99 FEB -- 9 PM 1: 54

February 05, 1999



Ms. Eva Chu Alameda County Department of Environmental Health Environmental Protection Division 1131 Harbor Bay Parkway, Room 250 Alameda, CA 94502-6577

Underground Storage Tank Removal / Soil Remediation Report

New Albany High School Site 603 Key Route Boulevard Albany, California

Dear Ms. Chu:

Re:

Artesian Environmental Consultants (Artesian) is pleased to submit a Underground Storage Tank (UST) Removal / Soil Remediation Report. The report documents the UST removal and soil remediation activities at the site of the New Albany High School in Albany, California, that occurred on the property from October, 1998 through November, 1998. Please find enclosed 1 copy of this report for your files.

Please feel free to call us at (510) 307-9943 if we may be of assistance, or if you have any questions or comments.

Sincerely,

Paul E. Jones

Project Manager / Geologist Artesian Environmental

## **Underground Storage Tank Removal / Soil Remediation Report**



New Albany High School Site 603 Key Route Boulevard Albany, California

Prepared For:

The Albany Unified School District c/o Mr. Richard Vila Vila Construction Company 590 South 33rd Street Richmond, CA 94804

February 5, 1999

Paul E. Jones
Project Geologist

Tames A. Jacobs, C.H.G #88 Principal Hydrogeologist

NO. 88

OF CALIF

#### **CONTENTS**

	ltem				
1.	Introd	Introduction			
	1.1	Scope of Work	1		
2.	Background				
3.	Field	Activities	2		
	3.1 3.2 3.3 3.4 3.5	Underground Storage Tank Removals Soil Excavation and Exploration Trenching Soil and Groundwater Sampling Soil Loading and Transportation Removal of Asbestos Containing Materials	3 4 4 5 5		
4.	Analytical				
	4.1 4.2	Analyses Conducted Sample Results 4.2.1 Confirmational Soil Samples - Excavation Floor / Sidewall 4.2.2 Confirmational Soil Samples - Exploration Trenches 4.2.3 Confirmational Soil Samples - Stockpiles 4.2.4 Groundwater from Excavation	6 6 6 7 7		
5.	Nature and Extent of Contamination				
6.	Waste Disposal				
7.	Conclusions and Recommendations				
8.	Repor	Report Distribution List			

#### **APPENDICES**

- A. Figures
  - 1. Site Location Map
  - 2. Site Map / Soil Sample Locations
  - 3-10 Photographs
- B. Permits
- C. Manifests
- D. Laboratory Analytical Reports with Chain of Custody Documentation
- E. Tables
  - 1. Analytical Results: Excavation Soil and Groundwater Samples
  - 2. Analytical Results: Stockpile Soil Samples

#### 1.0 INTRODUCTION

Artesian Environmental (Artesian) was initially retained by Vila Construction Company (Vila) on behalf of the Albany Unified School District (AUSD) to remove one 2,000 gallon Heating Oil Underground Storage Tank (UST) at the premises of the AUSD High School, located at 603 Key Route Boulevard in Albany, California. After removal of the UST, Artesian over-excavated petroleum contaminated soils from the vicinity of the UST and conducted exploratory trenching to determine the extent of visually contaminated soils at the direction of the Alameda County Department of Environmental Health (ACDEH). Artesian holds general engineering contractor 'A' license # 624461 including a Hazardous Material Removal Certificate.

This report documents UST removal and exploratory trenching activities performed by Artesian. Artesian excavated a total of 406 tons of petroleum contaminated soils (approximately 270 cubic yards) and transported them to Altamont Landfill, Inc. in Livermore, California (a Class II facility) for proper disposal.

Figure 1 (Site Location Map) shows the location of the subject site within the City of Albany. Figure 2 (Site Map) shows the site and major features of the site in relation to major surrounding offsite features. Figure 2 also shows the final dimensions of the excavation along with confirmational soil sample locations. Figures 3 through 10 provide photo documentation of UST removal and exploration trenching activities. All Figures are contained in Appendix A. The property is presently inactive pending redevelopment.

#### 1.1 SCOPE OF WORK

Artesian performed the following tasks:

- Obtained necessary permits from the ACDEH, Albany Fire Department, and City of Albany Department of Public Works (Permits are contained in Appendix B);
  - 2. Removed, transported, and disposed 1 heating oil UST;
  - 3. Performed over-excavation of soil from the vicinity of the former UST location and exploratory trenching away from the former UST location to determine the extent of visually contaminated soils.;
  - 4. Segregated soils into impacted and non-impacted stockpiles at the site based on indications of contamination such as unusual odors, staining, and photoionization detector (PID) readings;
  - 5. Selected for analysis by a state certified laboratory, soil samples from excavation walls, soil stockpiles, and below the UST. Analyses for each soil sample were selected in accordance with the requirements of the ACDEH and in accordance with the sampling requirements of the disposal facility chosen to receive the impacted soils;
  - 6. Transported and disposed excavated soils which contained total petroleum hydrocarbons as diesel (TPHd) in excess of 250 parts per million (ppm) or TPH as oil and grease (TPHog) in excess of 1000 ppm;

- 7. Contracted, coordinated, and documented the removal and disposal of asbestos containing materials discovered around buried pipes which carried steam when the (now demolished) onsite structure was in use; and
- 8. Documented the field activities, reviewed laboratory data, and prepared this report of the UST removal, over-excavation, and exploratory trenching activities;

#### 2.0 BACKGROUND

The subject site is located in the northern portion of Albany, California at the southeast corner of Key Route Boulevard and Thousand Oaks Boulevard approximately 1 mile east of Interstate Highway 80. The site is surrounded by residential properties and other AUSD property. The site is bounded by AUSD property to the east and south and by residences to the north and west.

In the fall of 1998, Vila Construction began site preparation activities for the construction of a new structure at the subject site. AUSD records indicated that one or two USTs had been used at the site to contain heating oil which was used to fuel furnaces in the former building. Vila then conducted exploratory excavations to confirm the presence or absence of the tank(s). Vila located a single UST and confirmed that no tank was present at the second suspected location. Artesian was then contracted to remove the UST and prepare this report.

#### 3.0 FIELD ACTIVITIES

Prior to removal of the UST, Mr. David Dell'Osso of Artesian obtained the UST removal permit from the ACDEH which was the lead agency. A UST removal permit was also obtained from the City of Albany Fire Department. Permits are contained in Appendix C.

Artesian evacuated the contents of the tank and arranged for the liquids and sludge to be transported to an appropriate facility for recycling. After the tank had been emptied sufficiently for removal, Artesian removed the 2,000 gallon heating oil UST and transported it as hazardous waste to a state licensed disposal facility.

Artesian excavated a total of approximately 560 cubic yards (approximately 840 tons) of soil during UST removal and exploration trenching activities. Soils were stockpiled separately according to whether they appeared contaminated. Artesian then collected representative samples of soil from the apparently impacted and non-impacted soil stockpiles for laboratory analysis to verify what volume of soil required disposal. Artesian collected a total of 10 confirmational soil samples from the soil stockpiles for laboratory analysis. Only 406 tons of petroleum contaminated soils contained concentrations of petroleum hydrocarbons which required that they be transported from the site for disposal. Impacted soils were then transported to Altamont Landfill in Livermore, California and disposed as Class II non-hazardous waste. Vila backfilled the remaining excavation using a combination of re-usable soil and imported fill.

#### 3.1 UNDERGROUND STORAGE TANK REMOVAL

On October 14, 1998, Artesian removed a 2,000 gallon capacity heating oil UST at the subject site. The tank was constructed of unwrapped, single walled steel and measured approximately 14 feet long and 5 feet in diameter.

The tank contained water, heating oil, and a sandy solid that required pumping before the tank could be removed. On July 1, 1998, 1,900 gallons of water and heating oil was pumped from the tank by Clearwater Environmental Management, Inc. (Clearwater), of Fremont, California and transported under hazardous waste manifest number 98197280 to a Clearwater facility in Alviso, California for recycling. After pumping liquids from the tank, a sandy, oily material remained in the tank which had to be loosened with a high pressure steam cleaner to allow its removal. On October 13, 1998, Artesian again contracted Clearwater to pump the material from the tank. Clearwater pumped, transported, and disposed a total of approximately 1,050 gallons of water and petroleum contaminated sand from the tank. Hazardous waste manifests for each truck load of UST contents transported from the site are contained in Appendix C.

After the tank had been emptied, soil was removed from the sides of the tank using a John Deere 690E excavator operated by Mr. Edward Svoboda, of Artesian. The tank was then purged by placing approximately 50 pounds of dry ice into the tank and allowing the dry ice to sublime, thereby displacing oxygen and potentially explosive vapors with the inert carbon dioxide gas. Air monitoring using a Gastech/ Tanktechtor vapor meter was performed during the excavation and purging of the tank. Prior to moving the tank, the Tanktechtor indicated 0.0 % of the lower explosive limit (LEL) and 3 % oxygen in vapors within the tank. Chains secured to the excavator were then attached to the mid-section of the tank for removal from the excavation.

On October 14, 1998 at approximately 3:00 p.m. the tank and associated piping were removed from the excavation and placed on plastic sheeting at the ground surface for inspection to determine the tank's condition. Associated piping was restricted to the UST excavation. The tank was mildly corroded, however, no obvious holes were noted. Photo documentation of the tank removal, tank condition, and condition of soil near the tank is contained in Appendix A as Figures 3 through 8.

The tank was then lifted onto a trailer bed for transport by Dexanna, Inc. of Concord, California to the ECI - Erickson, Inc. disposal facility in Richmond, California. The tank was transported as hazardous waste under hazardous waste manifest number 96734231. Dexanna's hazardous waste transporter license number is DOT503505. A hazardous waste manifest and a certificate of destruction for the UST transported from the site are contained in Appendix C.

Witnesses to the UST removal included Mr. Barney Chan of the ACDEH; Mr. Brian Crudo of the Albany Fire Department; Mr. Paul Jones, Mr. Edward Svoboda, and Mr. Greg Johnson of Artesian.

The depth to the bottom of the tank was approximately 12 feet below ground surface (BGS). Soils directly below the tank exhibited a strong petroleum odor and contained globules of an oily substance which is apparently weathered heating oil. The presence of petroleum in soils below the UST confirmed that a release of petroleum from the tank has occurred. An unauthorized release report was filed with the ACDEH by Mr. Jones on October 15, 1998.

#### 3.2 SOIL EXCAVATION AND EXPLORATION TRENCHING

After the UST was removed, the ACDEH indicated that soils visually impacted by petroleum should be over-excavated in the immediate vicinity of the former UST location. After over-excavating soils to an approximate excavation size of 20 feet by 15 feet, Artesian found that impacted soils remained in the excavation side-walls and that a thick, free-phase petroleum product was seeping from the walls in some locations at depth. Artesian excavated impacted soils to a depth of approximately 12 feet to 14 feet below ground surface (BGS) where bedrock was encountered. Fractures in the weathered bedrock were found to be impacted with the oily globules to an unknown depth. Artesian, in agreement with the ACDEH, then began exploration trenching to determine the lateral extent of impacted soils.

Artesian excavated petroleum contaminated soil from below and around the former UST location between October 16, 1998 and October 18, 1998. Excavated soil was screened in the field using a PID and segregated into contaminated and non-contaminated stockpiles. Contaminated soils were those that exhibited obvious staining, odor, and elevated levels of organic vapors as detected with the PID. Contaminated soils were stockpiled at the site on plastic sheeting and covered with plastic sheeting on a daily basis. Apparently noncontaminated soils were stockpiled elsewhere at the site for later use as excavation fill material. Equipment used to excavate and move soils at the site included a John Deere 490E Excavator and a Cat 928F front loader.

When soils had been over-excavated in the vicinity of the former UST location and apparently contaminated soils were still visible in the excavation walls, Artesian and the ACDEH agreed that exploration trenching was the next logical step toward determining the extent of contaminated soils prior to any attempt to remediate site soils by excavation and landfill disposal.

Artesian began exploration trenching in a northward direction. The northward trench was excavated to a total depth of approximately 14 feet BGS. Artesian stopped excavating approximately 25 feet north of the north wall of the UST excavation where there were no indications of contamination. Artesian then excavated in a westward direction. The westward trench was extended to approximately 65 feet west of the west wall of the excavation. Westward trenching was stopped due to space constraints, even though freephase petroleum product was seen to seep slowly from the westernmost end of the trench from a depth of approximately 13 feet BGS. A trench was excavated in a southward direction for approximately 55 feet south of the south wall of the excavation. Trenching was stopped in a southerly direction, even though globules of petroleum product were still present in soils, when the extent of soil contamination was found to be too extensive to feasibly remediate by excavation and land disposal. No trenching was conducted in an easterly direction due to space constraints. only 7 were analysed

#### 3.3 SOIL AND GROUNDWATER SAMPLING

A total of 19 confirmational soil samples were collected from the walls and the floor of the excavation as well as one groundwater sample. A total of 3 wall samples, 4 trench samples, and 2 floor samples were collected from the excavation with the excavator bucket during October 14 through October 19, 1998. Confirmational samples were collected to identify where contamination remains in the excavation and in the trenches. Three soil samples were collected from the excavation walls at depths of approximately 12 feet BGS. Of the three excavation wall samples collected, only the sample CS-North Wall was analyzed. The remaining excavation wall samples were not analyzed because samples were later collected at the furthest extent of the exploration trenches. Two floor samples were collected from below the UST at an approximate depth of 14.0 feet BGS. One sample was collected from the east end of the UST and one from the west end (samples CS-East and CS-West, respectively). Figure 2, contained in Appendix A, shows location and collection depths for the confirmational soil samples.

Of the four soil samples collected from the exploration trenches, samples West Trench 65-9 and West Trench 65-13 were collected from the westernmost extent of the west exploration trench from depths of 9 feet and 13 feet, respectively. Samples South Trench 45-8 and South Trench 45-13 were collected from the southernmost extent of the south trench from depths of 8 feet and 13 feet BGS, respectively. Soil samples collected from the exploration trenches were collected in pairs at each location so as to identify the contaminant concentrations at the stratigraphic upper bound of contaminated soil as well as in the vadose zone.

On October 22, 1998, a total of ten stockpile samples were collected to determine which soils required disposal and which were suitable for use as backfill material. One discreet soil sample was collected for every 50 cubic yards of apparently non-contaminated soil and one 4-point composite sample was collected for every 100 cubic yards of apparently contaminated soil. The samples were collected into 1-1/2-inch diameter stainless steel liners using a slide hammer, labeled, and immediately placed on ice for transport under chain-of-custody control to McCampbell Analytical (McCampbell), a state certified laboratory located in Pacheco, California. All samples were analyzed in accordance with the requirements of the ACDEH. See section 4.0 of this report for a detailed discussion of the analytes and sample results for soil and groundwater samples.

On October 19, 1998, one groundwater sample was collected from the excavation using a new disposable bailer. Groundwater was decanted into three 40-ml glass vials, two 1 liter glass bottles, and one plastic bottle. The containers of groundwater were immediately labeled and placed in an iced cooler for transport to McCampbell.

#### 3.4 Soil Loading and Transportation

On November 13, 1998 and November 19, 1998, Artesian loaded a total of 406 tons of petroleum impacted soils into trucks to be transported to Altamont Landfill. Lutrel Trucking of Byron, California provided transportation services.

#### 3.5 Removal of Asbestos Containing Materials

Approximately 100 linear feet of buried former steam pipes were found to be wrapped with asbestos containing materials. The asbestos had been covered with pitch which was then covered with sheet metal. To prevent dispersal of asbestos containing materials, the pipes were cut into sections of approximately 20 foot lengths and removed with coverings intact. Also to prevent dispersal, asbestos containing materials were misted with water any time they were exposed while cutting pipes into sections. The pipe sections were then sealed in plastic, transported from the site, and disposed as hazardous waste. Asbestos removal activities were conducted on October 18, 1998 and later on November 14, 1998 as additional pipes were found. The pipes were followed and removed until they were found to end in the subsurface. No known asbestos containing materials remain at the site. Enviroworks, of Point Richmond, California, provided properly trained workers to perform asbestos removal activities in accordance with all State and Federal regulations.

#### 4.0 ANALYTICAL

#### 4.1 ANALYSES CONDUCTED

The two confirmation soil samples collected from below the UST were analyzed for total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015; TPH as oil and grease (TPHog) by EPA Modified Method 8015; methyl tertiary butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020. Soil sample CS-East was also analyzed for polyaromatic hydrocarbons (PAH) by EPA Method 8270.

A total of 10 stockpile soil samples (CSP-1 through CSP-8, CONSP-1, and CONSP-2) collected from the excavated soil were analyzed for TPHd, TPHog, and BTEX. A total of 6 soil samples (CSP1 through CSP6), collected from the stockpile of clean soil, were also analyzed for TPHg and BTEX. Two of the stockpile soil samples were analyzed for reactivity, corrosivity, and ignitability in accordance with California Title 22, Section 66261.21 through 66261.23. One of the stockpile soil samples was analyzed for lead by EPA Method 6010. All analyses were performed by Mc Campbell Analytical in Pacheco, California, a State licensed laboratory.

#### 4.2 SAMPLE RESULTS

Results of laboratory analyses conducted for samples collected at the site are summarized below. Laboratory analytical reports are contained in Appendix D. Laboratory analytical results for soil and groundwater samples collected from the excavation floor and soils collected from exploration trenches are tabulated in Table 1, contained in Appendix E. Sample results of the analysis of stockpile soil samples are tabulated in Table 2, contained in Appendix E.

#### 4.2.1 Confirmational Soil Samples - Excavation Floor / Sidewall

Two soil samples (CS-East and CS-West) were collected from the floor of the excavation at the direction of the ACDEH from below each end of the UST. TPHd was detected at concentrations of 100 mg/Kg and 1,100 mg/Kg in samples CS-East and CS-west, respectively. TPHg was detected at concentrations of 11 mg/kg and 74 mg/Kg in samples CS-East and CS-West, respectively. TPHog was detected at concentrations of 460 mg/Kg and 2,400 mg/Kg in samples CS-East and CS-west, respectively. Of the BTEX compounds, only toluene and xylenes were detected. Toluene and xylenes were detected at concentrations of or below 0.33 mg/Kg in each of these two samples. MTBE and PAHs were all below appropriate laboratory detection limits in each of these two samples.

Soil sample CS-North wall contained TPHd at 1,300 mg/Kg, TPHog at 760 mg/Kg, and xylenes and toluene at or below 0.380 mg/Kg. Benzene and Ethylbenzene were not detected in this sample.

#### 4.2.2 Confirmational Soil Samples - Exploration Trenches

Results for samples West Trench 65-13 and South Trench 45-13 were similar with TPHd present at or below 2,500 mg/Kg, TPHog at or below 14,000 mg/Kg, toluene at or below 0.067 mg/Kg, and xylenes at or below 0.79 mg/Kg. Results for samples West Trench 65-9 and South Trench 45-8 were also similar with TPHd present at or below 350 mg/Kg, TPHog at or below 460 mg/Kg, ethylbenzene below or near detection limits, and xylenes at

or below 0.028 mg/Kg. BTEX compounds were below detection limits except as described above.

#### 4.2.3 Confirmational Soil Samples - Stockpiles

Sample results for TPHd ranged from near or below laboratory detection limits in samples CSP-1, CSP-2, CSP-4, and CSP-8 to 2,600 mg/Kg in CSP-5. TPHog was below laboratory detection limits in samples CSP-4 and CSP-8. TPHog ranged from 380 mg/Kg in CSP-1 to 3,000 mg/Kg in CSP-6. Benzene was not detected in any of the stockpile samples. Toluene was below detection limits in all samples except CSP-5 where is was near detection limits. Ethylbenzene was below detection limits in all stockpile samples except in samples CSP-5, CSP-6, and CSP-7 where it was near detection limits. Xylenes were below detection limits in all stockpile samples except in samples CSP-7 and CONSP-1 where it was near or slightly above detection limits. Sample CONSP-1 is the only sample analyzed for lead which was below laboratory detection limits. Samples CONSP-1 and CONSP-2 were the only samples analyzed for RCI which was within acceptable limits.

#### 4.2.4 Groundwater from Excavation

Concentrations of TPHg, TPHog, BTEX, MTBE, and PAH were below laboratory detection limits in the groundwater grab sample (GW-1) collected from the excavation on October 29, 1998. TPHd was detected in the groundwater sample at a concentration of 0.92 mg/L.

#### 5.0 NATURE AND EXTENT OF CONTAMINATION

The groundwater sample collected from the UST excavation did not contain significant concentrations of any petroleum hydrocarbons known to be present in impacted soils. If site groundwater away from the excavation were to show similar results, no further action regarding groundwater contamination would be anticipated.

Petroleum impacted soils at the site were found to pinch-out approximately 25 feet north of the excavation. Impacted soils were found to thin from the upper bound downward and away from the UST excavation with the thinnest contaminated interval in the vadose zone at a depth of approximately 12 to 14 feet BGS near the bedrock surface. Bedrock fractures and vadose zone soils were found to contain globules of what appears to be a petroleum product at distances of approximately 20 feet northward, at least 65 feet westward, and at least 45 feet southward from the UST excavation. Globules were not found at the upper limits of impacted soils (approximately 8 to 9 feet BGS). The above information, along with laboratory analytical results which confirm that higher concentrations of petroleum hydrocarbons are found within the vadose zone, indicates that petroleum appears to have migrated predominantly through the vadose zone to an unknown extent. Laboratory analytical results indicate that contaminants present in highest concentrations and of most concern at this site are TPHd and TPHog. No benzene was detected in soil or groundwater at the site. Concentrations of total BTEX were below 1 mg/Kg (mostly xylenes) in site soils.

#### 6.0 WASTE DISPOSAL

Artesian documented the transportation and disposal of a total of 406 tons (approximately 270 cubic yards) of contaminated soil. Soils were loaded by Artesian onto trucks with a Cat 928F loader and transported under non-hazardous manifest by Lutrel Trucking to Altamont Landfill for final disposal as Class II non-hazardous waste. Soils were disposed under Altamont approval number 53785600.

Approximately 300 linear feet of former steam pipes which contained one inner layer of asbestos containing material were transported by Asbestos Management Group of California, of Oakland, California to B and J Sanitary Landfill in Vacaville, California for final disposal. Hazardous waste manifests for asbestos containing materials removed from the site are contained in Appendix C.

#### 7.0 CONCLUSIONS / RECOMMENDATIONS

- One 2,000-gallon heating oil UST was removed and disposed.
- Excavation floor and wall samples confirm an unauthorized release of petroleum has occurred from the UST system.
- Exploration trenching has confirmed that petroleum impacted soils (including those in the vadose zone which contain globules of what appears to be a weathered petroleum product) extends approximately 25 feet in a northward direction, over 65 feet in a westward direction, and over 45 feet in a southward direction from the UST excavation.
- The minimum known volume of petroleum impacted soils at the site is too large for cost-effective remediation by excavation and land disposal.
- Benzene was not detected in any samples at the site.
- A total of 406 tons of petroleum impacted soils were transported from the site for disposal at a Class II landfill.
- Approximately 100 linear feet of a buried former steam pipe which was found to be wrapped with asbestos containing material was properly removed and disposed.

Artesian recommends that approximately 8 to 12 soil borings be installed at the site to delineate the extent of petroleum impacted soils and to determine if remediation is necessary. Artesian also recommends that three of the soil borings be used to collect groundwater samples from one location hydraulically up-gradient of the UST excavation and two locations down-gradient. Laboratory analytical data from the soil borings will be presented in a letter report, along with recommendations for closure or additional necessary action as appropriate.

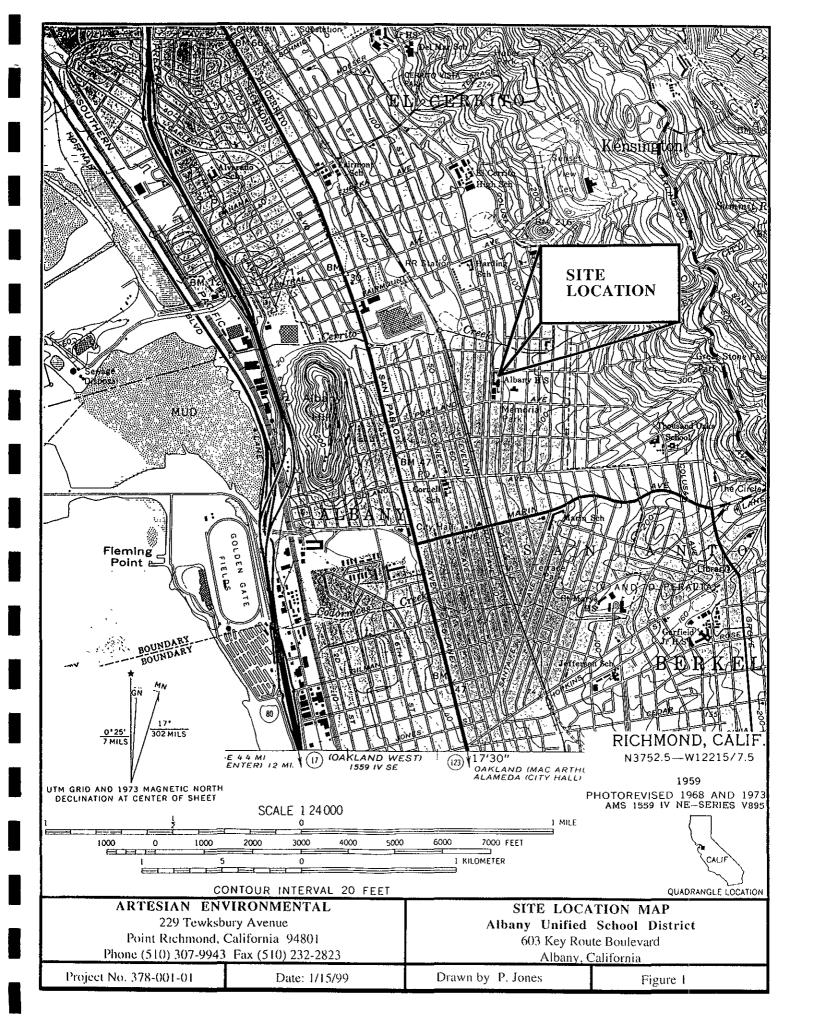
#### 8.0 DISTRIBUTION LIST

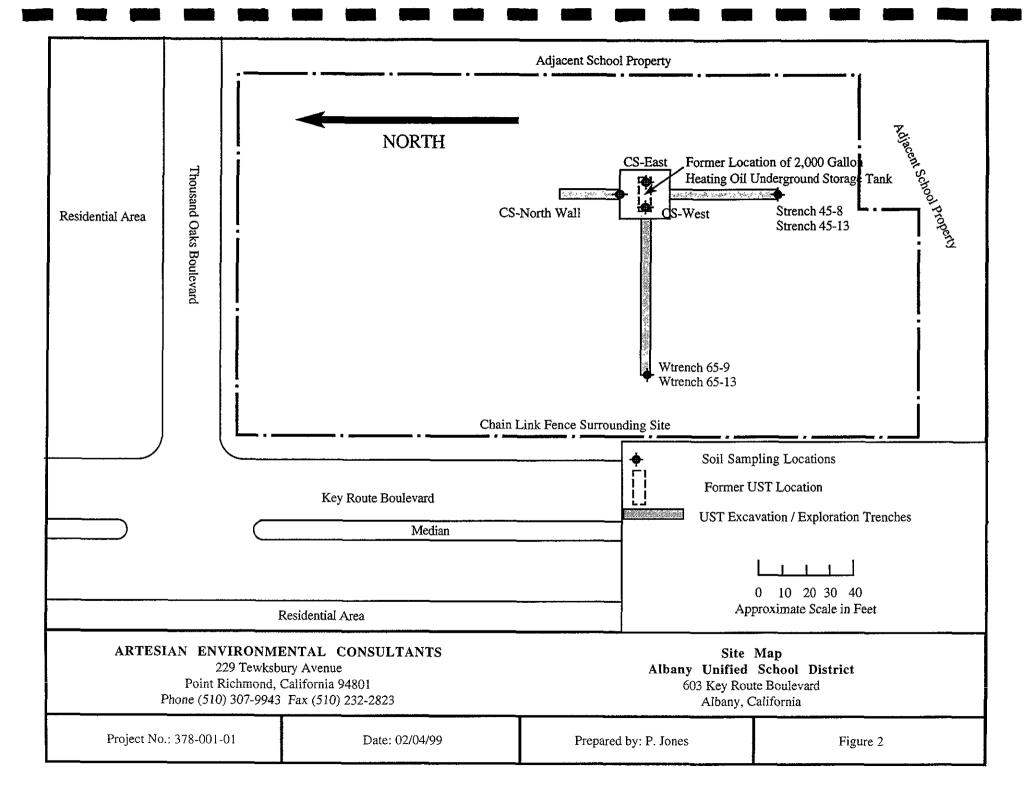
Copies of this report have been sent to the following:

Ms. Eva Chu Alameda County Department of Environmental Health Environmental Protection Division 1131 Harbor Bay Parkway, Room 250 Alameda, CA 94502-6577

The Albany Unified School District c/o Mr. Richard Vila Vila Construction Company 590 South 33rd Street Richmond, CA 94804

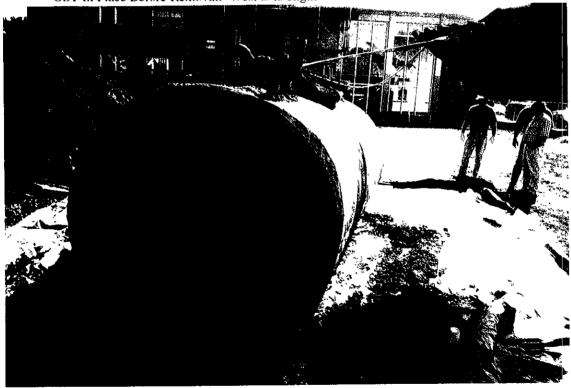
#### APPENDIX A: FIGURES







UST In Place Before Removal: West is to Right



West End of UST After Removal

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No :378-002-01 Date: 02/05/99 Prepared by: P. Jones



East End of UST After Removal



Bottom of UST After Removal

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No. 378-002-01

Date: 02/05/99

Prepared by: P. Jones



UST Loaded For Transport From the Site



Southeast Corner of Excavation: View Southeast

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No..378-002-01

Date: 02/05/99

Prepared by: P. Jones



Southwest Corner of Excavation: View Southwest



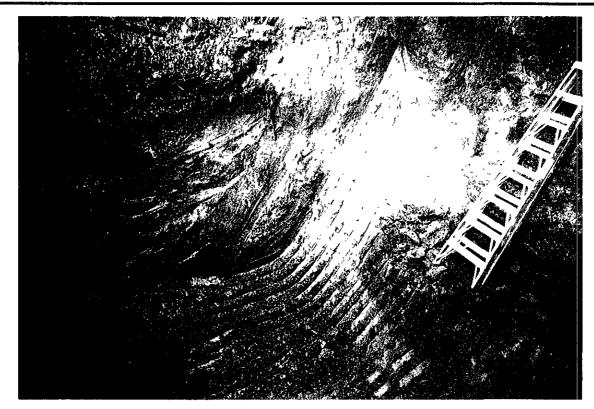
Typical Soil From Vadose Zone With Globules of Petroleum Product (48-inch Excavator Bucket for Scale)

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No 378-002-01 Date: 02/05/99 Prepared by: P. Jones Figure 6



Northeast Corner of Excavation: View Northeast



Overview of Excavation: View Southeast

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

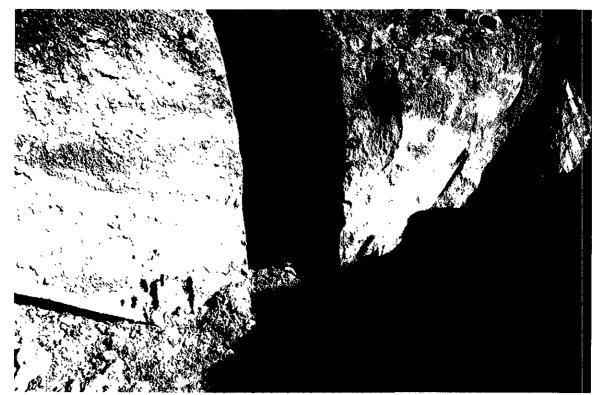
#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

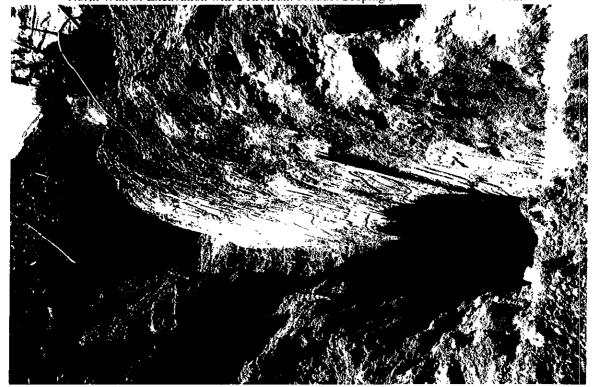
Project No. 378-002-01 Date

Date: 02/05/99

Prepared by: P. Jones



North Wall of Excavation with Petroleum Product Seeping From Wall: View North



North Exploration Trench: South to Left

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

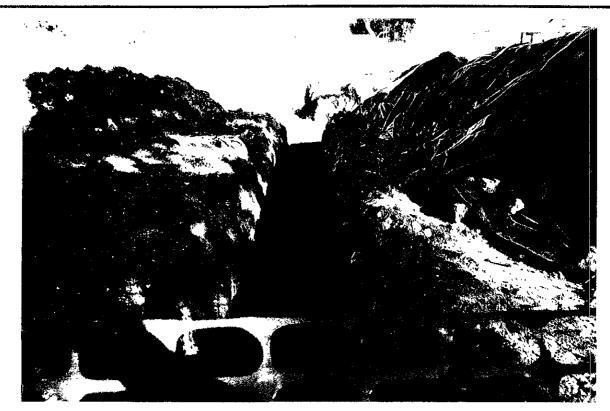
#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No.:378-002-01

Date: 02/05/99

Prepared by: P. Jones



West Exploration Trench: View East



Petroleum Seeping from Walls of West Trench at West End: West to Right

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

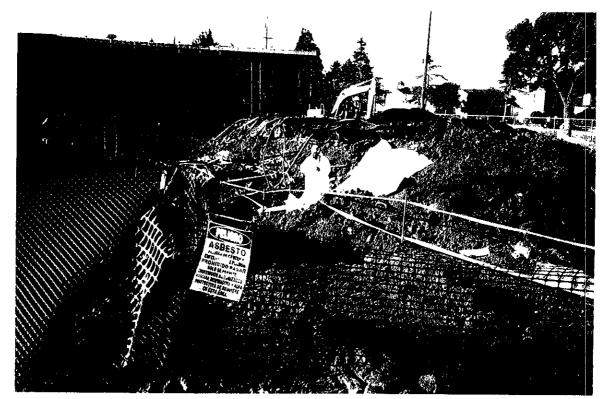
#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No. 378-002-01

Date: 02/05/99

Prepared by: P. Jones







Asbestos Removal Activities: View Southwest

229 Tewksbury Avenue Point Richmond, California 94801 Phone (510) 307-9943 Fax (510) 232-2823

#### **PHOTOGRAPHS**

New Albany High School 603 Key Route Boulevard Albany, California

Project No. 378-002-01 Date: 02/05/99 Prepared by: P Jones Figure 10

#### APPENDIX B: PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH ENVIRONMENTAL PROTECTION DIVISION 1131 HARBOR BAY PARKWAY, RM 250 ALAMEDA, CA 94502-6577 PHONE # 510/567-6700 FAX # 510/337-9335

Alemeds County Division of Mazerdoud Machine

closure/removal plans have been received and four adicated by this Denariment are to assure controllence

evallable to all contractors and craftsman involved with the accepted plans must be on the construction/destruction

must be submitted to this this Decemment and to the and Building inspections Department to determine if

1. Name of Business Albuy Business Owner or Contact Person (PRINT) Phone 4. Property Owner Business Name (if applicable) Address City, State 5. Generator name under which tank will be manifested EPA ID# under which tank will be manifested C A L O O O O O J J S S

UNDERGROUND TANK CLOSURE PLAN Complete according to attached instructions

6.	Contractor Afterian Environmental					
	Address 247 B Tents buy Ave					
	address 247 B Tents buy Ave City PT_ Richmond, CA_ Phone (570) 272-2728					
License Type* Gev. Epsinority, C-17, HAZ. ID# 6244 6/						
	*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.					
7.	Consultant (if applicable) Vila Constantion					
	Address 590 South 37Rd Staret					
	City, State Richmond CA. Phone (50) 276-9111					
8.	Main Contact Person for Investigation (if applicable)					
	Name Title					
	Company					
•	Phone					
9.	Number of underground tanks being closed with this plan					
	Length of piping being removed under this plan 50 ft					
	Total number of underground tanks at this facility (**confirmed with owner or operator)/_					
10.	State Registered Hazardous Waste Transporters/Facilities (see instructions).					
** T	Inderground storage tanks must be handled as hazardous waste **					
	a) Product/Residual Sludge/Rinsate Transporter					
	Name Clean water EPA I.D. No. CALO 00007013					
	Hauler License No. 3575 License Exp. Date 12/15/98					
	Address 7, 0, box 790					
	City Fremont State (A Zip 94537-7420					
	b) Product/Residual Sludge/Rinsate Disposal Site					
	Name Alviso Indepondent oil EPA ID# CAL 00 0/6/ 743 Address 5002 Archer Street					
	Address 5002 ARCher Street					
	city Alviso State (A Zip 95002					

• •	c) Tank and Piping Transporter
	Name ECT EPA I.D. No. CAO 982 030 /
•	Hauler License No. 1533 License Exp. Date 7-31-59
	Address 25 PAL BlvJ.
	city Richmond state CA zip 14801
	d) Tank and Piping Disposal Site
	Name ECT EPA I.D. No. CAD 982 070173
,	Address 255 PARR Blvd.
	city Richmond state CA zip 94801
11.	Sample Collector
	Name David OellOsso
	company ARTERIAN ENVIRORMENTAL
	Address 147 B Tewksburg Ave
	city R Richmond State C4 Zip 94801 Phone 570/ 272-2728
12.	Laboratory
	Name Calcost Analytical
	Name Colcost Analytical Address 4072 Watts Street
	State Certification No. 1236 State CA Zip 94608  State Certification No. 1236
13.	Have tanks or pipes leaked in the past? Yes[ ] No[ ] Unknown[ 🗸
	If yes, describe.

201 4/6/0E

\_ ? \_

•

14. Describe methods to be used for rendering tank(s) inert:

TANK will be Pumped and pendered inent with 30-50 165 of Day Ice And movitored with a TANK
Detector (LEL O, meter) PER FIRE DEPT REQUIREMENTS

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be permanently plugged.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

15. Tank History and Sampling Information \*\*\* (see instructions) \*\*\*

Tank		Material to be sampled	Location and
Capacity	Use History include date last used (estimated)	(tank contents, soil, groundwater)	Depth of Samples
2200 g Alba	instelled in 1939 Last used unknown (Abandow Tank)  IN 1939, the Tank was moved 20 feet westward due to constanction of a new Anditocium the tank was abandon in the 50; -605.	- Soils: All four sides of the excounting  - Soils: 2 Samples beneath TANK  - ground wrow is expected at 20 ft.	Silve wall Samples 27-9Act Delow grade  Bottom Samples  No 10-112 feet below grade  No water Sample, unless it is -ffected.

One soil sample must be collected for every 20 linear feet of piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

# Stockpiled Soil Volume (estimated) Sampling Plan 100 yds of Soil to be exacted tool For every 25 yds of Siil Renoved. impacted Siil will be thertel off-Site.

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [ \( \) no [ \( \) nknown

If yes, explain reasoning \_

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without <u>prior</u> approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.

- 16. Chemical methods and associated detection limits to be used for analyzing samples:
  The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.
  See attached Table 2.
- 17. Submit Site Health and Safety Plan (See Instructions)

	Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
	TPH-drese)	Soil - Stain Las Steel Liver In Teflow Cap.	8015; SW846	6-C 6-0-1789/Kg
	TEPH	Soil - Stainless Steet &	3550/8015) SW 846	64
	BTEX	Soil Stainless Steel Linea for Teflow Cap	8000 x 5W 846	extraction <0.1 mg/kg
	Of G. TPH-liesel)	Soil - Stanlars Steat Linen/w- Tatlon Cop Water-	55-20	C 50 mo /kg
	TEPH } BTEX	VOA bottle	5/4 40(5) -	5/4
:	096	- SEE T	TBLE X	

18. Submit Worker's Compensation Certificate copy				
Name of Insurer ENV. ENG. & INS. Sucs STATE FUND				
19. Submit Plot Plan ***(See Instructions)***				
20. Enclose Deposit (See Instructions)				
21. Report any leaks or contamination to this office within 5 days of discovery.  The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.				
22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.				
23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)				
I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.				
I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.				
I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.				
I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.				
Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.				
CONTRACTOR INFORMATION				
Name of Business Artesin Evuroumental				
Name of Individual Dell'Osso				
Name of Individual Devil DE/10510  Signature Date 9/10/58				
PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)				
Name of Business Alban, Unified School District				
Name of Individual D+1- Hulson				
Name of Business Alban, Unified School District  Name of Individual Dela Hulson Date 9/10/98				

#### INSTRUCTIONS

#### General Instructions

- \* Three (3) copies of this plan plus attachments and a deposit must be submitted to this Department.
- \* Any cutting into tanks requires local fire department approval.
- \* One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- \* State of California Permit Application Forms A and B are to be submitted to this office. One Form A per site, one Form B for each removed tank.

#### Line Item Specific Instructions

- 2. SITE ADDRESS
  - Address at which closure is taking place.
- 5. <u>EPA I.D. NO. under which the tanks will be manifested</u>
  EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781.
- 6. CONTRACTOR

Prime contractor for the project.

- 10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
  - a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
  - c) Tanks must be hauled as hazardous waste.
  - d) This is the place where tanks will be taken for cleaning.
- 15. TANK HISTORY AND SAMPLING INFORMATION

Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

**→** 

NOTE: These requirements are excerpts from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tank(s) and piping in addition to the tank(s) being removed.

#### 20. DEPOSIT

A deposit, payable to "County of Alameda" for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

- 21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from this office or from the San Francisco Bay Regional Water Quality Control Board (510/286-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.
- 22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;

#### EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

- 1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.
- 2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.
- 3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.
- 4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.
- 5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydro- carbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.
- 6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring):
- 7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTXCE) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).
- 8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.
- 9. PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:

	BOIL PPM	WATER PPB
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	DIFIED PROTOCOL
≤ 5 ppm (19%) ≤	10 ppm (10%) 5 ppm (21%) 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

- 10. LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.
- 11. IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chroma- togram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

#### **EPILOGUE**

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

white -env.health yellow -facility pink -files

# ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy. Sulte 250 Alameda, CA 94502-6577 (510) 567-6700

#### **Hazardous Materials Inspection Form**

II,III

144		**********************	wSite Site Alba Las Sall 0 Today/87 /4.	<i>Q</i> ()
11 4	BUSINESS PLANS (Title 19)		Site Site Name Albany High School Today 10,14	1_78
1167	1, Immediate Reporting 2, Bus. Plan Stds.	2703 25503(b)	Site Address 603 Key Rente	
•	3. RR Cars > 30 days 4. Inventory information	25503.7 25504(a) 2730	City Albany zip 94706 Phone	,
	5, Inventory Complete 6, Emergency Response 7, Training	25504(b) 25504(c)	MAX AMT stored > 500 lbs, 55 gal., 200 cft.?	
	8. Deficiency 9. Modification	25505(a) 25505(b)	Inspection Categories:	3
(1,8	ACUTELY HAZ. MAT'LS		I. Haz, Mat/Waste GENERATOR/TRANSPORTER	
	10. Registration Form Flied 11. Form Complete	25533(a) 25533(b)	II. Business Plans. Acute Hazardous Materials  III. Underground Tanks  Lewurn  Lewurn	
	12. RMPP Contents 13. Implement Sch. Regid? (Y/h	25534(c) 4) 25524(c)		
	15. Probable Risk Assessment 16. Persons Responsible	25534(d) 25534(g)	Callf. Administration Code (CAC) or the Health & Safety Code (HS&C)	
	17. Certification 18. Exemption Request? (Y/N) 19. Trade Secret Requested?	25534(f) 25536(b) 25538	Comments: 1000 Cals Block	J
III.	UNDERGROUND TANKS (Title	e 23)		
	1. Peimit Application	25284 (H&S)	Present to within the	<del></del>
Genera		25292 (H&S) 2712 2651	1 remaral of 1-2000	god U
	5. Closure Plans 6. Method		single will steel - n	wer cops
	1) Monthly Test 2) Daily Vaciose		3% 02, 6% LEL	7
	Semi-annual gradwater One fitne solt 3) Daily Vadose One fitne solt Annual tank test 4) Monitrly Gradwater	Vo	Route 125' (WX XE) Centractor Vila Cons	tudion
nks		, Ley		. A
Monitoring for Existing Fanks	One time sols 5) Doily inventory	D	wit & Anteren En Paul	Ines
<u> 70</u>	Annual tank testing Contribible leak det Vadose/gndwater mon.		Albang Fire: Bryan	Crud
gonno.	bally Inventory     Annual tank testing     Cont place leak det		tast lek- sampling &	ervice.
Mont	7) Weekly Tank Gauge Annual tank Isting		1 Conte traile: Dexano -> Enchoen	<del>)</del>
	8) Annual Tank Testing Daily Inventory 9) Other	_	Thuk has some strined & only soils caked on it	
	7. Precis Tank Test Date:	2643	possibly tram overfilling	
			195stochailes: (1) ≈ 10×25×5≈ 50cy	
	10, Ground Water. 11.Monitor Plan	2647	(2)15×15×6 = 90cy	- for
r Tankı	12.Access. Secure 13.Plans Submit Date:	2634 2711	(7) 25× 30×6= 50cy - generated trum exploratory exc	Ken h
ž	14. As Bullt Date:	2635	4 1-1 10 311	e Centra
Rev	8/88		19 t touch for the showls boiler	
		•	silsale a saly sitt	 !!
	Contact: _	Paul_		<b>,</b> 1
	Title: 🙏	resian	Project Manager Inspector: BCHAN	
	Signature:	X _	Signature: BChan	

white -env.health yellow -facility pink -files

# ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy. Sulte 250 Alameda, CA 94502-6577 (510) 567-6700

# Hazardous Materials Inspection Form

II. BUSINESS PLANS (TITLE 19)  1. International Presenting 2503(10)  2. S. B. Cars > 30 days 2503(10)  2. S. Cars of the State 1 2503(10)  2. Person Lack Deletion 1 2503(10)  2. Person Lack Deletion 2 2503(10)  2. Deletion Lack Deletion 2 2503(10)  2. Person	***************************************		Site Ste Name Albany High Seline Today's 14 98
2. B. B. P. Bros. Schools 2. L. Preventory formation 2. Southory 2	II.A BUSINESS PLANS (Title 19)		Ndille
Library Conceived  6. Emergency Response  6. Emergency Response  750 (2)  6. Emergency Response  750 (2)  750 (		25503(b)	Site Address 603 Key Koute Blod
a. 6. Emisgratory Response 2550400) 2. 7. Toring 2550500 2. 10. Registration Form Fled 2550500) 2. 10. Registration Form Fled 2550500) 2. 11. Form Complete 2550500) 2. 11. Form Complete 2550500) 2. 12. RMPP Conferring 2550500) 2. 12. RMPP Conferring 2550500) 2. 13. Registration Fled 2550500 2. 14. Official Conferring 2550500) 2. 14. Official Conferring 2550500 2. 15. Exercise Responsible 2550500 2. 15. Exercise Responsible 2550500 2. 16. Exercise Responsible	4. Inventory Information	2550¾(a)	City Albana 710 94706 Phone
II. BACUTELY HAZ. MATLS  II. Registration From Filed 25533(a)  II. Rem Complete 25533(b)  II. Rem Complete 25533(a)  II. Rem Complete 25533(a)  II. Rem Complete 25533(a)  III. Underground Tanks III. Underground Tanks  III. Under	o. Emergency Response     Training	25504(b) 25504(c)	
III. UNDERGROUND TANKS (THE 23)  III. UNDERGROUND TANKS (THE 23)  III. PomPl Application 2007 (1/6)  III. PomPl Application 2007 (1/6)  III. UNDERGROUND TANKS (THE 23)  III. UNDERGROUND TANKS (THE 2			
10. Registration Form Field 11. Form Complete 25533(b) 11. Representation of the Complete 2553(c) 12. Representation of the Complete 2553(c) 13. Representation of the Complete 2553(c) 14. Representation of the Complete 2553(c) 15. Representation of the Complete 2553(c) 16. Representation of the Complete 2553(c) 17. Representation of the Complete 2553(c) 18. Representation of the Complete 2553(c) 19. Representation of the Represent	II.B ACUTELY HAZ. MAT'LS		I. Haz. Mat/Waste GENERATOR/TRANSPORTER
13. trojement Sch. Period (17 (M)) 14. Oriste Corseq. Assess. 15. Probable (Risk Assessment) 16. Person Responsible 25534(c) 2554(c) 25534(c) 2554(c) 25		25533(b)	
15. Probable (Risk Assessment)   16. Person Responsible   25534(g)   25534(	13. Implement Sch. Req'd? (Y/N	D	(description)
Electropisco Requestra (2) 25536  10. Trode Secret Requested 2 25536  10. Permit Application 25284 (HeS) 25284 (He	15, Probable Risk Assessment 16, Persons Responsible	25534(d) 25534(g)	Callf. Administration Code (CAC) or the Health & Safety Code (HS&C)
III. UNDERGROUND TANKS (Title 23)  The pit Caurty was excavaled it leben 4512  I. Permit Application  2. Pepeins Lock Detection  2. Records Monthamore  3. Records Monthamore  4. Release Report  2. Science Pione  2. Science Pione	16. Exemption Request? (Y/N)	25536(b)	<del> </del>
2. Pipolite Lack Detection 2002 (Has)  2. Recide Monthiorance 4. Recides Report 5. Cleare Plans  2001  6. Monthod 1) Monthly Test 2) Oaly Vacciose Cons the ests Annual tark test Construction the ests Annual tark testing Contribus beached Contribu	III. UNDERGROUND TANKS (Title	23)	The pit cavity was excavated ~ 2' below USI &
3. Recents Modificance 2712  3. Recents Modificance 2712  5. Closure Plans 2651  6. Method 2070  1. Monthly Test 20 Doby Vacciose One time obt 3. Doby Vacciose One time obt 3. Doby Vacciose One time obt 4. Monthly Grahader Construe state of the state o			Soil spled from east & west ends
-6. Method  1) Month y test  2) Day Vactores Semi-currud gradwater Oris three side  3) Day Vactores Oris three side  4) Month y Gradier Oris three side  5) Day I mentiony Annual tark itering Contribute lock det  7) Deady I mentiony Annual tark itering Contribute lock det  7) Mention for Keeding Contribute lock det  8) Day I mentiony Annual tark itering Contribute lock det  7) Weedy Tonk Gouge Annual tark itering B) Annual tark itering Contribute lock det  7) Deady I mentiony Annual tark itering Contribute lock det  7) Mention tark itering Contribute lock det  8) Month y Gradier Contribute lock det  7) Mention tark itering Contribute lock det  8) Day I mentiony Contribute lock det  9) Oliver  1) Month y test  1) La courant to a serie lock det  1) La courant true  2) La courant	3. Records Maintenance 4. Release Report	2712	agest aple blue may sandy selt only being age
2) Darly Vaccose Serri-Corrisor graduates Oris free ests 3) Doby Vaccose One tree ests Arrusol tork test 4) Morithy Gordwater One free sols 5) Doby Inventory Arrusol tork testing Corrispose lock doft 7) Weekly Tork Gordge Arrusol tork testing Doby Inventory Arrusol tork testing Only Inventory Arrusol tork testing Doby Inventory 9) Other  -7. Precis Tork Test Date: -8. Precis Tork Test Dolle: -9. Sol Testing9. Sol Testing10. Ground Water.  2000  2		2670	
Doily codose The side of the s	Monthly Test     Daily Vaciose	* ***	West and see - bive gray sends, gravely, silk
Amostark test  4) Morthy Growater One fine sols  5) Daily Inventory Amost trick testing Contribbe leck clest Vocases/growater mon.  6) Daily Inventory Annual trick testing Contribbe leck clest Vocases/growater mon.  6) Daily Inventory Annual trick testing Contribbe leck clest Vocases/growater mon.  6) Daily Inventory Annual trick testing B)	One time sols	Partition . which a	W/ ont postets which as 20 from Soil ~ 16 bgs ically
Spely inventory Annual tank testing Contribute lock dot Vaciose/grickator mon.  6) Daily inventory Annual tank testing Contribute lock dot 7) Weekly Tank Gouge Annual tank testing B) Annual Tank Testing Daily inventory 9) Other  -7. Precis Tank Test Date:  -8. Inventory Rec9. Soil Testing10. Ground Water.  2643  -10. Ground Water.  2644  -11. Ground Water.  2645  -12. Contribute as sples. Site is crumarisally in upon Supole is sufficiently and sples. Supole is crumarisally in upon Supole is sufficiently Supole is supole is sufficiently Supole is sufficiently Supole is supole is sufficiently Supole is su	Annual tank test	•••	Will excurate laterally (N+S) approx 2-3 dente
Vodose/gradwatermon.  6) Doth Inventory Annual took testing Contribe leak det  7) Weekly Tank Gauge Annual tank Testing B) Annual tank Testing Doth Inventory 9) Other	One fine rols		sam depth as sples Site is chowing impost
Arrustion testing Contribute leading 8) Arrustion the string B) Arrustion the string Contribute leading 8) Arrustion the string Doty inventory 9) Other			& will want to see if additional excavation
5 will gill ~13 bg, taken from bucket, toling gray gravits it policy inventory  9) Other	6) Daily inventory Annual tank testing	v=	istranated given provinte to a W (antiqueted)
5 will gill ~13 bg, taken from bucket, toling gray gravits it policy inventory  9) Other	Controloe leak det 7) Weekly Tank Gauge		Nwall sple triber - B by s w/ slidelymore development
-7. Precis Tonk Test Date:  8. Inventory Rec.  9. Soil Testing.  10. Ground Water.  2044  A lide walls Story pules for TCHd, 9, BTEX &TO  SO-100 Cy addid soil I recarded from the overline  A lide walls Story pules will be completed in the finite	Annual Tank Testing     Daily Inventory		5 will gile ~13 bgs, taken from bucket, blue gray gravits 1/4
Date:  8. Inventory Rec.  9. Soil Testing.  10. Ground Water.  2044  A licetually Story pules will be completed in the fruit		-	US. run initial 5+W pples for TCHd, g. 67EX &TO
10. Ground Water. 2047 of lide walls Stort parles will be campled in the full	Date: 8. Inventory Rec.	4	50-100 cy addit soil excusted from the overese
			of eidewalls Stochpales will be campled in the futu
12 Access, Secure 2634 CW 10 Particular of Colombia CX.	11.Monitor Plan 12.Access, Secure	2634	due to potential of adda ox.
Date:  14. As Built 2035  Pls Contact Scatt Sonny for by Cloning inspecting	<u>≱</u> Date:		Pls contact Scatt Spany for bellowing inspectung
Date: Gurlettens another sple from west and ~16'-	<del>_</del>		Gurenteris another sple from west and -16'-
mount, and define you gravely silt.			mount, and off no your gravely silt
Part I (a)		Pul	li, III
Contact: 1 au 1 Johns	Λ V <sup>-</sup>	1 400 1	P CIIA
Signature: X Signature: Signature:		V 5194 1	Oic Con

REPROPERTION OF THE INSPECTION	VESS NO : CONTACT:	CITY: STATE LIC.		A	PROPERTY OWNER: A L-S D
LOOR SHEATHING ROUGH FRAMING ROUGH FRAMING ROUGH ELECTRICAL ROUGH ELECTRICAL ROUGH PLUMBING-DWV ROUGH WRITHIN SEEN CALLED FOR WITHIN ANY OF THE REQUIRED APPROVAL ROUGH PRESCRIPTION WALLS RISULATION VALLS RISULATION VALLS RISULATION CEILING ROUGH APPLY WALLEDGARD INTIL THE ABOVE ITEMS HAVE BEEN APPROVED RIVWALL RATHROOM GREENBOARD RITTERIOR LATH ROUGH PROVAL RETWINLE ROUGH PROVAL RETWINLE ROUGH PROVAL RETWINLE ROUGH PROVAL RESCOURCES ROUGH PROVAL RESCOURCES RIVER ROUGH PROVAL RESCOURCES ROUGH PROVAL	CONTACT:			<u>}</u>	<u>_</u>
ROUGH FRAMING ROUGH FRAMING ROUGH FRAMING ROUGH FEATHER WATER ROUGH PLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMBING WATER SHOWER PAN STORM DRAINS ROOFFLOOR DRAINS ROOFFL	CONTACT:			A	<u>,</u>
ROUGH FRAMING ROUGH FRAMING ROUGH FRAMING ROUGH ELECTRICAL ROUGH FLUMBING-DWV ROUGH PLUMBING-DWV ROUGH PLUMB	CONTACT:			, 0	
ROUGH FRAMING  ROUGH PLUMBING-DWV  ROUGH RORK HAS NORK HAS REQUESTED BY THE INSPECTION OR AS REQUESTED BY THE INSPECTION OR AND INSPECTION OR AN	CONTACT:			ğ	2
SMOKE DET. TEST	CONTACT:		1	ADDRESS:	ŭ,
SMOKE DET. TEST		Ö.		Š	7
SMOKE DET. TEST		D	2		PROPERTY OWNER
SMOKE DET. TEST		=	1		2
SMOKE DET. TEST		Ç			.??
SMOKE DET. TEST	ZIP:				
SMOKE DET. TEST	ا ا	7 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	5	,	1 1
SMOKE DET. TEST		,			
SMOKE DET. TEST	- 1				1
SMOKE DET. TEST				i	
SMOKE DET. TEST		1			17
SMOKE DET. TEST	<del></del>				0
SMOKE DET. TEST	ľ	-	ğ		1
SMOKE DET. TEST		1	JOB DESCRIPTION	2	1
SMOKE DET. TEST			ESC	СПҮ:	
SMOKE DET. TEST			至		
SMOKE DET. TEST			Ĭ	.	] [
SMOKE DET. TEST			ž		
SMOKE DET. TEST	I	-	1	. }	1 1
SMOKE DET. TEST	ł		İ	.	
SMOKE DET. TEST			1	ZIP:	
SMOKE DET. TEST		_	フー	1	
SMOKE DET. TEST		2	9		1
SMOKE DET. TEST	1		_		1EL:
SMOKE DET. TEST	1	P	2		12
SMOKE DET. TEST				1	i l
SMOKE DET. TEST	- 1				
SMOKE DET. TEST			6		1 1
SMOKE DET. TEST			•		
SMOKE DET. TEST		}	2		
2 m 1	1	8	-		[
IRE SPRINKLER TEST  FIRE ALARM TEST  LIFE SAFETY INSP.  LIFE SAFETY IN			7		<b></b>
FIRE ALARM TEST  LIFE SAFETY INSP.  LIFE SAFETY INSPECTION SERVICES MUST, BE SIGNED OFF PRIOR TO CALLING FOR A FINAL INSPECTION  FIVE BAY NOTIFICATION REQUIRED FOR ALL FINAL INSPECTIONS  ERVICE CHANGE  EMP. PERM. POWER  FINAL BUILDING  INAL BUILDING  INAL BUILDING	- 1	d	6	DATE: BY:	PERMIT
LIFE SAFETY INSP.  INAL FIRE DEPT.  INAL		$\parallel$		ü	<u> </u>
THE ABOVE CLEARANCES MUST BE SIGNED OFF PRIOR TO CALLING FOR A FINAL INSPECTION  FIVE DAY NOTIFICATION REQUIRED FOR ALL FINAL INSPECTIONS  ERVICE CHANGE  TEMP. PERM. POWER  FINAL BUILDING  INAL MECHANICAL  INAL BUILDING		- I	0	0	1
THE ABOVE CLEARANCES MUST: BE SIGNED OFF PRIOR TO CALLING FOR A FINAL INSPECTION.  FIVE DAY NOTIFICATION REQUIRED FOR ALL FINAL INSPECTIONS.  ERVICE CHANGE  EMP. PERM. POWER  FINAL BUILDING  INAL MECHANICAL  INAL BUILDING		- 11	i	_	
FIVE DAY: NOTIFICATION REQUIRED FOR ALL: FINAL INSPECTIONS.  ERVICE CHANGE  EMP. PERM. POWER  FINAL BUILDING  INAL MECHANICAL  INAL BUILDING	1	-  \	. ]	23/41	11
ERVICE CHANGE  JEMP, PERM, POWER  FINAL BUILDING  INAL MECHANICAL  INAL BUILDING				20	, [2]
FINAL BUILDING  INAL RELIMBING				1 4	H
FINAL BUILDING  INAL MECHANICAL  INAL BUILDING  INAL BUILDING			ļ	€	[W
INAL MECHANICAL BILLIMBING			1	VALUE	1,1
MAL DI HARING			ľ	i.	
INAL PLUMBING   カルデー		1	Ì		1
FINAL ELECTRICAL ROOM ROOM ROOM ROOM ROOM ROOM ROOM ROO					1
INAL ELECTRICAL TAG					- 1
S Ž m					- 1
INSTALLATION CERT.				I	- 1
		1			
INAL GAS TAG		- 1	ì		Ì

·

and effect.	
License Class AB.C57 Lic. Number 62446	WC LAV BATH T. SHOWER I SHK I DISHWASHED I SHE
Licensee Thribana Lary Aman	DAINORY I SPA
OWNER-BUILDER DECLARATION  Thereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 70315 Business and Professions Code Assetting	CLOTHES FLOOR SINK URINAL DRINKING GAS SYSTEMS WATER HTR.
after, improve, demolish or repels any storyture of the last which requires a permit to construct,	WASTE SEWER SEWER WIR POWE COLUMN TO THE RESERVED AND THE
Confractor's License I aw Chapter 9 (commencing with Case of pursuant to the provisions of the	NTERCEPTER CO. STATE STATE OTHER PER 100 SO. FT.
violation of Section 7031.5 by any explicant for a possible that the latest exemption, Any	ELECTRICAL PERMIT
the man me managed bolians (\$5000).).	CONTRACTOR
☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure if not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's Learner Learner.	STATE LICENSE NO, AND CLASSIFICATION
thereon, and who does such work himself or through his arms apply who builds or improves	
withing one year of completion, the owner-huilder will have the building or improvement is sold	FEE \$
some state for the purpose of sale.)	
D.I. as owner of the property, am exclusively contracting with licensed contractors to construct the popiect (Sec. 7044, Business and Professions Code: The Contractor's License Law does not sport up to where of property who halfe or improve the contractor's License Law does not	SERVICE   CIRCUITS   CUID ETS   CUID ETS
apply to an owner of property who builds or improves thereon, and who contractor's License Law does not with a contractor's licensed pursuant to the Contractor's License Law.). All such Construction must build you such construction must build you such construction must be contractor.	SERVICE CIRCUITS OUTLETS FIXTURES SWITCHES WATER HTR RANGE DRYER
If am exempt under Sec, B. & P.C. for this reason	DISPOSAL DISHWASHER SPA PANS/MOTORS PER 100 SQ. FT.
V	
Signature of owner Date	HEATING / COOLING PERMIT
WORKERS' COMPENSATION DECLARATION hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers'	CONTRACTOR
Compensation Insurance, or a certified copy thereof (Sec. 3800, Labor Code).	STATE LICENSE NO, AND CLASSIFICATION
Olicy A - 092 - 000 197 - 98 Company Aries an Engroupe all	FEE \$
Certified copy is hereby furnished.  1 Certified copy is filed with the city building inspection department.	
policant Date 10/	
Fem Jones - 7/4/98	FURN. DUCT/FLUE HOOD: COMP. AIR COND. OTHER PER 100 BOLE.
CERTIFICATE OF EXEMPTION	AN CONU. OTHER PER 100 SO FT.
ROM WORKERS' COMPENSATION INSURANCE	DEPARTMENT USE ONLY
this section need not be completed if the permit is for one hundred dollars (\$100) or less.) certify that in the periormape of the work for which this permit is issued, I shall not employ	The transfer of the second of
ny person in any manner so asto become subject to the Workers' Compensation Laws of California	Plans received by Date Value of Project \$
gnature Date	Construction Permit Fee
	Plumbing Permit Fee
OTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions of the Labor Code, you must forthwith comply with such	Electrical Permit Fee
or this partial state on deemed revoked.	Heating/Cooling Permit Fee
ONSTRUCTION LENDING AGENCY	Plan Check Tee
ereby affirm that there is a construction lending agency for the performance of the ork for which this permit is issued. (Sec. 3097, Civil Code).	Sewer Connection Fee
NDERS Q	SMIP.
NDERS DORESS	Capital Improvement ree School Impact Tax
A	School Impact Tax  Right of Way Usage Fee
NOT CONCEAL OR COVER ANY CONSTRUCTION LINES THE WORK OF	Fire Department Fee 18-64 Control of the Control of
SPECIED AND THE INSPECTION IS RECORDED. ALL INSPECTION REQUESTS EDECURED 24 HOURS IN ADVANCE OF THE INSPECTION.	Other
SERTIFY THAT I HAVE BEAD THIS APPLICATION AND STATE THAT THE	Surcharges
CAL ORDINANCES AND STATE I AWS BELATING TO BUILDING CONTENT ALL	Total
PRESENTATIVES OF THIS CITY TO ENTED LIBOUT THE ABOVE AUGUSTA	Comments
LD HARMLESS THE CITY OF ALBANY ACADET ALL MADILITIES TO SAVE, INDEMNIFY AND	APPROVALS
TO SOUTH TO SEE WHICH MAY IN ANY WAY ACCRUE AGAINST SAID	The state of the s
The same of the sa	
111 / SQ 181	ENGINEERING
Date Date	FIRE
ires and becomes gull and void should work not be commoned within 100	OTHER-
n the date of approval, or should with not be commenced within 180 days and a period of 180 days after work is commenced.	PERMIT APPROVE
To days after work is commenced	DATE
Vallow Eilo no r	

Pink - Inspector

White - Job



PERMIT APPLICATION

City of Albany



TOTAL FEES, TAXES AND DEPOSITS

#### 1000 SAN PABLO, ALBANY CA. 94706 PUBLIC WORKS OFFICE

FOR INSPECTION - PHONE: 528-5760

A.P. NO:

#### FOR APPLICANT TO FILL IN BUILDING PROJECT IDENTIFICATION 603 Key Koulo Blud Address of Building Un Food School Od Owner(S) Name 715-0886 Telephone No. Contractor's Name elesian Environmental Tewksbury. Contractor's Mailing Address Ph. (\$1) 307-9743 City Bus. Lic. Architect and/or Engineer Architect and/or Engineer's Address Lic. No. LICENSED CONTRACTORS DECLARATION I hereby affirm that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect. License Class 6/31/99 Licensee Arlesia Exp. Date \_ **OWNER-BUILDER DECLARATION** I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, after, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapler 9 (commercing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any volation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).) □ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure if not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within the year of completion, the owner-builder will have the burden of proving that he did not build of improve for the purpose of sale.). I I, as owner of the property, am exclusively contracting with licensed contractors to construct the poject (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law.). All such Construction must obtatn tity Bus. Lic. ☐ I am exempt under Sec. \_ , B. & P.C. for this reason Signature of owner **WORKERS' COMPENSATION DECLARATION** hereby affirm that I have a certificate of consent to self-insure, or a certificate of Workers' Compensation Insurance, or a certified copy thereof (Sec 3800, Labor Code). Policy A-092-000197-98 Company Artes an Environmental ☐ Certified copy is hereby furnished. ☐ Certified copy is filed with the city building inspection department Applicant CERTIFICATE OF EXEMPTION FROM WORKERS' COMPENSATION INSURANCE (This section need not be completed if the permit is for one hundred dollars (\$100) or less.) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so asko become subject to the Workers' Compensation Laws of California Signature

NOTICE TO APPLICANT: If, aller making this Certificate of Exemption, you should become subject to the Workers' Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked

I hereby affirm that there is a construction lending agency for the performance of the

CONSTRUCTION LENDING AGENCY

work for which this permit is issued. (Sec. 3097, Civil Code).

NAME

	DESCRI	PTION	OF WO	DRK		
I I JAJE,	oroun		Slar.	<b>4</b>	77	
Can	78. Marie 7	**************************************	· ) ^ .	168	1000A	
	444	, .		(4.5)	7.6	- 4 S
* 1 Th. 12 Charles		•	, ,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V(5.4)	
260		**************************************	:: (A. 184 A.)		1997	
The state of the s	PLUM	BING	PERMI		regulation, press	274.709.60
CONTRACTOR			***			n Mari
STATE LICENSE NO. AND CLA	SSIFICATION				EE \$	3.00
		·		74		#3 5 t
		· · ·			2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	
WC, LAV. BAT	HT. SHOWER	SINK	DISHWASHER	LAUNDRY	T.   S	
	OR SINK URINA	L DRINKI FOUNT/		SYSTEMS ETS	WATER HTR	
WASTE SEWER INTERCEPTER CO	SEWE	SYSTEMS	NG OTHER	PER 1	00 8Q. FT.	
7.050 . 4	ELECT	RICA	このあるのかかんろん	* .6858 PG 0.		chall the
CONTRACTOR	Charles Charles to A	19 19 44 ·	:42/35 V	· ***	(XXX	· Sections
STATE LICENSE NO. AND CLA	The West of	Subort.			15 35 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13.50
		ž3.,	******		EES	
			14~ Politike 14~4*-56.7		144544	200000 2000000 20000000
SERVICE CIRCUITS		2-4	TTCHES WATER	HTTE PV	WGE DR	YER A
1925/34 1 11/2/23		YA GA	измотонз	PI:R 100 SC	250 75 2 FT. 25 72 -	, 385 - 483
	EATING /	COO				
CONTRACTOR : 1 1 1 2 2 2 2 2 2						**************************************
STATE LICENSE NO. AND GLA	SSIFICATION					
				F	EE\$	(Market)
			and Audionalia			(41),60% (41)
	HOOD COMP	AIR C		HER IN	ER 100 SQ FT.	
			14 8			
Zwis Carlo	DEPART	MEV.			**************************************	
Plans received by	A Come	Date _		134	भिन्न क्ष	> <u>*</u>
Value of Project \$ Construction Permit Fo	ee (	 \$	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ ". F <sub>B</sub> .*		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Plumbing Permit Fee		\$	1 400 1 774	- 33	35.2	35
Electrical Permit Fee	· in single	\$	The state of the s	١٠٠٠	` /v.	i i

· vir

Heating/Cooling Permit Fee

Sewer Connection Fee

Capital Improvement Fee

Plan Check Fee

1 10 3 3 3 3 1

134

## APPENDIX C: MANIFESTS

Collibring—Environmental Profection Agency proved OMB No. 2050–0039 (Expires 9-30-99) int or type. Form designed for use on elite (12-pitch) typewriter.	See Instructions		1, 77 A.	<b>t</b> ,or,		nento, Californ
WASTE MANIFEST	000358	。 フェダ	1415	of s		
3. Generator's Name and Mailing Address  ABANY A  A  A  A  A  B  A  A  A  A  A  A  A  A	igh school	0/				
4. Generator's Phone (	10111147	74206				
1	IS EPA ID Number			icustration de		
	R 0 0 0 0 0 7	0   1   3		· · · · · · · · · · · · · · · · · · ·	經(6) 的第三代於	W
		1 1 1	iii virior			
	IS EPA ID Number					
5002 ARCHER STREET				Andrew Andrews		
		12. Co		13. Jotal Quantity	14. Unit Wt/Vol	
a.			7,10		10	
Non-RCRA Hazardous Waste Liquid		0 0 1	TIT	1/0/50	G	Year of the second
, b.				,		
			<u> </u>			V Cilian
<b>c.</b>			`		\$ C	
13	3.	111	1			
i Abblestel E. sagtem the Mithall Marst Meso.	**************************************		i ( ;	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c		
	· 美术学》 · 美生物学 · 本性物学	****	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
이 얼굴시작됐는 얼룩이 그런 나면서 있다.			SVI W NATED			
15. Special Handling Instructions and Additional Information			1. W. W. W. W. P. P.			and the second second
Emergency Contact: (510) 797-8511 Altr: Kirk Hayward			÷	, ,	•	•
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this marked, and labeled, and are in all respects in proper condition for training	s consignment are fully and according to	urately descri	bed above t	by proper shipping a	name and are class	ified, packed,
· · · · · · · · · · · · · · · · · · ·					- ,	
and the environment; OR, if I am a small quantity generator, I have ma available to me and that I can afford.	ide a good faith effort to mini	mize my was	te generatio	n and select the be	st waste managen	ent method th
Printed/Typed Name!  17. Transporter 1 Acknowledgement of Receipt of Materials	Signature				Month	113
TELLY Gaines	Signature	$\sum_{\ell}$	en	Ò.	Month / O	15 S
	Signature :	•		,	Month	Day
19. Discrepancy Indication Space		- 14P1-4				
						_
	UNIFORM HAZARDOUS WASTE MANIFEST  3. Generator's Name and Mailing Address ACA HAZARDAL ABOVE ABO	UNIFORM HAZAROUS WASTE MANIFEST  3. Generator's Name and Mailing Address LIA   DO OOOR 315 8 9  3. Generator's Name and Mailing Address LIA   BAMY HIGH SCACA ALBAMY CACA 4. Generator's Phone   1  5. Transporter I Company Name  CLEARWATER ENVIRONMENTAL  7. Transporter 2 Company Name  8. US EPA ID Number  9. Designoided Facility Name and Site Address ALVISO INDEPENDENT OIL 6002 AROHER STREET ALVISO, CA 95002  11. US BOT Description (including Proper Shipping Name, Hazard Class, and ID Number)  a.  15. Special Handling instructions and Additional Information WEAR PPE Emergency Conduct: (\$10) 797-8511 Attn: Mrk Hayward ERG  16. GENERATOR'S CETIFICATION: I hareby declare that the contents of this consignment are fully and accommarked, and labeled, and are in all respects in proper condition for transport by highway occording to marked, and labeled, and are in all respects in proper condition for transport by highway occording to an increase of the contents of this consignment are fully and accommarked, and labeled, and are in all respects in proper condition for transport by highway occording to an increase of the contents of this consignment are fully and accommarked, and labeled, and are in all respects in proper condition for transport by highway occording to an increase of the contents of this consignment are fully and accommarked, and labeled, and are in all respects in proper condition for transport by highway occording to an increase of the contents of the contents of this consignment are fully and accommarked. If I can be a content of the contents of th	UNIFORM HAZAROUS WASTE MANIFEST  (AI / DO DO DO BY 315 15 9 7 5  3. Generator's Name and Modiling Address  BAMY HIST SCACO  AUSTRAL AND SCACO  AUSTRAL D Number  CLEARWATER ENVIRONMENTAL  7. Transporter 2 Company Name  9. Designated Facility Name and Site Address  AUSO INDEPENDENT OIL  BOOZ ARCHER STREET  AUSO INDEPENDENT OIL  BOOZ ARCHER STREET  AUSON ON BOOZ  11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)  No.  a.  Non-RCPA HAZARdous Waste Liquid  b.  15. Special Handling Instructions and Additional Information  WEAR PPE  Emergency Contract: (\$10) 797-8511 Attr. Wirk Hayward  ERG 3  If in a large quantity generator, I cartify that I have a program in place to reduce the volume and toxicity of we practicable and that I have selected the practicable method for transport by highway according to applicable and that I have selected the practicable method of transport by highway and and toxicity of we practicable and that I have selected the practicable method of transport by highway and and toxicity of we practicable and that I have selected the practicable method of transport by highway according to applicable of the first one and that I can addred.  Pristagd/Typed Name  7. Transporter 2 Action/wedgament of Receipt of Materials  Frinted/Typed Name  Signature   UNIFORM HAZARDOUS WASTE MANIFEST  1. Generator's Nome and Modiling Address BANY HISA SCACO ACRAE SCACO ACRAE SCACO ACRAE SCACO ACRAE SCACO ACRAE STREET ALVISO INDEPENDENT OIL BOOK AROHER STREET ALVISO, CA \$5002  11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)  12. Containers  13. Special Handling instructions and Additional Information WEAR PER  14. Special Handling instructions and Additional Information WEAR PER  15. Special Handling instructions and Additional Information WEAR PER  16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above marked and the in all respects in proper condition for transport by highway according to applicable internation  WEAR PER  16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above marked and that it have selected the procincible method of treatment, storage, or disposed currently available to a which investigation and that I can afford.  Privately Typed Name  17. Traits point: A actionomic agreement of Receipt of Materials  18. Irranspacher 2 Actionwhedgement of Receipt of Materials  19. Irranspacher 2 Actionwhedgement of R	UNIFORM HAZARDOUS  WASTE MANIFEST  JAMOO O O O R 3 S 9 7 5 6 5 6  3. Generator's Name and Mailling Address  A Generator's Phone I  5. Transporter I Company Name  CLEARWATER ENVIRONMENTAL  7. Transporter I Company Name  CLEARWATER ENVIRONMENTAL  10. US EPA ID Number  CLEARWATER ENVIRONMENTAL  11. US DOI Description (including Proper Shipping Name, Hazard Class, and 10 Number)  12. Commental Company Name  13. Add to Number  14. In	UNIFORM HAZARDOUS  WASTE MANIFEST  CALL NO LOOK BIS STORES  3. Generator's Name and Mailling Address  CALL NO LOOK BIS STORES  4. Generator's Name and Mailling Address  A Generator's Places I  5. Insurporter 1 Company Name  CLERRYMERE REWINFONMENTAL  7. Transporter 2 Company Name  CLERRYMERE REWINFONMENTAL  7. Insurporter 2 Company Name  CLERRYMENT REWINFONMENTAL  8. US ETA ID Number  ALVISO INDEPERVOEINT OIL  6. ON ETA ID Number  12. Containers  13. Total  14. Unit  15. Special Name Insure I	

DO NOT WRITE BELOW THIS LINE.

DO NOT WRITE BELOW/THIS LINE.

Signature

Sind Fort Plea	ie of ( m Ap	California—Environmental Protection Agency proved OMB No. 2050-0039 (Expires 9-30-99) rint or type. Form designed for use on elite (12-pitch) typowriter.	See Instruction	s on back o	of page	6.974300	Department of T	oxic Substances Contro
	1	UNIFORM HAZARDOUS  UNIFORM HAZARDOUS  UNIFORM HAZARDOUS  1. Generator's US EPA  CALOOO	1001358 (	onifest Document	3 <sub>1</sub> 3	2, Page 1 1 of	Information in the is not required by	shaded areas
		3. Generator's Name and Mailing Address Albany H. 603 Key Route Blued, -1		ol.f.		Veriller vessioner Samaters iv	36	734231
-755(	Ì	4. Generalor's Phone (510) 215-0886	947	06			المحارفا المح	
1-800-852-7550			US EPA ID Number A D 9 8 2 4 3	8566	642 GO	inistrator di anteradione	(5) (5)	J. (7-1) 74:52
 1-8		7. Transporter 2 Company Name 8.	US EPA ID Number		Professional Association	enispael) – 19. paga – Viens		
Ď (ð		ERIGKSONIING and Site Address 10. 255 PARR BLVD	US EPA ID Number	<u> </u>	জি জীচাট :	ANO (0) (0) (2) (4)	1. (b. ve 2.9)	D.
Š			A D 0 0 9 4 6	6 3 9 2	i Poli		3 0-2	क्षित्र में उन्हों
N N		11. US DOT Description (including Proper Shipping Name, Hazard Class, WASTE EMPTY STORAGE TANK	and ID Number)	12. Con No.	tainers Type	13. Total Quantity	14. Unit Wt/Vol	isto significi
1-800-424-8802: WITHIN CALIFORNIA,	G	Non-RCRA hazardous waste solid		001	TP	02000	P	Mariedeo es
4-8802	NED	ь.					Seles Vare	• <b>1</b> 116
90-42	Ă T O	c.						
	R	d.						9¶*
CENTER					1		   ±2.5/7	Diffici
RESPONSE		Participal Complete Section (Complete Section Complete Se	THE SELECTION		K Hepeli D	n Codes (on Worle)	Graphic Alberta	
		智力的 1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000 (1000	E NEED WESTED W	3 A S S S S S S S S S S S S S S S S S S	sindikasi S			
ATIONAL		Wearappropriate protective cloning 24 Hour Emergency Telephone Numb 24 Hour Emergency Contact:	when handling	SITEL	.OCA	TION: Ca	Keyk	ute Bla
보 보		24 Hour Emergency Contact:	er: (310)))	N	, 02	141	BANY, G	ERG 171
CALL THE IN		16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the marked, and labeled, and are in all respects in proper condition for the	nis consignment are fully and a	ccurately describ	ed above b	y proper shipping na and national govern	me and are classifi ment regulations.	ed, packed,
OR SPILL,		If I am a large quantity generator, I certify that I have a program in practicable and that I have selected the practicable method of treatme and the environment; OR, if I am a small quantity generator, I have novailable to me and that I can offord.	nt, storage, or disposal currer	ntly available to	me which n	ninimizes the present	and future threat	to human health
	<b>↓</b>	Printed/Typed Name Paul F Jones Again ton 17. Transporter 1 Acknowledgement of Receipt of Moterials	Signature	72			1 0	Pay   9   8
OF EMERGENCY	RANS	Printed/Typed Name James R. Cox	Signature Smill	APP.	0	Ž.	Month 1 0	Pay 4 9 8
25	O RTER	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature			1-1/2	Month	Day Year
- AS	F A	19. Discrepancy Indication Space	I .					1 1 1
	Ĉ-L							
	Ĭ T Y	Facility Owner or Operator Certification of receipt of hazardous materi Printed/Typed Name DAVID SATO	als covered by this manifest ex Signature	ccept as noted in	Item 19		Month	Day Year
L		DIVID 2010	1	<del>7</del>			1	7//0

THE NATIONAL RESPONSE CENTER 1-800-424-8802: WITHIN CALIFORNIA, CALL 1-800-852-7550

CALL

EMERGENCY OR

ö

DAY OR NIGHT TELEPHONE (510) 235-1393

REPRESENTATIVE

# CERTIFICATE

# **CERTIFIED SERVICES COMPANY**

255 Parr Boulevard • Richmond, California 94801

**NO.** 30253

			-		_
ı		_		 -	
	CUSTO	М	ER		

JOB NO. 674300 ARTESIAN ENV.

FOR:	ERICKSON, INC.	TANK NO	24212						
LOCATION:	RICHMOND, CA	DATE: 11/5/98	TIME: 3:37:55 PM						
EST METHOD	STECH/1314 SMPN	LAST PRODUCT	FO						
Petroleum Institute and have	e found the condition n conditions existing	to be in accorda at the time the	s in accordance with the American ance with its assigned designation. Inspection herein set forth was and instructions.						
TANK SIZE 2,000 GALL	ON TANK	CONDITION	SAFE FOR FIRE						
HEMARKS:			SON, INC. HERBY CERTIFIES THAT THE						
PERMITTED HAZARDOUS WASTE FACILITY.									
ERICKSON, INC. I	ERICKSON, INC. HAS THE APROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK SHIPPED TO US								
FOR PROCESSIN	<b>G.</b>		797/14 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -						
			ons of the above tanks, or if in any doubt, for 24 hours if no physical or atmospheric						
STANDARD SAFETY	DESIGNATION								
19.5 percent by volume; and that (	b) Toxic materials in the a idues are not capable of p	tmosphere are within	xygen content of the atmosphere is at least permissable concentrations; and (c) In the rials under existing atmospheric conditions						
SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.									
The undersigned representative ack which it was issued.	nowledges receipt of this o	certificate and unders	tands the conditions and limitations under						

TITLE

INSPECTOR

## APPENDIX D: LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/16/98
229 Tewksbury Avenue	USD	Date Received: 10/19/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/19/98
!	Client P.O:	Date Analyzed: 10/19/98

10/26/98

#### Dear Paul:

#### Enclosed are:

- 1). the results of 1 samples from your #378-002-01; Albany USD project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/16/98		
229 Tewksbury Avenue	USD	Date Received: 10/19/98		
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/21/98		
	Client P.O:	Date Analyzed: 10/22-10/23/98		

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\*

Lab ID	Client ID	Matrix	TPH(g)⁺	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
97509	W Trench 65	S			ND	0.067	ND	0.79	94
							M		
									· · · ·
									,-
									·,
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		w	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		s	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

<sup>&</sup>quot;cluttered chromatogram; sample peak coelutes with surrogate peak

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.



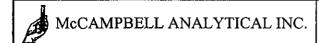
110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Environmental		Client D	roject ID: #378-002-01; Albany	Date Sampled: 10/16/98		
		USD	oject 1D: #378-002-01; Albany	_		
229 Tewksb	ury Avenue			Date Received: 1	10/19/98	
Point Richm	ond, CA 94801	Client Co	ontact: Paul Jones	Date Extracted:	10/21/98	
		Client P.	O:	Date Analyzed:	10/24-10/25/98	
EPA methods n		• •	C23) Extractable Hydrocarbon omia RWQCB (SF Bay Region) method (		D(3510)	
Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>		% Recovery Surrogate	
97509	W Trench 65	S	2500,b,g		100	
				1000		
				····	<u>.</u>	
					***	
				******	T	
			· · · · · · · · · · · · · · · · · · ·			
					n. <del> </del>	
	1				<del></del>	
Reporting L	imit unless otherwise	w	50 ug/L			
stated; ND means not detected above the reporting limit		s	1.0 mg/kg			

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

<sup>&</sup>quot;cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

<sup>\*</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.



110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Env	ironmental		Project ID: #378-002-01; Albany	Date Sampled: 10/16/98
229 Tewksbu	ry Avenue	USD		Date Received: 10/19/98
Point Richmo	ond, CA 94801	Client	Contact: Paul Jones	Date Extracted: 10/23/98
		Client	P.O:	Date Analyzed: 10/23/98
EPA methods 41			Oil & Grease (with Silica Gel Clear ds 5520 D/E&F or 503 D&E for solids and 5	~ /
Lab ID	Client ID	Matrix		Grease*
97509	W Trench 65	S	14,	000
				H-MARLE - CARACTER - C
				***************************************
				-
			7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	
stated; ND mean	it unless otherwise s not detected above	W	5 m	
the rep	orting limit	S	50 m	ng/kg
* water samples mg/L	are reported in mg/L, w	ipe samples	in mg/wipe, soil and sludge samples in mg/k	g, and all TCLP / STLC / SPLP extracts in
h) lighter than w	ater immiscible sheen i	present; i)	liquid sample that contains greater than ~5vo	l. % sediment.

DHS Certification No. 1644

\_\_\_\_\_Edward Hamilton, Lab Director

Date: 10/22/98

Matrix: SOIL

	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#90401)	MS	MSD	Spiked	MS	MSD	
							<del></del>
TPH (gas)	0.000	2.103	2.180	2.03	104	107	3.6
Benzene	0.000	0.208	0.228	0.2	104	114	9.2
Toluene	0.000	0.214	0.236	0.2	107	118	9.8
Ethylbenzene	0.000	0.206	0.228	0.2	103	114	10.1
Xylenes	0.000	0.612	0.662	0.6	102	110	7.8
TPH(diesel)	. 0	318	325	300	106	108	2.1
TRPH (oil and grease)	0.0	23.5	24.6	20.8	113	118	4.6

<sup>\*</sup> Rec. = (MS - Sample) / amount spiked x 100

Date: 10/23/98-10/24/98 Matrix: SOIL

-	Concent	ration	(mg/kg)	Ī	% Reco	very	
Analyte	Sample  (#90401)	MS	MSD	Amount Spiked	MS	MOD	RPD
	(#90401)	MS	MaD	Spiked	MS	MSD	
TPH (gas)	0.000	2.103	2.180	2.03	104	107	3.6
Benzene	0.000	0.208	0.228	0.2	104	114	9.2
Toluene	0.000	0.214	0.236	0.2	107	118	9.8
Ethylbenzene	0.000	0.206	0.228	0.2	103	114	10.1
Xylenes	0.000	0.612	0.662	0.6	102	110	7.8
TPH(diesel)	0	316	314	300	105	105	0.7
TRPH (oil and grease)	0.0	22.2	22.1	20.8     20.8	107	106	0.5

% Rec.  $\neq$  (MS - Sample) / amount spiked x 100

12764 X934 doc

	McCA	MBELI	ANA	LYT	ICA.	LIN	IC.						Т			10	C 1 1	Q C	<b>T</b> 7	<u> </u>	<u>\_</u>	끘	~	(e)									
		110 2 <sup>md</sup> /	VENUE S	OUTH	. #D7										ant.			C	HA	JIL	4 (	)F	CU			D	YF	(EC	COI	SD_			
Telepho	ne: (510) 798	3-1620	HECO, CA	94553		Eav.	(510	N 70	0 1/	22					П	JRI	N A	RC	U	ΝD	TI	ME	į	C								X	
Report To: Paul	0	<u>es</u>		Bill T	0.	Tax.	(310	79	8-10	22			+											RU	JSH	_ 2	24 H	IOU!	R 4	8 HO	UR	<b>X</b> 5 DA	Y
Company: Artesia	n Environme	ntal			<u>v.                                    </u>								-			<del></del>	<del>, .</del>	Ar	aly	sis F	(eq	uest							Othe	r	Cor	nment	s
229 Te	wksbury Ave	nue											-		(F.													$\Box$					
Point F	Richmond, CA	94801											ᅴᇣ	-	3/B								_							1			
Tele: (510) 232-28	327		]	Fax: (	510)	232-	2823	,					<b>−</b>  £		E&	_						1	18						•				
Project #: 378 -	10-600		1	Projec	t Nar	ne:	ÆΠ	00.4	.,	//<	<u> </u>		+ 8015Y MTBE	1	520	418							2										
Project Location:	306 Keul	Parte	Blvd.	A	lba	и <i>И</i>	<u> </u>	7,000	<del>y</del> -	<u></u>	עני				ξe (5	ls (		20)		  -			827						ł	1			
Sampler Signature		12				==							1808		jea	윺		/ 80		¥			525			010				1	İ		
		SAM	PLING		l "	Τ	MΑ	IRI)	7	M	IETH	OD	Gas (602/8020	ାଜ	શ્ર	<u>8</u>		602		3,8	8		PA			9.776							i
		<b></b>	ı —	2	ig.	┢			<del>~</del> —	PR	ESER	VEL		18	Ö	표		EPA		PCI	/ 82	ĺ	ρ E			/235					İ		
SAMPLE ID	LOCATION			Containers	Comtainers				Ì				H as	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	als	Lead (7240/7421/239.2/6010)					1		
		Date	Time	onta	ပ္ပို	×		ရွ	) 			m .	BTEX & TPH a	ă	E G	etro	1/1	NO	8/8	3/8	4/8	2/8	PN.	Ž	LUFT 5 Metals	740/					1		- 1
		•	]	ů #	Type	Water	Soil	Sludge	the	Ice		Other	¥	H	tal F	tal P	A 6(	EX	A 60	A 60	A 62	4 62	H's /	Ξ	FT.5	d (7.							- 1
115		20/	1		-	^	S	c lo	0	,2 	H	d C	H	=	T <sub>0</sub>	To	品	B	田	뮵	品	EP.	₹.	₹	5	g	Ş.						- 1
W Trench 65		10/16/98	1520				ΔĹ			X			T	又	X			又		_	_		_				-	+	_				
													1-	Ī			$\neg \dagger$	• }							$\dashv$		[-	$\dashv$			10	66.	
								$\top$		┪	$\top$	$\top$	<b>-</b>	<del>                                     </del>					$\dashv$						[			-					
						1	_	+		_	┪	+	┨─╌										]				[_	-					
					[——	1-1	+	+		-	- -	-													_		[.		.	] ,			
	<del></del>			ļ <u>-</u>				+-	┦	-+	-	+		_		-	ļ			]	.	j		Ì		-		- }					
	·					H	-	+	$\vdash$	_	- -	4_	ļ										ł				ļ		1				
							-	┿-		_ _		↓_	.[i															-	-				
						$\sqcup$	_ _	_								1	i				_			_   .			-	-		1			
																			_ -		_		-			-	·-   -			·			
							_					T					$\top$	7	$\dashv$	+		$\exists$		$\dashv$	VAĀ	ςıh	201	L ATTTA	LS 01				
										7		†-		GE/	D CO	<b>1</b>	_	-		-+	PR	ESE	RVAT	IN	· un	7 7	œu	MOLA	<u>ralnı</u>	HEK			
		_					$\top$		T	1	1-	+		υų	D CO	KOF	ron		$\pm$	+	ΑP	PRh	PRIA	TF	+	#	= -	+	╬	<del>                                     </del>			
							1		_	+		-	-	EAL	) SP/	\C₽/	<b>WSE</b>	NT		4	ch	NTA	NHR	S	1	_[_	_ _	_ _	<u> </u>				- 1
						-	╬	+	$\dashv$	+	+-	┼-	-							I	$\perp$				-	•							
						-	-		_	- -	-	-		-4	$\bot$			$\perp$		$\bot$					-								
Relinquished By:		Date:	Time	Pecai	lord D.		_		丄	丄							_				1		$\top$	$\top$			1						
		Date:	Time:	Receiv		_		7					Rei	mar	ks:	£	)	1		1					7/T	—-	L_ ^ .	71 <sup>:::</sup>		7 1/2	r ,		
Relinguished By:			Time		<u> </u>		K_									ا	au	4		<u> </u>	Э'n	es	_	w	ιι ~	7	a	u	u	20 F	4		
lecel		Pate:	Time:	Receiv			7	٠							نر	14	N	ılι	150	2	. ,	_		- [	1	4	- }	_	-				
Relinquished By:				Receiv	<u>uil</u>			<u>u</u>	<u>س</u>	<u> </u>					·	v	_			- ,_ •	,				•	i							_
-			Ψ	, sectory	eu By:	•	l						٨		<u>ب</u>	ملا	33		10/	1	1	_								7614		- (/	$\mathcal{A}$
												[		- V		תונ	, رز —	ر 	[	ر ا	14	8										Y	N)

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/14/98
229 Tewksbury Avenue	USD	Date Received: 10/15/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/15/98
	Client P.O:	Date Analyzed: 10/15/98

10/22/98

Dear Paul:

#### Enclosed are:

- 1). the results of 2 samples from your #378-002-01; Albany USD project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/14/98				
229 Tewksbury Avenue	USD	Date Received: 10/15/98				
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/15-10/22/9				
	Client P.O:	Date Analyzed: 10/15-10/22/98				

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g) <sup>†</sup>	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
97052	CS-North W	S			ND	0.036	ND	0.38	96
97055	CS-East	S	11,g,j	ND	ND	ND	ND	0 057	103
97056	CS-West	S	74,g,j	ND	ND	0.031	ND	0.33	98
					***************************************				
			<b></b>						
									,
otherwi	g Limit unless se stated; ND	W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
	detected above orting limit	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

\*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

<sup>&</sup>quot; cluttered chromatogram; sample peak coelutes with surrogate peak

Artesian Env		Client Pr USD	roject ID: #378-002-01; Albany	Date Sampled: 1  Date Received:			
	ond, CA 94801	Client C	ontact: Paul Jones	Date Extracted: 10/15-10/21/98			
		Client P.	O:	Date Analyzed:	10/15-10/25/98		
EPA methods m			C23) Extractable Hydrocarbon		D(3510)		
Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>	3C1 1D(3330) 01 GC11	% Recovery Surrogate		
97052	CS-North	S	1300,b,g		100		
97055	CS-East	S	100,6		94		
97056	CS-West	s	1100,b,g		104		
· · · · · · · · · · · · · · · · · · ·							
			· · · · · · · · · · · · · · · · · · ·				
					-		
					~		
			40. /-				
stated; ND mea	mit unless otherwise ans not detected above porting limit	W	50 ug/L				
tne re	porting iimit	S	1.0 mg/kg				

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

<sup>&</sup>quot;cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

<sup>&#</sup>x27;The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.



110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Env	ironmental	Client	Project ID: #378-002-01; Albany	Date Sampled: 10/14/98
229 Tewksbu		USD	,	Date Received: 10/15/98
	ond, CA 94801	Client	Contact: Paul Jones	Date Extracted: 10/15-10/23/98
		Client	P.O:	Date Analyzed: 10/15-10/23/98
EPA methods 41			Dil & Grease (with Silica Gel Clean ods 5520 D/E&F or 503 D&E for solids and 5	
Lab ID	Client ID	Matrix		Grease*
97052	CS-North	S	7	60
97055	CS-East	S	4	60
97056	CS-West	S	24	400
				*AP-MACLES
				WATERWALLS.
			NAMES OF THE PROPERTY OF THE P	
	nit unless otherwise is not detected above	W	5 n	ng/L
	orting limit	S	50 n	ng/kg
mg/L	, -		in mg/wipe, soil and sludge samples in mg/k	

Artesian Environmental	Client Pro	oiect I	D: #37	8-002-01; Albany	Date Sam	pled: 10/14/9	8		
229 Tewksbury Avenue	USD	.,			Date Rec	eived: 10/15/9	8		
Point Richmond, CA 94801	Client Co	ntact:	Paul J	ones	Date Extracted: 10/16/98				
	Client P.0	):			Date Ana	lyzed: 10/19/9	98		
TD 1 1605 10510 0050		Volat	ile Org	ganics By GC/MS		······································			
EPA method 625 and 3510 or 8270 and	a 3550		<del></del>	07057				-:	
Lab ID				97055					
Client ID				CS-East					
Matrix				S					
Compound	Concentration*	Report W	ing Limit S	Compound		Concentration*	Report	ting Limit S	
Acenaphthene	ND<0.5	10	0.33	Di-n-octyl Phthalate		ND<0.5	10	0.33	
Acenaphthylene	ND<0.5	10	0.33	1,2-Diphenylhydrazine		ND<0.5	10	0.33	
Anthracene	ND<0.5	10	0.33	Fluoranthene	•	ND<0.5	10	0.33	
Benzidine	ND<2.4	50	1.6	Fluorene		ND<0.5	10	0.33	
Benzoic Acid	ND<2.4	50	1.6	Hexachlorobenzene		ND<0.5	10	0.33	
Benzo(a)anthracene	ND<0.5	10	0.33	Hexachlorobutadiene	~~~	ND<0.5	10	0.33	
Benzo(b)fluoranthene	ND<0.5	10	0.33	Hexachlorocyclopentad	iene	ND<2.4	50	1.6	
Benzo(k)fluoranthene	ND<0.5	10	0 33	Hexachloroethane		ND<0.5	10	0.33	
Benzo(g,h,i)perylene	ND<0.5	10	0.33	Indeno(1,2,3-cd)pyrene		ND<0.5	10	0.33	
Benzo(a)pyrene	ND<0.5	10	0.33	Isophorone	·····	ND<0.5	10	0.33	
Benzyl Alcohol	ND<1.0	20	0.66	2-Methylnaphthalene		ND<0.5	10	0.33	
Bis(2-chloroethoxy)methane	ND<0.5	10	0.33	2-Methylphenol (o-Cres	ol)	ND<0.5	10	0.33	
Bis(2-chloroethyl) Ether	ND<0.5	10	0.33	4-Methylphenol (p-Cres		ND<0.5	10	0.33	
Bis(2-chloroisopropyl)Ether	ND<0.5	10	0.33	Naphthalene		ND<0.5	10	0.33	
Bis(2-ethylhexyl) Phthalate	ND<0.8	10	0.33	2-Nitroaniline		ND<2.4	50	1.6	
4-Bromophenyl Phenyl Ether	ND<0.5	10	0.33	3-Nitroaniline		ND<2.4	50	1.6	
Butylbenzyl Phthalate	ND<0.5	10	0.33	4-Nitroaniline		ND<2.4	50	1.6	
4-Chloroanaline	ND<1.0	20	0.66	2-Nitrophenol	<del></del>	ND<2.4	50	1.6	
4-Chloro-3-methylpheno	ND<0.5	10	0.33	4-Nitrophenol		ND<2.4	50	1.6	
2-Chloronaphthalene	ND<0.5	10	0.33	Nitrobenzene		ND<0.5	10	0.33	
2-Chlorophenol	ND<0.5	10	0.33	N-Nitrosodimethylamin	e	ND<0.5	10	0.33	
4-Chlorophenyl Phenyl Ether	ND<0.5	10	0.33	N-Nitrosodiphenylamin		ND<0.5	10	0.33	
Chrysene	ND<0.5	10	0.33	N-Nitrosodi-n-propylan	nine	ND<0.5	10	0.33	
Dibenzo(a,h)anthracene	ND<0.5	10	0.33	Pentachlorophenol		ND<0.5	10	0.33	
Dibenzofuran	ND<0.5	10	0.33	Phenanthrene		ND<0.5	10	0.33	
Di-n-butyl Phthalate	ND<0.5	10	0 33	Phenol		ND<0.5	10	0.33	
1,2-Dichlorobenzene	ND<0.5	10	0.33	Pyrene		ND<0.5	10	0.33	
1,3-Dichlorobenzene	ND<0.5	10	0.33	1,2,4-Trichlorobenzene		ND<0.5	10	0.33	
1,4-Dichlorobenzene	ND<0.5	10	0.33	2,4,5-Trichlorophenol		ND<0.5	10	0.33	
3,3-Dichlorobenzidine	ND<1.0	20	0.66	2,4,6-Trichlorophenol		ND<0.5	10	0.33	
2,4-Dichlorophenol	ND<0.5	10	0.33	Comments: j				<u> </u>	
Diethyl Phthalate	ND<0.5	10	0.33	Sur	rogate Recov	eries (%)			
2,4-Dimethylphenol	ND<0.5	10	0.33	2-Fluorobiphenyl		· · · · · · · · · · · · · · · · · · ·	90		
Dimethyl Phthalate	ND<0.5	10	0.33	2-Fluorophenol			77	_	
4,6-Dinitro-2-methylphenol	ND<2.4	50	1.6	Nitrobenzene-d5			79		
2,4-Dinitrophenol	ND<2.4	50	1.6	Phenol-d5	<del></del>		78		
	ND<0.5	10	0.33					_	
2,4-Dinitrotoluene	ו כימ~מאו	10	0.55						

<sup>\*</sup>water samples are reported in ug/L, soil and sludge samples in mg/kg, wipes in ug/wipe and all TCLP / STLC / SPLP extracts in ug/L

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen is present; i)liquid sample that contains greater than ~5 vol % sediment; j) sample diluted due to high organic content

Date: 10/14/98-10/15/98 Matrix: SOIL

]	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
1	(#90401)	MS	MSD	Spiked	MS	MSD	
TPH (gas)	0.000	2.243	2.281	2.03	110	112	1.7
Benzene	0.000	0.198	0.208	0.2	99	104	4.9
Toluene	0.000	0.206	0.214	0.2	103	107	3.8
Ethylbenzene	0.000	0.206	0.212	0.2	103	106	2.9
Xylenes 	0.000	0.614	0.630	0.6	102	105	2.6
   TPH(diesel)	   0 	340	347	300	113	116	2.0
TRPH (oil and grease)	0.0	23.6	21.9	20.8	113	105	7.5

% Rec. = (MS - Sample) / amount spiked x 100

#### QC REPORT FOR SVOCs (EPA 8270/625/525)

Date: 10/19/98-10/20/98 Matrix: SOIL

	Concentr	ation	(ug/Kg)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#90401)	MS	MSD	Spiked	MS	MSD	
Phenol	0	53	81	100	53	81	83.6
2-Chlorophenol	0	52	64	100	52	64	20.7
1, 4-Dichlorobenzene	0	62	68	100	62	68	9.2
N-nitroso-di-n-propyl	0	62	93	100	62	93	40.0
1, 2, 4-Trichlorobenz	0	58	62	100	58	62	6.7
${\tt 4-Chloro-3-methylphen}$	0	69	90	100	69	<sup></sup> 90	26.4
4-Nitrophenol	0	59	64	100	59	64	8.1
Acenaphthene	0	64	72	100	64	72	11.8
2, 4- Dinitrotoluene	0	61	70	100	61	70	13.7
Pentachlorophenol	0	66	63	100	66	63	4.7
Pyrene	0	64	64	100	64	64	0.0

% Rec. = (MS - Sample) / amount spiked x 100

12692 XA32

	McCAM	BELL A	NALY	TIC	AL I	NC.	•																		ΣŸ	R.	EC	COR	D u	ba .	
	11	0 2 <sup>nd</sup> AVE	ENUE SOU CO. CA 94:		<b>37</b>							İ		Τ	UF	KN	AR	Uυ	INL	) 11	ME		RU:		2.					UR 5 DAY	
Telephone	e: (510) 798-1				Fax	c: (5	10)	798-10	522			$\dashv$							1:-	D			KO.	J11		1		Other		Comments	
Report To: Paul	Jone	· <i>c</i> ;	Bil	l To:					_			_			1		- F	na	lysis	Kec	luesi	1		-		$\dashv$			Τ	Commission	$\dashv$
Company: Artesian												-	1		<u></u>	İ			ļ								j	, Ì		!	
	vksbury Aven							-					<u></u>	1	<u> </u>	- 1						0					1	. 1			
	Point Richmond, CA 94801  Fele: (510) 232-2827 Fax: (510) 232-2823						$\dashv$	Σ	- 1	Grease (5520 E&F/B&F)	al	ļ	İ		-		8310	,				.		1	-	l					
Tele: (510) 232-282											·		3	1	220	48	ļ	_ [	Ì	-		EPA 625 8270						1			- }
Project #: 378	-002-0	21	Pre	oject	Name		110	any_	US	5_()		-	8		) ie	us (		57	>	-		8			6				ļ	1	
Project Location:	603 Kes	y Route	Blud.	-	ALK	ani	4					$\dashv$	8		ica	arbo		Ø		5		623			109					}	1
Sampler Signature:	-	7 3			7				_	MET	CHO	<u>D</u>	205/		8	일		9		9	3	PA			39.7				1	1	1
		SAMP	LING		<u> 2</u>	N	(AT	RIX	P	RES	ERV	ED	Gas (602/8020 + 8015)/ MTBE	TPH as Diesel (8015)	Total Petroleum Oil &	Total Petroleum Hydrocarbons (418.1)		BTEX ONLY (EPA 602 / 8020)	_   }	EPA 608 / 8080 FCB S	5	ڇا	S.		Lead (7240/7421/239.2/6010)					1	-
		1		STS	aji	Ţ								sel (	enm	E	9	,	800	28   28	27.02	.∀	[eta]	etals	747				ļ	İ	
SAMPLE ID	LOCATION			Containers	Type Comtainers					1	1		BTEX & TPH as	Dies	strol	io i	EPA 601 / 8010	<b>z</b>	EPA 608 / 8080		CFA 624 / 8270	PAH's / PNA's by	CAM-17 Metals	LUFT 5 Metals	7240				İ		
<u></u>		Date	Time	out	c C	Te l	_	Sludge	털	_	Ó	ier	% X	1 as	F F	al Pe	9	X	9	ಶ   ೪ ≰   •	2 2	H's	Σ	FT	g				ł	İ	
		i i		‡ C	ľyb	Water	Sou	13/3	5 3		HNO,	Other	BTE	TPF	Tot	Tot	EP.	H	EP.	£   6	F 6	<u>.</u>	5	131	ت	SC.	İ		-		
		10/		-		<u> </u>	K	1	×		+	1		<b>¥</b>	*			*					<del> </del>							Hold.	
CS-North Wall		19/14/98	1610						<del></del>	<del>  </del>	+-	<del> </del>	-	7-	<b>7</b> -		$\vdash$	<u> </u>	-	$\top$	-	_	-							Hold	
CS-West Well		914/98	1635	_ _		_	X.		_	<u> </u>	-	-	╢	-		_	-		-	+		+-	┼─	-	-		1	+	1	12010	
CS-South Wall		14/92	1645				<u>X</u>			Χ_	$\bot$	-	<b> </b>	<u> </u>		<u> </u>					-	-	<u> </u>	-				+		48	E
CS- East			1520	i			x			۲		1	X	X		ž					- -	>	¥′	.			<b>-</b>				34.62
CS-West		10/14/79	1530	1_			1			X_			X	X	X	ļ					-	-		- -			.	-\\ <u>-</u>		5day	
C5 - W- 7E									-				J	.l		<u> </u>					_ _	_ _					-	.   '	€	97052	
																							_   _				.	F_		3/032	
		<del> </del>					-	+ +	_		1		1	1	1								Ì			_	_	į.	H	97053	
	ļ	<del>-</del>	-		<del> </del>		$\dashv$		十	+	+	+	╁┈	1-		$\top$	1					$\top$		7				نيد. و			
				<u> </u>	-		-		十		+	-	┨╌	╁╌	┼─	-	-	—		一十	_		-	$\top$	╁		1	1	H	97054	
				<u> </u>	<u> </u>		-		_}	_	+	-		+	-	┼	<del>                                     </del>			$\dashv$	VΛΔ	SID	2011	ΛΗΤΔ1	din	THER	╗	+	-	- <b>-</b>	
			ł	1						101			4_	$oldsymbol{\perp}$	<u> </u>	1_	- Ç	SEC	ERV.	TIN.			XU II	TUINE	11	1111111	-	++	13	97055	
										101	inh.	700	S TI	MN!	1	<u>'</u>		DDD	( <del>1</del> 17)	ATE		4	-1-	+	1		┪_		1		
				1						U C	100	C13(	1	ריים. קייע	<u> </u>	十/			MINE		Ì		Ĺ.						200	97056	
	-	<del>                                     </del>	<del> </del>		┼	$\vdash$			1	<del>-17</del>	+	- 3.	17	<del>./ 24. </del>	-	¥		ווט	HUIVE	רַסת	-	-						1 1		37030	
	-			╂	╂	-			$\dashv$	-			╁	+	-	+	+		<del> </del> -				_	1	T						ADDICAL .
	l 1			<u> </u>	ļ	<u> </u>						_	+-	1	n rico	<u></u>	$\frac{1}{}$	<u></u>	1			<u> </u>	٠-	1//	,	<u> </u>	1	10	1	C 0/-	
Relinquished By		Date:	Time:	Rec	eived E	sy: 11 s - l	11/1	2,-17	<=	#6	-/ <sup>^</sup>	3	ľ	CIII	aiks	). 1	$/\!\!\!/\!\!\!/$	9	as	0		r	101	0		N	0	ريجو	7	Samp (	>
1/20		15/98		1-1		u (		MI		_~	· ·			N			′_'			L	12	,	1	· i i :	t.,	V-	<b>)</b>	17	tna	Sample lysis	1
Relinquished By:									Je	シア	1	P	05	5/	~	1 =	•	,	U	, u					$\mathcal{O}$						
augel B	445	78	11.35			ide	11	/w	4				4			(	)														
Relinquished By:		Date:	Time:	Rec	erved I	sy:	l	,					- 1	, -	·C	.,	لما	أير	141	nc/	=	٠									
1			1	1									17	< 0\	٠,	V۸۵	ھ	1D	الم	70	つ	ستر	٦								

110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone . 925-798-1620 Fax : 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/19/98
229 Tewksbury Avenue	USD	Date Received: 10/20/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/20/98
	Client P.O:	Date Analyzed: 10/20/98

10/27/98

Dear Paul:

Enclosed are:

- 1). the results of 1 samples from your #378-002-01; Albany USD project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<a href="http://www.mccampbell.com">http://www.mccampbell.com</a> E-mail: main@mccampbell.com

Artesian Environmental	Client Project ID: #378-002-01; Albany	Date Sampled: 10/19/98
229 Tewksbury Avenue	USD	Date Received: 10/20/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/20-10/21/98
	Client P.O:	Date Analyzed: 10/22-10/23/98

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\* EPA methods 5030, modified 8015, and 8020 or 602; California RWOCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)⁺	мтве	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
97351	GW-1	w	ND	ND	ND	ND	ND	ND	99
97352	S Trench 45-8	S			ND	ND	ND	0.013	96
97353	S Trench 45-13	S			ND	0.021	ND	0.23	96
97354	W Trench 65-9	S			ND	ND	0 008	0.028	96
			-						
									· EN PROSENTA
			<del> </del>						
									···
									.,
	-								
<u> </u>									
otherwise	ing Limit unless stated; ND means	W	50 ug/L	5.0	0 5	0.5	0.5	0.5	
not det	ected above the orting limit	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

<sup>&</sup>quot;cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>&</sup>quot;The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; j) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern

Artesian Env	vironmental	P .	roject ID: #378-002-01; Albany	Date Sampled: 10/19/98				
229 Tewksb	ury Avenue	USD		Date Received:	10/20/98			
Point Richm	ond, CA 94801	Client C	ontact: Paul Jones	Date Extracted: 10/21/98				
		Client P.	O:	Date Analyzed:	10/24-10/25/98			
EPA methods m			•C23) Extractable Hydrocarbon ornia RWQCB (SF Bay Region) method (		D(3510)			
Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>		% Recovery Surrogate			
97351	GW-1	W	920,c		104			
97352	S Trench 45-8	S	350,b,g		100			
97353	S Trench 45-13	S	1400,b,g		101			
97354	W Trench 65-9	S	280,b,g		100			
		,						

	* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP
1	extracts in ug/L

50 ug/L

1.0 mg/kg

W

S

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit

<sup>\*</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

<sup>&#</sup>x27;The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.



				,									
Artesian Env		Client USD	Project ID: #378-002-01; Albany	Date Sampled: 10/19/98  Date Received: 10/20/98									
Point Richme	ond, CA 94801	Client	Contact: Paul Jones	Date Extracted: 10/20/98									
		Client	P.O:	Date Analyzed: 10/20-10/23/98									
EPA methods 4			oleum Oil & Grease (with Silica Gel Clean-up) * ard Methods 5520 D/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids										
Lab ID	Client ID	Matrix		Oil & Grease*									
97351	GW-1	W	)	ND									
97352	S Trench 45-8	S	4	60									
97353	S Trench 45-13	S	1	100									
97354	W Trench 65-9	S	4	50									
	nit unless otherwise	W	5 n	ng/L									
	orting limit	S	S 50 mg/kg										
mg/L	, -		in mg/wipe, soil and sludge samples in mg/l										

DHS Certification No. 1644

\_\_\_\_\_Edward Hamilton, Lab Director

Date: 10/21/98-10/22/98 Matrix: WATER

	Concent	ation	(mg/L)		% Recov	very	
Analyte	Sample  (#97115)	MS	MSD	Amount Spiked	MS	MSD	RPD
TPH (gas) Benzene Toluene Ethyl Benzene Xylenes	0.0	73.0 9.5 9.9 9.7 30.1	78.3 9.7 9.9 9.7 29.9	100.0 10.0 10.0 10.0 30.0	73.0 95.0 99.0 97.0	78.3 97.0 99.0 97.0 99.7	6.9 2.1 0.0 0.0 0.7
TPH(diesel)	0.0	170	171	150	113	114	1.1
TRPH (oil & grease)	0	27500	26900	23700	116	114	2.2

<sup>%</sup> Rec. = (MS - Sample) / amount spiked x 100

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$ 

Date: 10/23/98-10/24/98 Matrix: WATER

	Concentr	(mg/L)		% Reco	very		
Analyte	Sample			Amount			RPD
	(#96818)	MS	MSD	Spiked	MS	MSD	
	1	<del> </del>		<u> </u>			·····
   TPH (gas)	0.0	89.0	93.9	l   100.0	   89.0	93.9	5.4
Benzene	0.0	9.6	9.3	10.0	96.0	93.0	3.2
Toluene	0.0	9.9	9.5	10.0	99.0	95.0	4.1
Ethyl Benzene	0.0	9.9	9.8	10.0	99.0	98.0	1.0
Xylenes	0.0	30.2	29.4	30.0	100.7 	98.0	2.7
TPH(diesel)	0.0	165	159	150	110	106	3.9
						<u></u>	
TRPH   (oil & grease) 	N/A	N/A	N/A	N/A   	N/A	N/A	N/A

<sup>%</sup> Rec. = (MS - Sample) / amount spiked x 100

Date: 10/22/98

Matrix: SOIL

	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#90401) 	MS	MSD	Spiked 	MS	MSD	
TPH (gas)	0.000	2.103	2.180	2.03	104	107	3.6
Benzene	0.000	0.208	0.228	0.2	104	114	9.2
Toluene	0.000	0.214	0.236	0.2	107	118	9.8
Ethylbenzene	0.000	0.206	0.228	0.2	103	114	10.1
Xylenes	j 0.000	0.612	0.662	0.6	102	110	7.8
TPH(diesel)	0	318	325	300	106	108	2.1
TRPH (oil and grease)	0.0	23.5	24.6	20.8	113	118	4.6

<sup>%</sup> Rec. = (MS - Sample) / amount spiked x 100

Date: 10/23/98-10/24/98 Matrix: SOIL

	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#90401)	MS	MSD	Spiked	MS	MSD	
				l			
TPH (gas)	0.000	2.103	2.180	2.03	104	107	3.6
Benzene	0.000	0.208	0.228	0.2	104	114	9.2
Toluene	0.000	0.214	0.236	0.2	107	118	9.8
Ethylbenzene	0.000	0.206	0.228	0.2	103	114	10.1
Xylenes	0.000	0.612	0.662	0.6	102 	110	7.8
				<u> </u>			
TPH(diesel)	0	316	314	300	105	105	0.7
TRPH	0.0	22.2	22.1	20.8	107	106	0.5

% Rec. = (MS - Sample) / amount spiked x 100

# CHROMALAB, INC.

**Environmental Services (SDB)** 

October 27, 1998

Submission #: 9810364

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: AE-AVSB

Project#: 12737-300

Received: October 21, 1998

re: One sample for Polynuclear Aromatic Hydrocarbons (PAHs) analysis.

Method: SW846 Method 8270A Nov 1990

Client Sample ID: GW-1 FILTER

Spl#: 211518 *Matrix:* WATER Extracted: October 22, 1998 Sampled: October 19, 1998 Run#: 15557 Analyzed: October 22, 1998

DEPARTMENT

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK DILU SPIKE FAC	
ANALYTE	(ug/L)	(ug/L)	(ug/L)	(%)	
NAPHTHALENE	N.D.	2.0	N.D.		1
ACENAPHTHYLENE	N.D.	2.0	N.D.		ī
ACENAPHTHENE	N.D.	2.0	N.D.	71.3	ī
FLUORENE	N.D.	5.0	N.D.		ī
PHENANTHRENE	N.D.	2.0	N.D.		ī
ANTHRACENE	N.D.	2.0	N.D.		ī
FLUORANTHENE	N.D.	2.0	N.D.		ī
PYRENE	N.D.	2.0	N.D.	101	1
BENZO (A) ANTHRACENE	N.D.	2.0	N.D.		1
CHRYSENE	N.D.	2.0	N.D.		ī
BENZO (B) FLUORANTHENE	N.D.	2.0	N.D.		ī
BENZO (K) FLUORANTHENE	N.D.	2.0	N.D.		ī
BENZO (A) PYRENE	N.D.	2.0	N.D.		ī
INDENO(1,2,3-CD)PYRENE	N.D.	2.0	N.D.		ī
DIBENZO (A, H) ANTHRACENE	N.D.	2.0	N.D.		ī
BENZO (GHD) PERYLENE	N.D.	2.0	N.D.		ī
((		1		•	-
Waland .					

Michael Lee

Analyst

Michael Verona Operations Manager

CLIENT: MCCAM

# C(9/07/61/21)5/8 CLIENT: NCCF McCAMPBELL ANALYTIC REF #: 42698

10/28/98

**USTODY RECORD** 

110 2<sup>nd</sup> AVENUE SOUTH, #L.

PACHECO, CA 94553-5560 TURN AROUND TIME Telephone: (925) 798-1620 Fax: (925) 798-1622 Bill To: MAI Report To: BO HAMILTON **ANALYSIS REQUEST OTHER** Project #: 12737 Project Name: AE-AUSB Project Location: EPA - Priority Pollutant Metals LEAD (7240/7421/239.2/6010) METHOD SAMPLING MATRIX PRESERVED EPA 625/8270 PAH'S EPA 608/8080-PCB's only **COMMENTS** ORGANIC LEAD # Containers LOCATION SAMPLE ID EPA 602/8020 EPA 601/8010 Date Time EPA 608/808 Soil Air Sludge Other Ice HCI HINO<sub>3</sub> 6W-1 10/19/98 1245 ZLTR. 97351 Relinquished By: Time: Received By: Date: Remarks: Maria R. Venegas 10/21/18
Relinquished By: Date: Received By: 10/2/93 1905
Received By: Time: Relinquished By: Date: Time:

12737 x A33

				127				<u> </u>																									
	McCA					INC						1					Cŀ	ΙA	ΙN	$\overline{\mathbf{O}}$	F(	CŪ	ŜΊ	Ō	D١	7 F	(EC	$\overline{CO}$	RD	)			
		110 2 <sup>nd</sup> A' PAC'11	VENUE SC ECO, CA !		#D7									TU	RN	AR	ROI	JN	D I	ΓIN	1E			1		Ţ	ב			3		Ø	i
Telephor	ne: (510) 798			, 1335	F	ax: (5	10) 7	98-16	522														RU	SH	2			JR	48 F	IOL	JR 5		
Report To:		·	Ē	ill To		····	<u> </u>					╁					Ana	lysi	s Re	eque	est				-		Г	Otl			Com		
Company: Artesian	n Environmer	ntal							-			1	T				Т	Í	T	Ī	T	1					<del>                                     </del>			一			_
229 Te	wksbury Ave	nue										1		Grease (5520 E&F/B&F)		ŀ			ł		.									j	i		
Point R	ichmond, CA	94801				•					. "-"	MTBE		Z.F/E		1						ୁ	- 1								i		
Tele: (510) 232-28			F	ax: (5	10) 2	32-28	23					Ž		0 E	£	- 1		ı				8	1							- 1	ı		
Project #: 378 -	002-01		P	roject	Nam	ie: A	Iban	u L	SD			80 50 50 50		552	418	- 1		1		ł		270											
Project Location:	603 Keu K	Porto B	ludy 1	41ban	LY			<del>, .</del>				1 +		ase (	Suo		1 g	l	겁			2/8	l	ļ	(0)								
Sampler Signature:				_								2/8020		8	carb		27.8		ő	-		62			/601						i		
		SAMI	PLING		S	N	1ATR	JX	М	ETH	OD	18	3			1	8	-	S, E	8	- }	싎	- {	-	39.2		1			ļ	l		
			·	22	iner		1		PRI	ESER	$\overline{}$	- Ş	8	일	Ξ	0	<u>a</u>	ا و	9 P	٣		s by	2	ی	21/2		1				!		
SAMPLE ID	LOCATION			Containers	Type Comtainers			į	1		S	Æ	TPH as Diesel (8015)	Total Petroleum Oil	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)		1				i		
		Date	Time	nta	ပ္ပ			80 F		ير ا	Other #3	] ¦	O SI	Petr	Pet	5	<u></u>	8	808	24/	25/	<u>-</u>	5	5	724						i		
		į		ပိ	ğ	Water	Air	Sludg	Ice	HCI	김물	BTEX &	H	gal	gal	¥.	<u>ĕ</u>	Ž	۲	ا کِ	٨	Ĭ	≱∣	표	) pe:	5							
				#	-	P 0	ა   ₹	S	Ĭ	王   p	90	ľ	F	Ľ	ř	<b>⊞</b>	m l	Ξi	Ξ			<u>~</u>	ਹ	5	J.	2							
GW-1		1/14/48	1245	6		X			IX.	XΙ	X	ΊX	ľΧ	X							•	X							12.0				
STrench 45-8		10/14/40	1300	1			ć					1	X	X			X					_		_					<b>199</b>		9/,	35:1	
STrench 45-13		14/19/98	1310	1			( )					1	X 米 米	*		-	XXX				-  -										97.	152 53 54	
WTrench 65-9		10/19/98	1216				X		┨─┤	-		┨╴╴	1		-					-  -	}-								-3				
NO TIENCH DO I		114 148	1010	I		- <u>*</u>	<b>\</b> -		-			-	\rac{1}{2}	<b>^</b>		- 1	egthinspace = 1.5 T	ŀ	İ			ł								Ź	97%	53	
	***				<b> </b>	<b>I</b> ∤-			-			-		-						.		.							1.4		977	<b>5</b> /*	Ø.
	··				<b> </b>				1_									.  .	.	.								_	3. 3.				
1				<u> </u>	<u> </u>							.]	ļ				_				_ [	[		_								Bar Line	
									1			1												_									
						$\Pi$	$\top$					Ţ	1				_			-		-			-		1	-			-		_
·-, ·, ·-					<u> </u>			*				1		-				[			-			-			-						_
		<u> </u>		<b></b> -			$\dashv \dashv$	_		+	1		-			[	-	- }		-	-				<b></b> .								
	\ <del>_</del>				<b> </b> -		+	-	+		_	<del> </del>	ļ							_				VUA		kG .	MEH	ĦZ	DTHE	R_		<i>-</i>	
<del></del>	,				<u> </u>	<u></u>	$\perp$			$\dashv$			CE/H			_			<b>,</b>	<u> </u>	SER'	YA]	<u>0N</u>		1			Ш		_			
					<b> </b>							[	1000	<u>CU</u>	MDIT	ION.	$\equiv$			APF	RCP	RIA	E										
													EAD	SPA	CE A	BSE	NIL	4		CQì	ITAI	VEI)	S				Ì						
																					_	_											
Relinguished By:	-> J	Date:	Time:	Rece	ived B	y:		1/ -	<del></del>		1	R	ema	rks:		<u> </u>			!_			!	!		1		·			L			
// \/		10/ 120/48	912	41	NG	C/ L	517	57	(n)	3(4)	cred		1	٥	1		low	ے م		t	5	_	a l	/	и	//	a	20	1110	40	<u>s</u> .		
Relinquished By:	4	Date:	Time:		ived B		<u> </u>					1	V	-	~	~	, U = () ,	C		u	í		0	ι	- 0	(		- 1 - 1	7				
Jugt Fred	7/>	pc-se	1312-	Ma	314	10	21	~~	ز مید					To	~	، ڪ	e i		S	Zm	pl	ر_	5										
Relinquished By:		Date:	Time:		ived B		~	nin	jur	<u>-</u>		1	2							V									lyg				
												17	32	0 1	LA H	12	1	3/2	1/	00	_	٦.	. 1										
		<u></u>	<del></del>	<u> </u>								<u> </u>	<u> </u>	3	· · · <u>U</u>	<u>-                                    </u>	<u>.                                     </u>	ା ବ	٠٠/١	70	<b>5</b> /	'W	ч										

110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com/E-mail: main@mccampbell.com/

Artesian Environmental	Client Project ID: #378-002-01; AVSD	Date Sampled: 10/22/98
229 Tewksbury Avenue		Date Received: 10/23/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/23/98
	Client P.O:	Date Analyzed: 10/23/98

10/30/98

Dear Paul

Enclosed are:

- 1). the results of 10 samples from your #378-002-01; AVSD project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Artesian Environmental	Client Project ID: #378-002-01; AVSD	Date Sampled: 10/22/98
229 Tewksbury Avenue		Date Received: 10/23/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/23-10/28/98
	Client P.O:	Date Analyzed: 10/23-10/28/98

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline\*, with Methyl tert-Butyl Ether\* & BTEX\*

EPA meth	EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)												
Lab ID	Client ID	Matrix	TPH(g)⁺	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate				
97622	CSP-1	s			ND	ND	ND	ND	105				
97623	CSP-2	s			ND	ND	ND	ND	106				
97624	CSP-3	S			ND	ND	ND	ND	107				
97625	CSP-4	S			ND	ND	ND	ND	103				
97626	CSP-5	S			ND	0.007	0 013	ND	107				
97627	CSP-6	S			ND	ND	0.011	ND	99				
97628	CSP-7	S			ND	ND	0.007	0.006	104				
97629	CSP-8	S			ND	ND	ND	ND	103				
97630	CONP-1a-d	S			ND	ND	ND	ND	109				
97631	CONP-2a-d	S			ND	ND	ND	0.063	105				
	g Limit unless se stated; ND	W	50 ug/L	5.0	0.5	0.5	0.5	0.5	A Dick and any or the second				
means not	detected above porting limit	s	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005					

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

<sup>&</sup>quot;cluttered chromatogram; sample peak coelutes with surrogate peak

<sup>\*</sup>The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant, h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com/E-mail: main@mccampbell.com/

Artesian Environmental	Client Project ID: #378-002-01, AVSD	Date Sampled: 10/22/98
229 Tewksbury Avenue		Date Received: 10/23/98
Point Richmond, CA 94801	Client Contact: Paul Jones	Date Extracted: 10/23/98
	Client P.O:	Date Analyzed: 10/26-10/29/98

### Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel \*

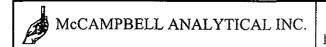
EPA methods modified 8015, and 3550 or 3510; California RWOCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) <sup>+</sup>	% Recovery Surrogate
97622	CSP-1	s	2.0,g	101
97623	CSP-2	S	26,b,g	101
97624	CSP-3	S	250,c,g	102
97625	CSP-4	S	ND	100
97626	CSP-5	S	2600,b,g	109
97627	CSP-6	S	990,b,g	109
97628	CSP-7	S	210,b,g	89
97629	CSP-8	S	2.7,g	89
97630	CONP-1a-1d	S	430,b,g	105
97631	CONP-2a-d	S	180,b,g	104
	unless otherwise	W	50 ug/L	
	not detected above ting limit	s	1.0 mg/kg	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

<sup>\*</sup> cluttered chromatogram resulting in coeluted surrogate and sample peaks, or, surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.



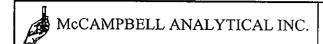
110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

Artesian En	vironmental			Date Sampled: 10/22/98				
229 Tewksb		Client	Project ID: #378-002-01; AVSD	Date Received: 10/23/98				
	ond, CA 94801	Client	Contact: Paul Jones	Date Extracted: 10/23-10/26/98				
		Client	P.O:	Date Analyzed: 10/23-10/26/98				
EPA methods 4			Dil & Grease (with Silica Gel Clea ods 5520 D/E&F or 503 D&E for solids and	* /				
Lab ID	Client ID	Matrix		Grease*				
97622	CSP-1	S	3	380				
97623	CSP-2	S		520				
97624	CSP-3	S	2	200				
97625	CSP-4	S	1	ND				
97626	CSP-5	S	2	600				
97627	CSP-6	S	3	000				
97628	CSP-7	S	1	300				
97629	CONSP-1a	S		ND				
97630	CONP-1a-d	S	[,	300				
97631	CONP-2a-d	S	4	40				
		·						
tated; ND mea	nit unless otherwise ns not detected above	W	5 r	ng/L				
the rep	oorting limit	S	50 r	ng/kg				

mg/L

DHS Certification No. 1644	DHS	Certification	No.	1644
----------------------------	-----	---------------	-----	------

h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5vol % sediment.



110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

Artesian En	vironmental	Client	Project ID: #37	78-002-01; AVSD	Date Sampled:	10/22/98
229 Tewkst	oury Avenue				Date Received:	10/23/98
Point Richn	nond, CA 94801	Client	Contact: Paul J	ones	Date Extracted:	10/23/98
		Client	P.O:		Date Analyzed:	10/26/98
EPA analytical	methods 6010/200.7, 23	9.2 <sup>+</sup>	Lea	nd*	-	- (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Lab ID	Client ID	Matrix	Extraction °	Lea	ad*	% Recovery Surrogate
97630	CONSP-1a-d	S	TTLC	ı	0	102

TTLC

TTLC

STLC,TCLP

S

W

3.0 mg/kg

0.005 mg/L

0.2 mg/L

Reporting Limit unless otherwise stated; ND means not detected above

the reporting limit

<sup>\*</sup> soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L

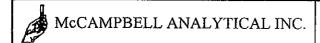
\*Lead is analysed using EPA method 6010 (ICP) for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water

e EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC - CA Title 22

<sup>\*</sup> surrogate diluted out of range; N/A means surrogate not applicable to this analysis

A reporting limit raised due matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations



110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone : 925-798-1620 Fax : 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com

Artesian En	vironmental	Client P	roject ID: #378-002-01	; AVSD	Date Sampl	led: 10/22/98
229 Tewksb	ury Avenue				Date Receiv	ved: 10/23/98
Point Richm	ond, CA 94801	Client C	ontact: Paul Jones		Date Extrac	cted: 10/26/98
		Client P	.O:		Date Analy	zed: 10/26/98
California Title	RCI ( 22, Section 66261.21-662	(Reactivity 261.23	y , Corrosivity & Igni	tability) fo	r Solids	- 1988 to a
Lab ID	Client ID	Matrix	Reactivity <sup>+</sup>		osivity# @_°C)	Ignitability <sup>6</sup>
97630	CONSP-1a-d	S	negative	7.70	@ 23°	negative
97631	CONSP-2a-d	S	negative	6.87	@ 22 <sup>0</sup>	negative
					-	

11/	Edward	Hamilton,	Lah	Director
111	Edward	nammon,	Lao	Director

<sup>\*</sup> negative means no obvious reaction with water, no evolution of gas upon contact with water, appears to contain no reactive cyanide or sulfide (<~5 mg/kg cyanide and 50 mg/kg sulfide by EPA SW-846, chapter 7, modified), and shows no indication of explosivity.

<sup>&</sup>quot; EPA method 9045; pH =  $-\log(a_{H+})$  @  $_{\circ}^{\circ}$ C;  $\pm 0.1$  units

enegative for a soil means the absence of spontaneous combustion and the absence of flammability upon exposure to a naked flame.

#### QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/23/98-10/24/98 Matrix: SOIL

	Concent	ration	(mg/kg)	1	% Reco	very	
Analyte	Sample  (#90401) 	MS	MSD	Amount     Spiked   	MS	MSD	RPD
TPH (gas) Benzene	0.000	2.103 0.208	2.180	2.03	104	107	3.6
Toluene Ethylbenzene	0.000	0.214	0.228 0.236 0.228	0.2   0.2   0.2	104 107 103	114 118 114	9.2 9.8 10.1
Xylenes	0.000	0.612	0.228	0.2	103	110	7.8
TPH(diesel)	0	316	314	300	105	105	0.7
TRPH (oil and grease)	0.0	22.2	22.1	   20.8   	107	106	0.5     

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD)  $\times$  2  $\times$  100

## QC REPORT FOR HYDROCARBON ANALYSES

Date:

10/26/98-10/27/98 Matrix: SOIL

	Concent	ration	(mg/kg)	1	% Reco	very	
Analyte	Sample			Amount			RPD
<u> </u>	(#90401) 	MS	MSD	Spiked	MS	MSD	
		······································					
TPH (gas)	0.000	1.835	1.864	2.03	90	92	16
Benzene	0.000	0.196	0.204	0.2	98	102	4.0
Toluene	0.000	0.198	0.208	0.2	99	104	4.9
Ethylbenzene	0.000	0.202	0.208	0.2	101	104	2.9
Xylenes 	0.000	0.604	0.624	0.6	101	104	3.3
TPH(diesel)	0	342	341	300	114	114	0.5
TRPH (oil and grease)	0.0	22.3	21.8	20.8	107	105	2.3

% Rec. = (MS - Sample) / amount spiked x 100

RPD =  $(MS - MSD) / (MS + MSD) \times 2 \times 100$ 

## QC REPORT FOR ICP and/or AA METALS

Date: 10/26/98-10/27/98

Matrix: SOIL

Extraction:

TTLC

	Concent	ration			% Reco	very	
Analyte	(m	g/kg,mg/	L)	Amount			RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Total Lead	0.0	5.04	5.17	5.0	101	103	2.6
Total Cadmium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Chromium	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Nickel	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Zinc	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Copper	N/A	N/A	N/A	N/A	N/A	N/A	N/A
STLC Lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\* Rec. = (MS - Sample) / amount spiked x 100

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$ 

<b>/</b> b	ed	1514	10 =	>						\r\{	·]-		5 M	10=	2							:.	ved By	Кесе	:əmiT	Date:		linquished By:
E-AZMOD &	e - d e - d e - d 50	15N 15N 15A	102 103 103			1-0	150	/0J	< ?			- d - d	310 3N	10						· A	2.2	:	ved B	уссе	Time:	Date:		linquished By:
; 5000)104 50	50	gd	mi	06		9/	1/5	ad	mc	9	12	<b>75</b> 1	ァァ	eng	7						2		M bevi	Бесе	Time: 24:8	£2-0/ Date:	110	linquished By:
Sent Co.																					$\sum$			1	E3:6	186/11/0		16-92NG
Mar (Programme)								_ _	_	_			_					ļ				<		1	Strie	Sattle		98-05NG
<b>€</b> 9 08926 €		X			].					X			X	X		_		_		_		<u></u>			Still	86/22/01		VC-09N
						[.	.			-			_			1	_			_	X			<u> </u>	176.6	BUTCHU		DI-97/
62926		-	-	-		ĺ	-	}-								1	-	_		_	-K	<u> </u>		1	11.21	05/240		U -63V
News	<u></u>									~	<b></b>		_			-		┼-			+	<u> </u>		1	10.2	04/1/2	<b>/</b>	91-950
9746	g 2				-	-		-				<u></u>	$\bigcirc$	$\Delta$		$\dashv$	_				>			1	9/1:01	05/7/10	<u> </u>	101-25NO
£ £ 2926	Ž	^	X				-  -	-	-	\{\hat{x}				$\geq$		$\dashv$	$\perp$	-	$\vdash$		\ \ \ \	}		<u>'</u>	1001	30/00/	<u></u>	07-03 40
				-		-				4			$\hat{\mathbf{x}}$	<del>*</del>				┼-	$\vdash$	-	-5			- 1	2001	1, 4 / X	]	200
97976					-					X			ν			-		-	$\left  - \right $		$- \hat{\chi} $			1	1500	35/02/0	1	C~16
92926							-  -	.		X	-	-	À	¥ V		$\dashv$		+-	-		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			<u> </u>	1.51	Bacel		5-15
		-			ĺ					X			X	Î.	-			┼-	-		X			1		BEICELO	1	7000 5015
77876	4		-		-	-	-		-				$\mathbf{\hat{x}}$	$\hat{\mathbf{y}}$		+	+	十			-3				E 611	85/00/0		2-05
67873								-	- -	X			X	$\hat{\mathbf{x}}$		-	+	╁		-	7			Ì	Een	Bojecjo	'! 	-05
		75			$\overline{}$	굯	П	m	7 0	+	<u> </u>		$\overline{}$		- B			1		· (Δ)	<del></del> -	<del></del>		211-	1 20 //	1		1 05
6 <b>2925</b>		RCI	Lead (7240/7421/239.2/6010)	LUFT 5 Metals	CAM-17 Metals	PAH's / PNA's by	EPA 625 / 8270	EPA 624 / 8240 / 8260	EPA 608 / 8080 PCB's	BTEX ONLY (EPA 602 / 8020)	EPA 601 / 8010	Total Petroleum Hydrocarbons	Total Petroleum Oil &	TPH as Diesel (8015)	BTEX & TPH as Gas (602/8020 +	Other	HNO.	Ice	Other	Sludge	Air	Water	Type Comtainers	# Containers	əmiT	Date	LOCATION	2VMbre id
			1/239			by E		/82	PCH	EPA		Ну	일	8015	Gas (c		SERV		7	KIX.	TAI	N.	CIS		DNI	IAMAS		
			2/60			EPA 625 / 8270	ĺ	8	Ω	602 /		rocar	S C		02/30	(1)	J.I.T.	. FV	ł				<u>.                                    </u>	5	<del>'</del>	22		:51utsagi2 15lqni
141,			ē		1	25/8			ONLY	8020		bons	Grease (5520		20 + 8							97			, v	यश	es 603	oject Location:
/M												(418.1)	5520		8015)V				4	<u> 21</u>			Name			10		
12002		1	1			/8310			1			=			умтве						٤٤	86-6	10) 23	5) -x	<u>हर्</u>	10046	ichmond, CA	:1e: (510) 232-282
Sonon 1													E&F/B&F)		Ü								•				легорования и роспорожения общения общения общения общения общения общения общения общения общения общения общ Настроиться общения общения общения общения общения общения общения общения общения общения общения общения общ	
		<u> </u>											J													Įe.	Environment	ompany: Artesian
1et Comments		<u></u>					isən	Red	sisy	IsnA									~	0.61	75.	<u> </u>		oT II	Βij			ToT hod
YAG & SUOH 84			7				~~ Y 4 7	T ¥ .	~*	201	YY 7	. T. Y	ο·					Z	۲91 <i>-</i>	864	101	ς) :x	г <u>Ч</u>	£\$\$:	CO. CA 94		-867 (012) :9 <sub>1</sub>	nodasisT
RD 149e 10t2	Ϳ ϼϹϹ		1 ~	J TO		า <i>^</i>	NE.	ノ Y i ITT (	UNI		<b>58</b> 3	捌	怮	7	ス	_TV	3S8A	VCE	AS O	HEV		~ · · ·		ŧ ,HTt	ENCIE 2OC	IΛV <sub>pu</sub> Z 0		
1030 And 1980 19	ECO X 7	1 3	<u>717</u>		<u>ار</u> د.	1J	<u>)t</u>	ノハ	1 V	<u>п</u>	1141	HON	<del>14</del> 7	-	J				<del>))) ()</del> (	<del>000</del>		ואנ	147	)I.L./	7.1AVA	LIAR	MADoM	
نا من بصب	<u></u> _	Ŧ,	3 W	اب! 		$\perp$				N	OIIV	ZEBA	389		-			^	•	ICE\								

 $f^* A$ 

CHAIN OF CUSTOD'S TECH McCAMBELL ANALYTICAL INC.  $\Box$ TURN AROUND TIME 110 2<sup>nd</sup> AVENUE SOUTH, #D7 24 HOUR 48 HOUR 5 DAY RUSH PACHECO, CA 94553 Fax: (510) 798-1622 Comments Telephone: (510) 798-1620 Other Analysis Request Bill To: Report To: Paul Total Petroleum Oil & Grease (5520 E&F/B&F) Company: Artesian Environmental 229 Tewksbury Avenue PAH's / PNA's by EPA 625 / 8270 / 8310 BTI:N N TPH as Gas (602/8020 + 8015) MTBE Point Richmond, CA 94801 Total Petroleum Hydrocarbons (418.1) Fax: (510) 232-2823 Tele: (510) 232-2827 Project Name: AUSD HTEN ONLY (EPA 602 / 8020) Project #: 378 -002-01 HI A 608 / 8080 PCB's ONLY 1,cml (7240/7421/239.2/6010) Albany Key Rie. Project Location: 603 EPA 024 / 8240 / 8260 Sampler Signature: METHOD PRESERVED TP11 us Diesel (8015) **MATRIX** SAMPLING Type Comtainers EPA 601 / 8010 ('AM-17 Metals 1317 025 / 8270 1,111" 5 Metals CITA (108 / 8080 # Containers LOCATION SAMPLE ID Air HCI Other Office Time Water Date 12 Soil Ice CONSP-20 Remarks: Received By: Time: Date: Relinquished By 15:HS 10-23 Received By Time: Date: Relinquished By: Received By: Time: Date: Relinquished By:

# APPENDIX E: TABLES

TABLE 1: EXCAVATION SOIL AND GROUNDWATER SAMPLE RESULTS

Albany Unified School District 603 Key Route Boulevard Albany, California

Sample	Sample	TPH-d	TPH-g	TPH-og	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PAH	
Location	Date	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
								· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u></u>	
CS-East	10-14-98	100	11	460	ND	ND	ND	0.057	ND	All ND	
CS-West	10-14-98	1,100	74	2,400	ND	0.031	ND	0.330	ND	NA	
CS-North Wall	10-14-98	1,300	NA	760	ND	0.036	ND	0.380	NA NA	NA	
WTrench 65-13	10-16-98	2,500	NA.	14,000	ND	0.067	ND	0.790	NA NA	NA NA	
WTrench 65-9	10-19-98	280	NA	450	ND	ND	0.008	0.028	NA.	NA	
STrench 45-8	10-19-98	350	NA	460	ND	ND	ND	0.013	NA.	NA	
STrench 45-13	10-19-98	1,400	NA	1,100	ND	0.021	ND	0.230	NA NA	NA NA	
GW-1*	10-19-98	920 μg/L	ND	ND	ND	ND	ND	ND	ND	All ND	

NOTES:			
TPH-g	Total Petroleum Hydrocarbons as gasoline	mg/Kg	milligrams per kilogram (ppm)
TPH-d	Total Petroleum Hydrocarbons as diesel	μց∕Ն	micrograms per liter (ppb)
TPH-og	Total Petroleum Hydrocarbons as oil and grease	ND	Not Detected (above reporting limit)
MTBE	Methyl Tertiary Butyl Ether	NA ·	Not Analyzed
PAH	Polynuclear Aromatic Hydrocarbons	ppm	parts per million
*	Groundwater sample resuits reported in µg/L	ppb	parts per billion

TABLE 2: STOCKPILE SOIL SAMPLE RESULTS
Albany Unified School District
603 Key Route Boulevard

Albany, California

Sample	Sample	TPH-d	TPH-og	Benzene	Toluene	Ethylbenzene	Xylenes	Lead	RCI*	
Location	Date	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg		
			<u></u>							
CSP-1	10-22-98	2	380	ND	ND	ND	ND	NA	NA	
CSP-2	10-22-98	26	620	ND	ND	ND	ND	NA	NA	
CSP-3	10-22-98	250	2,200	ND	ND	ND	ND	NA	NA	
CSP-4	10-22-98	ND	ND	ND	ND	ND	ND	NA .	NA	
CSP-5	10-22-98	2,600	2,600	ND	0.007	0.013	ND	NA.	NA	
CSP-6	10-22-98	990	3,000	ND	ND	0.011	ND	NA .	NA	
CSP-7	10-22-98	210	1,300	ND	ND	0.007	0.006	NA NA	NA	
CSP-8	10-22-98	2.70	ND	ND	ND	ND	ND	NA NA	NA	
CONSP-1	10-22-98	430	1300	ND	ND	ND	ND	ND	Acceptabl	
CONSP-2	10-22-98	180	440	ND	ND	ND	0.063	NA	Acceptabl	

NOTES:			
TPH-d	Total Petroleum Hydrocarbons as diesel	mg/Kg	mılligrams per kilogram (ppm)
TPH-og	Total Petroleum Hydrocarbons as oil and grease	ppm	parts per million
RCI	Reactivity, Corrosivity, and Ignitability	ND	Not Detected (above reporting limit)
2/4	Samples tested negative for reactivity and ignitability with pH near neutral (7)	NA	Not Analyzed