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**Soil and Groundwater Investigation**

**Site at**

**4919 Tidewater Avenue  
Oakland, CA**

**prepared by**

**Gen Tech Environmental, Inc.  
1936 Camden Avenue, Suite 1  
San Jose, California**

95124

May 17, 1994  
Project No. 9344

DiSalvo Trucking  
660 Mariposa Street  
San Francisco, California 94107

Attn: Mr. Charles Lawler

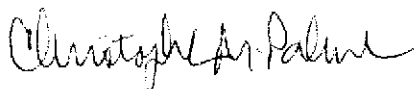
Re: **Soil and Groundwater Investigation**  
**Site at 4919 Tidewater Avenue, Oakland, CA**

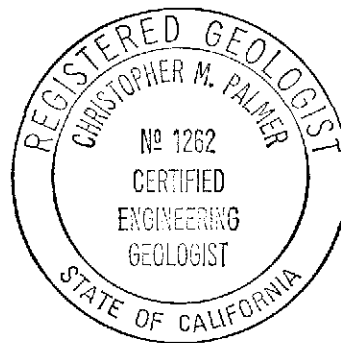
Dear Mr. Lawler,

Gen Tech Environmental, Inc. has completed the Soil and Groundwater Investigation for the above referenced site. Please call if you have any questions.

Sincerely,  
Gen Tech Environmental, Inc.

  
Stuart Solomon  
Principal

  
Christopher M. Palmer  
C. E. G. 1262



attachments

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## Introduction

Four underground storage tanks and product line piping were removed in 1989 by Gen Tech Environmental, Inc. (GTE) (see Figures 1 and 2). At that time, significant diesel fuel contamination (both dissolved and separate phase) was observed and an interim cleanup of soil and groundwater was performed. Also, a previously unknown pipeline (suspected to be a petroleum refinery line) was discovered, which leaked petroleum into the open excavation. Excavated soil was treated by biologic degradation techniques, and left on-site. Due to financial distress, further site investigation was not performed until this study. A summary report of the previous work was prepared and submitted to the Alameda County Health Services, Department of Environmental Health by GTE (1994).

## Field Activities and Methods

Fourteen exploratory borings were drilled at the locations shown on Figure 2. Three boreholes were converted to groundwater monitoring wells. The boreholes were drilled with truck mounted hollowstem auger drilling equipment. All drilling equipment and sampling tools were cleaned prior to arriving, and before leaving the site. The augers were advanced to the desired sampling depth interval, and a drive split spoon sampler driven ahead of the drill bit. The sampler was then retrieved and disassembled, and the soil filled brass liner was sealed with Teflon® paper and plastic endcaps, labeled, logged onto chain-of-custody forms and placed in a chilled ice chest.

The boreholes were logged using the Unified Soil Classification System under the supervision of a registered geologist using the attached GTE Sampling Protocol (see Appendix A and B). Additional lithologic information was collected to describe the subsurface geology. Soil samples were field tested using a modified Handy Field Analytical Laboratory Test, which is a quantitative colorimetric test for the presence of hydrocarbons. Upon completion of the borehole drilling and collection of information, the boreholes not converted to monitoring wells were backfilled with cement grout, placed from the bottom to top of the borehole.

## Monitoring Well Installation

Three monitoring wells were installed using the attached GTE Protocol. The wells were cased with Sch. 40 PVC casing threaded together; glues were not used. The slotted interval was a 0.020 inch slot and the annular space around the slots backfilled with a 2/12 size sand. Previous experience has shown this to be a reliable well design in fine grained and stratified depositional environments. Final well design was modified to the site specific conditions encountered in the borehole during drilling. Once the aquifer strata was defined, the casing was lowered to the bottom of the borehole, leaving only a minimal slotted interval above the occurrence of groundwater to observe for floating product. Since groundwater occurs very near the surface at this site, a design compromise was necessary for Alameda County Flood Control and Water Conservation District permit requirements for minimum well annular seals.

The sand pack was placed to a point about two feet above the slots. A bentonite seal was placed atop the sand pack, and a cement grout seal placed atop the bentonite using a tremie line, filling from the bottom to top of the borehole. A traffic rated well head access box and security device completed each well.

### Well Head Survey

All wells were surveyed to mean sea level using a known datum to allow accurate measurements and groundwater gradient to be calculated. The elevation data and groundwater elevation data are presented in Table 1 below and the survey data is attached in Appendix B.

**Table 1. Groundwater Elevation Data**

Well No.	Depth to Grdwtr. (ft)	Casing Elev. (ft.) MSL	Groundwater Elev. ft. MSL
MW-1	1.26	2.68	1.42
MW-2	1.92	3.50	1.58
MW-2 3	1.33	3.15	1.82
Recovery Well	no reading	3.15	no measurement

MSL - Mean Sea Level

### Monitoring Well Development

All monitoring wells were developed to remove the drilling muck, grade the sand pack and provide a more complete hydraulic connection to the aquifer. The well volume was calculated and a number of those volumes will be removed until the water became clear and the amount of sand pumped was minimal. The well will be allowed to recover for at least 72 hours prior to sampling. A log of the development was kept for each well (see Appendix C).

### Borehole Groundwater and Monitoring Well Sampling

Each exploratory boring and monitoring well was sampled. The ground water samples collected from the boreholes were used for a reconnaissance of the size and location of the contaminant plume. The boreholes and wells were sampled using the attached GTE Sampling Protocol. A brief summary of these procedures follows: Each borehole was advanced into the aquifer and temporarily cased. The groundwater entering the borehole was sampled using a clean bailer, and carefully poured into the appropriate laboratory prepared container with minimum cavitation.

Each monitoring well was purged using calculated well volumes based upon the depth to water in each casing. Depth to groundwater measurements were made to the nearest one-one hundredth of one foot, and each well checked for the presence of separate phase product. As each purge

volume was removed, measurements of pH, electrical conductivity and temperature were taken until those parameters stabilize, which is interpreted as aquifer water entering the casing. The sample was carefully collected with a clean bailer and poured into the appropriate laboratory prepared container with minimum cavitation (see Appendix C).

Each groundwater sample was labeled, logged onto a chain-of-custody form, and placed in a chilled ice chest. Upon completion of the borehole sampling, the borehole will be sealed. Upon completion of well sampling, the well was closed and locked and the sampler will move to the next sampling point.

### Subsurface Conditions

Fourteen exploratory soil borings were advanced on-site at the locations shown on Figure 2. The site is located at the fringe of the San Francisco Bay, and the region appears to have been filled to create land and lift the surface roughly 5 feet above the high tide line. The site is underlain by artificial fill, silty clay, silt, clayey sand and peat (in which thin fine grained sand laminae and beds occur). The artificial fill caps the entire site and is assumed to be landfill placed prior to development. The artificial fill may contain concrete, asphalt and gravel and varies from 1- to 3-feet across the site, although locally it may be as thick as 6-feet. Contamination was observed in boreholes EB-1, 2, 3, 4, 6 and 11 and MW-1, 2 and 3. Floating product (1/32nd inch thick) was observed in Well MW-2. A film of floating product was observed in the existing recovery well. The native silty clay, silt, clayey sand and peat underlie the fill and grade into each other laterally and vertically. Reduced vegetation was observed in the underlying clay in rootholes, and may represent the top of the younger Bay Mud.

Groundwater was encountered in each borehole at depths of about 1- to 3.5-feet, and groundwater appeared to be unconfined and to enter the boreholes slowly. The boreholes were advanced to a maximum depth of 12-feet, into a clay strata. Depth to groundwater measurements yielded an estimate of a westerly flow direction, under an estimated gradient of 0.0016. Given the proximity to the bay fringe, tidal changes may affect the site (see Figures 2, 3, 4, 5 and 6).

### Chemical Analysis and Results

Six soil and fourteen groundwater samples were analyzed at a State certified analytical laboratory. Selected samples were tested for the following: Total Petroleum Hydrocarbons as Gasoline (TPHG), Total Petroleum Hydrocarbons as Diesel (TPHD), Benzene (B), Toluene (T), Ethylbenzene (E), Xylene (X), and Oil and Grease (OG) using EPA Methods 3550, 3510/8015, 5030, 5520, 8015, 8020 and 602. The results are attached (see Appendix D) and listed below in Tables 1, 2 and 3.

TABLE 2. SOIL BORING CHEMICAL DATA

Sample No.	TPHG mg/kg	TPHD mg/kg	B -----	T all	E ug/kg	X -----	OG mg/kg
MW#1@C/F	ND	4.4	ND	ND	ND	ND	ND
MW#2@C/F	ND	<del>29,000</del>	ND	ND	ND	ND	<del>29,000</del>
MW#3@C/F	250	150	180	ND	2,100	2,000	ND
EB-3@C/F	ND	ND	ND	ND	ND	ND	ND
EB-5	ND	ND	ND	ND	ND	ND	180
EB-6	ND	2.5	ND	ND	ND	ND	ND
EB-8	ND	ND	ND	ND	ND	ND	ND
EB-11*	ND	7.5	ND	ND	ND	ND	ND

C/F - Contact between artificial fill and native sediments, see boring logs for depth.

\*Reported as CB in Oil and grease results by laboratory

mg/kg - Milligrams per Kilogram

ug/kg - Micrograms per kilogram

TABLE 2. GROUNDWATER CHEMICAL DATA

Sample No.	TPHG ug/l	TPHD ug/l	B -----	T ug/l	E -----	X -----	OG ug/l
EB-1GWS	ND	240	ND	ND	ND	ND	ND
EB-2GWS	2,500	64,000	ND	1.2	ND	ND	100
EB-3GWS	ND	330	ND	ND	ND	ND	ND
EB-4GWS	200	73,000	200	ND	0.80	4.4	38
EB-5GWS	ND	ND	ND	ND	ND	ND	ND
EB-6GWS	94	650	ND	ND	ND	ND	ND
EB-7GWS	ND	ND	ND	ND	ND	ND	ND
EB-8GWS	ND	ND	ND	ND	ND	ND	ND
EB-9GWS	ND	ND	ND	ND	ND	ND	ND
EB-10GWS	ND	220	ND	ND	ND	ND	3.4
EB-11GWS	ND	290	ND	ND	ND	ND	ND
MW-1	ND	ND	ND	ND	ND	ND	ND
MW-2	FP	FP	FP	FP	FP	FP	FP
MW-3	250	7,700	ND	ND	ND	1.2	1.7

FP - Floating Product, monitoring well sample not collected.

ND - Not Detected

mg/l - milligram per liter

ug/l - microgram per liter

## Discussion

The site is located at the fringe of the Bay, and in an area of artificial fill overlying the native bay mud deposits. The diesel was observed to be present on groundwater at a depth of about 3- to 4-feet in 1989 during the initial tank removal and interim site cleanup. Soil excavated and treated at that time is on-site in piles or berms along the front (northeastern corner) and rear (southern fence line) of the site. Aeration and biological treatment of the soil is discussed in previous reports (see Geo-Environmental June, 1989 and Aqua Terra letter of July, 1989) (see Figure 2).

Exploratory boreholes revealed that diesel is present in boreholes EB-2, EB-4, EB-6, EB-10, MW-2 and MW-3 (see Figures 3 and 4). The diesel appears to have spread laterally since 1989, and is present in the fill porosity. Diesel is also present in the existing recovery well and is assumed to have collected in the recovery trench (although direct observations were not made). These contaminants appear in soil samples at the contact between the fill and native soil (which corresponds to a depth of roughly 3 feet (and the occurrence of groundwater) at most locations. Contaminant migration has occurred toward the truck access gate, but overall migration appears very slow. The presence of peat may tend to retard the diesel movement by absorption onto the carbon-rich deposits. The appearance of the diesel is black and oily and is interpreted to have been undergoing some microbial degradation.

A relatively slow groundwater movement is inferred from the groundwater measurement data. Overall site groundwater movement is westerly under a very flat gradient (see Figures 5 and 6). This probably is the cause of the lateral, yet constricted plume movement. Given the location very near the bay fringe, tidal influences may affect flow. The very clayey aquifer strata and artificial fill, appear to have limited downgradient migration of the plume, however lateral and northerly cross gradient spreading of the plume is apparent when compared to the 1989 data. The plume is currently located within site boundaries, except for the eastern edge which is interpreted to be just off-site under Tidewater Avenue.

## Conclusions and Recommendations

Previous work has removed the contaminant sources. Diesel contamination occurs in the artificial fill and at the capillary fringe. Native sediment occurs below roughly three feet, and peat strata occur on the western side of the site. The contaminant plume is located under the site, and appears to have spread laterally since the work done in 1989. The groundwater flow gradient is currently westerly and is very flat. The predominant contaminant is diesel fuel, with minor gasoline and benzene contributions. Plume movement is very slow, although the most elevated concentrations have moved north of the pipeline and tank leak sources. The plume is almost entirely on site, with the exception of the eastern plume edge that is interpreted to be just off-site under Tidewater Avenue.

GTE recommends that the existing product recovery well and trench system installed in 1989 be reactivated. This approach should be effective in capture of the plume, as supported by its previous use. The existing wells should be placed on a quarterly monitoring schedule. The recovery well/trench system and its effectiveness would be evaluated after six months of operation, and modified as needed.



## Limitations

This report has been prepared specifically for the site at 4919 Tidewater Avenue site, and was done according to the State and local agency suggested guidance documents for these investigations. The interpretations, conclusions and recommendations made herein are based on the data and analysis for the soil and water samples collected on-site and should be reviewed in the context of the whole report and previous work at this site. Please note that reports of contamination must be submitted to the agencies in a timely manner. Gen Tech Environmental, Inc. is not responsible for errors in laboratory analysis and reporting, or for information withheld during the course of the study, and no warranty or guarantee is expressed or implied therein.

## References

Gen Tech Environmental, Inc. report dated March 23, 1994 entitled, "Summary Report of Previous Site Activity Di Salvo Trucking, 4919 Tidewater Avenue, Oakland, CA," Project No. 9407, 11 pages with attachments.

Letter dated February 24, 1994, File: 01-0495 and 2198.17, to Mr. Charles Lawlor of DiSalvo Trucking Co. 660 Mariposa Street San Francisco, CA 94107 from the California Regional Water Quality Control Board San Francisco Bay Region, re: Legal Request for Submittal of a Technical Report Resulting from the Alameda County Department of Environmental Health's Pre-Enforcement Review Panel Meeting on January 18, 1994.

Gen Tech Environmental, Inc. letter to Charles Lawlor, dated October 11, 1993 Re: 4919 Tidewater, Oakland, CA-Hydrant Piping Leak Evaluation, 2 pages with attached photographs.

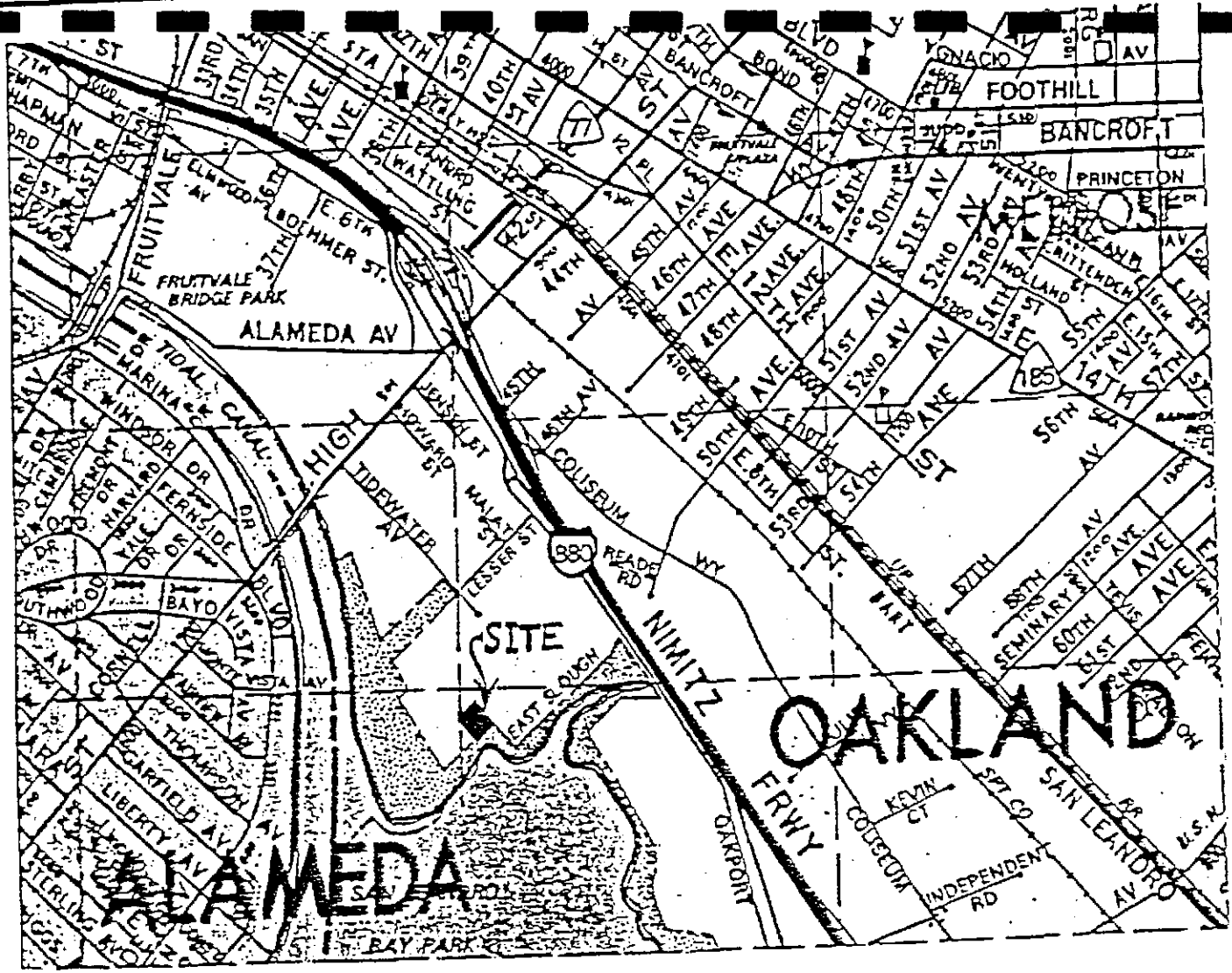
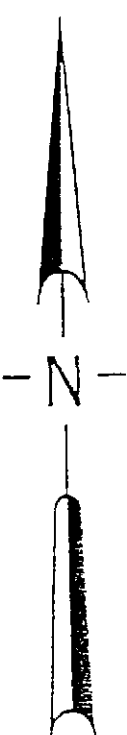
Geo-Environmental Technology Inc., report dated March, 12, 1991, entitled, "Contaminated Site Interim Report."

Aqua Terra Technologies letter to Mr. Stuart Solomon, GET, dated July 7, 1989, re: Stockpiled Soil deSalvo Trucking Oakland, CA, 3 pages with attached chemical data.

Geo-Environmental Technology Inc., report dated June 15, 1989, entitled, "Technical Report Preliminary Investigation."

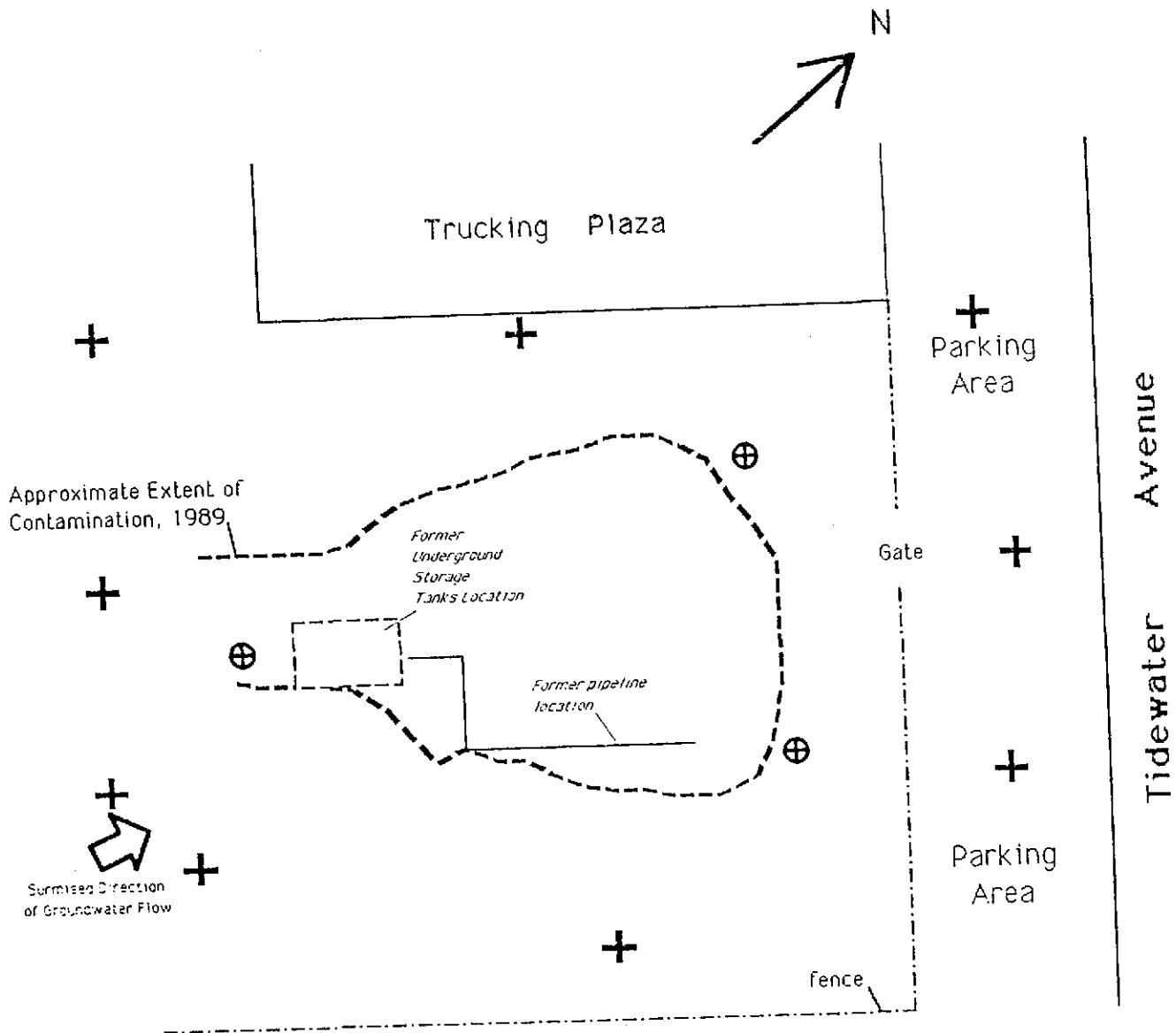
Geo-Environmental Technology Inc., report dated, "Declassification of Contaminated Soil Report."

Geo-Environmental Technology Inc., report dated April 27, 1989 entitled, "Underground Tank Removal Report," 6 pages with attachments.



Base map from Thomas Bros. Map Series

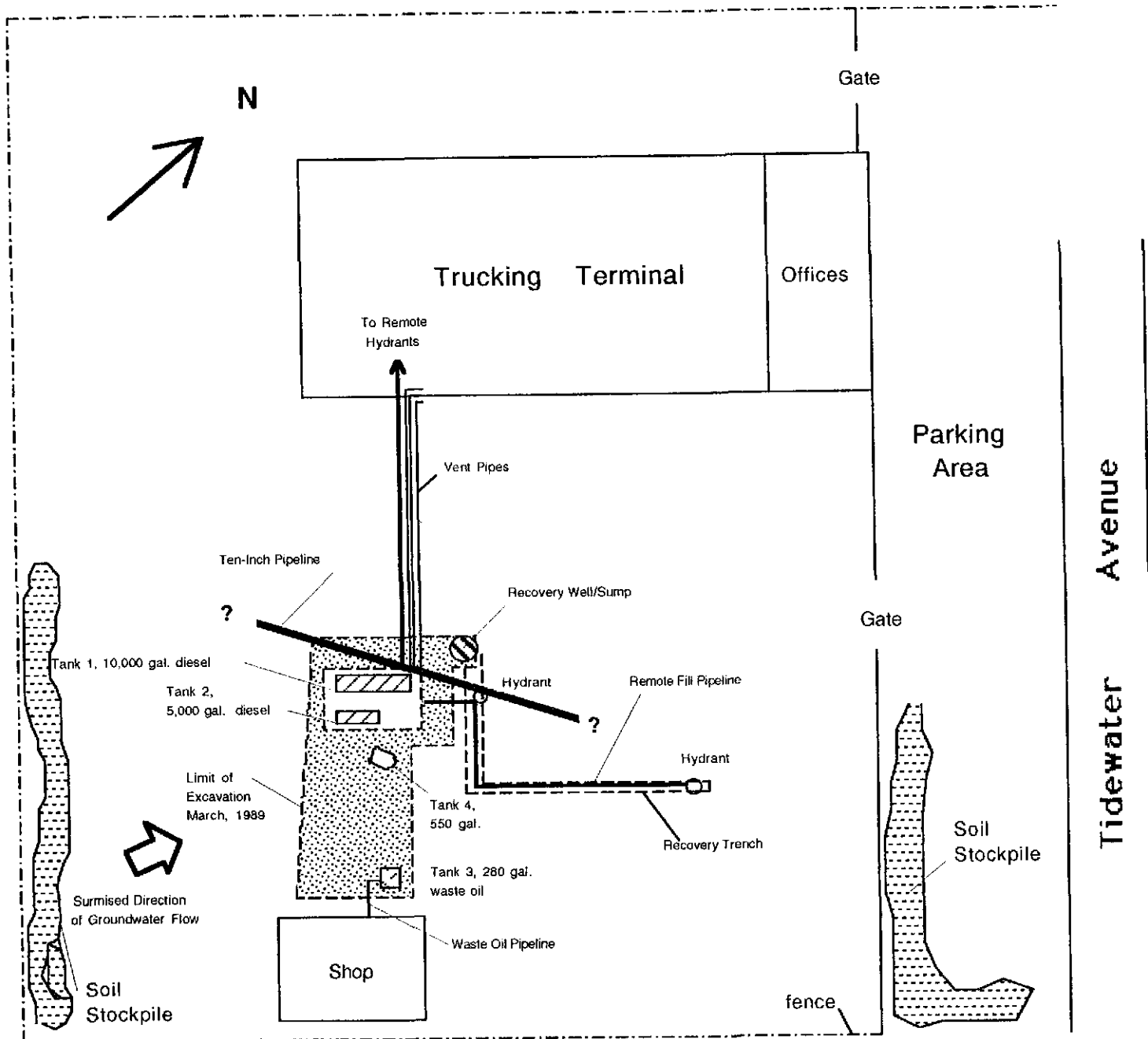
<b>Gen-Tech Environmental</b>		
SCALE: 1"=2200'	VICINITY MAP	DRAWN BY
DATE: 6-10-89		REVISED
DISALVO TRUCKING 4919 TIDEWATER AVENUE OAKLAND, CALIFORNIA		



- ⊕ Proposed Monitoring Well Location
- ⊕ Proposed Exploratory Boring Location

*Gen Tech Environmental, Inc.*  
*San Jose, CA*

Proposed Exploratory Boring and Monitoring Well Locations DiSalvo Trucking 4919 Tidewater Avenue Oakland, CA	Project No. 9344 Scale: 1" = 50' Date: Mar., 1994 Figure 1
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**Notes:** Information presented taken from Geo-Environmental Technology, Inc. June, 1989.

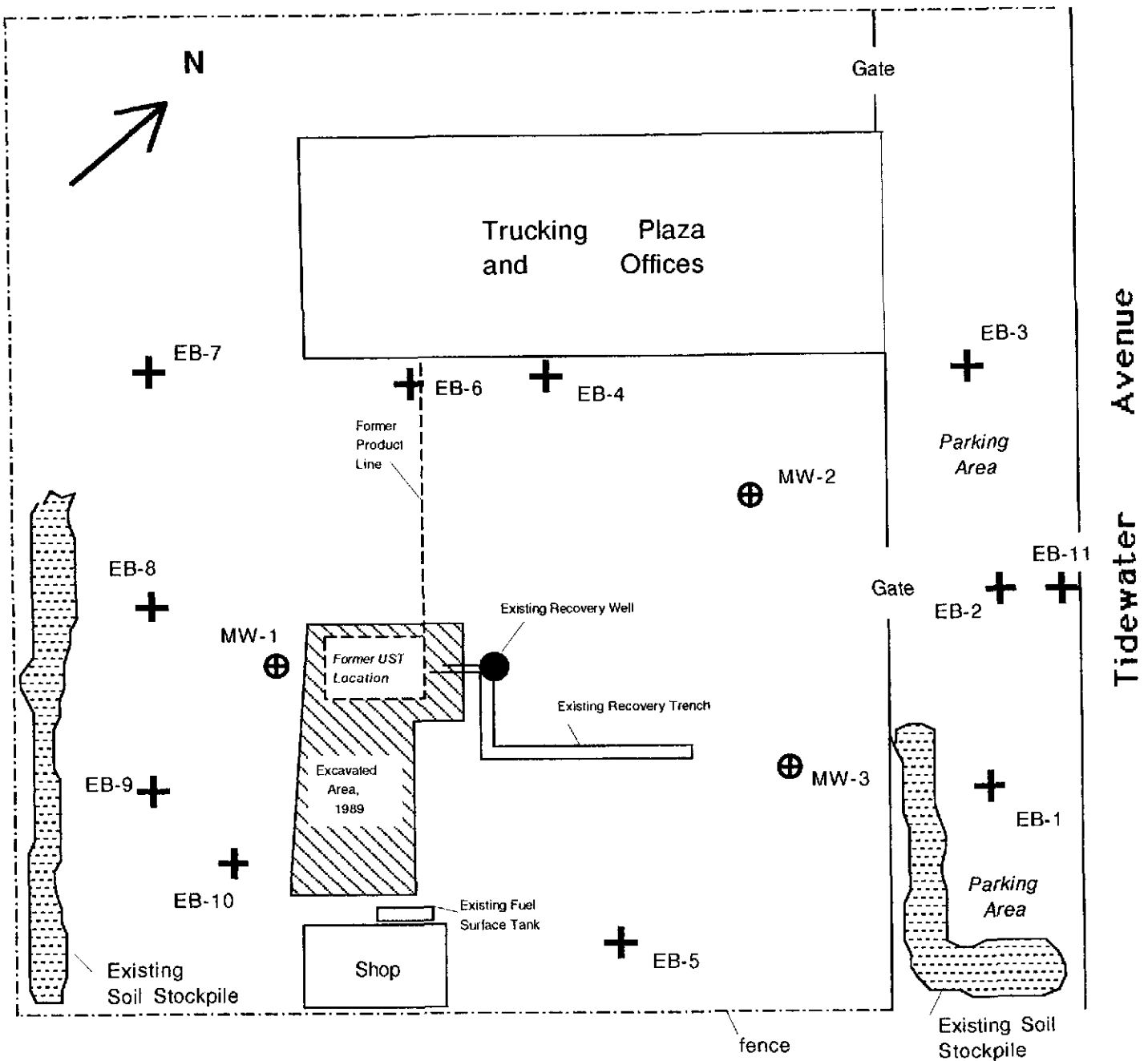
Tank No. 4 discovered during excavation, apparently used for petroleum storage. Ten-inch pipeline discovered during excavation, possible related to oil refinery use in area, original source unknown.

**Site Plan Tank Location and Previous Excavation Map**  
 DiSalvo Trucking  
 4919 Tidewater Avenue  
 Oakland, CA

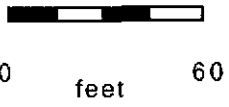
Project No. 9344  
 Scale: 1" = 60'  
 Date: Mar., 1994

Figure 2

**Gen Tech Environmental, Inc.**  
 San Jose, CA



- MW-3 ⊕ Monitoring Well Location
- EB-5 + Exploratory Boring Location

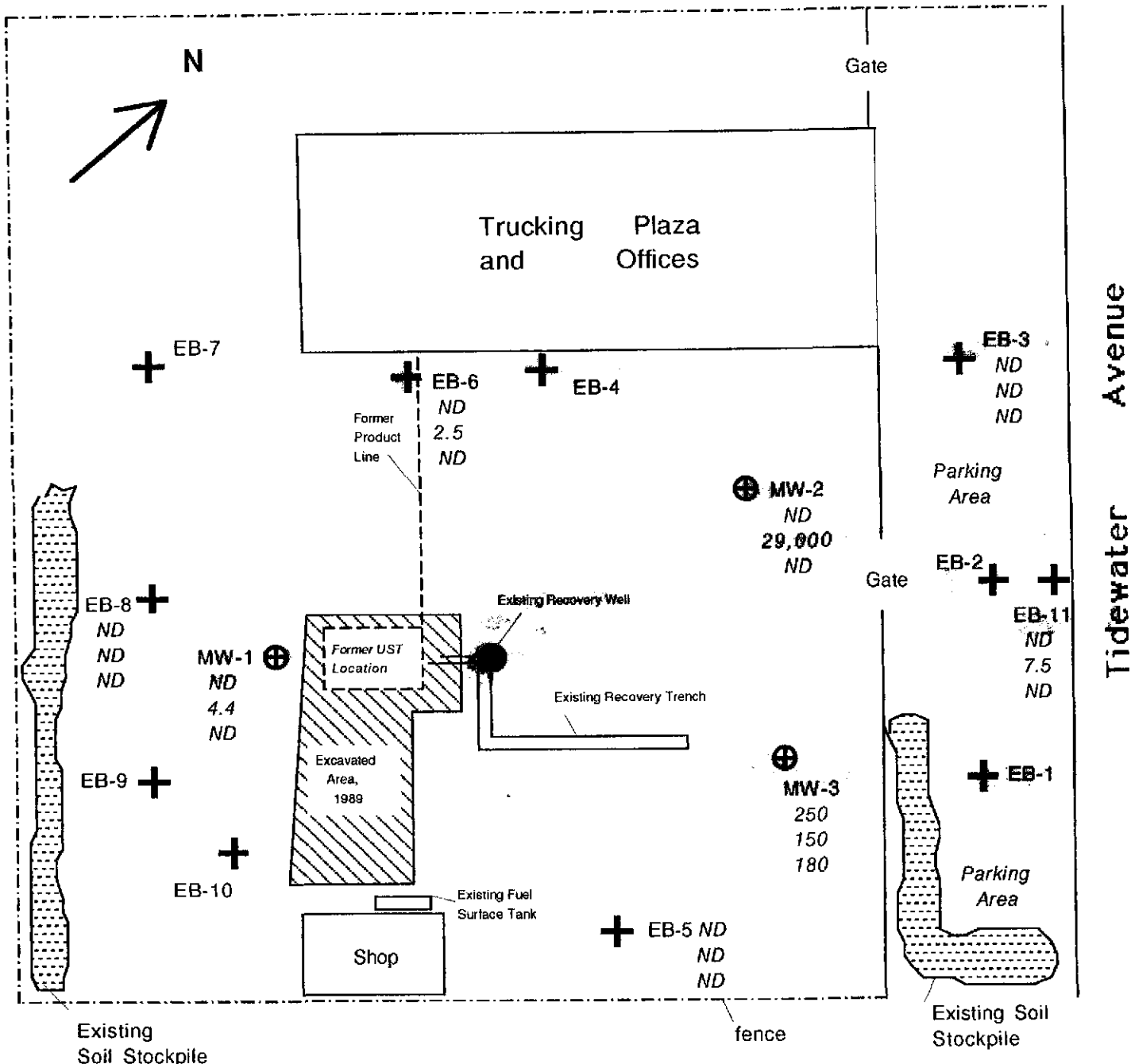


**Gen Tech Environmental, Inc.**  
**San Jose, CA**

**Exploratory Boring and Monitoring Well Locations**  
 DiSalvo Trucking  
 4919 Tidewater Avenue  
 Oakland, CA

Project No. 9344  
 Scale: 1" = 60'  
 Date: Apr., 1994

**Figure 3**



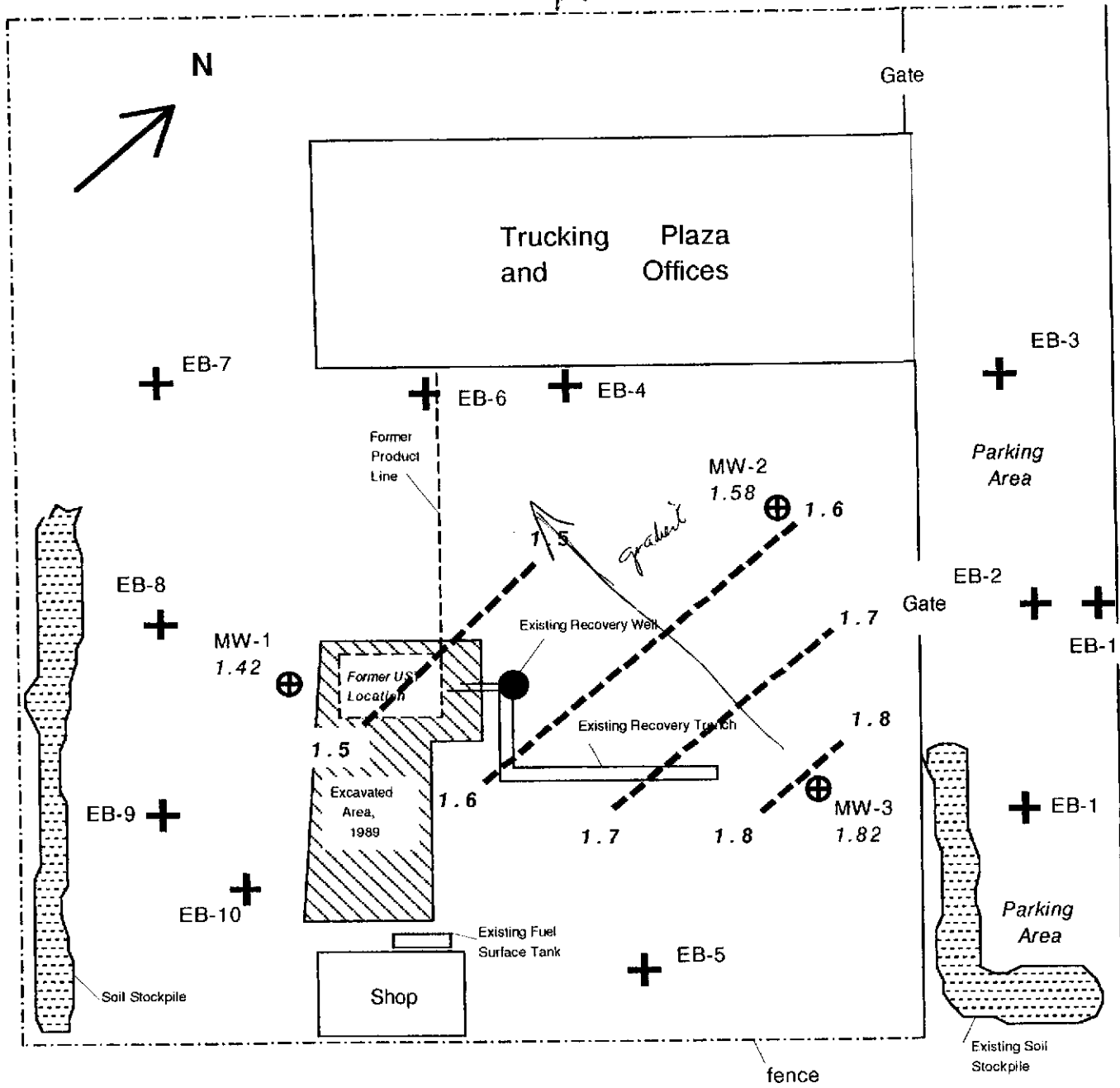
- MW-3 ⊕ Monitoring Well Location 250 -TPH, Gasoline mg/kg  
150 -TPH, Diesel mg/kg
- EB-5 ⊕ Exploratory Boring Location 180 - Benzene, ug/kg

Soil samples collected at the contact of the artificial fill and native soil which corresponds to the capillary fringe

<b>Soil Chemical Results</b>	Project No. 9344
DiSalvo Trucking	Scale: 1" = 60'
4919 Tidewater Avenue	Date: Apr., 1994
Oakland, CA	<b>Figure 4</b>

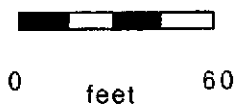
**Gen Tech Environmental, Inc.**  
San Jose, CA

*gradient  
F. 0.03*



MW-3  
1.82 ⊕ Monitoring Well Location,  
Groundwater Elevation in feet

+ Exploratory Boring Location



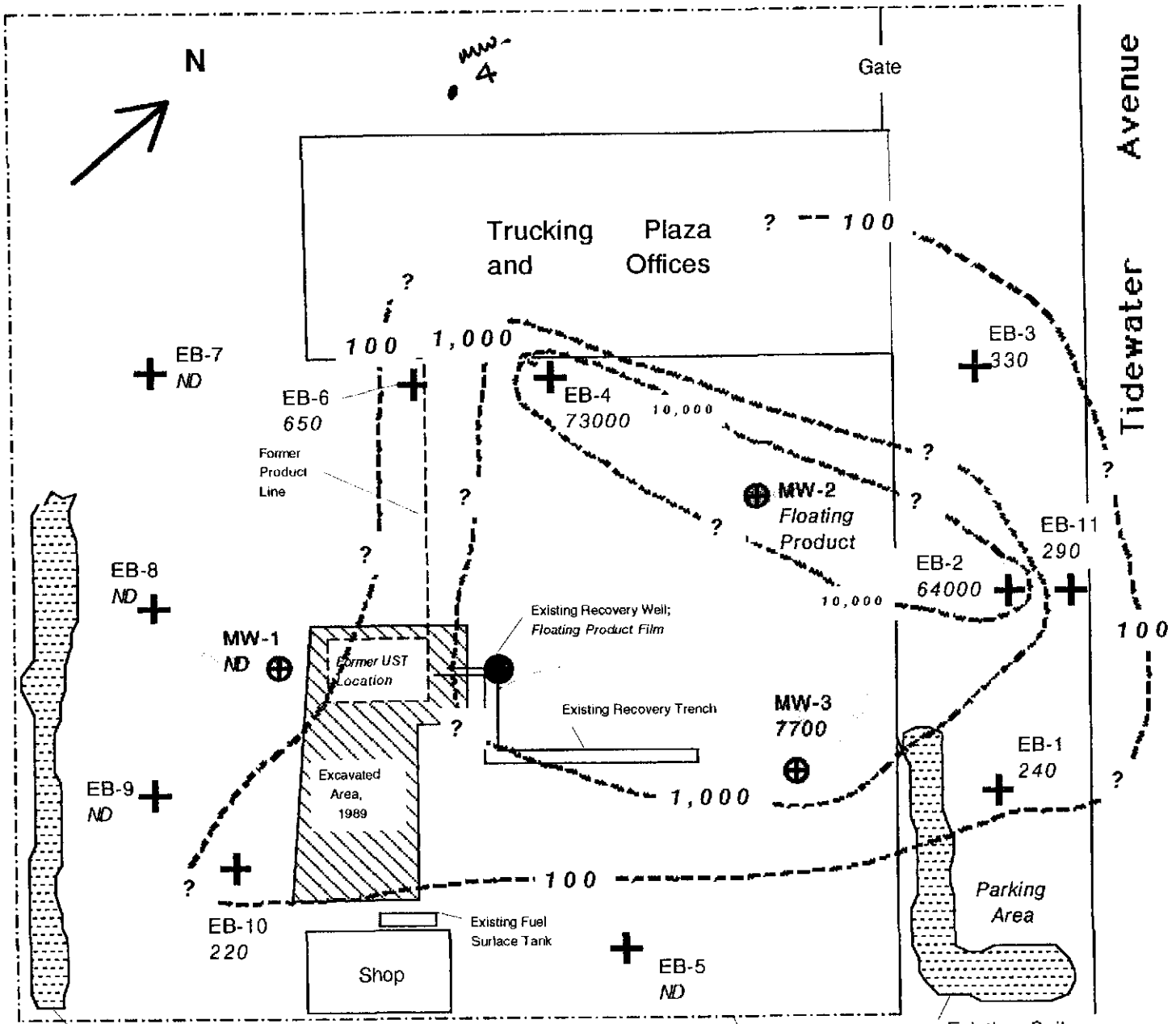
1.8 --- Groundwater Elevation,  
in feet, MSL; datum, City of Oakland  
catch basin.

**Gen Tech Environmental, Inc.**  
**San Jose, CA**

**Groundwater Elevation**  
**Contory Map, April 14, 1994**  
DiSalvo Trucking  
4919 Tidewater Avenue  
Oakland, CA

Project No. 9344  
Scale: 1" = 60'  
Date: Apr., 1994

**Figure 5**



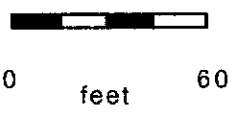
Existing Soil Stockpile

fence

Existing Soil Stockpile

- MW-3 ⊕ 7700 Monitoring Well Location  
TPHD in ug/l
- EB-5 ⊕ ND Exploratory Boring Location  
TPHD in ug/l

1,000 --- Interpreted TPHD concentration, ug/l, April 14-15, 1994. Contours include both "grab" groundwater sample and monitoring well sample data (see report text).



**Gen Tech Environmental, Inc.**  
San Jose, CA

<p><b>TPH Diesel Concentration Contour Map, April, 1994</b></p> <p>DiSalvo Trucking 4919 Tidewater Avenue Oakland, CA</p>	<p>Project No. 9344 Scale: 1" = 60' Date: Apr., 1994</p> <p><b>Figure 6</b></p>
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## GEN TECH ENVIRONMENTAL, INC. DRILLING, SEALING WELL CONSTRUCTION AND SAMPLING PROTOCOL

Last Rev. 4/5/93  
Exploratory Boring Drilling and Sealing

Exploratory boring and well construction, and borehole sealing procedures follow guidelines recommended by the USEPA, California Regional Water Quality Control Board, and modified as required by City, local or water district agencies. Drilling is performed only under approved permits and boreholes are sealed upon completion.

### Soil Sampling Procedures

1. Drive (or hydraulically push) soil sampling will commence at a depth of 5 feet below surface grade. The samples will be taken at 5 foot increments and at intervals of geologic interest or obvious contamination. Additional sampling and/or continuous coring may be done at the discretion of the supervising geologist. All logging will be done using the Unified Soil Classification System, together with pertinent geologic observations.
2. Soil sampling tools (split spoons, cores, etc.) will be disassembled, steam-cleaned or cleaned in soapy (TSP) water, rinsed with clean tap water and finally rinsed with or distilled water, and air-dried prior to taking each sample. The cleaned tools will then be reassembled with similarly cleaned, dry brass sample liners and carefully lowered into the hollow stem augers for the collection of the next sample. The drill rig will be decontaminated as needed and at the discretion of the logging geologist.
3. When sampling stockpile soils or during excavations, the soil sample will be collected by the following procedure; a clean brass liner will be pushed into the stockpile or soil in the excavator bucket. About two inches of soil will be brushed away and the liner pushed into the soil. The liner is then removed, sealed, labeled and logged onto chain-of-custody forms and packed in a chilled ice chest.
4. The soil samples in the lowermost of brass liners in the sampling tool (if in good condition) will be retained for chemical testing. The samples will be labeled and sealed in the field in their original liners. Sample liners ends will be sealed with aluminum foil, capped with clean cap plugs, and taped.

5. The remaining soil sample will be extruded from the other rings in the field and lithologically logged. Sampler shoe cuttings, drill rig response and bit penetration rate will also be logged. The cuttings and the soils samples not retained for chemical analysis will be placed in 55-gallon drums pending chemical analysis and off-site disposal.

6. All samples retained for chemical analysis will be stored on ice in a clean, covered cooler-box for transport to the Laboratory.

### Reconnaissance Groundwater Sampling Procedures

1. Reconnaissance groundwater sample, handling, and storage will follow guidance documents of the Environmental Protection Agency and Regional Water Quality Control Board and local agency guidelines for the investigation.

2. Reconnaissance groundwater samples will be collected in the field in temporarily cased exploratory boreholes using clean Teflon or disposal bailers. The samples will be collected from temporarily cased exploratory boreholes. All sample containers will be properly prepared, sealed, labeled, and identified. Label information will include the date, sampler name, sampling time, and identification number, and the project name and number.

3. The sample will be delivered to a State Certified Laboratory within two days of collection. Samples will be kept on ice and/or refrigerated continuously for shipment to the Laboratory.

4. The sealed sample will only be opened by Laboratory personnel who will perform the chemical analysis.

5. The samples will be analyzed according to the approved EPA Method and storage for the requested analysis.

6. Groundwater sampling will begin 24 hours following well development, following the procedures detailed below for monitoring well sampling. Depth to water measurements are made to the nearest 0.01 foot a surveyed datum (project or known) and wells are checked for separate phase product. Boreholes are sealed following water sampling.

### Monitoring Well Construction

1. The proper permits will be obtained from the appropriate agency or Water District, using a Well Inspector as required to be present to witness the installation of the annular seal. The soils borings will be drilled with a continuous-flight hollow-stem auger of at least 3 inches Inside Diameter (ID) and 6 to 8 inches Outside Diameter (OD). All augers will be thoroughly steam-cleaned prior to visiting the site. The augers will be steamed cleaned between borings at a location well away from the proposed borings or adequate clean auger will be available to complete all of the wells without reusing auger sections.
2. A geologic drilling log will be made of the materials encountered and sample depth for each boring. The soils/sediment lithology will be logged using the Unified Soil Classification System. The log will include field descriptions of the soil lithologic variations, moisture conditions, geologic data, and any unusual characteristics which may indicate the presence of chemical contamination.
3. The borings will be advanced to a depth of 45 feet if a saturated zone is not encountered (in absence of other depth specifications). If a saturated zone is encountered, the boring will advance no further than 15 feet below first encountered groundwater or 5 feet into the underlying clay aquitard. A seal will be placed in the overdrilled portion of the aquitard.
4. During the drilling operations, 55-gallon drums will be on site to contain potentially contaminated soils and rinse water.
5. Where borings are completed as groundwater monitoring wells, 2-inch ID schedule 40 PVC blank pipe will be used. Usual well screen selection will be 2 inch ID Schedule 40 PVC pipe with 0.020 inch machine slot. Sections will be threaded and screwed together; glues will not be used. Screens will extend 3-5 feet above first encountered groundwater. The annulus of the perforated section will be packed with clean #3 or #4 Monterey Sand, or equivalent, to a point about 2-feet above the screen interval. Final well design will be adjusted in the field to site specific subsurface conditions, and will be placed so as not to interconnect two possible aquifers. Screens will extend a nominal length above first encountered groundwater for floating product detection. A 1-2 foot thick bentonite seal will be placed on top of the sandpack. A cement annular seal which extends to the surface will be placed by tremie line from the bottom to top of the remaining annular space above the bentonite.

6. The top of the well casing will be locked to prevent contamination and tampering. Above-grade or at-grade well completion will depend upon the final well location. Above-grade completion will require a 6 inch diameter locking, steel protective casing and a Christy, or equivalent, traffic box and concrete pad.

#### Monitoring Well Development

1. Wells will be developed until the water is free of fine-grained sediments and/or until field measurements of pH, and electrical conductivity have stabilized. Approximately 4 to 10 well volumes of water will be removed during development of the well. Duration of development will be specific for each well and continue until the water clears and sand content is minimal or ceases.

2. Equipment inserted into the well during development will be decontaminated by washing or steam cleaning prior to and after its use. Development water will be collected in drums.

#### Monitoring Well Sampling

1. Depth to groundwater will be measured to the nearest 0.01 foot, and the well checked for presence of separate phase product. If present, the apparent thickness of the product will be measured. The well will not be sampled if separate phase product is present.

2. The standing well volume calculated, and 4 to 10 well volumes will be purged from the well prior to sampling. Measurements of conductivity, temperature and the pH of the water will be taken until parameters have stabilized to indicate that aquifer water is entering the well.

3. The groundwater samples will be collected using a Teflon Bailer. A field log will record sampling measurements and observations. Aquifer parameters which will be measured are; pH, temperature and electrical conductivity. Aquifer water is assumed to be entering the well when these parameters are measured within a 10% range. The sample will be collected when the well recovers to within 80% of the original depth to water measurement.

4. The bailer will be thoroughly steam-cleaned or cleaned with soapy (TSP) water, rinsed with tap water, and finally rinsed with deionized or distilled water prior to the collection of each sample. A separate clean bailer will be used to sample each individual well.

5. All water retained for chemical analysis will be placed in clean, borosilicate, 40ml VOA vial with a teflon cap, or clean amber glass one-liter bottles and other sample containers as appropriate for water sampling purpose and test parameters. Each sample vial or bottle is topped-off to avoid air space, and will be inverted to check for air bubbles, and filled to minimum headspace. Samples will be placed on ice, blue ice, or refrigerated at 4 degrees Centigrade at all times.
6. Water samples blanks of distilled water will be poured through the sampling bailer and placed in clean sample collection bottles or vials. One water sample blank will be taken for each set of water samples collected from each boring or well.
7. All sampling equipment will be decontaminated following each sampling event, prior to use the next monitoring well.

#### Sample Records and Chain of Custody

1. Sample records for each sample will contain information on sample type and source; Gen-Tech Environmental project number, sampler name, sampling date, location, Laboratory name, sampling method, and any significant conditions that may affect the sampling.
2. A signature Chain-of-custody and transference documentation will be strictly maintained at all times.
3. A copy of the Laboratory sample results and the completed Chain of Custody will be provided with the technical report.

#### Quality Control and Quality Assurance Objectives

The sampling and analysis procedures employed by GTE for groundwater sampling and monitoring follow quality assurance and quality control (QA/QC) guidelines set out in Federal, State and local agencies guidance. Quality assurance objectives have been established to develop and implement procedures for obtaining and evaluating water quality and field data in an accurate, precise and complete manner. In this way, sampling procedures and field measurements provide information that is comparable and representative of actual field conditions. Quality control is maintained by site specific field protocols and requiring the analytical laboratory to perform internal and external QC checks. The goal is to provide data that are accurate, precise, complete comparable and representative.

The definitions as developed by overseeing federal, state, and local agency guidance documents for accuracy, precision, completeness, comparability and representativeness are:

- o **Accuracy** - the degree of agreement of a measurement with an accepted reference or true value.
- o **Precision** - a measure of agreement among individual measurements under similar conditions. Usually expressed in terms of standard deviation.
- o **Completeness** - the amount of valid data obtained from a measurement system compared to the amount that was expected to meet the project data goals.
- o **Comparability** - express the confidence with which one data set can be compared to another.
- o **Representativeness** - a sample or group of samples that reflect the characteristics of the media at the sampling point. It also includes how well the sampling point represents the actual parameter variations which are under study.



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
5997 PARKSIDE DRIVE    PLEASANTON, CALIFORNIA 94588    (510) 484-2600

1 April 1994

Gen-Tech Environmental  
1936 Camden Avenue, Suite 1  
San Jose, CA 95124

Gentlemen:

Enclosed is drilling permit 94193 for a monitoring well construction project at 4919 Tidewater Avenue in Oakland for DiSalvo Trucking.

Please note that permit condition A-2 requires that a well construction report be submitted after completion of the work. The report should include drilling and completion logs, location sketch and permit number.

If you have any questions, please contact Wyman Hong at extension 235 or me at extension 233.

Very truly yours,

Craig A. Mayfield  
Water Resources Engineer III

WH:mm  
Enc.

RECEIVED

APR 4 1994

ANSWERED \_\_\_\_\_



# ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600

FAX (510) 462-3914

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 4919 Tidewater Avenue  
Oakland CA  
(See attached map)

PERMIT NUMBER 94193  
LOCATION NUMBER \_\_\_\_\_

CLIENT  
Name D. Salvo Trucking  
Address 660 Mariposa St Voice \_\_\_\_\_  
City San Francisco, CA Zip 94107

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT  
Name Gen Tech Environmental, Inc.  
Address 1736 Camden Ave. Fax 408/559-1228  
City San Jose, CA 95118 Voice 408/559-1220  
Zip 95124

**A. GENERAL**

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT  
 Construction  
 Cathodic Protection  
 Water Supply  
 Monitoring  
 Geotechnical Investigation  
 General  
 Contamination  
 Well Destruction

**B. WATER WELLS, INCLUDING PIEZOMETERS**

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

PROPOSED WATER SUPPLY WELL USE  
Domestic  Industrial  Other Monitoring water Quality  
Municipal  Irrigation

**C. GEOTECHNICAL.** Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:  
Mud Rotary  Air Rotary  Wallerstein Auger   
Cable  Other

**D. CATHODIC.** Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO. Bayland Drilling Lic # 374152

**E. WELL DESTRUCTION.** See attached.

WELL PROJECTS  
Drill Hole Diameter 8 in. Maximum \_\_\_\_\_  
Casing Diameter 2 in. Depth 20 ft.  
Surface Seal Depth 2 ft. min. Number 3

Comment: Very shallow groundwater, as shallow as 4 feet below surface at this location. Boreholes will be backfilled with cement grout.

GEOTECHNICAL PROJECTS  
Number of Borings N/A Maximum \_\_\_\_\_  
Hole Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.

ESTIMATED STARTING DATE April 10, 1994  
ESTIMATED COMPLETION DATE April 12, 1994

Approved Wyman Hong Date 1 Apr 94

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE D. Salvo Trucking Date March 22, 1994

Wyman Hong  
RECEIVED







APR 4 1994

ANSWERED \_\_\_\_\_



# STANDARD SYMBOLS






## Legend

-  Soil sample location
-  Soil sample collected for laboratory analysis
-  No soil recovery
-  First encountered groundwater level
-  Potentiometric groundwater level
-  Disturbed or bag soil sample
- 2.5 YR 6/2 Soil color according to Munsell Soil Color Charts (1975 Edition)

## Penetration

Sample drive hammer weight - 140 pounds falling 30 inches.  
Blows required to drive sampler 1 foot are indicated on the logs

## Well Construction

-  Annular seal
-  Bentonite seal
-  Sand pack
-  Well riser section
-  Well screen section

## UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS More than half of material is larger than No. 200 sieve size	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size	Clean Gravels	GW Well-graded gravels, gravel-sand mixtures, little or no fines
		Gravels with Fines	GP Poorly graded gravels, gravel-sand mixture, little or no fines
			GM Silty gravels, gravel-sand-silt mixtures
			GC Clayey gravels, gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size	Clean Sands	SW Well-graded sands, gravelly sand, little or no fines
			SP Poorly graded sands, gravelly sands, little or no fines
		Sands with Fines	SM Silty sands, sand-silt mixtures
			SC Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS More than half of material is smaller than No. 200 sieve size	Low Liquid Limit	ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts, with slight plasticity	
		CL Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
		OL Organic silts and organic silty clays of low plasticity	
	High Liquid Limit	MH Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
		CH Inorganic clays of high plasticity, fat clays	
		OH Organic clays of medium to high plasticity, organic silts	
	Pt Peat and other highly organic soils		


## NOTES:

- Boundary Classification: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example, GW-GC, well-graded gravel-sand mixture with clay binder.
- All sieve sizes on this chart are U.S. standard.
- The terms "silt" and "clay" are used respectively to distinguish materials exhibiting lower plasticity from those with higher plasticity.
- For a complete description of the Unified Soil Classification System, see "Technical Memorandum No. 3-357," prepared for Office, Chief of Engineers, by Waterways Equipment Station, Vicksburg, Mississippi, March 1953.

Project No. 9407 Boring/Well No. EB-1  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 2.5' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 10.5' to surface

Sample No.	Blow HAN	Count	Depth	Lithology Log	Well Detail/ Backfill
EB-1 5'	Trace	9	0 - 5	Asphalt Pavement and artificial fill  SC - Clayey SAND, greenish gray 5GL 4.5/1, 20% silty clay, clay is highly plastic, loose, saturated.	
EB-1 10'	Trace	5	5 - 10	CL - Silty CLAY, dark greenish gray 5GL 4/0, highly plastic, grasses buried in life position, odor of methane, soft-medium stiff, moist.	
				Bottom of Boring = 10.5 feet.	
<p>NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil</p>					

Project No. 9407 Boring/Well No. EB-2  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 2.7' Static: no measurement

Borehole Completion  
 Well Installed: NO  
 Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
EB-2@	100	23			Asphalt Pavement and artificial fill	
2'	ppm				SM - Silty SAND, dark yellowish brown, moist, artificial fill?	
				5	GW - Sandy GRAVEL, dark greenish gray, up to 50% fine to coarse sand, diesel odor, saturated at 3 feet; artificial fill film on water	
					Bottom of Boring = 5 feet. Diesel film observed on groundwater in borehole.	
					NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colorimetric test for Hydrocarbon presence in soil	

Project No. 9407 Boring/Well No. EB-3  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 3.2' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
EB-3@ 2'	NO	41		Asphalt Pavement and artificial fill	
			5	GW - Sandy GRAVEL, dark greenish gray, up to 40% fine to medium sand, slight odor, saturated at 3 feet; artificial fill? Saturated at 3.2 feet, flowing at 4 feet.	
				Bottom of Boring = 5 feet.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil	

Project No. 9407 Boring/Well No. EB-4  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 2.8' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
EB-4	No	10		Asphalt Pavement and and Concrete	
2'	Test		5	GW - dark greenish gray 5GY4/1, 40% medium to coarse sand, loose, moist to saturated, diesel film on water.	
				Bottom of Boring = 5 feet.	
				Groundwater entry into borehole, diesel film on water.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	



Project No. 9407 Boring/Well No. EB-6  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 2.9' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
EB-6 2'	10 ppm	6		Asphalt Pavement and Concrete	
			5	GW - Sandy GRAVEL FILL, 5GL 4/0, dark gray, 40% med to fine sand, 10% silt, loose, saturated at 3 feet; slight diesel odor. 10% clay at 4.5 feet, up to	
				CL - Sandy CLAY, dark gray, 30% fine sand, saturated, slight odor	
				Bottom of Boring = 5 feet.	
				Groundwater enters borehole very slowly, slight sheen on water	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	

Project No. 9407 Boring/Well No. EB-7  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 3.5' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 6' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
				Asphalt Pavement and Concrete	
EB-7@ 2'	Trace	21	5	CL - Silty Clay, greenish gray, 20% silt, med. plasticity, very slight odor, very stiff; interbed of peat from 3.5'-5'; clay underlies the peat, clay very soft, contains veg. fragments, saturated; methane odor.	
				Bottom of Boring = 6 feet. Groundwater enters borehole very slowly.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colorimetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	



Project No. 9407 Boring/Well No. EB-8  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 1.25' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 7' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
EB-8 3'	ND	6		Asphalt Pavement and and Concrete	
				OL - ML - Organic SILT to SILT, dark gray, medium stiff, moist to saturated.	
			5	CL - Silty CLAY, dark gray, high plasticity, soft, saturated.	
				Bottom of Boring = 7 feet. Groundwater enters borehole very slowly.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	

Project No. 9407 Boring/Well No. EB-9  
 Client: DiSalvo Trucking Date Drilled: April 7, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 3.40' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No. HAN Count

Sample

Depth

Lithology Log

Well Detail/  
 Backfill

Sample No.	HAN	Count	Depth	Lithology Log	Well Detail/ Backfill
				Asphalt Pavement and and Concrete	
EB-9@ 2'	Trace	10	5	ML - Sandy SILT, dark greenish gray 5G 4/1, 30% fine sand, nonplastic, rare veg. fragments, very slight odor, stiff, moist to saturated.	
				Bottom of Boring = 5 feet. Groundwater enters borehole very slowly.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	

Project No. 9407 Boring/Well No. EB-10  
 Client: DiSalvo Trucking Date Drilled: April 8, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 1.8' Static: no measurement

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
EB-10 <sup>⊕</sup> 2'	None	12		Asphalt Pavement and and Concrete sampler refusal at 1.5-2 feet	
			5	ML - SILT, dark greenish gray, nonplastic, stiff, very moist to saturated; grades to Peat from 3.5-5 feet; odor.	
				Bottom of Boring = 5 feet.	
				Groundwater enters borehole very slowly, slight sheen on water.	
				NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	

Project No. 9407 Boring/Well No. EB-11  
 Client: DiSalvo Trucking Date Drilled: April 8, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: N/R  
 Water Levels: 1st Enc: 3.0' Static: 2.57'

Borehole Completion  
 Well Installed: NO

Cement Grout Seal: 5' to surface

Sample No.	HAN	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
EB-11	Trace	12			Asphalt Pavement and and Concrete sampler refusal at 1.5-2 feet	
2'					CL - Silty CLAY, dark greenish gray, high plasticity, stiff, very moist.	
				5	SW - Gravelly SAND, dark gray, 20% gravel, med. dense, saturated. Flows at 5 feet.	
					Bottom of Boring = 5 feet.	
					Groundwater enters borehole very slowly.	
					NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil; test not run if sheen or film on groundwater.	

**Gen Tech Environmental, Inc. San Jose, CA**

**Exploratory Boring Log**

**Project No. 9407 Boring/Well No. MW-1**  
**Client: DiSalvo Trucking Date Drilled: April 8, 1994**  
**Location: 4919 Tidewater, Oakland, CA Logged by: EL**  
**Drilling Method: Hollowstem Auger Permit: ACWCFCO 94193**  
**Water Levels: 1st Enc: 3± Static: no measurement**

**Borehole Completion**  
 Well Installed: 2" dia. PVC sch 40  
 Total Depth: 8' Casing Depth: 8'  
 Screen Length: 5' 0.020" Blank Length: 3'  
 Sand Pack: 2/12 Top Sand: 2.5' Top Bentonite: 2'  
 Grout Seal: 2' to surface vault box  
 Casing Elev. MSL: 2.68'

Sample No.	HAN	Blow Count	Depth	Lithology Log	Well Detail/ Backfill
MW-1@ con. fill.	Trace	66		Asphalt and Baserock and concrete rubble.	
MW-1@ @5'	No Test	3		Artificial FILL, wood, concrete very dense, moist.	
MW-1@ @7'	No Test	3	5	OM-PT - SILT and PEAT, black, highly plastic, soft, very moist.	
MW-1@ @9'	No Test	2		Same as above. Same as above, thin interbeds of clay in peat.	
			10	Bottom of Boring = 8 feet	

NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil

Project No. 9407 Boring/Well No. MW-2  
 Client: DiSalvo Trucking Date Drilled: April 8, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: ACWCFCD 94193  
 Water Levels: 1st Enc: 4.0' Static: 2.5'

**Borehole Completion**  
 Well Installed: 2" dia. PVC sch 40  
 Total Depth: 8' Casing Depth: 8'  
 Screen Length: 5' 0.020" Blank Length: 3'  
 Sand Pack: 2/12 Top Sand: 2.5' Top Bentonite: 2'  
 Grout Seal: 2' to surface vault box  
 Casing Elev. MSL: 3.50'

Sample No.	HAN	Blow Count	Sample	Depth	Lithology Log	Well Detail/Backfill
MW-2@ con. fill.	1000 ppm	50 for 6"	⊗		Asphalt and Baserock and concrete rubble, diesel saturated base material.	
MW-2@ @5'	No Test	15	▨	5	GW - Sandy GRAVEL, light olive brown, 2.5Y 5/3, 40% sand, strong diesel odor, very dense, saturated at 4', assume contains some artificial fill.	▽
MW-2@ @7'	No Test	3	▨		SM - Silty SAND, dark gray, 50-50% silt and sand, odor, sheen on water in sampler, med. dense, saturated.	
					PT - PEAT, black, dissem. clay in peat, very moist.	
				10	Bottom of Boring = 8 feet	

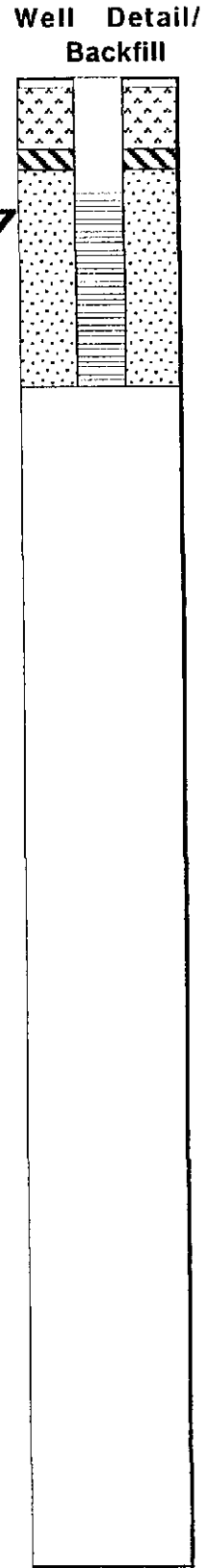
NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil

Project No. 9407 Boring/Well No. MW-3  
 Client: DiSalvo Trucking Date Drilled: April 8, 1994  
 Location: 4919 Tidewater, Oakland, CA Logged by: EL  
 Drilling Method: Hollowstem Auger Permit: ACWCFCD 94193  
 Water Levels: 1st Enc: 4.0' Static: 2.0'

**Borehole Completion**  
 Well Installed: 2" dia. PVC sch 40  
 Total Depth: 8' Casing Depth: 8'  
 Screen Length: 5' 0.020" Blank Length: 3'  
 Sand Pack: 2/12 Top Sand: 2.5' Top Bentonite: 2'  
 Grout Seal: 2' to surface vault box  
 Casing Elev. MSL: 2.90'

Sample No.	HAN	Blow Count
MW-3 @2'	800 ppm	28
MW-3@ @5'	No Test	11
MW-3@ @7'	No Test	Push

Sample	Depth	Lithology Log
		Asphalt and Baserock and concrete rubble. GW - Sandy GRAVEL FILL, dark gray, 5GY4/0, 40% sand, strong diesel odor, very dense, saturated at 4'.
	5	SM - Silty SAND, dark gray, 30% silt, rare gravel, odor, med. dense, saturated.
		PT - PEAT, black, laminated, methane odor, very moist.
	10	Bottom of Boring = 8 feet



NOTE: HAN refers to the Modified Hanby Field Laboratory Field test, a qualitative colormetric test for Hydrocarbon presence in soil

**JAMES RASP P.E.**  
**5134 ELROSE AVENUE**  
**SAN JOSE, CALIFORNIA 95124**  
**(408) 448-6768**

Project No. 94041  
May 3, 1994

Mr. Chris Palmer  
Gen-Tech Environmental  
1936 Camden Avenue, Suite 1  
San Jose, California 95124

Dear Mr. Palmer

At your direction I determined the locations and elevations of the 3 new monitoring wells and the existing recovery well at the DiSalvo Truck Terminal at 4919 Tidewater Avenue, Oakland, California. The elevations and the distances between the monitoring wells are listed below. This information and the locations of the wells are also shown on the attached sketch.

MW-1	Handhole Lid	2.89'
	PVC Well Casing	2.68'
MW-2	Handhole Lid	4.01'
	PVC Well Casing	3.50'
MW-3	Handhole Lid	3.15'
	PVC Well Casing	2.90"
Recovery Well	Well Cover	3.36'
	PVC Well Casing	3.15'
MW-1 to MW-2		224.4 ft.
MW-1 to MW-3		242.1 ft.
MW-2 to MW-3		109.3 ft.

The elevation of the flowline of the catch basin at the easterly corner of Lesser Street and Tidewater Avenue, 1.11', obtained from the Oakland Public Works Department was used as a benchmark. The locations on the PVC well casings where the elevations were taken were marked with a black marker. None of the casing caps were locked. The recovery well is a 4" PVC casing and is located in a 4' square concrete vault with an 18" square steel plate cover. It is not secured. There were no abnormal conditions noted during our work on site.



Mr. Chris Palmer  
Page 2  
May 3, 1994

We trust that the above information meets your needs. Should you have any questions or comments please do not hesitate to call me.

Very Truly Yours,



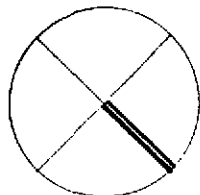
James W. Rasp P.E.



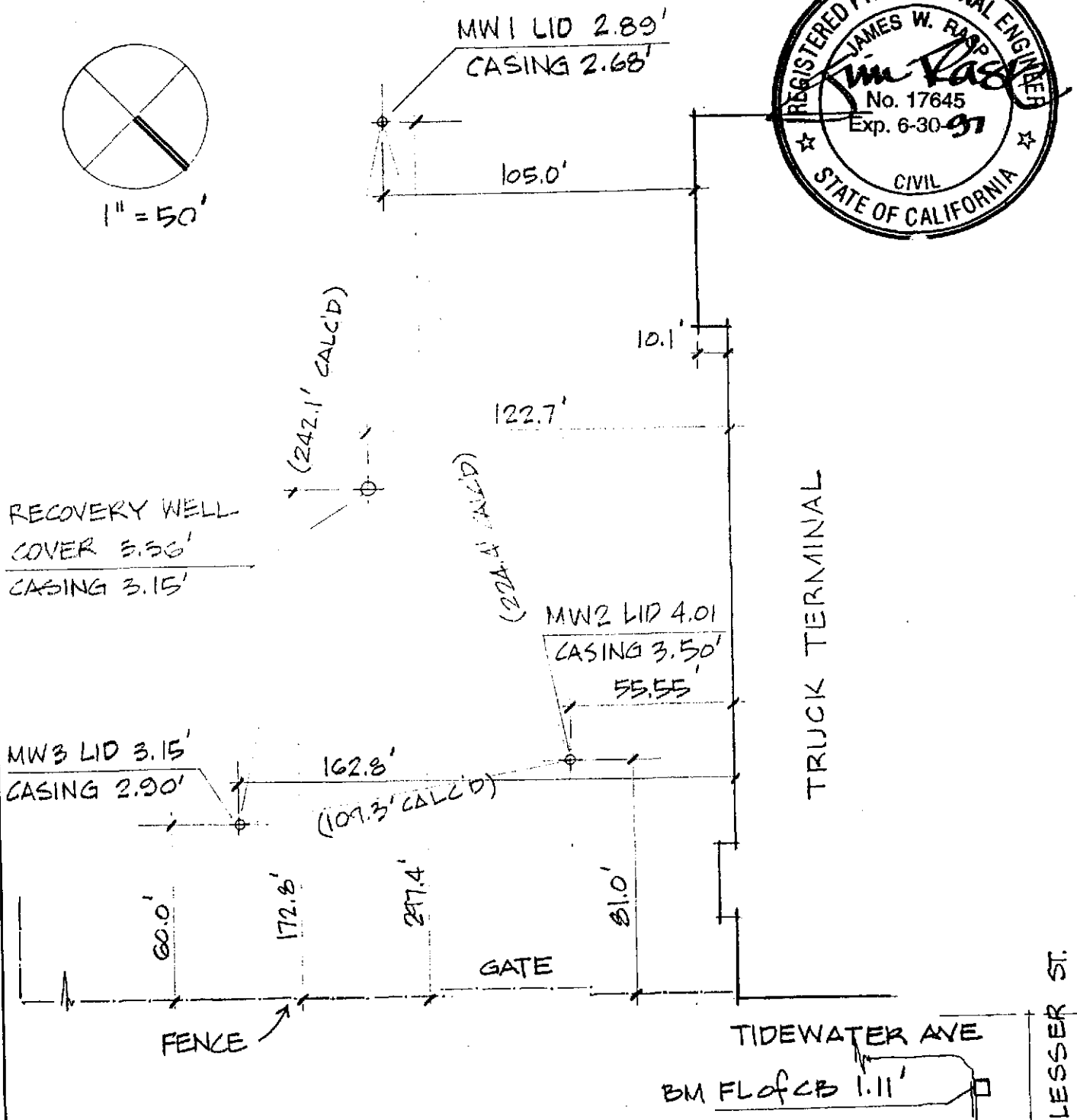
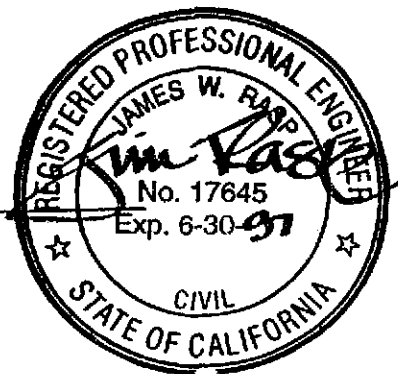


JAMES RASP P.E.  
 Civil and Structural Engineering  
 5134 Elrose Avenue  
 San Jose, California 95124  
 (408) 448-6768

JOB 94041 / GENTECH / DISALVO-OAKLAND  
 SHEET NO. 1 OF 1  
 CALCULATED BY JIM RASP DATE 5/2/94  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE 1" = 50'



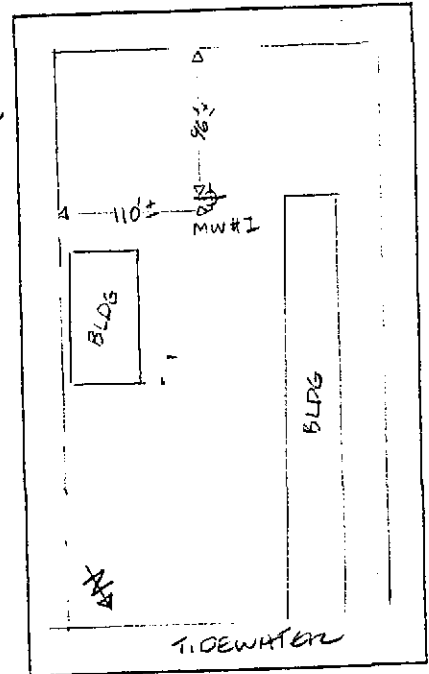
1" = 50'



# WATER-QUALITY SAMPLING INFORMATION

Project Name 1) GALVO TRUCKING Project No. 9407  
 Date APRIL 14TH '94 Sample No. MW#1-GWS

Samplers Name MIC LISSOL  
 Sampling Location TIDEWATER AVE., OAKLAND CA  
 Sampling Method DEVELOPE & SAMPLE AFTER 10 MIN. 1 DISP-BOTTLE  
 Analyses Requested T.O.C. - TPH DIESEL - TPH GAS w/ BTX  
 Number and Types of Sample Bottles used 2-1L MYLAR 2-400ML VOLS  
 Method of Shipment PACKED IN ICE



LOCATION MAP

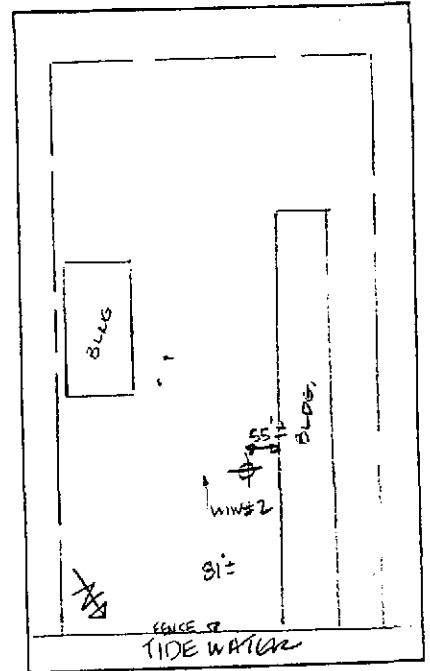
GROUND WATER		SURFACE WATER	
Well No. <u>MW#1</u>	Stream Width _____	Well Diameter (In.) <u>2"</u>	Stream Depth _____
Depth to Water Static (ft) <u>1.26'</u>	Stream Velocity _____	Water in Well Box <u>NONE</u>	Rained recently? _____
Well Depth (ft) <u>6.80'</u>	Other _____	Well Depth (ft) <u>6.80'</u>	
Height of Water Column in Well <u>5.54'</u>	<input checked="" type="checkbox"/> 2-inch casing = 0.16 gal/ft	Water Volume in Well <u>0.88 GAL</u>	4-inch casing = 0.65 gal/ft
	5-inch casing = 1.02 gal/ft		6-inch casing = 1.47 gal/ft

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (°F)	pH (S.U.)	COND (micro/cm) X 1000	OTHER		REMARKS
						X	VOL	
11:58 <sub>a</sub>	1.26'	Ø	76.1°	6.80	13.95	<input checked="" type="checkbox"/>	0	NO SCREEN (FIP) NO ODOOR NO TURBIDITY
12:20 <sub>a</sub>	—	1	72.7°	6.80	14.15	X	1	
12:26	—	2	71.5°	6.76	14.22	X	2	
12:28	—	3	72.3°	6.90	16.79	X	3	VERY SLOW RECHARGE
12:33	—	4	71.7°	6.88	18.40	X	4	
12:40	6.32' ✓	5	71.4°	6.86	17.22	X	5	
12:45	—	5.25	71.2°	6.86	17.29	X	6	WAITED FOR RECHARGE >2' WATER IN WELL
12:50	—	5.50	71.2°	6.92	17.01	X	7	
12:54	—	5.75	70.6°	6.94	16.92	X	8	
12:58	—	6.00	71.0°	6.91	16.71	X	9	
1:02	✓	6.25	70.6°	6.87	16.55	X	10	WATER IS CLEAR NO SILT - NO TURBID

Suggested Method for Purging Well \_\_\_\_\_

# WATER-QUALITY SAMPLING INFORMATION

Project Name D. SALVO TRUCKING Project No. 9407  
 Date APRIL 14TH 94' Sample No. MW #2 - GWS  
 Samplers Name ERIC LISSON  
 Sampling Location TIDWATER AVE. OAKLAND  
 Sampling Method PERCUTANEOUS & SURFACE w/ DISPOSABLE CONTAINER  
 Analyses Requested T.O.C., TPH DIESEL, TPH GAS, W/PTX  
 Number and Types of Sample Bottles used 2 - 1L minimum  
2 - 40ml vials  
 Method of Shipment PACKED IN ICE



LOCATION MAP

GROUND WATER		SURFACE WATER	
Well No. <u>MW #2</u>	Stream Width _____	Well Diameter (in.) <u>2"</u>	Stream Depth _____
Depth to Water Static (ft) <u>1.92'</u>	Stream Velocity _____	Water in Well Box <u>1/4" W/16W</u>	Rained recently? _____
Well Depth (ft) <u>7.13'</u>	Other _____	Well Depth (ft) <u>7.13'</u>	
Height of Water Column in Well <u>5.21'</u>	<input checked="" type="checkbox"/> 2-inch casing = 0.16 gal/ft	Water Volume in Well <u>0.83 GAL</u>	<input type="checkbox"/> 4-inch casing = 0.65 gal/ft
	<input type="checkbox"/> 5-inch casing = 1.02 gal/ft		<input type="checkbox"/> 6-inch casing = 1.47 gal/ft

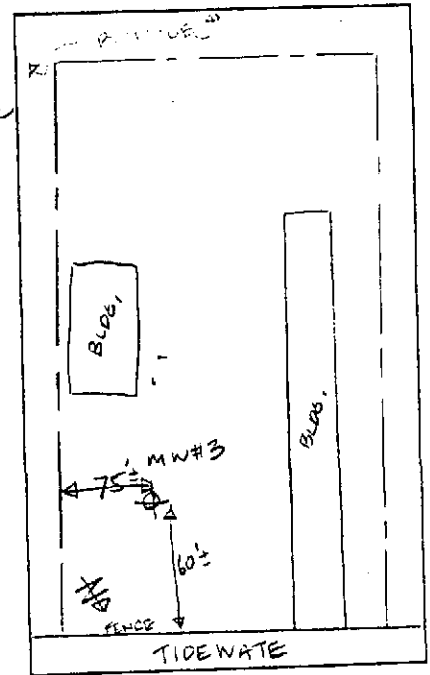
TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP °F	pH (S.U.)	COND (micro/cm) X 1000	OTHER		REMARKS
						X	VOL	
1:23p	1.92'	0	77.1°	7.06	3.71	X	0	THIN FILM 1/32" DISSOLVED ON WATER ODDLY TO OIL APPEARS
1:40p	—	1	74.8°	6.87	4.41	X	1	TURBID (GROUN WATER)
		2				X	2	WATER REMAINS DISCONTINUED DUE TO FLOATING PIPES
		3				X	3	FOULING EQUIPMENT.
		4				X	4	
		5				X	5	
		6				X	6	
		7				X	7	
		8				X	8	
	↓	9				X	9	WATER SLIGHTLY TURBID
2:10p	2.50'	10				X	10	TOTAL OF 10 GALS. PURGED FROM WELL. FLOATING FROM NO SAMPLE SEC.

Suggested Method for Purging Well \_\_\_\_\_

# WATER-QUALITY SAMPLING INFORMATION

Project Name D. SALVO TRUCKING Project No. 9407  
 Date APRIL 14TH 94 Sample No. MW#3-GWS  
 Samplers Name ERIC HSSOL  
 Sampling Location TIDEWATER AVE. OAKLAND  
 Sampling Method PRELIMINARY SAMPLE w/ DISPOSABLE BOTTLES  
 Analyses Requested T.O.C. - TPH DIESEL - TPH GAS - BTEX  
 Number and Types of Sample Bottles used 2-1L AMBER  
2-40ml VIALS  
 Method of Shipment PACKED IN ICE

GROUND WATER		SURFACE WATER	
Well No. <u>MW#3</u>	Stream Width _____	Well Diameter (In.) <u>2"</u>	Stream Depth _____
Depth to Water. Static (ft) <u>1.33'</u>	Stream Velocity _____	Water In Well Box <u>NONE</u>	Rained recently? _____
Well Depth (ft) <u>6.95'</u>	Other _____	Well Depth (ft) <u>6.95'</u>	2-inch casing = 0.16 gal/ft
Height of Water Column In Well <u>5.62'</u>		4-inch casing = 0.65 gal/ft	
Water Volume In Well <u>0.89 GAL.</u>		5-inch casing = 1.02 gal/ft	
		6-inch casing = 1.47 gal/ft	



LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (°F)	pH (S.U.)	COND (micro/cm) x 1000	OTHER		REMARKS
						X	VOL	
2:30	1.33'	0	76.1°	6.95	4.13	x	0	NO FIP - SLIGHT ODOR TURBID (GREEN WATER)
2:40		1	73.0°	6.77	4.07	x	1	
2:42		2	71.3°	6.84	4.15	x	2	
2:44		3	70.6°	6.87	3.78	x	3	FIRST RECHARGE
2:56		4	70.1°	6.71	3.06	x	4	SLIGHT GREEN ODOR PROVIDED ON BOTTLE (DISPOSABLE)
3:01	1.42' ✓	5	70.3°	6.73	3.70	x	5	
3:06		6	70.0°	6.80	4.04	x	6	
3:08		7	70.3°	6.64	3.12	x	7	SLIGHTLY LESS TURBID
3:11		8	69.9°	6.76	2.89	x	8	
3:13		9	69.7°	6.71	2.80	x	9	
3:16	1.48' ✓	10	69.4°	6.77	2.90	x	10	SLIGHT ODOR SLIGHT GREEN SLIGHTLY TURBID

Suggested Method for Purging Well MW#3 SAMPLED ONLY FOR QUALITATIVE ANALYSIS OF DISCHARGE PRODUCT

Order # 15915

PROJ. MGR. ERIC LISSON  
 COMPANY G.T.E.  
 ADDRESS 1936 CAMDEN AVE. #1  
SAN JOSE CA 95124

SAMPLERS (SIGNATURE) \_\_\_\_\_ (PHONE NO.) \_\_\_\_\_

### ANALYSIS REPORT

SUBM #: 9404102  
 CLIENT: GENTECH  
 DUE: 04/15/94  
 REF: 15915

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608, 8090)	PHENOLS (EPA 604, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr	CAM METALS (1)	PRIORITY POLL METALS (13)	EXTRACTION (TCLP, STLC)	NUMBER OF CO
CB-1-GWS	4/7/94	10:00	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-2-C/F	"	10:30	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-2-GWS	"	10:50	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-3@C/F	"	11:40	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-3-GWS	"	12:00	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-4@C/F	"	12:25	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-4-GWS	"	12:35	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-5@C/F	"	1:15	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-5-GWS	"	2:00	WATER		X	X	X	X	X	X	X	X	X	X	X					4

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NAME: <u>DI SALVO</u>	TOTAL NO. OF CONTAINERS <u>24</u>	CHAIN OF CUSTODY SEALS	REC'D GOOD CONDITION/COLD
PROJECT NUMBER <u>9407</u>	CONFORMS TO RECORD	LAB NO	
SHIPPING ID NO			
VIA			

RELINQUISHED BY <u>[Signature]</u> (SIGNATURE) <u>ERIC LISSON</u> (PRINTED NAME) <u>G.T.E.</u> (COMPANY)	1. RELINQUISHED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)	2. RELINQUISHED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)	3. RELINQUISHED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)
RECEIVED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)	1. RECEIVED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)	2. RECEIVED BY <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (COMPANY)	3. RECEIVED BY (LABORATORY) <u>[Signature]</u> (SIGNATURE) <u>[Name]</u> (PRINTED NAME) <u>[Company]</u> (LAB)

SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOLD SOILS UNTIL NOTIFICATION  
C/F samples taken off hold  
per Eric Lissou 4/11

PROJ. MGR. EMIL LISSOR  
COMPANY G.T.E.  
ADDRESS 1936 Camden Ave. #1  
SAN JOSE CA 95124  
SAMPLERS (SIGNATURE) \_\_\_\_\_ (PHONE NO.) \_\_\_\_\_

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 6240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 525/627, 6270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608, 8080)	PHENOLS (EPA 604, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS
CB-6 @ C/F	4/7/94	2:00 P	SOIL		X	X						X				HOLD FOR				1
CB-6-GWS	"	2:10 P	WATER		X	X						X				HOLD				4
CB-7 @ C/F	"	2:45 P	SOIL		X	X						X								1
CB-7-GWS	"	3:07 P	WATER		X	X						X				HOLD FOR				4
CB-8 @ C/F	"	3:20 P	SOIL		X	X						X								1
CB-8-GWS	4/8/94	7:45 A	WATER		X	X						X				HOLD				4
CB-9 @ C/F	"	8:15 P	SOIL		X	X						X								4
CB-9-GWS	"	8:25 A	WATER		X	X						X								4

Add per E. Lissor 4/11

**PROJECT INFORMATION**

PROJECT NAME: D. STANLEY TRUCKING

PROJECT NUMBER: # 9407

SHIPPING ID NO

VIA:

**SAMPLE RECEIPT**

TOTAL NO. OF CONTAINERS: 20

CHAIN OF CUSTODY SEALS

REC'D GOOD CONDITION/COLD

CONFORMS TO RECORD

LAB NO

SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOLD SOILS UNTIL NOTIFICATION  
C/F samples taken off hold  
per E. Lissor 4/11

RELINQUISHED BY

1. Emil Lissor 3:00 P (TIME)  
(SIGNATURE)  
Emil Lissor 4/8/94 (DATE)  
(PRINTED NAME)  
G.T.E. (COMPANY)

2. RELINQUISHED BY

1. \_\_\_\_\_ (SIGNATURE) \_\_\_\_\_ (TIME)  
\_\_\_\_\_ (DATE) \_\_\_\_\_ (DATE)  
\_\_\_\_\_ (COMPANY)

2. RECEIVED BY

1. \_\_\_\_\_ (SIGNATURE) \_\_\_\_\_ (TIME)  
\_\_\_\_\_ (DATE) \_\_\_\_\_ (DATE)  
\_\_\_\_\_ (COMPANY)

2. RECEIVED BY (LABORATORY)

1. B. Morrow 1507 (TIME)  
(SIGNATURE)  
B. Morrow 4-8-94 (DATE)  
(PRINTED NAME)  
Chromalab (LAB)





# CHROMALAB, INC.

Environmental Services (SDB)

April 13, 1994

ChromaLab File#: 9404102

GEN-TECH ENVIRONMENTAL

Atten: Eric Lissol

Project: DI SALVO TRUCKING  
Received: April 8, 1994

Project#: 9407

re: 11 samples for Gasoline and BTEX analysis.

Matrix: WATER

Sampled on: April 7, 1994

Analyzed on: April 11, 1994

Method: EPA 5030/8015/602

Run#: 2629

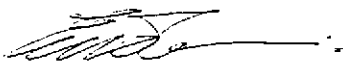
Lab #	SAMPLE ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
48542	EB-1-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48543	EB-2-GWS	2500	N.D.	1.2	N.D.	N.D.
48544	EB-3-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48545	EB-4-GWS	200	N.D.	0.80	0.60	4.4
48546	EB-5-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48547	EB-6-GWS	94	N.D.	N.D.	N.D.	N.D.
48548	EB-7-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48549	EB-8-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48550	EB-9-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48551	EB-10-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
48552	EB-11-GWS	N.D.	N.D.	N.D.	N.D.	N.D.

DETECTION LIMITS	50	0.5	0.5	0.5	0.5
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK SPIKE RECOVERY (%)	115	113	114	111	109

ChromaLab, Inc



Billy Thach  
Chemist



Eric Tam  
Laboratory Director

RECEIVED

APR 28 1994

ANALYZED

# CHROMALAB, INC.

Environmental Services (SDB)

April 13, 1994

ChromaLab File#: 9404102

GEN-TECH ENVIRONMENTAL

Attention: Eric Lissol

Project: DI SALVO TRUCKING  
Received: April 8, 1994

Project#: 9407

Re: 8 samples for Gasoline and BTEX analysis.

Matrix: SOIL

Sampled on: April 7, 1994

Analyzed on: April 11, 1994

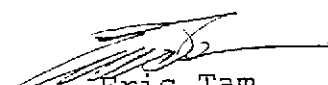
Method: EPA 5030/8015/8020

Run#: 2628

Lab #	SAMPLE ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
48554	EB-3 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48556	EB-5 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48557	EB-6 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48559	EB-8 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48561	EB-11 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48562	MW #1 @ C/F	N.D.	N.D.	N.D.	N.D.	N.D.
48563	MW #2 @ C/F	250	180	N.D.	2100	2000
	te: DETECTION LIMIT = 100 UG/KG FOR TOLUENE					
48564	MW #3 @ C/F	13	N.D.	N.D.	5.6	N.D.
	DETECTION LIMITS	1.0	5.0	5.0	5.0	5.0
	BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
	BLANK SPIKE RECOVERY(%)	119	81	102	100	104

ChromaLab, Inc.

  
Billy Thach  
Chemist

  
Eric Tam  
Laboratory Director

RECEIVED  
APR 20 1994

ANNEXED

# CHROMALAB, INC.

Environmental Services (SDB)

April 18, 1994

ChromaLab File No.: 9404102

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Eleven water samples for Diesel analysis

Project Name: DI SALVO TRUCKING

Project Number: 9407

Date Sampled: April 7, 1994

Date Submitted: April 8, 1994

Date Extracted: April 14, 1994

Date Analyzed: April 14, 1994

## RESULTS:

<u>Sample I.D.</u>	<u>Diesel (<math>\mu\text{g/L}</math>)</u>
EB-1-GWS	240
EB-2-GWS	64000
EB-3-GWS	330
EB-4-GWS	73000
EB-5-GWS	N.D.
EB-6-GWS	650
EB-7-GWS	N.D.
EB-8-GWS	N.D.
EB-9-GWS	N.D.
EB-10-GWS	220
EB-11-GWS	290

BLANK

N.D.

BLANK SPIKE RECOVERY

107%


DETECTION LIMIT

50

METHOD OF ANALYSIS

3510/8015

ChromaLab, Inc.



Alex Tam  
Analytical Chemist



Eric Tam  
Laboratory Director

# CHROMALAB, INC.

Environmental Services (SDB)

April 18, 1994

ChromaLab File No.: 9404102

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Eight soil samples for Diesel analysis

Project Name: DI SALVO TRUCKING

Project Number: 9407

Date Sampled: April 7, 1994

Date Submitted: April 8, 1994

Date Extracted: April 13, 1994

Date Analyzed: April 13, 1994

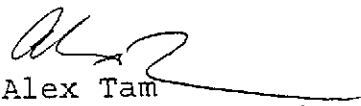
## RESULTS:

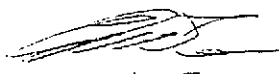
<u>Sample I.D.</u>	<u>Diesel (mg/Kg)</u>
EB-3 @ C/F	N.D.
EB-5 @ C/F	N.D.*
EB-6 @ C/F	2.5
EB-8 @ C/F	N.D.
EB-11 @ C/F	7.5
MW#1 @ C/F	4.4
MW#2 @ C/F	29000
MW#3 @ C/F	150

\* Detection limit equals 5.0 mg/Kg due to matrix interference.

BLANK	N.D.
BLANK SPIKE RECOVERY	104%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.

  
Alex Tam  
Analytical Chemist

  
Eric Tam  
Laboratory Director

# CHROMALAB, INC.

Environmental Services (SDB)

April 15, 1994

ChromaLab File No.: 9404102

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Eleven water samples for Oil & Grease analysis

Project Name: DI SALVO TRUCKING

Project Number: 9407

Date Sampled: April 7, 1994

Date Submitted: April 8, 1994

Date Analyzed: April 13, 1994

## RESULTS:

<u>Sample I.D.</u>	<u>Oil &amp; Grease (mg/L)</u>
EB-1-GWS	N.D.
EB-2-GWS	100
EB-3-GWS	N.D.
EB-4-GWS	38
EB-5-GWS	N.D.
EB-6-GWS	N.D.
EB-7-GWS	N.D.
EB-8-GWS	N.D.
EB-9-GWS	N.D.
EB-10-GWS	3.4
EB-11-GWS	N.D.

BLANK

N.D.

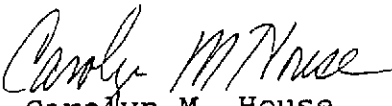
DETECTION LIMIT

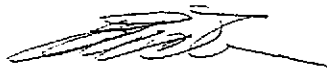
1.0

METHOD OF ANALYSIS

STD METHOD 5520 B & F

ChromaLab, Inc.

  
Carolyn M. House  
Analyst



Eric Tam  
Laboratory Director

cc

RECEIVED

APR 26 1994

# CHROMALAB, INC.

Environmental Services (SDB)

April 15, 1994

ChromaLab File No.: 9404102

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Eight soil sample for Oil & Grease analysis

Project Name: DI SALVO TRUCKING

Project Number: 9407

Date Sampled: April 7, 1994

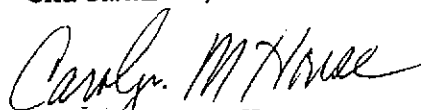
Date Submitted: April 8, 1994


Date Analyzed: April 15, 1994

## RESULTS:

Sample I.D.	Oil & Grease (mg/Kg)
MW #1 @ C/F	N.D.
MW #2 @ C/F	36000
MW #3 @ C/F	N.D.
EB #3 @ C/F	N.D.
EB #5 @ C/F	180
EB #6 @ C/F	N.D.
EB #8 @ C/F	N.D.
CB-11 @ C/F	N.D.
BLANK	N.D.
DETECTION LIMIT	50
METHOD OF ANALYSIS	STD METHOD 5520 E & F

ChromaLab, Inc.

  
Carolyn M. House  
Analyst

  
Eric Tam  
Laboratory Director

cc

FAX COVER SHEET

DATE: 4-15-94  
TO: Eric  
COMPANY: Chromalab  
Fax #: \_\_\_\_\_  
FROM: Stuart Solomon  
RE: Ni Salvo #9407  
NO. PAGES: \_\_\_\_\_ PLUS COVER SHEET

MESSAGE:

please add the following  
tests for CHLORIDES, SULFATES,  
BICARBONATES, PH, and  
RCI for soil samples).  
MW#1 @ C/F, MW#2 @ C/F,  
MW#3 @ C/F and EB-8 @ C/F

results due before noon on Monday  
4/18/94 @ \$64.00 per sample x 100% for 24 hr.  
CONFIDENTIALTY NOTICE RWSH

The document/s accompanying this telecopy transmission contain confidential information belonging to the sender which is legally privileged. The information is intended only for the use of the individual or entity named above in direct business dealings with Gen-Tech Environmental Inc..

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1936 Camden Ave. Suite 1  
San Jose, CA 95124

(408) 559-1248

Chain of Custody

DATE 4/7/94 PAGE 1 OF 3

ANALYSIS REPORT

SUBM #: 9404102  
CLIENT: GENTECH  
DUE: 04/15/94  
REF: 15915

PROJ. MGR. ERIC LISSOL  
COMPANY G.T.E.  
ADDRESS 1936 CAMDEN AVE. #1  
SAN JOSE CA 95124

SAMPLERS (SIGNATURE) \_\_\_\_\_ (PHONE NO.) \_\_\_\_\_

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.
CB-1-GWS	4/7/94	10:00	WATER	
CB-2-C/F	"	10:30	SOIL	
CB-2-GWS	"	10:50	WATER	
CB-3-C/F	"	11:40	SOIL	
CB-3-GWS	"	12:00	WATER	
CB-4-C/F	"	12:25	SOIL	
CB-4-GWS	"	12:35	WATER	
CB-5-C/F	"	1:15	SOIL	
CB-5-GWS	"	2:25	WATER	

TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 8242)	BASENEUTRALS, ACIDS (EPA 625/627, 8270, 828)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 606, 8080)	PHENOLS (EPA 804, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr	CAM METALS (1)	PRIORITY POLL METALS (13)	EXTRACTION (TCDF, STLC)	NUMBER OF CO
X	X	X	X	X	X	X	X	X	X	HOLD					4
X	X	X	X	X	X	X	X	X	X						4
X	X	X	X	X	X	X	X	X	X	<del>HOLD</del> RUN					4
X	X	X	X	X	X	X	X	X	X	HOLD					4
X	X	X	X	X	X	X	X	X	X	<del>HOLD</del> RUN					4
X	X	X	X	X	X	X	X	X	X						4

**PROJECT INFORMATION**

PROJECT NAME: DI SALVO

PROJECT NUMBER: 9407

SHIPPING ID NO

VIA:

**SAMPLE RECEIPT**

TOTAL NO. OF CONTAINERS: 24

CHAIN OF CUSTODY SEALS

REC'D GOOD CONDITION/COLD

CONFORMS TO RECORD

LAB NO

SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOLD WORKS UNTIL NOTIFICATION  
C/F samples taken off hold  
per Eric Lissol 4/11

RELINQUISHED BY 1. Eric Lissol 3:00P (TIME) 4/8/94 (DATE)

RELINQUISHED BY 2. \_\_\_\_\_ (TIME) \_\_\_\_\_ (DATE)

RECEIVED BY 1. \_\_\_\_\_ (TIME) \_\_\_\_\_ (DATE)

RECEIVED BY 2. \_\_\_\_\_ (TIME) \_\_\_\_\_ (DATE)

RECEIVED BY (LABORATORY) 3. B. Housh (TIME) \_\_\_\_\_ (DATE)

RECEIVED BY (LABORATORY) 3. B. Housh (TIME) \_\_\_\_\_ (DATE)

LAB: Chromalab



P. 003

TEL: 510 851 8798

APR - 11 '94 (MON) 08:47 CHROMALAB, INC.



1936 Camden Ave., Ste 1  
San Jose, CA 95124  
(408) 559-1248

DATE 4/7/94 PAGE 2 OF 3  
Chain of Custody

PROJ. MGR. MIKE LISSON  
COMPANY G.T.E.  
ADDRESS 1436 Camden Ave. #1  
SAN JOSE CA 95124  
(PHONE NO.)

SAMPLERS (SIGNATURE) [Signature]  
(408) 559-1248

**ANALYSIS REPORT**

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 0020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524, 2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608, 8080)	PHENOLS (EPA 604, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLC)	CHLORIDES	SULFATES	BICARBONATES	PH	RCI	NUMBER OF CONTAINERS
CB-6@d/f	4/7/94	2:00 P	SOIL		X	X	X	X	X	X	X	X	X	X	X										1
CB-6-GWS	"	2:10 P	WATER		X	X	X	X	X	X	X	X	X	X	X										4
CB-7@d/f	"	2:45 P	SOIL		X	X	X	X	X	X	X	X	X	X	X										1
CB-7-GWS	"	3:01 P	WATER		X	X	X	X	X	X	X	X	X	X	X							X	X	X	4
CB-8@d/f	"	3:20 P	SOIL		X	X	X	X	X	X	X	X	X	X	X										1
CB-8-GWS	4/8/94	7:45 A	WATER		X	X	X	X	X	X	X	X	X	X	X										4
CB-9@d/f	"	8:15 A	SOIL		X	X	X	X	X	X	X	X	X	X	X										4
CB-9-GWS	"	8:25 A	WATER		X	X	X	X	X	X	X	X	X	X	X										4

**PROJECT INFORMATION**

PROJECT NAME: D. SPALDO TRAILING  
PROJECT NUMBER: #9407  
SHIPPING ID NO:  
VIA:  
SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOW SOILS UNTIL NOTIFICATION  
C/F samples taken off hold  
per E. Lissol 4/11

**SAMPLE RECEIPT**

TOTAL NO. OF CONTAINERS: 20  
CHAIN OF CUSTODY SEALS:  
REC'D GOOD CONDITION/COLD:  
CONFORMS TO RECORD:  
TAB NO.:

RELINQUISHED BY: [Signature] 3:00 PM (TIME)  
G.T.E. 4/8/94 (DATE)  
G.T.E. (COMPANY)

RECEIVED BY: [Signature] (TIME)  
[Printed Name] (DATE)  
[Company] (COMPANY)

RELINQUISHED BY: [Signature] (TIME)  
[Printed Name] (DATE)  
[Company] (COMPANY)

RECEIVED BY (LABORATORY): [Signature] 1507 (TIME)  
[Printed Name] 4-8-94 (DATE)  
[Company] (LABORATORY)



1936 Camden A Suite 1  
San Jose, CA 95124

(408) 559-1248

9404102  
Chain of Custody

DATE 4/8/94 PAGE 3 OF 3

**ANALYSIS REPORT**

PROJ. MGR. ERIC LISSOL  
COMPANY G.T.E.  
ADDRESS 1936 CAMDEN AVE. #1  
SAN JOSE CA. 95124

SAMPLERS (SIGNATURE) [Signature] (PHONE NO.) (408) 559-1248

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 824, 8240, 824.2)	BASE/NEUTRALS, ACIDS (EPA 825/827, 8270, 525)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608, 8080)	PHENOLS (EPA 604) 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLC)	CHLORIDES SULFATES DICARBONATES PH	PC1	NUMBER OF CONTAINERS	
km-10-GWS	4/8/94	8:40	WATER		X	X						X											4
MW #1 @ CF	"	9:15	SOIL		X	X						X			RUN	Now					X X X		1
MW #2 @ CF	"	10:30	SOIL		X	X						X			RUN	Now					X X X		1
MW #3 @ CF	"	12:30	SOIL		X	X						X			RUN	Now					X X X		1
CB-11 @ CF	"	1:09	SOIL		X	X						X			HOLD	Run							4
CB-11-GWS	"	1:20	WATER		X	X						X											

**PROJECT INFORMATION**

PROJECT NAME: Disposal Treatment

PROJECT NUMBER: 9407

SHIPPING ID NO:

VA:

**SAMPLE RECEIPT**

TOTAL NO. OF CONTAINERS: 12

CHAIN OF CUSTODY SEALS

REC'D GOOD CONDITION/COLD

CONFORMS TO RECORD

LAB NO.

SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOLD SOILS UNTIL NOTIFICATION  
C/F samples taken off hold  
per E. Lissol 4/11

**RELINQUISHED BY**

1. [Signature] 3:00P (TIME)  
ERIC LISSOL 4/8/94 (DATE)  
G.T.E. (COMPANY)

2. RECEIVED BY (LABORATORY)  
[Signature] 1:30 (TIME)  
B. Maccari 4/8/94 (DATE)  
Chromalab (COMPANY)

# CHROMALAB, INC.

5 DAYS TURNAROUND

Environmental Laboratory (1094)

## F A C S I M I L E

MESSAGE NO.:

FAX NO.:

TOTAL PAGES: 4

DATE: 9-11

FROM: Jackie

TO: Eric Reisol

SHOULD YOU HAVE PROBLEMS RECEIVING THIS MESSAGE, PLEASE CALL (510) 831-1788 OR FAX NUMBER (510) 831-8798.

### MESSAGE:

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# CHROMALAB, INC.

CLIENT: GENTECH  
 DU: 0 3/94  
 REF: 16037 ADD 9404102

Date: 4/15/94 Time: 11:52

Call Date: 4/15/94 Add On Due Date: 4/18/94

Submission No.: PA 04102

Comments: Rush, Due 4/18/94 by noon.

Name of Caller: Steve Stroman

Special Quote: 41 64 x 2 = 82 12.5 per Sample by ET

Company: Gen-Tech

Project Name: \_\_\_\_\_

Project No.: \_\_\_\_\_

## ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	Resistance	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STLC)	Chloride, Sulfate	Bicarbonates	pH	NUMBER OF CONTAINERS
EB-8 @ C/F			S													X						X	X	X	-
MW#1 @ C/F																X						X	X	X	-
MW#2 @ C/F																X						X	X	X	-
MW#3 @ C/F																X						X	X	X	-

RECEIVED  
 APR 26 1994

# CHROMALAB, INC.

Environmental Services (SDB)

April 18, 1994

ChromaLab File No.: 9404201

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Four soil samples for pH analysis.

Project Name: DI SALVO TRUCKING

Project Number: 9407

Date Sampled: April 7, 1994


Date Submitted: April 8, 1994

Date Analyzed: April 18, 1994

## RESULTS:

<u>Sample I.D.</u>	<u>pH Units</u>
EB 8 @ C/F	8.4
MW #1 @ C/F	8.5
MW #2 @ C/F	10.9
MW #3 @ C/F	8.3
BLANK	7.0
METHOD OF ANALYSIS	EPA 9045

ChromaLab, Inc.

  
Carolyn M. House  
Analyst



Eric Tam  
Laboratory Director

cc

APR 26 1994

ANSWERED



# GeoAnalytical Laboratories, Inc.

1031 Kansas Avenue  
Modesto, CA 95351

Phone (209) 572-0900  
FAX (209) 572-0916

## CERTIFICATE OF ANALYSIS

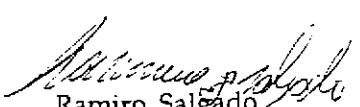
Report # F105-10  
ChromaLab  
2239 Omega Rd Ste 1  
San Ramon CA 94583

Date: 04/18/94  
Date Received: 04/15/94  
Date Started: 04/15/94  
Date Completed: 04/18/94

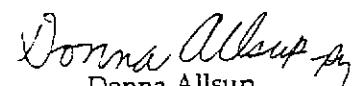
Project Name:

Project # 9404102

Sample ID	Lab ID	Detection Limit	Method	Analyte	Results
EB-8 @ C/F	F20623	1	120.5/5.0	Resistivity	1510 $\mu$ ohm-cm
		1	300	Chloride	136 mg/Kg
		1	300	Sulfate	1 mg/Kg
		10	310.1/10.0	Bicarbonate	66 mg/Kg
MW#1 @ C/F	F20624	1	120.5/5.0	Resistivity	3050 $\mu$ ohm-cm
		1	300	Chloride	48 mg/Kg
		1	300	Sulfate	6 mg/Kg
		10	310.1/10.0	Bicarbonate	812 mg/Kg
MW#2 @ C/F	F20625	1	120.5/5.0	Resistivity	2320 $\mu$ ohm-cm
		1	300	Chloride	10 mg/Kg
		1	300	Sulfate	36 mg/Kg
		10	310.1/10.0	Bicarbonate	ND mg/Kg
MW#3 @ C/F	F20626	1	120.5/5.0	Resistivity	1290 $\mu$ ohm-cm
		1	300	Chloride	5 mg/Kg
		1	300	Sulfate	1 mg/Kg
		10	310.1/10.0	Bicarbonate	21 mg/Kg

  
Ramiro Salgado  
Chemist

Certification # E757

  
Donna Allsup  
Laboratory Director



1936 Camden Ave., Suite 1  
San Jose, CA 95124  
(408) 559-1248

Chain of Custody

DATE 4/7/94 PAGE 1 OF 3

#1114 P03  
FAX NO: 510/831-8798  
ID: CHROMALAB INC  
APR-18-'94 MON 13:40

PROJ. MGR. ERIC LISSON  
COMPANY G.T.E.  
ADDRESS 1936 CAMDEN AVE. #1  
SAN JOSE CA 95124

SAMPLERS (SIGNATURE)  (PHONE NO.) (408) 559-1248

**ANALYSIS REPORT**

SUBM #: 9404102  
CLIENT: GENTECH  
DUE: 04/15/94  
REF: 15915

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 603, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 802, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 824, 8240, 524.2)	BASENEUTRALS, ACIDS (EPA 825/627, 8270, 625)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/POB (EPA 606, 6080)	PHENOLS (EPA 604, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr,	CAM METALS (I)	PRIORITY POLL METALS (13)	EXTRACTION (TCLP, STLC)	NUMBER OF CO
CB-1-GWS	4/7/94	10:00	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-2-CDF	"	10:30	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-2-GWS	"	10:50	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-3@CDF	"	11:40	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-3-GWS	"	12:00	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-4@CDF	"	12:25	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-4-GWS	"	12:35	WATER		X	X	X	X	X	X	X	X	X	X	X					4
CB-5@CDF	"	1:15	SOIL		X	X	X	X	X	X	X	X	X	X	X					4
CB-5-GWS	"	2:25	WATER		X	X	X	X	X	X	X	X	X	X	X					4

**SAMPLE RECEIPT**

**PROJECT INFORMATION**

PROJECT NAME: DI SALVO  
PROJECT NUMBER: 9407  
SHIPPING ID. NO.  
VIA:

TOTAL NO. OF CONTAINERS: 24  
CHAIN OF CUSTODY SEALS  
REC'D GOOD CONDITION/COLD  
CONFORMS TO RECDRO  
LAB NO.

SPECIAL INSTRUCTIONS/COMMENTS: STANDARD 5 DAY  
HOLD WORKS UNTIL NOTIFICATION

RELINQUISHED BY: Eric Lissou 3:00 PM 4/8/94  
(SIGNATURE) (TIME) (DATE)  
G.T.E. (PRINTED NAME)  
(COMPANY)

RECEIVED BY: B. ...  
(SIGNATURE) (TIME) (DATE)  
(PRINTED NAME) (DATE)  
(COMPANY)

RELINQUISHED BY: Eric Lissou 3:00 PM 4/8/94  
(SIGNATURE) (TIME) (DATE)  
G.T.E. (PRINTED NAME)  
(COMPANY)

RECEIVED BY: B. ...  
(SIGNATURE) (TIME) (DATE)  
(PRINTED NAME) (DATE)  
(COMPANY)

H114 P04

FAX NO: 510/831-8798

TO: GEN-TECH  
APR-18-'94 MON 13:41 ID: CHROMALAB INC

PROJ. MGR. ERIC LISSON  
COMPANY G.T.E.  
ADDRESS 1936 CAMDEN AVE. #3  
SAN JOSE CA 95124  
(PHONE NO.)

SAMPLERS (SIGNATURE)  
  
SAMPLE ID. DATE TIME MATRIX LAB ID.

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 8030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 802, 8020)	TPH - Diesel (EPA 8103/3650, 8015)	PURGEABLE AROMATICS RTEX (EPA 802, 8020)	PURGEABLE HALOCARBONS (EPA 801, 8010)	VOLATILE ORGANICS (EPA 824, 8240, 824.2)	BASE/NEUTRALS, ACIDS (EPA 825/827, 8270, 825)	TOTAL OIL & GREASE (EPA 820 E&F)	PESTICIDES/PCB (EPA 608, 6080)	PHENOLS (EPA 604, 6040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, BSL)	NUMBER OF CONTAINERS
ES-6@df	4/7/94	2:00p	SOIL		X	X														1
ES-6-GWS	"	2:10p	WATER		X	X														4
ES-7@df	"	2:45p	SOIL		X	X														1
ES-7-GWS	"	3:01p	WATER		X	X														4
ES-8@df	"	3:20p	SOIL		X	X														1
ES-8-GWS	4/8/94	7:45A	WATER		X	X														4
ES-9@df	"	8:15	SOIL		X	X														1
ES-9-GWS	"	8:25A	WATER		X	X														4

ANALYSIS REPORT

**PROJECT INFORMATION**

PROJECT NAME: D. STENO TRAILWAY

PROJECT NUMBER: #9407

SHIPPING ID NO:

VIA:

SPECIAL INSTRUCTIONS/COMMENTS: STRONG COPY  
HOLD SOILS UNTIL NOTIFICATION

**SAMPLE RECEIPT**

TOTAL NO. OF CONTAINERS: 20

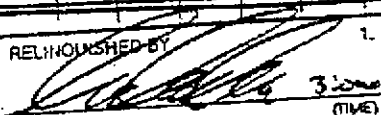
CHAIN OF CUSTODY SEALS

REC'D GOOD CONDITION/COLD

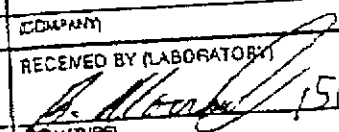
CONFORMS TO RECORD

LAB NO.

RELINQUISHED BY

1.  3:00p (TIME)  
(SIGNATURE)  
ERIC LISSON 4/8/94 (DATE)  
(PRINTED NAME)  
G.T.E. (COMPANY)

2. RECEIVED BY

1.  1507 (TIME)  
(SIGNATURE)  
B. Morrow 4-8-94 (DATE)  
(PRINTED NAME)  
Chromalab (COMPANY)

2. RELINQUISHED BY

(SIGNATURE) (TIME) (SIGNATURE) (TIME)  
(PRINTED NAME) (DATE) (PRINTED NAME) (DATE)  
(COMPANY)





1936 Camden Ave., Suite 1  
San Jose, CA 95124

(408) 559-1248

Chain of Custody

DATE 4/8/94 PAGE 3 OF 3

#1114 P05

FAX NO: 510/831-8798

TO: GEN-TECH  
APR-18-'94 MON 13:42 ID: CHROMALAB INC

ANALYSIS REPORT

PROJ. MGR Eric Lissou  
COMPANY G.T.E.  
ADDRESS 1936 Camden Ave. #1  
San Jose CA. 95124

SAMPLERS (SIGNATURE)   
(PHONE NO.) (408) 559-1248

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) w/BTEX (EPA 802, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASENEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 820 E&F)	PESTICIDES/PCB (EPA 605, 8080)	PHENOLS (EPA 604, 8040)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	EXTRACTION (TCLP, STLD)	NUMBER OF CONTAINERS
CG-10-GWS	4/8/94	8:40	WATER		X	X						X								4
MW #1 @ CF	"	4:15	SOIL		X	X						X								1
MW #2 @ CF	"	10:30	SOIL		X	X						X								1
MW #3 @ CF	"	12:30	SOIL		X	X						X								1
CG-11 @ CF	"	1:59	SOIL		X	X						X								4
CG-11-GWS	"	1:20	WATER		X	X						X								4

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT NAME: <u>DISAHO TRUCKING</u>	TOTAL NO. OF CONTAINERS <u>11</u>	RECEIVED BY 	RELINQUISHED BY 
PROJECT NUMBER: <u>9407</u>	CHAIN OF CUSTODY SEALS	SIGNATURE <u>Eric Lissou</u>	(TIME) <u>3:00P</u>
SHIPPING ID. NO.	REC'D GOOD CONDITION/COLD	(PRINTED NAME) <u>Eric Lissou</u>	(DATE) <u>4/8/94</u>
WA:	CONFORMS TO RECORD	(COMPANY) <u>G.T.E.</u>	(COMPANY)
SPECIAL INSTRUCTIONS/COMMENTS: <u>STANDARD 5 DAY HOLD SOILS UNTIL NOTIFICATION</u>		RECEIVED BY	RECEIVED BY
		(SIGNATURE)	(TIME)
		(PRINTED NAME)	(DATE)
		(COMPANY)	(COMPANY)

RELINQUISHED BY		RECEIVED BY (LABORATORY)	
(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)
(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)
(COMPANY)		(COMPANY)	

RECEIVED BY (LABORATORY)	
(SIGNATURE) <u>K. Morrow</u>	(TIME) <u>4:59</u>
(PRINTED NAME) <u>Chromalab</u>	(DATE)
(COMPANY) <u>Chromalab</u>	



# CHROMALAB, INC.

Environmental Services (SDB)

April 19, 1994

ChromaLab File#: 9404199

GEN-TECH ENVIRONMENTAL

Written: Eric Lissol

Project: DISALVO TRUCKING  
Received: April 15, 1994

Project#: 9407

re: 2 samples for Gasoline and BTEX analysis.

Matrix: WATER

Sampled on: April 14, 1994

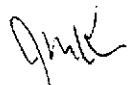
Analyzed on: April 18, 1994

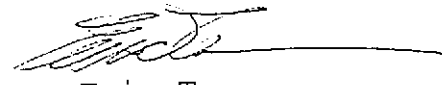
Method: EPA 5030/8015/602

Run#: 2679

Lab #	SAMPLE ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl- Benzene (ug/L)	Total Xylenes (ug/L)
9294	MW #1-GWS	N.D.	N.D.	N.D.	N.D.	N.D.
9295	MW #3-GWS	250	N.D.	N.D.	N.D.	1.2
DETECTION LIMITS		50	0.5	0.5	0.5	0.5
BLANK		N.D.	N.D.	N.D.	N.D.	N.D.
BLANK SPIKE RECOVERY(%)		84	105	107	103	106

ChromaLab, Inc.

  
Jack Kelly  
Chemist

  
Eric Tam  
Laboratory Director

MAY 3 1994

ANSWERED

# CHROMALAB, INC.

Environmental Services (SDB)

April 22, 1994

ChromaLab File No.: 9404199

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Two water samples for Diesel analysis

Project Name: DISALVO TRUCKING

Project Number: 9407

Date Sampled: April 14, 1994

Date Extracted: April 21, 1994

Date Submitted: April 15, 1994

Date Analyzed: April 21, 1994

## RESULTS:

<u>Sample I.D.</u>	<u>Diesel (<math>\mu\text{g/L}</math>)</u>
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MW#1-GWS

N.D.

MW#3-GWS

7700

BLANK

N.D.

SPIKE RECOVERY

93%

DUP SPIKE RECOVERY

97%

DETECTION LIMIT

50

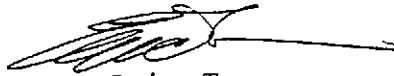
METHOD OF ANALYSIS

3510/8015

ChromaLab, Inc.



Alex Tam  
Analytical Chemist



Eric Tam  
Laboratory Director

# CHROMALAB, INC.

Environmental Services (SDB)

April 21, 1994

ChromaLab File No.: 9404199

GEN-TECH ENVIRONMENTAL

Attn: Eric Lissol

RE: Two water samples for Oil & Grease analysis

Project Name: DISALVO TRUCKING

Project Number: 9407

Date Sampled: April 14, 1994

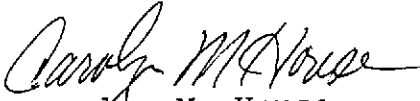
Date Submitted: April 15, 1994


Date Analyzed: April 20, 1994

## RESULTS:

Sample I.D.	Oil & Grease (mg/L)
MW #1-GWS	N.D.
MW #3-GWS	1.7
BLANK	N.D.
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	STD METHOD 5520 B & F

ChromaLab, Inc.

  
Carolyn M. House  
Analyst

  
Eric Tam  
Laboratory Director

cc