropene	3.066	3.013	E3 1.7	15
20 1,1,2-Trichloroethane	3.196	3.454	E3 -8.1	15
21 Dibromochloromethane	3.123	3.140	E3 -0.5	15
24 Toluene	7.797	7.825	E3 -0.4	15
25 Tetrachloroethene	3.310	3.450	E3 -4.2	15
27 Chlorobenzene	10.560	10.584	E3 -0.2	15
28 Ethylbenzene	5.442	5.590	E3 -2.7	15
29 Xylene (total)	19.263	19.605	E3 -1.8	15
30 Styrene	11.193	11.452	E3 -2.3	15
31 1,1,1,2-Tetrachloroethane	2.971	3.001	E3 -1.0	15
32 1,1,2,2-Tetrachloroethane	2.929	2.695	E3 8.0	15
33 FREON-11	685.688	732.600	-6.8	20
35 FREON-12	2.423	2.343	E3 3.3	20
36 FREON-113	4.345	4.836	E3 -11.3	20
43 Freon-22	2.904	2.991	E3 -3.0	20

Data File : C:\HPCHEM\1\DATA\WOB1515.D

Vial: 1

Acq On : 20 Oct 2006 2:51 pm

Operator: Raphe HGS

Sample : STANDARD 50 ng

Inst : GC/MS Ins

Misc : 20OCT06

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\N072806.M (RTE Integrator)

Title : FULL SCAN

Last Update : Fri Oct 20 15:15:45 2006

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	AccRge
1	Vinyl Chloride	2.667	2.446	E3	8.3 20
2	Bromomethane	454.879	438.140		3.7 20
3	Chloroethane	828.508	772.160		6.8 20
4	1,1-Dichloroethene	4.832	4.211	E3	12.9 15
6	Methylene Chloride	3.970	3.721	E3	6.3 15
7	1,2-Dichloroethene (cis)	7.950	9.113	E3	-14.6 15
8	1,1-Dichloroethane	6.399	5.818	E3	9.1 15
9	Chloroform	2.944	2.752	E3	6.5 15
10	1,2-Dichloroethane	2.157	2.238	E3	-3.8 15
12	1,1,1-Trichloroethane	3.713	3.437	E3	7.4 15
3	Carbon Tetrachloride	2.549	2.220	E3	12.9 15
4	Benzene	8.595	7.496	E3	12.8 15
15	Trichloroethene	4.233	3.790	E3	10.5 15
16	1,2-Dichloropropane	6.311	6.479	E3	-2.7 15
7	Bromodichloromethane	2.952	2.821	E3	4.4 15
18	cis-1,3-Dichloropropene	2.956	2.770	E3	6.3 15
19	trans-1,3-Dichloropropene	3.066	2.838	E3	7.4 15
0	1,1,2-Trichloroethane	3.196	3.038	E3	4.9 15
1	Dibromochloromethane	3.123	2.809	E3	10.1 15
24	Toluene	7.797	6.775	E3	13.1 15
15	Tetrachloroethene	3.310	3.008	E3	9.1 15
7	Chlorobenzene	10.560	9.797	E3	7.2 15
28	Ethylbenzene	5.442	5.078	E3	6.7 15
29	Xylene (total)	19.263	19.077	E3	1.0 15
0	Styrene	11.193	9.768	E3	12.7 15
1	1,1,1,2-Tetrachloroethane	2.971	2.779	E3	6.5 15
32	1,1,2,2-Tetrachloroethane	2.929	2.495	E3	14.8 15
3	FREON-11	685.688	665.560		2.9 20
5	FREON-12	2.423	1.941	E3	19.9 20
36	FREON-113	4.345	5.004	E3	-15.2 20
13	Freon-22	2.904	2.628	E3	9.5 20

Data File : C:\HPCHEM\1\DATA\WOB1523.D
 Acq On : 20 Oct 2006 4:40 pm
 Sample : LCS 1 ng
 Misc : SD/AEI 20OCT06
 MS Integration Params: rteint.p
 Quant Time: Oct 20 17:37 2006

Vial: 1
 Operator: Raphe HGS
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: N072806.RES

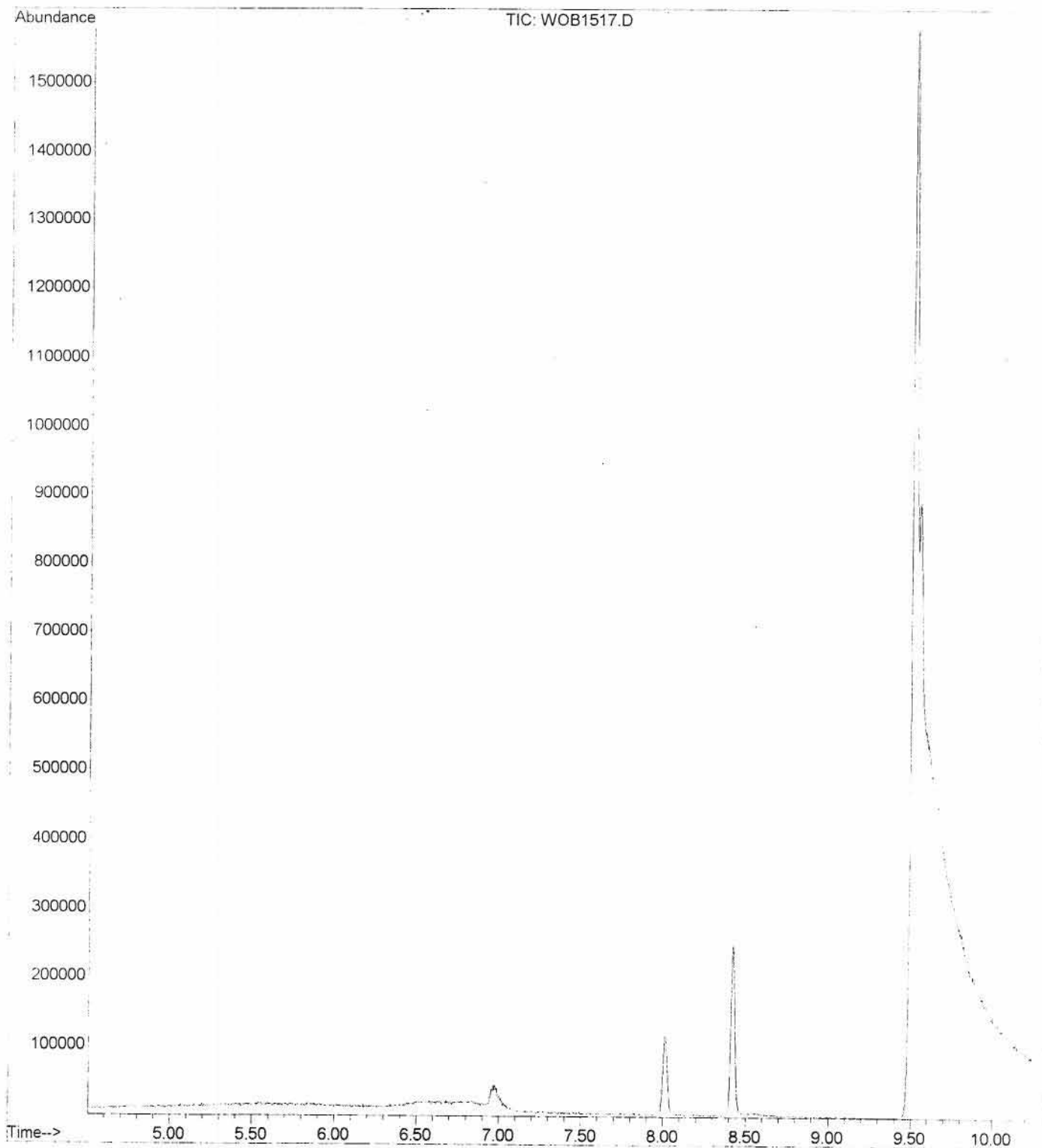
Quant Method : C:\HPCHEM\1\METHODS\N072806.M (RTE Integrator)
 Title : FULL SCAN
 Last Update : Fri Oct 20 15:15:45 2006
 Response via : Initial Calibration
 DataAcq Meth : N072806

R.T. QIon Response Conc Units AccRge

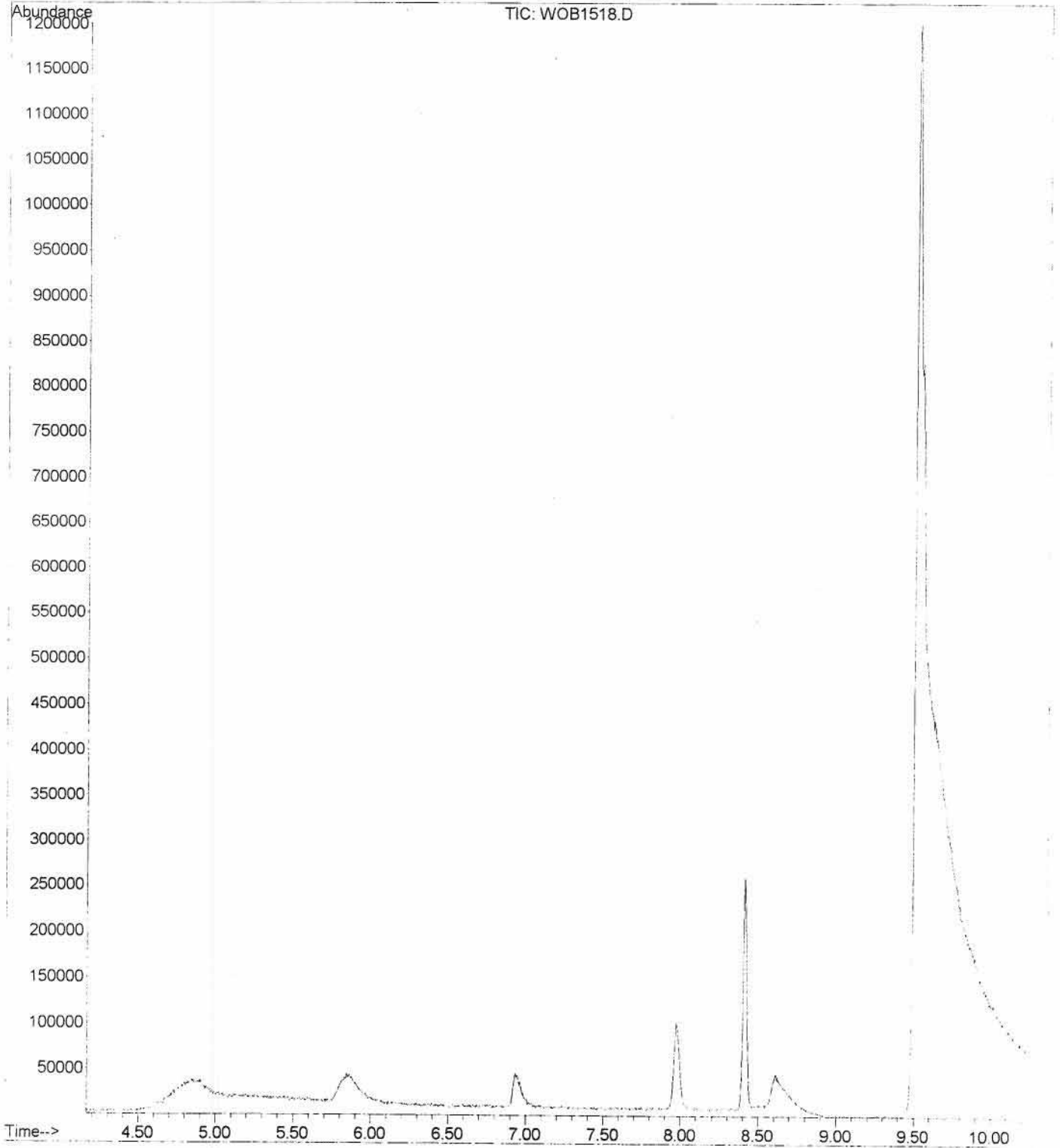
Target Compounds	R.T.	QIon	Response	Conc	Units	AccRge
1) Vinyl Chloride	3.89	62	3527	1.32	µG/L	0.5-1.5
2) Bromomethane	4.33	94	590	1.30	µG/L	
3) Chloroethane	3.90	64	915	1.10	µG/L	
4) 1,1-Dichloroethene	5.66	96	3497	0.72	µG/L	
6) Methylene Chloride	5.96	84	3960	1.00	µG/L	
7) 1,2-Dichloroethene (cis)	7.87	96	6439	0.81	µG/L	
8) 1,1-Dichloroethane	6.87	63	4288	0.67	µG/L	
9) Chloroform	9.09	83	3250	1.10	µG/L	
10) 1,2-Dichloroethane	8.43	62	2539	1.18	µG/L	
12) 1,1,1-Trichloroethane	8.19	97	5475	1.47	µG/L	
13) Carbon Tetrachloride	8.28	117	2603	1.02	µG/L	
14) Benzene	8.45	78	12430	1.45	µG/L	
15) Trichloroethene	8.79	130	5555	1.31	µG/L	
16) 1,2-Dichloropropane	6.87	63	4480	0.71	µG/L	
17) Bromodichloromethane	9.09	83	3250	1.10	µG/L	
18) cis-1,3-Dichloropropene	9.35	75	1707	0.58	µG/L	
19) trans-1,3-Dichloropropene	9.55	75	3202	1.04	µG/L	
20) 1,1,2-Trichloroethane	9.84	97	3208	1.00	µG/L	
21) Dibromochloromethane	9.95	129	3686	1.18	µG/L	
24) Toluene	9.59	92	10271	1.32	µG/L	
25) Tetrachloroethene	9.95	164	4377	1.32	µG/L	
27) Chlorobenzene	10.58	112	13194	1.25	µG/L	
28) Ethylbenzene	10.57	106	6850	1.26	µG/L	
29) Xylene (total)	10.65	106	16965	0.88	µG/L	
30) Styrene	10.96	104	10732	0.96	µG/L	
31) 1,1,1,2-Tetrachloroethane	10.61	131	2722	0.92	µG/L	
32) 1,1,2,2-Tetrachloroethane	9.09	83	3250	1.11	µG/L	
33) FREON-11	5.36	101	867	1.26	µG/L	
35) FREON-12	3.42	85	3602	1.49	µG/L	
36) FREON-113	5.00	101	5484	1.26	µG/L	
43) Freon-22	3.39	51	4279	1.47	µG/L	
44) Freon-141B	5.33	81	6813	0.88	µG/L	

Chromatograms

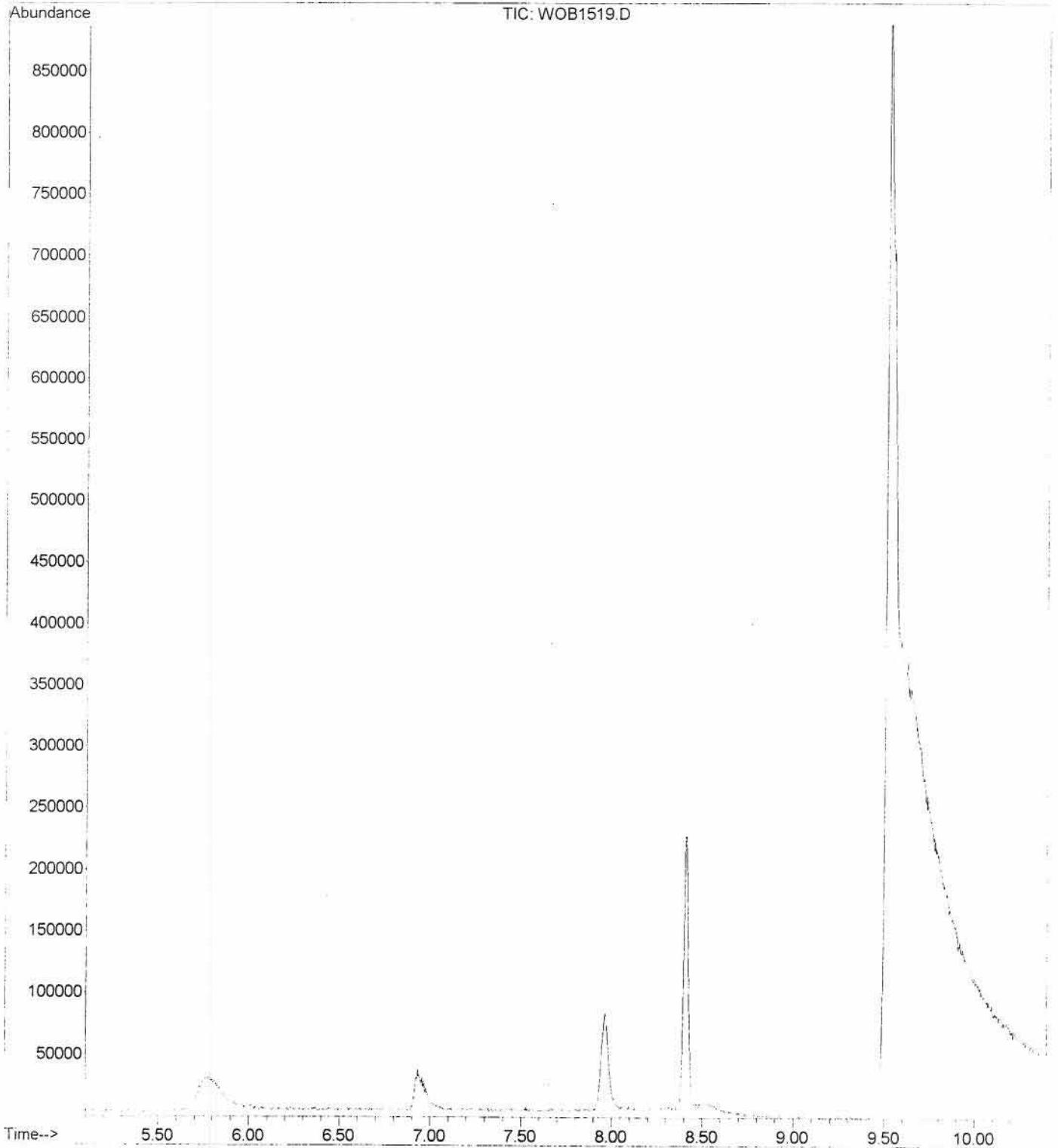
File : C:\HPCHEM\1\DATA\WOB1517.D
Operator : Raphe HGS
Acquired : 20 Oct 2006 3:08 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV2-08248-5
Misc Info : SD/AEI 20OCT06 1216 G2
Vial Number: 1



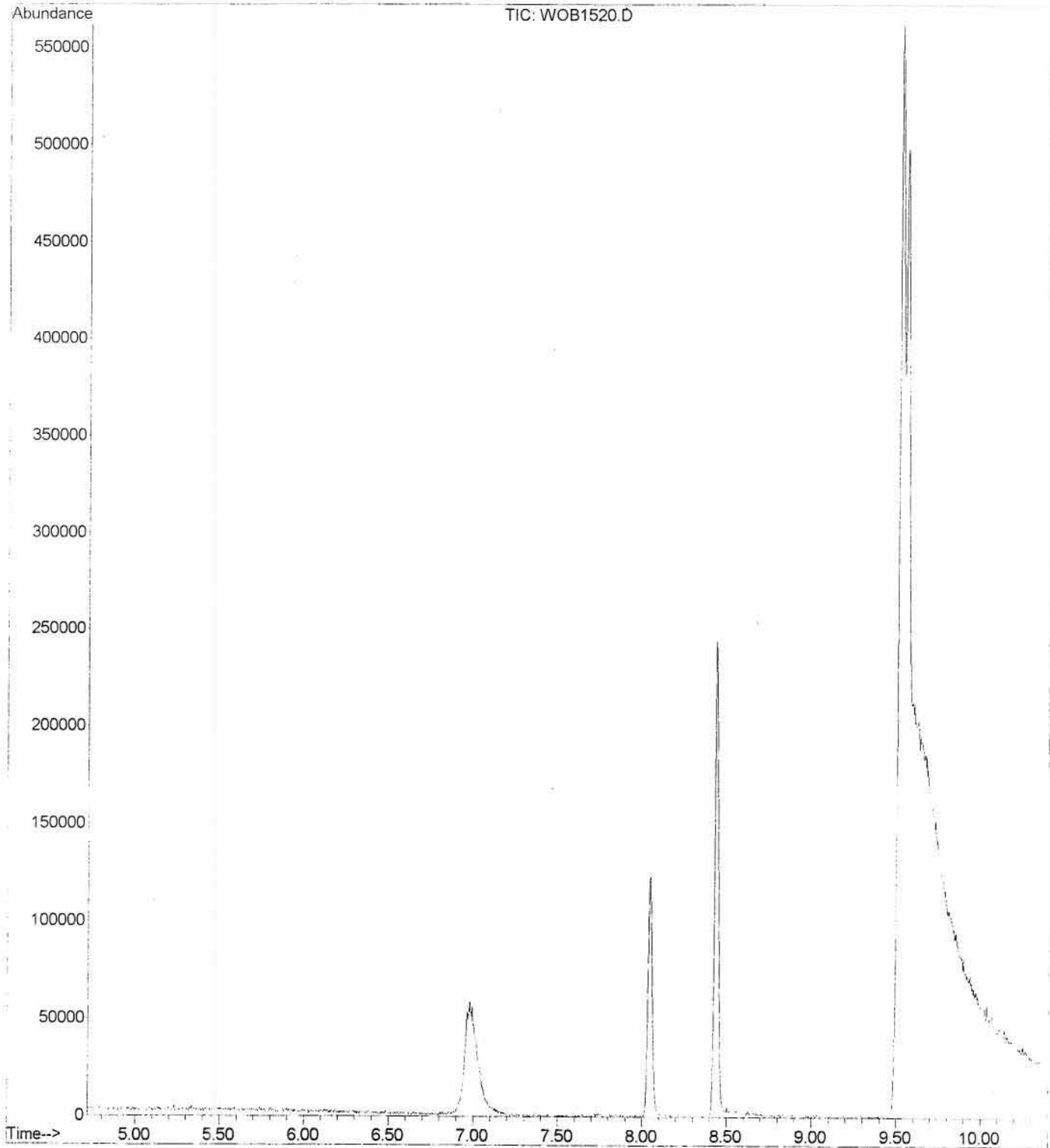
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Operator : Raphe HGS
Acquired : 20 Oct 2006 3:21 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV1-08249-5
Misc Info : SD/AEI 20OCT06 1216 A5
Vial Number: 1



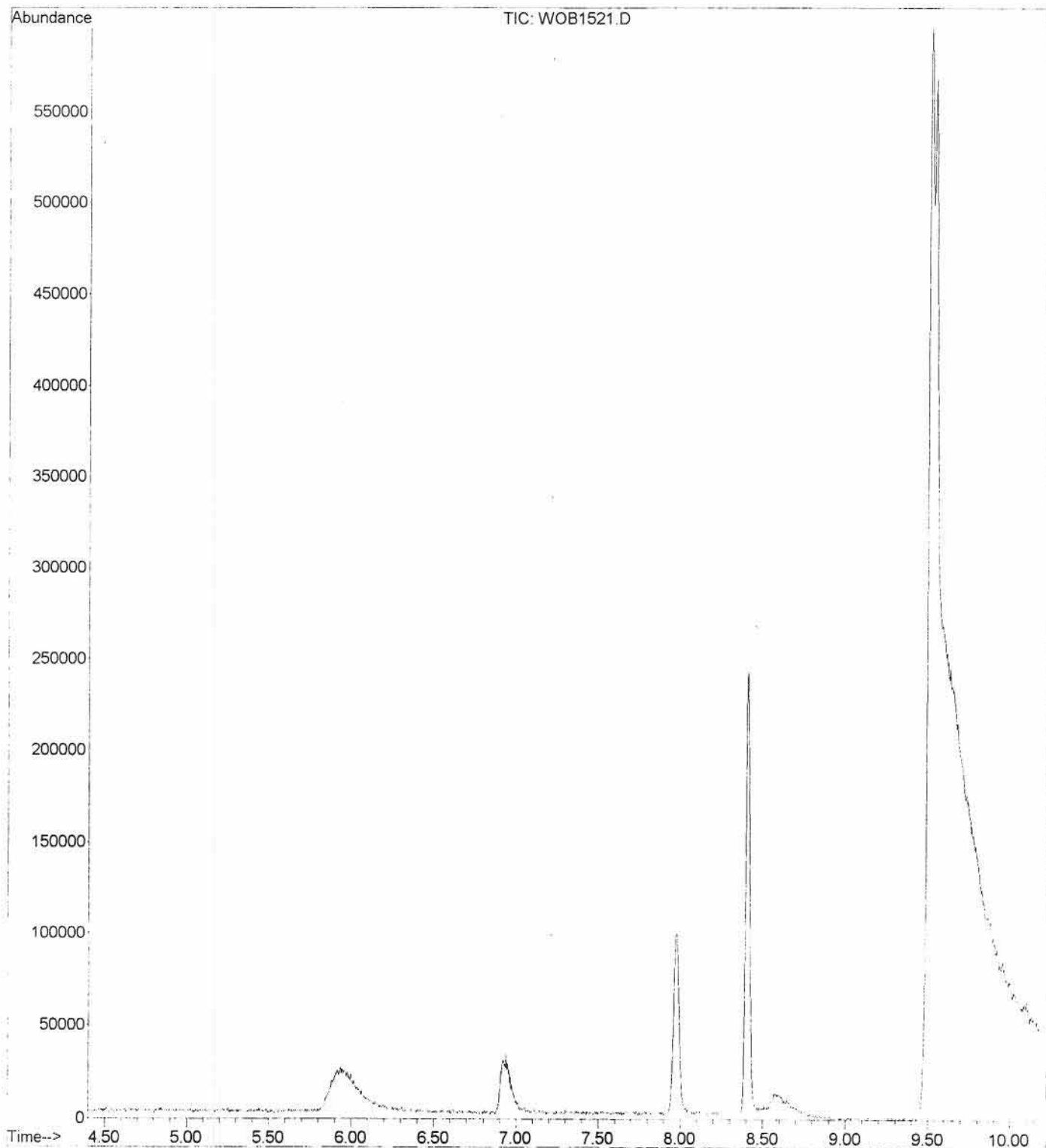
File : C:\HPCHEM\1\DATA\WOB1519.D
Operator : Raphe HGS
Acquired : 20 Oct 2006 3:35 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV3-08250-5
Misc Info : SD/AEI 20OCT06 1221 A10
Vial Number: 1



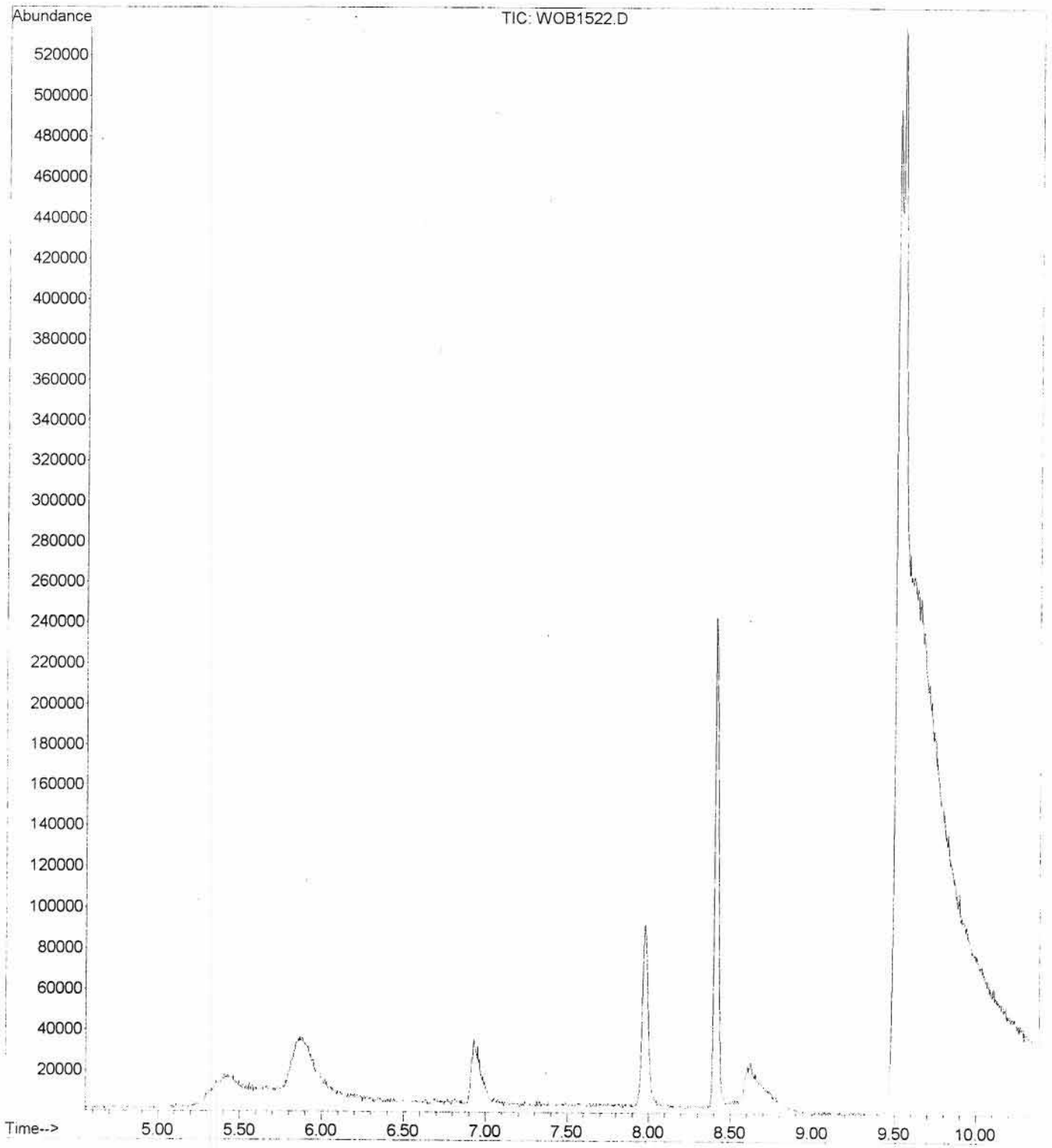
File : C:\HPCHEM\1\DATA\WOB1520.D
Operator : Raphe HGS
Acquired : 20 Oct 2006 3:55 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV5-08251-5
Misc Info : SD/AEI 20OCT06 1226 E6
Vial Number: 1



File : C:\HPCHEM\1\DATA\WOB1521.D
Operator : Raphe HGS
Acquired : 20 Oct 2006 4:09 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV6-08252-5
Misc Info : SD/AEI 20OCT06 1231 F4
Vial Number: 1



File : C:\HPCHEM\1\DATA\WOB1522.D
Operator : Raphe HGS
Acquired : 20 Oct 2006 4:22 pm using AcqMethod N072806
Instrument : GC/MS Ins
Sample Name: SV4-08253-5
Misc Info : SD/AEI 20OCT06 1234 N11
Vial Number: 1



Appendix D:
Comerica Consultant Checklist

CONSULTANT CHECKLIST TO ACCOMPANY PHASE II INVESTIGATION REPORT FOR COMERICA BANK

Please check "YES" or "NO" as appropriate. If "Not Applicable," please write NA in the Comments column.

REC = Recognized Environmental Condition

PAOC = Potential Area of Concern


	YES	NO	COMMENTS:
Were <u>all</u> RECs and PAOCs identified in the Phase I ESA report investigated in the Phase II study?	X		
Are all sampling locations clearly identified in the text of the report with the RECs or PAOCs which there were intended to address?	X		
Is the logic of the Phase II sampling plan clearly spelled out with respect to the sampling depths and locations chosen, the chemical analytes selected for analysis, the potential for groundwater impacts downgradient of source areas, the relevant exposure pathways, etc.?	X		
Were detectable concentrations of chemicals found in soil?		X	
Were detectable concentrations of chemicals found in groundwater?		X	
Were detectable concentrations of chemicals found in surface water?		X	
Was an exposure pathway analysis performed and documented in the report?		X	
Were <u>any</u> applicable cleanup or screening criteria exceeded in soil, groundwater, or surface water?		X	
Are the lateral and vertical extent of any chemically impacted soil, groundwater, or surface water <u>fully</u> defined?			NA

	YES	NO	COMMENTS:
Are the sources of the contamination well understood?	X		
Is it possible that contamination extends or has migrated beyond the subject property's boundaries?		X	
Have sensitive receptors on or near the site been identified, evaluated, and described in the Phase II report?		X	
Is any contamination believed to have migrated to the subject property from off-site sources or locations?		X	
If so, have the potential impacts of those contaminants on subject property uses or activities (including any planned construction) been evaluated?			NA
Is any commingling of contaminants from on-site and off-site sources suspected?		X	
Has groundwater flow direction been reliably determined at the subject property through the proper installation and surveying of monitoring wells?		X	
Have recommendations for additional subsurface investigation been made?		X	
Have recommendations for achieving regulatory closure been made?		X	
Have the costs of achieving regulatory closure been provided (together with an approximate timetable for completion)?		X	
Has a site plan with all sampling locations clearly labeled been included in the report?	X		

Has the groundwater flow direction been shown on the site plan which depicts the various sampling locations?	YES	NO X	COMMENTS:
Were tables provided which compare any chemicals detected in soil, groundwater, or surface water to relevant and applicable cleanup or screening criteria?			NA
Are soil boring and well installation logs included in the report?	X		
Are geological cross sections included?		X	
Are laboratory data sheets with QA/QC information included?	X		

**CONSULTANT CHECKLIST TO ACCOMPANY PHASE II
INVESTIGATION REPORT FOR COMERICA BANK**

This Phase II Checklist was completed by:



Signature of Preparer

October 30, 2006

Date

Agatha Mondala

Printed Name of Preparer

Project Engineer

Title of Preparer