



~~October 7, 1991~~

91 OCT -9 AM 11:38

Mr. Jim Craig
Castro Valley Autohaus
20697 Park Way
Castro Valley, California 94546

Subject: Results of Sampling Activities - Soil Stockpile
Castro Valley Autohaus
20697 Park Way
Castro Valley, California
(Project # 919289)

Dear Mr. Craig:

This letter presents the results stockpiled soil sampling activities conducted by Aqua Terra Technologies, Inc. (ATT) at the subject property. Included herein is a discussion of the project background, sample collection activities, analytical results, conclusions, and recommendations.

Background

ATT understands that in November 1989, approximately 12 cubic yards of soil was excavated during the removal of an underground waste oil storage tank at the subject property in 1989. Following excavation, the soil was stockpiled in the asphalt parking area at the facility, and covered with plastic sheeting. Mr. Scott Seery of the Alameda County Health Care Services Agency (ACHCSA) requested in an August 12, 1991 letter (Attachment A), that the soils be characterized and properly disposed of.

ATT prepared a sampling plan to characterize the stockpiled soil for disposal at a local landfill. The sampling plan was prepared to address volatile and non volatile organic compounds (VOCs) which may have been associated with the former underground waste oil storage tank. ATT confirmed the scope of the sampling plan on August 15, 1991 in a telephone conversation with Mr. Seery.

Soil Stockpile Sampling Activities

ATT collected composite soil samples on August 21 and September 20, 1991 from the subject property's stockpiled soil. The composite samples were collected by removing approximately 12 to 16 inches of surface soil from the stockpile and collecting a sample of the freshly exposed soil. This procedure

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was repeated at three different locations within the stockpile (Plate 1, Attachment B). Each composite soil sample was placed in single one-gallon Zip-lock plastic bags. The soil from the three locations was gently mixed within the Zip-lock bag, and then firmly packed into a pre-cleaned two inch brass tube. The ends of the tube were covered with teflon sheeting and capped with plastic end caps. The caps were sealed with adhesive tape and the samples were labeled and placed in a cooler containing ice for transport to a DHS certified laboratory for analysis. The August composite soil sample was analyzed for total extractable petroleum hydrocarbons (TEPH) which included total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as kerosene, and motor oil by EPA Method 8015, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020. The September composite sample was analyzed for volatile halocarbons in accordance with EPA Method 8010.

Lead analysis was not performed because previous soil sampling activities conducted by others demonstrated that site soils do not contain elevated levels of lead. The results of previous analyses for lead are included in Attachment C. The ACHCSA concurred with this finding in the August 12, 1991 letter (Attachment A).

Soil Stockpile Analytical Results

The laboratory analysis for ATT's soil sampling activities are in Attachment D. Copies of the chain of custody documentation and sample collection records are presented in Attachment D.

The soil sample collected from the stockpile did not contain TPH as gasoline, TPH as diesel, TPH as kerosene, BTEX, or volatile halocarbons above analytical detection limits. Motor oil was detected in the sample at a concentration of 96 mg/Kg.

Conclusions

Results of the stockpile sampling activities demonstrate that the soils contain less than 100 mg/Kg of petroleum hydrocarbons. The San Francisco Bay Region of the California Regional Water Quality Control Board (RWQCB) established guidelines for disposal of soils excavated during underground storage tank removal in a memorandum to local implementing agencies dated

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January 11, 1990. The RWQCB guideline states that soils containing less than 100 mg/Kg of TPH should be disposed of at Class III landfills. The soil stockpiled at the site satisfies the above criteria and is, therefore, suitable for disposal at a local Class III landfill.

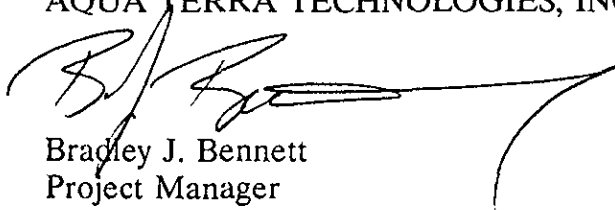
Recommendations

ATT has contacted Mr. John Lydick at the Browning and Ferris Eastern Alameda County Landfill facility in Livermore, California to obtain a disposal request application. Mr. Lydick stated that the landfill evaluates this type of request on a case-by-case basis, and that soils which meet the landfill criteria are routinely accepted at the landfill at a disposal cost of approximately \$19.00 per cubic yard. ATT recommends that the soil be disposed of at the Eastern Alameda County Landfill.

Please feel free to contact me if you have any questions regarding matters discussed herein.

Sincerely,

AQUA TERRA TECHNOLOGIES, INC.



Bradley J. Bennett
Project Manager

BJB:mp

attachments

cc: W. Motzer, Ph.D., ATT
S. Seery, ACHCSA
J. Lydick, BFI
L. Feldman, RWQCB

ATTACHMENT A

August 12, 1991 ACHCSA Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



August 12, 1991

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Mr. Robert Blackman
Castro Valley Autohaus
20697 Park Way
Castro Valley, CA 94546

RE: PRELIMINARY SITE ASSESSMENT

Dear Mr. Blackman:

This Department is in receipt and has completed review of the May 22, 1991 D & D Management Consultants, Inc. (D & D) summary documenting the installation of one (1) monitoring well and soil sample analysis, and the June 20, 1991 International Technology Corporation (IT) water sampling and analysis report, as submitted under Castro Valley Autohaus cover dated July 1, 1991.

The two water samples analyzed, one collected near the top of the water column in the completed well, the other near the bottom, both identify the presence of the compound 1,1-dichloroethane in similar concentrations (1.3 and 1.2 ug/l [ppb]); a soil sample collected at 5 feet below grade during boring advancement identified the presence of acetone at a concentration of 0.033 mg/kg (ppm). Neither total lead nor organic lead appear to be of concern.

At this time, you are required to adhere to the following sampling and reporting schedule:

- 1) The well is to be surveyed vertically and horizontally to an established benchmark to the accuracy of 0.01 foot, and values converted to elevations above mean sea level (MSL). [Note: this requirement has been discussed previously in correspondence from this Department dated August 6, 1990, and is a mandatory requirement of the RWQCB; neither of the the referenced D & D and IT reports indicate that the well has been surveyed.]

Water level measurements are to be collected quarterly for the life of this project;

- 2) Water samples are to be collected quarterly, and are to be analyzed for the presence of chlorinated compounds (EPA Method 601 or 624) and volatile organics (EPA Method 624 or 602). It is recommended that analysis method 624 be used to meet this requirement as total analysis costs will be reduced;

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August 12, 1991
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- 3) Summary reports are to be submitted to this Department and the RWQCB quarterly for the duration of this project until eligible for final "sign-off" by the RWQCB. Such reports are due the first day of the second month of each subsequent quarter (i.e., November 1, February 1, May 1, and August 1). Hence, the next report is due for submittal November 1, 1991 and shall document sampling/monitoring activities occurring at your site during the 3rd quarter of 1991 (July-Sept.).

The referenced quarterly reports are to include, among other elements, the following information where appropriate:

- o Details and results of all work performed during the designated period of time: records of field observations and data, water level data, chain-of-custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.
- o Status of ground water contamination characterization
- o Interpretation of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.
- o Recommendations or plans for additional investigative work or remediation

Please be advised that all future reports must be submitted under seal of a California-registered professional (i.e., RG, CEG, or RCE), in accordance with the California Business and Professions Code. All work performed at your site is to be under the direction of this appropriately registered individual; however, the actual work may be performed by a subordinate employee, but such work must be reviewed and the final product signed by the registered person.

Finally, this Department has been assured in the past that the stockpiled soil was to be sampled and analyzed concurrent with the installation and sampling of the monitoring well, and that the disposal/treatment of said soil was to follow once the level of contamination was known. No report documenting this sampling has been received by this office. Further, as of last month, this soil was still stockpiled on-site. Please bear in mind that this soil has been stockpiled on your site since November 1989.

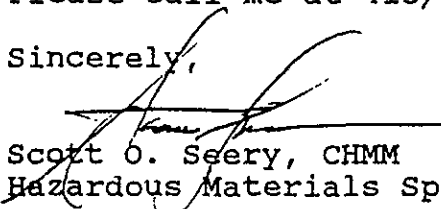
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RE: Castro Valley Autohaus
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Section 66471, Title 22, California Code of Regulations (CCR), requires that producers of waste determine whether such waste is hazardous by California standards. You are presently in violation of the cited section. Further, should the material prove to be a hazardous waste, you are also in violation of 22CCR Section 66508 for storage of such waste for over 90 days.

As a result of these facts, you are directed to sample and analyze this stockpiled soil for the range of known possible contaminants (i.e., chlorinated and volatile organic compounds) following appropriate protocol, and submit a report to this Department within 30 days, or by September 12, 1991. This report is to include potential disposal and/or treatment options, as appropriate.

Please call me at 415/271-4320 should you have any questions.

Sincerely,



Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
Lester Feldman, RWQCB
Howard Hatayama, DHS
Bob Bohman, Castro Valley Fire Department
Louis Richardson
Jim Craig
files

ATTACHMENT B

Plate 1

PARK WAY



Soil Stock Pile

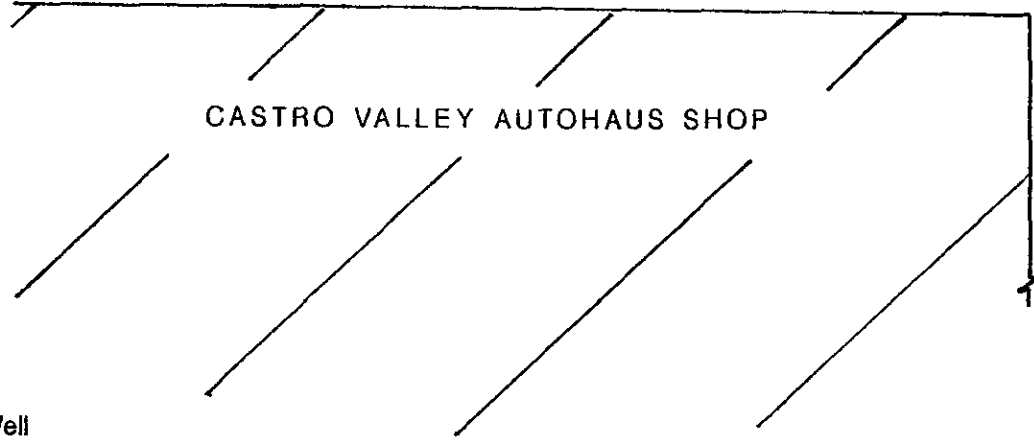


MW1

Parking Lot

Sidewalk

SAN CARLOS AVENUE



CASTRO VALLEY AUTOHAUS SHOP

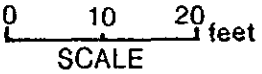
LEGEND



Monitoring Well



Composite Sampling Locations



SCALE



PLATE
1

ATT

Aqua Terra Technologies
Consulting Engineers
& Scientists

Site Map

Castro Valley Autohaus

JOB NUMBER
919289

DATE
10/91

ATTACHMENT C

Previous Analytical Results - Metals

Page: 7 of 21
Date: December 27, 1989
Client Project ID: Castro Valley
Auto Haus, 20697 Parkway

IT ANALYTICAL SERVICES
SAN JOSE, CA

Work Order Number: S9-11-366

Client Sample ID: 7' East side of Excav.

Sample Date: 11/29/89
Lab Sample ID: S9-11-366-03
Receipt Condition: Cool

Results - Milligrams per Kilogram

Parameter	E.P.A. Method	Detection Limit	Detected
Cadmium	6010	0.25	None
Chromium	6010	0.50	42.
Lead	6010	1.5	53.
Zinc	6010	0.50	67.

ATTACHMENT D

**ATT Sampling Documentation
and Analytical Results**

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

August 29, 1991

ChromaLab File No.: 0891207

AQUA TERRA TECHNOLOGIES, INC.

Attn: Brad Bennett

RE: One soil sample for Gasoline/BTEX analysis

Date Sampled: August 21, 1991

Date Submitted: August 22, 1991


Date Extracted: August 28, 1991

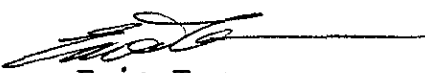
Date Analyzed: August 28, 1991

RESULTS:

Sample I.D.	Gasoline (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)
SP1	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	87.6%	87.4%	86.6%	87.9%	87.7%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/ 8015	8020	8020	8020	8020

ChromaLab, Inc.


David Duong
Chief Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

September 3, 1991

ChromaLab File No.: 0891207

AQUA TERRA TECHNOLOGIES, INC.

Attn: Bradd Bennett

RE: One soil sample for TEPH analysis

Date Sampled: August 21, 1991

Date Submitted: August 22, 1991

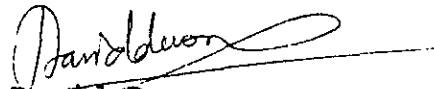
Date Extracted: August 30, 1991

Date Analyzed: August 30, 1991

RESULTS:

Sample I.D.	Kerosene (mg/kg)	Diesel (mg/kg)	Motor Oil (mg/kg)
SP1	N.D.	N.D.	96
BLANK	N.D.	N.D.	N.D.
SPIKED RECOVERY	----	101.1%	----
DETECTION LIMIT	1.0	1.0	10
METHOD OF ANALYSIS	3550/8015	3550/8015	3550/8015

ChromaLab, Inc.



David Duong
Chief Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

September 26, 1991

ChromaLab File # 0991167

Client: Aqua Terra Technologies

Attn: Brad Bennett

Date Sampled: Sept. 20, 1991

Date Submitted: Sept. 23, 1991

Date Analyzed: Sept. 26, 1991

Project Number: 919289

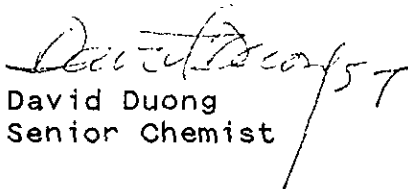
Sample I.D.: SS-2

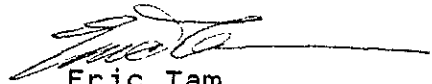
Method of Analysis: 8010

Detection Limit: 5.0 µg/kg

COMPOUND NAME	µg/kg	Spike Recovery	
CHLOROMETHANE	N.D.	---	---
VINYL CHLORIDE	N.D.	---	---
BROMOMETHANE	N.D.	---	---
CHLOROETHANE	N.D.	---	---
TRICHLOROFLUOROMETHANE	N.D.	92.3%	91.5%
1,1-DICHLOROETHENE	N.D.	---	---
METHYLENE CHLORIDE	N.D.	---	---
1,2-DICHLOROETHENE (TOTAL)	N.D.	---	---
1,1-DICHLOROETHANE	N.D.	---	---
CHLOROFORM	N.D.	95.2%	93.6%
1,1,1-TRICHLOROETHANE	N.D.	---	---
CARBON TETRACHLORIDE	N.D.	---	---
1,2-DICHLOROETHANE	N.D.	---	---
TRICHLOROETHENE	N.D.	---	---
1,2-DICHLOROPROPANE	N.D.	---	---
BROMODICHLOROMETHANE	N.D.	---	---
2-CHLOROETHYL VINYLETHER	N.D.	---	---
TRANS-1,3-DICHLOROPROPENE	N.D.	---	---
CIS-1,3-DICHLOROPROPENE	N.D.	---	---
1,1,2-TRICHLOROETHANE	N.D.	93.1%	91.1%
TETRACHLOROETHENE	N.D.	---	---
DIBROMOCHLOROMETHANE	N.D.	---	---
CHLOROBENZENE	N.D.	---	---
BROMOFORM	N.D.	---	---
1,1,2,2-TETRACHLOROETHANE	N.D.	---	---
1,3-DICHLOROBENZENE	N.D.	---	---
1,4-DICHLOROBENZENE	N.D.	---	---
1,2-DICHLOROBENZENE	N.D.	94.8%	90.5%

ChromaLab, Inc.


David Duong
Senior Chemist


Eric Tam
Lab Director

Aqua Terra Technologies, Inc.

2950 Buskirk Avenue, Ste. 120
 Walnut Creek, CA 94596
 Tel. (415) 934-4884
 Fax. (415) 934-0418

ATT

CHAIN OF SAMPLE CUSTODY RECORD

(original document, please return)

Page 1 of 1

Sampled By: RICHARD BRUSH

Date Sampled: 8/21/91

Signature: *Richard C. Brush*

ATT Job #: _____

Lab Name: CHROMALAB

Results To Be Sent To: BRAD BENNETT

Contact: _____

Results Needed By: 5 DAY TURN AROUND

Phone #: _____

Fax Results ASAP

Lab Job #: _____

Sample Collection				Sample Preservation			Sample Containers		Analysis/EPA Method No.					Remarks
Sample I.D.	Time (24 hr)	Matrix (e.g. Water, Soil)	Number of Containers	Ice	HCL	Dry Ice	2" BRASS TUBE	40 ML GLASS VOA	TPH-6	DIEX	TEPH	8240		
SP1	15:25	SOIL	1	X			X		X	X	X			
MW1	15:55	WATER	3	X				X				X		
FB	15:39	"	"	X				X				X		
CHROMALAB FILE # 891207														
ORDER # 3253														

Notes:

SP1 IS A COMPOSITE SOIL SAMPLE, COMPOSITE WAS DONE IN THE FIELD. ALL SAMPLES KEPT ON ICED COOLER UNTIL REACHING THE LAB.

Relinquished by/ Company Affiliation	Date	Time	Received by: Company Affiliation	Date	Time
<u><i>Richard C. Brush</i></u>	<u>8-22-91</u>	<u>11:45</u>	<u><i>Brad Bennett</i></u>	<u>8-22-91</u>	<u>11:45</u>

SAMPLE COLLECTION RECORD - SOIL

ATT

Date: 8-21-91, Job No.: 919289 Page 1 of 1

Site Location: CASTRO VALLEY AUTOHAUS

Sample Location Sketch/Site Plan Attached?: Y / N

Samples from (check one): Stockpile, Excavation Pit,
 Other (explain)/_____

Sampling Equipment: Hammer, Spade-Shovel, Hand Sampler,
 Other (indicate)/_____

Equipment Cleaning: Triple Rinsed, Steam Cleaned,
 Other (indicate)/_____

Sample Cont. Cleaning: Pre-Cleaned, Steam Cleaned,
 Triple Rinsed, Other (indicate)/_____

Sample I.D.	No. of Cont.	No. of Dupli.	Lithology	Texture/Pliabil.	Moisture Content	Type of Contain	Coll. Time
SPI	1	0	DRIED CLAY ROCKY	HARD BUT CRUMBLY	LOW	2" BRASS TUBE	15:23

Sample Preservation: Iced Cooler, Other/_____

Notes: _____

Sampled By (signature): [Signature]