SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 866-0919 ■ (415) 791-6406

September 21, 1990

File No. 8-90-421-SI

Mr. Gilbert Wistar
Alameda County
Health Care Service Division
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94612

Subject: Plaza Car Wash
400 San Pablo Avenue
Albany, California.

Dear Mr. Wistar:

Enclosed is the proposed work plan for the above referenced site. This plan has been prepared according to the items discussed in our meeting on September 11, 1990.

Please review the proposal and comment at your earliest convenience. We have scheduled the work to commence within one week of approval.

Sincerely,

SOIL TECH ENGINEERING, INC.

Frank Hamedi-Fard

5.23-97

SITE SEARCH/FILE REVIEW

TO: Juliet Shin

DATE OF FILE SEARCH: May 29, 1997 9:00am

SITE STID NO.

400 San Pablo Ave. Albany 94706 3605 Cop
Playa Car Wash

YOUR COOPERATION IS REALLY APPRECIATED, THANK YOU

Felicia Brown
FILE REVIEW CLERK

F.S-by Scott Johnson of Doedman / Kang attorneys

5-23-97

SITE SEARCH/FILE REVIEW

TO: Juliet Shin

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FILE REVIEW CLERK

Y.S.-by Scott Johnson of Doedman / Kang attorneys

File No. 8-90-421-SI

PROPOSED WORK PLAN FOR
KAMUR INDUSTRIES, INC.
PLAZA CAR WASH SITE
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA
SEPTEMBER 20, 1990

PREPARED FOR:
KAMUR INDUSTRIES, INC.
2351 SHORELINE DRIVE
ALAMEDA, CALIFORNIA 94501

BY:
SOIL TECH ENGINEERING, INC.
298 BROKAW ROAD
SANTA CLARA, CALIFORNIA 95050

SOIL TECH ENGINEERING, INC.

File No. 8-90-421-SI

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SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 866-0919 ■ (415) 791-6406

September 21, 1990

File No. 8-90-421-SI

Kamur Industries, Inc.
2351 Shoreline Drive
Alameda, California 94501

ATTENTION: MR. MURRAY STEVENS

SUBJECT: PROPOSED WORK PLAN FOR THE SUBJECT SITE
Located at 400 San Pablo Avenue
Albany, California.

Dear Mr. Stevens:

We have prepared the enclosed work plan as requested in the meeting on September 11, 1990, by the Alameda County Department of Health (ACDEH) and the California Regional Water Quality Control Board (CRWQCB). This work plan is being submitted to the ACDEH and the California Regional Water Quality Control Board (CRWQCB).

- Removal of product lines from the former fuel leak area. Excavate, remove and store the contaminated soil on-site and soil sampling of the sidewalls and bottom of excavation.
- Sampling of stockpiled soil and proper disposal.
- Backfilling of excavation with clean soil.
- Repiping of the fuel lines.
- Installation of four monitoring wells to assess the extent of contamination.

File No. 8-90-421-SI

- Quarterly monitoring of all on-site wells for one year (the monitoring would include collecting water level measurements and groundwater samples for analysis of Total Petroleum Hydrocarbons (TPH) as gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX).
- Surface water (El Cerrito Creek) sampling per RWQCB requirements during the wet weather seasons (October 1990 to April 1991).

If you have any questions or require additional, feel free to contact our office at your convenience.

Sincerely,

SOIL TECH ENGINEERING, INC.

RICHARD DOWNS
ENVIRONMENTAL EDITOR

LAWRENCE KOO, P. E.
C. E. #34928

FRANK HAMEDI-FARD
GENERAL MANAGER

File No. 8-90-421-SI

PROPOSED WORK PLAN
FOR
KAMUR INDUSTRIES, INC.
PLAZA CAR WASH SITE
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

INTRODUCTION:

As requested by the Alameda County Department of Environmental Health - Hazardous Material Division (ACDEH) and the California Regional Water Quality Control Board (CRWQCB). The enclosed work plan for the subject site has been prepared in accordance with ACDEH and CRWQCB existing guidelines for Fuel Tank Leak Sites.

Soil Tech Engineering, Inc. (STE), in conjunction with Alpha Geo Services, will be performing the work outlined in the proposed work plan after approval from the above agencies.

SITE DESCRIPTION:

The site is located at 400 San Pablo Avenue, in Albany, California, approximately one mile east of San Francisco Bay (see Figure 1). The site is bordered by El Cerrito Creek to the north, San Pablo Avenue to the east and Adams Street to the west. The surrounding area is consists of light commercial and residential.

The site was vacant until 1950. The Plaza Car Wash and the adjacent Norge Dry Cleaners facilities were constructed in the late 1950's (see Figure 2). The three existing underground fuel storage tanks were installed on the site in 1970.

The observation of petroleum free-product in the adjacent El Cerrito Creek on July 3, 1989, prompted the Albany Fire Department to install absorbent materials and boom as a temporary containment measure. A storm drain, which borders the site on the west, was determined to be the source of petroleum product discharge into the creek.

It is our understanding that on July 1989, inventory reconciliation records for Plaza Car Wash, reviewed by Kamur Industries, showed discrepancies in the unleaded gasoline inventory.

A product line test, conducted in mid-July 1989, confirmed a small leak in the unleaded gasoline fuel lines beneath the pump island on July 26, 1989.

The leak was repaired and approximately one cubic yard of gasoline contaminated soil was removed from beneath the line. Analytical results of a composite sample of the excavated soil revealed a Total Volatile Hydrocarbon concentration of 7,500 parts per million (ppm).

PREVIOUS INVESTIGATIONS:

Subsurface Consultants, Inc. (SCI) was retained by Kamur Industries to perform a site assessment. On August 1, 1989, SCI drilled five soil borings and obtained soil samples for laboratory analysis. Four of the soil borings were completed as monitoring wells. The location of the monitoring wells is shown in Figure 3.

Laboratory analysis showed the presence of gasoline contaminants in all soil and groundwater samples obtained on August 1 and 3, 1989.

Per CRWQCB staff request, water samples were also obtained from El Cerrito Creek and the storm drain outlet on August 3, 1989. Laboratory analysis revealed high levels of dissolved hydrocarbons at the storm drain outlet to the creek and low levels were detected about 20 feet down-gradient.

A soil vapor study (SVS) was conducted by SCI in the area of the Plaza Car Wash and adjacent properties, revealed the presence of contaminants. The results of the SVS investigation are described in the SCI report dated November 7, 1989.

On September 19, 1989, Pacific Pipeline Survey conducted a video inspection of the Adams Street storm drain. The inspection revealed excess concrete along the pipe bottom, a bend across the pipe section and large cracks were detected in the pipe. The bend area was considered to be the most likely location for petroleum product to enter the drain pipe and eventually discharged into El Cerrito Creek.

On October 10 and 11, 1989, Riedel Environmental Services, Inc. installed a sump on Adams Street, placed adjacent to the damaged section of the storm drain for optimum groundwater level influence. Storm drain pipe joints exposed during sump installation procedures were sealed with mortar. All excavated soils found to be contaminated, when screened with an organic vapor analyzer, were removed and stored on-site for proper disposal. On December 18, 1989, ITES removed stockpiled soils from the product line repair and sump installation areas. Soils were treated on-site and subsequent sampling indicated to be non-hazardous. The treated soil was transported to the West Contra Costa Sanitary Landfill for disposal.

In December, 1989, Kamur Industries retained International Technology Environmental Services (ITES) to conduct the monitoring and sampling of on-site monitoring wells, the Adams Street sump and El Cerrito Creek. The sampling was conducted on a monthly basis from December, 1989 through May, 1990. All on-site wells showed either high levels of dissolved hydrocarbons or some floating product. The sump also indicated high levels of dissolved hydrocarbons. The El Cerrito Creek samples showed non-detectable levels in the up-stream station. The storm drain outlet samples showed high levels of dissolved hydrocarbons and the down-stream station showed fairly low levels. The ITES report dated July 24, 1990, summarizes the sampling results.

On the basis of the previous work performed by SCI and ITES, STE proposes the following.

- Development of a Health and Safety Plan.
- Removal of product lines from the former fuel leak area. Excavate, remove and store the contaminated soil on-site and soil sampling of the sidewalls and bottom of excavation.
- Sampling of stockpiled soil and proper disposal.
- Backfilling of excavation with clean soil.
- Repiping of the fuel lines.
- Installation of four monitoring wells to assess the extent of contamination.
- Quarterly monitoring of all on-site wells for one year (the monitoring would include collecting water level measurements and groundwater samples for analysis of Total Petroleum Hydrocarbons (TPH) as gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX).
- Surface water (El Cerrito Creek) sampling per RWQCB requirements during the wet weather seasons (October 1990 to April 1991).

Task 1: Health and Safety Plan

As required by OSHA, a site Health and Safety Plan will be developed prior to initiating proposed on-site activities. The Health and Safety Plan will incorporate safeguards against chemical and physical hazards associated with drilling, sampling and

excavating activities. STE staff working on-site as part of this scope of work, will be required to read and adhere to the plan. The project manager will have the responsibility for implementing the Health and Safety Plan.

Task 2: Soil Excavation

Soil will be excavated from the former fuel leak area where high concentrations of TPH were identified by SCI in their previous investigations (Figure 3).

Shallow soil (depths ranging from 3 to 10 feet) will be excavated from the former fuel leak area. The excavated soil will stored on-site for proper disposal. The limits of excavation will initially be based upon visual evidence of gasoline contaminations. Following the excavation of visibly affected soil, soil samples will be collected from the base and sides of the excavation. These samples will be collected in brass tubes using a hand-held sampling device. The ends will be trimmed, sealed with aluminum foil and plastic caps, taped, labeled and stored in an ice chest for delivery to state-certified laboratory for analysis with the proper chain-of-custody attached. Additional excavation will be performed, if deemed necessary, following review of the soil sample analysis results. In order to expedite excavation, a certified mobile laboratory will be used.

Task 3: Sampling of Stockpiled Soil

The excavated soil will be stockpiled on-site on plastic sheeting and will be sampled to determine whether it is feasible to treat on-site by aeration. Permits will be obtained from the ACDEH, for storing on-site, and the Bay Area Air Quality Management District (BAAQMD) for on-site treatment.

Upon approval from BAAQMD, the excavated soils will be aerated, sampled and analyzed in accordance with the Bay Area Air Quality Management District aeration guidelines, to reduce VOC concentrations. Following aeration, the soils will be transported to a licensed Class III landfill facility for disposal. The limits of excavation will initially be based upon field measurements of VOCs using a photoionization detection (PID) device. Following the excavation of measurably affected soil, soil samples will be collected from the base and sides of the excavation. These samples will be collected in brass tubes using a hand-held sampling device, and will be preserved and handled using methods described previously. The soil samples will be submitted to a state-certified analytical laboratory for analysis for TPH and BTEX. Additional excavation will be performed, if deemed necessary, following review of the soil sample analysis results.

Task 4: Backfilling

The excavation will be backfilled with clean material as described in Site Grading and Backfilling in Appendix "B".

Task 5: Installation of Product Pipelines

Repiping of the fuel lines will be based upon contamination detected in the excavation. If contamination is not detected in the vicinity of the underground tank complex, Kamur Industries will install the product lines in accordance with ComSystem, attached in Appendix "C". The underground tanks will be removed if high levels of hydrocarbon contamination (>100 ppm) are detected below or near the tank complex, and a work plan for the proposed new tanks will be submitted.

Task 6: Well Installation, Well Development and Soil Sampling

The present groundwater monitoring network at the site consists of four monitoring wells (MW-1, MW-2, MW-3 and MW-4). STE proposes to install four additional groundwater monitoring wells. The proposed wells will be located as follows: one up-gradient, one down-gradient of the excavation area to replace existing wells #1 and 4 (which will be properly abandoned during excavation), one at the southwest corner of the property and one west of the storm drain (see Figure 3).

Well Installation and Soil Sampling:

Prior to drilling, appropriate permits for well installation and well abandonment will be obtained from the ACDEH. The wells will be installed using the hollow-stem auger drilling method. The wells are expected to be approximately 20 to 30 feet deep and

will be constructed of flush-threaded, 2-inch diameter, PVC casing with approximately 10 feet of 0.002-inch, factory-made, slotted well screen. The screened interval will extend across the top of the groundwater surface to assess the possible presence of floating product.

Soil samples from the borings will be collected during drilling using a continuous sampler to provide detailed lithologic data. Samples will be collected in brass tubes with selected samples being preserved for possible chemical analysis. Preserved samples will be covered with foil, capped, taped, and labeled with the time, day and depth interval. Samples will be stored in a chilled ice chest for transport to an analytical laboratory.

All proposed wells will be drilled and installed in accordance with STE's Standard Operation Procedure (SOP) attached in Appendix "A".

All pertinent drilling, sampling equipment and well casing will be steam cleaned prior to each boring.

Well elevations will be surveyed to the nearest 0.01 foot relative to mean sea level, by a state-licensed surveyor.

Well Development:

The newly-installed monitoring wells will be developed by bailing, jetting, swabbing and/or pumping to remove sediment around the well and to enhance hydraulic communication with the surrounding

formations. Observations concerning specific conductance, pH, temperature, quantity, and clarity of water withdrawn from the wells will be recorded during this process. Approximately 48 hours after well development, the water levels will be measured in all on-site wells and samples of the groundwater will be collected with a clean Teflon Bailer. Approximately three to ten well casing volumes of groundwater will be removed from each well before the samples are collected.

Water Sampling:

The water samples will be placed in laboratory-supplied sample containers. Immediately after sample collection, samples will be placed into a chilled cooler for transport to a state-certified laboratory for chemical analysis. Strict chain-of-custody protocol will be followed in all phases of sample handling.

All sampling equipment will be cleaned using Alconox (a laboratory-grade detergent) and/or high-pressure steam, and the bailer will be fitted with a new rope prior to use in each well. STE's sampling SOP is attached in Appendix "A".

Soil and water samples from the borings will be analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethyl-benzene and Xylenes (BTEX) using EPA Methods 8015 and 8020.

Task 7: Surface Water Sampling

El Cerrito Creek water will be sampled in accordance with the CRWQCB monitoring program. Four monitoring stations (EC-1 through EC-3 and SD-1) are proposed which will consist of an up-gradient station (EC-1) above the storm drain, the storm drain outlet (SD-1), a down-gradient station (EC-2) about 20 to 30 feet below storm drain outlet and EC-3 about 100 feet below the storm drain outlet (see Figure 5).

Water sampling will occur 24 to 48 hours following a significant measurable rainfall (greater than 0.25 inches), and will be analyzed for TPH as gasoline. Monthly surface water results will be submitted to the client.

Task 8: Data Evaluation and Report Preparation

A written report of our findings from this investigation will be prepared containing:

1) A brief description of the field methods used during the site investigation.

2) A summary of relevant information obtained.

3) Our interpretation of the data collected during the field investigation and recommendations.

QUARTERLY MONITORING OF MONITORING WELLS:

Water-Level Measurements

Water levels will be measured, on a quarterly basis, in the newly installed groundwater monitoring wells and existing wells for a period of one year. Existing and proposed monitoring wells on the site will be incorporated into the water-level measurement program.

Water levels will be measured to the nearest 0.01 foot using a Solinst electric water-level probe graduated in 0.02-foot increments, and an Actat electric water-level probe, or an engineer's tape graduated in 0.01-foot increments. Water elevation will be calculated, shallow groundwater piezometric contours will be constructed, and horizontal hydraulic flow direction and gradients will be estimated.

Groundwater Sampling:

Groundwater samples will be collected for chemical analysis in approximately six wells on a quarterly basis for a period of one year (the number and location of wells to be included in the quarterly monitoring program will be assessed based on the results of the initial sampling and analysis described previously).

After representative water samples have been obtained, the samples will be labeled and placed in a chilled cooler for transport to the analytical laboratory. Strict chain-of-custody protocol will be followed during sample handling and shipment.

All groundwater samples collected from monitoring wells will be analyzed by a state-certified laboratory using EPA Methods 8015 and 8020 for TPH and BTEX respectively.

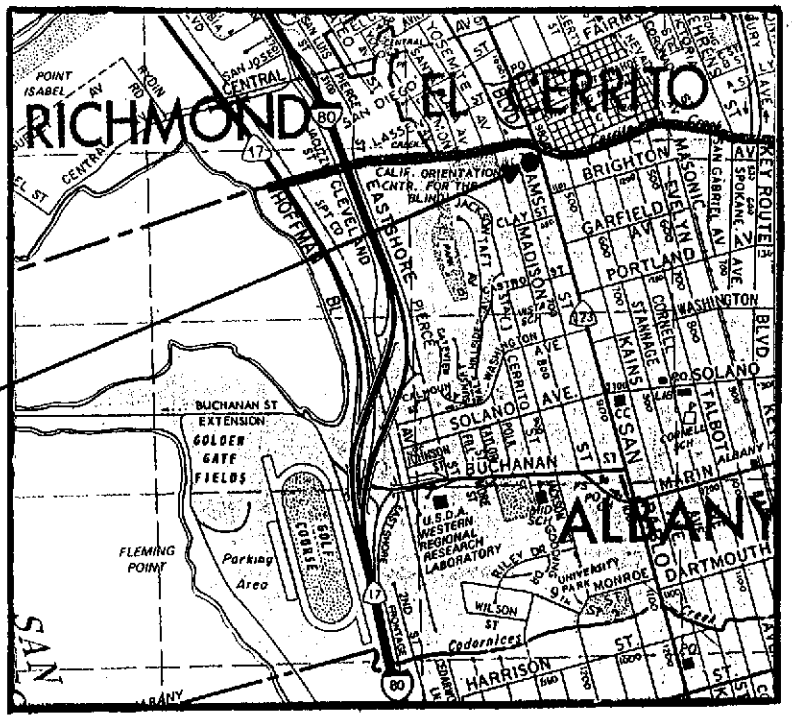
Surface Water Sampling:

As indicated earlier, four stations will be monitored after 24 hours of a significant rainstorm exceeding 0.25-inches. A monthly report of surface water will be submitted to the client.

SCHEDULE:

STE can begin the work within one week after being given authorization and work plan approval by the ADEH.

We anticipate that the tasks outlined above (i.e. installation of four shallow monitoring wells, collection and analysis of soil samples and first-quarter groundwater samples, excavation of gasoline affected soil) can be completed and a written report provided to the client within 60 days of our receipt of written authorization to proceed and approval of this work plan by the Alameda County Health Department, barring any delays due to weather conditions or subcontractor unavailability.



Thomas Brothers Map 1982 Edition
Alameda - Contra Costa Counties

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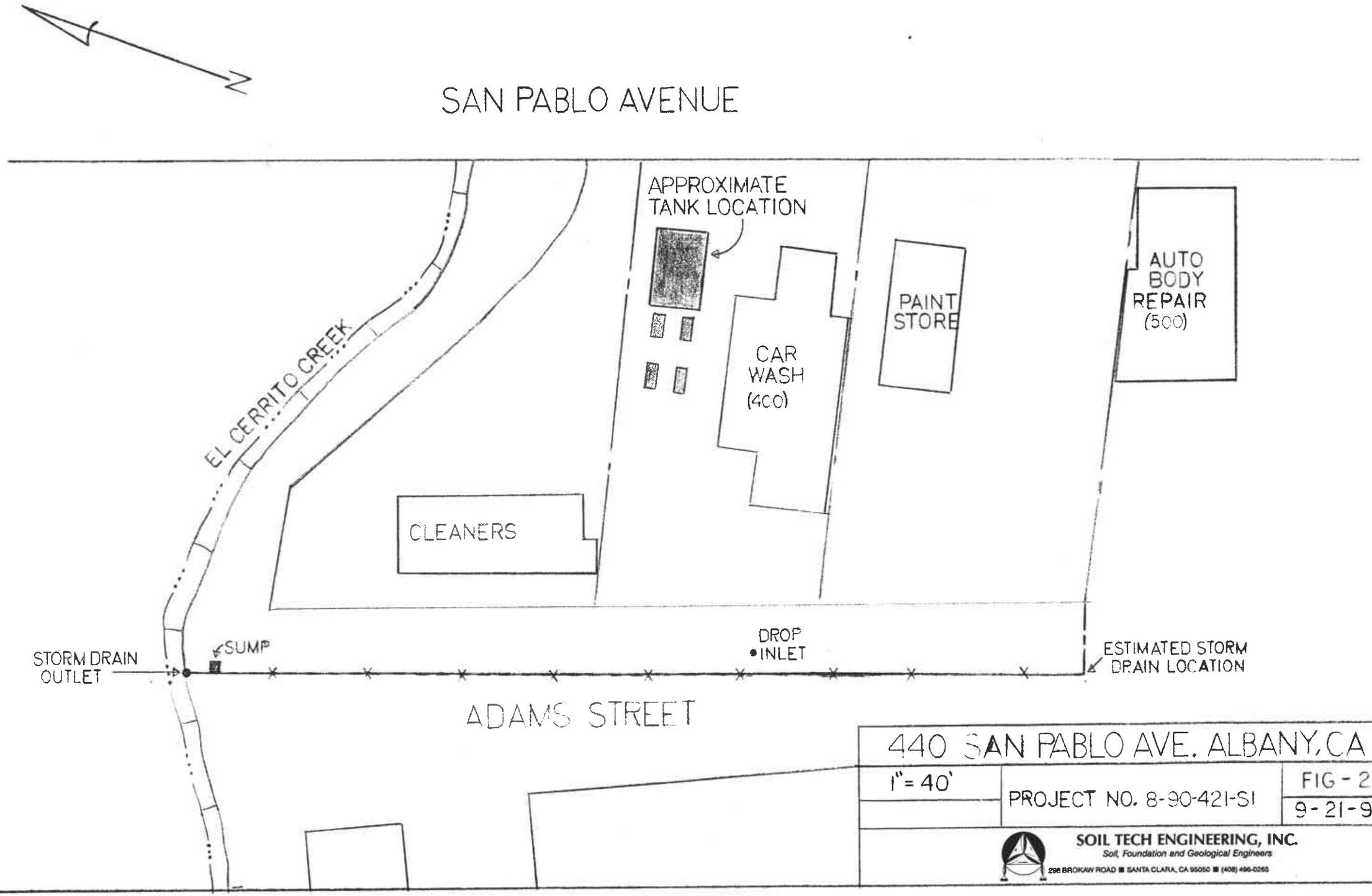
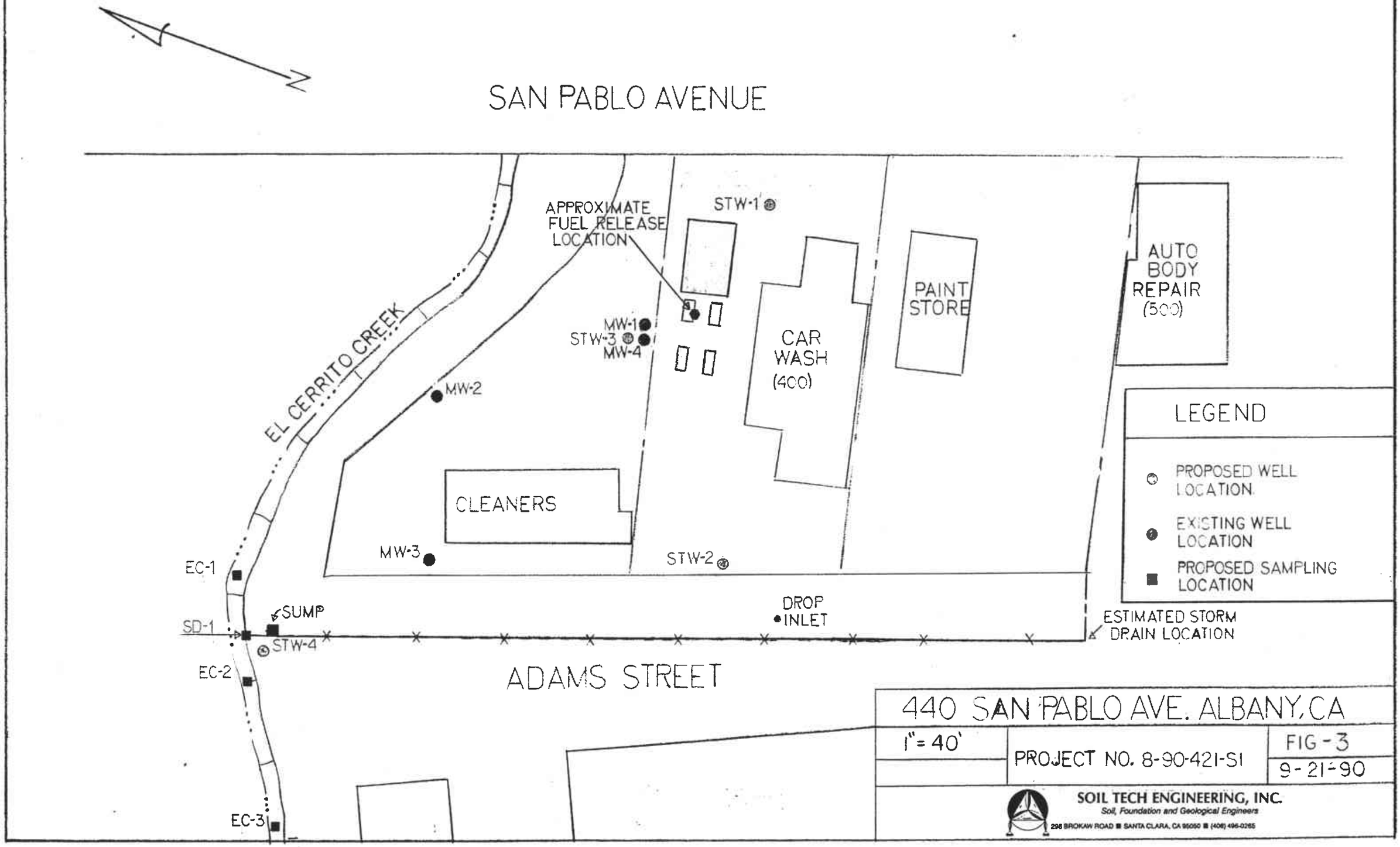
Figure 1



440 SAN PABLO AVE. ALBANY, CA

1" = 40'	PROJECT NO. 8-90-421-SI	FIG - 2
		9-21-90

SOIL TECH ENGINEERING, INC.
Soil, Foundation and Geological Engineers
298 BROKAW ROAD ■ SANTA CLARA, CA 95050 ■ (408) 496-0265


SAN PABLO AVENUE
APPROXIMATE FUEL RELEASE LOCATION
STW-1
MW-1
STW-3
MW-4
MW-2
EL CERRITO CREEK
CAR WASH (400)
PAINT STORE
AUTO BODY REPAIR (500)
CLEANERS
MW-3
STW-2
EC-1
SUMP
SD-1
STW-4
EC-2
EC-3
DROP INLET
ESTIMATED STORM DRAIN LOCATION
ADAMS STREET
LEGEND
PROPOSED WELL LOCATION
EXISTING WELL LOCATION
PROPOSED SAMPLING LOCATION
440 SAN PABLO AVE. ALBANY, CA
1" = 40'
PROJECT NO. 8-90-421-S1
FIG - 3
9-21-90
SOIL TECH ENGINEERING, INC.
Soil, Foundation and Geological Engineers
298 BROKAW ROAD ■ SANTA CLARA, CA 95050 ■ (408) 496-0265

File No. 8-90-421-SI

DRILLING AND SOIL SAMPLING PROCEDURE

A truck mounted drill rig, using a continuous, solid-flight, hollow stem auger will be used in drilling soil borings to the desired depths.

Prior to drilling, all drilling equipment (i.e. auger, pin, and drilling head) will be thoroughly steam-cleaned to minimize the possibility of cross-contamination and/or vertical migration of possible contaminants.

In addition, prior to obtaining each individual soil sample, all sampling tools, including the split-spoon sampler and brass liners will be thoroughly washed in a Tri-Sodium Phosphate (TSP) solution followed by a rinse in distilled water.

During the drilling operation, relatively undisturbed soil samples will be taken from the required depth by forcing a 2-inch I.D., split-spoon sampler insert with a brass liner into the ground by means of a 140-lb. hammer, falling 30-inches or by hydraulic forces, at various depths.

The samplers will contain relatively undisturbed soil. In general, the first section of soil from the sampler (shoe) will be used in the field for lithologic inspection and evidence of contamination. The selected brass liner will be immediately trimmed, and the ends of the brass liner will be covered tightly with aluminum foil and plastic caps, sealed with tape, labeled, placed in a plastic bag

and store in an ice chest on blue ice in order to minimize the escape of any volatiles present in the samples. Soil samples for analysis are subsequently sent to a State Certified Hazardous Waste Laboratory accompanied by a chain-of-custody record.

Soil samples collected at each sampling interval will be inspected for possible contamination (odor or peculiar colors). Soil vapor concentrations are measured in the field by using Photoionization Detector (PID), PhotoVac-Tip Air Analyzer. The purpose of this field analysis is to qualitatively determine the presence or absence of hydrocarbons and to establish which soil samples will be analyzed at the laboratory. The soil sample is sealed in a zip-lock plastic bag and placed in the sun to enhance volatilization of the hydrocarbons from the sample. The data is recorded on the drilling log at the depth corresponding to the sampling point.

Other soil samples may be collected to document the stratigraphy and estimate relative permeability of the subsurface materials.

Soil tailings obtained during drilling will be stored on-site in steel drums, pending the analytical test results, for proper disposal.

SOIL TECH ENGINEERING
Soil, Foundation and Geological Engineers
298 BROKAW ROAD, SANTA CLARA, CA 95050

File No. _____

Date _____

By _____

Job _____

Site Description _____ (continued on reverse side)

Type of Drill Rig _____ Hole Dia. _____

(NOTE WATER LEVEL, TIME, DATE AT END OF LOG, CAVING, ETC.)

Elev. _____ Datum _____

Sample Quality	Blows/6 inches	Sample Loc.	Sample No.	Depth		Soil Classification	Penetrometer
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				0			
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				0			
				1			
				2			

File No. 8-90-421-SI

MONITOR WELL INSTALLATION

Prior to well installation, all the necessary permits will be obtained from the local regulatory agencies.

The boreholes for monitor wells are drilled with the diameter at least two inches larger than the casing outside diameter (O.D.).

Monitor wells will be cased with threaded factory perforated and blank, schedule 40 P.V.C. The perforated interval consists of slotted casing, generally 0.010 to 0.040 inch wide by 1.5 inch long slots, with 42 slots per foot (slots which match formation grain size as determined by field grain-size distribution analysis), a P.V.C. cap is fastened to the bottom of the casing (no solvents, adhesive, or cements are used). The well casing is thoroughly washed and steam-cleaned.

After setting the casing inside the borehole, kiln dried sand or gravel filter-material is poured into the annular space from the bottom of the boring to 2 feet above the perforated interval. A 1 to 2-feet thick bentonite plug will be placed above this filter material to prevent grout infiltration into the filter material. Approximately 1 to 2 gallons of distilled water will be added to hydrate the bentonite pellets. The well is then sealed from the top of the bentonite seal to the surface with concrete or neat cement (containing about 5% bentonite) (see Well Construction Detail).

For protection from vandalism and surface water contamination, Christy boxes with a special type of Allen screw are installed around the well head, (for wells in parking lots, drive-ways and building areas). Steel stovepipes with padlocks are usually set over well heads in landscaped areas.

In general, groundwater monitoring wells shall extend to the base of the upper aquifer, as defined by the consistent (less than 5 feet thick) clay layer below the upper aquifer, or at least 10 to 15 feet below the top of the upper aquifer, whichever is shallower. The wells shall not extend through the laterally extensive clay layer below the upper aquifer. The wells shall be terminated 1 foot to 2 feet into such a clay layer.

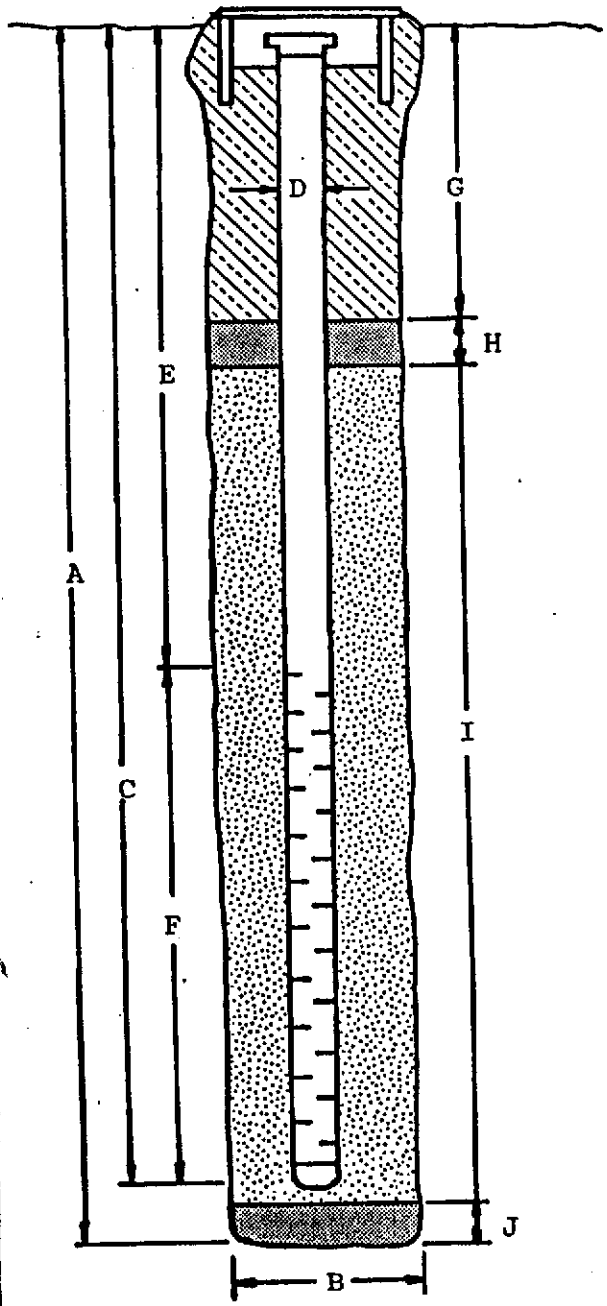
WELL DETAILS

PROJECT NAME:_____ BORING/WELL NO._____

PROJECT NUMBER:_____ CASING ELEVATION:_____

WELL PERMIT NO.:_____ SURFACE ELEVATION:_____

G-5 Vault Box



A. Total Depth:_____

B. Boring Diameter:_____

Drilling method:_____

C. Casing Length:_____

Material:_____

D. Casing Diameter:_____

E. Depth to Perforations:_____

F. Perforated Length:_____

Perforated Interval:_____

Perforation Type:_____

Perforation Size:_____

G. Surface Seal:_____

Seal Material:_____

H. Seal:_____

Seal Material:_____

I. Gravel Pack:_____

Pack Material:_____

Size:_____

J. Bottom Seal:_____

Seal Material:_____

File No. 8-90-421-SI

WELL DEVELOPMENT AND WATER LEVEL MEASUREMENTS

For all newly-installed groundwater monitoring wells, the well casing, filter pack and adjacent formation shall be cleared of disturbed sediment and water.

Well development techniques will include pumping, bailing, surging, swabbing, jetting, flushing and air lifting by using a stainless steel or Teflon bailer, submersible stainless steel pump, or air lift pump. The well development will continue until the groundwater appears to be relatively free of fine-grained sediments and/or until field measurements of pH, electrical conductivity and temperature stabilize.

To assure that cross-contamination does not occur between wells, all well development tools be thoroughly washed in a Tri-Sodium Phosphate (TSP) solution followed by a rinse in distilled water or steam-cleaned before each well development.

Subsequent to well installation, the well(s) will be surveyed to the nearest benchmark to an accuracy of 0.01 feet, in order to accurately measure the groundwater elevation. The depth to the static water surface in all wells will be measured monthly.

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MONITORING WELL SURVEY SHEET

NAME: _____ DATE: _____

FACILITY NAME AND ADDRESS: _____

_____

DATE WELLS SURVEYED: _____

FIELD ACTIVITIES

	RUN 1		RUN 2		RUN 3	
WELL NUMBER	ROD READING	RIM ELEVATION	ROD READING	RIM ELEVATION	ROD READING	RIM ELEVATION

WARNING: HAVE YOU SURVEYED ALL WELLS? LOCATED ALL WELLS?

HAVE YOU CHECKED FOR AND SURVEYED EXISTING MONITORING WELLS ON ADJACENT PROPERTIES OR PROPERTIES ACROSS THE STREET?

DO WE HAVE ACCURATE SKETCHES AT 1"=30' (AND 1"=100' IF NECESSARY)? IF NOT, MAKE THEM.

\SURVEY

File No. 8-90-421-SI

GROUNDWATER SAMPLING

Prior to collection of groundwater samples, all of the sampling equipment (i.e. bailer, cables, bladder pump, discharge lines and etc...) are cleaned by pumping TSP water solution followed by distilled water.

Prior to purging the well, "Water Sampling Field Survey Forms" will be filled out (depth to water level and total depth of well and well casing volume calculated). The well will be then bailed or pumped to remove four to ten well-volumes or until the discharged water temperature, conductivity and pH stabilize. "Stabilized" is defined as three consecutive readings within 15% of one another.

The groundwater sample will be collected when the water level in the well recovers to 80% of its static level.

Forty milliliter (ml.) glass Volatile Organic Analysis (VOA) vials with Teflon septa will be used as sample containers. The groundwater sample will be decanted into each VOA vial in such a manner that no air space is present. The cap is quickly placed over the top of the vial and securely tightened. The groundwater sample will be labeled and refrigerated for delivery with proper chain-of-custody to the laboratory. Chain-of-custody information should include a sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

In general, a laboratory-cleaned bailer will be used for each monitoring well sampled.

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Soil, Foundation and Geological Engineers

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WELL MONITORING/SAMPLING

Name:_____ Date:_____

FACILITY NAME AND ADDRESS:_____

_____

DATE WELLS DEVELOPED:_____

FIELD ACTIVITIES

DEVELOPING MONITORING PURGING (PUMP/BAIL) SAMPLING

WELL NUMBER	WELL DEPTH	WATER DEPTH	PRODUCT THICKNESS	SHEEN PRESENCE	ODOR	VOLUME WATER	PURGED PRODUCT

SKETCH -- REMARKS

Volume of Water in Casing or Hole

Diameter of Casing or Hole (In)	Gallons per foot of Depth	Cubic Feet per Foot of Depth	Liters per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509×10^{-3}
1½	0.092	0.0123	1.142	1.142×10^{-3}
2	0.163	0.0218	2.024	2.024×10^{-3}
2½	0.255	0.0341	3.167	3.167×10^{-3}
3	0.367	0.0491	4.558	4.558×10^{-3}
3½	0.500	0.0668	6.209	6.209×10^{-3}
4	0.653	0.0873	8.110	8.110×10^{-3}
4½	0.826	0.1104	10.26	10.26×10^{-3}
5	1.020	0.1364	12.67	12.67×10^{-3}
5½	1.234	0.1650	15.33	15.33×10^{-3}
6	1.469	0.1963	18.24	18.24×10^{-3}
7	2.000	0.2673	24.84	24.84×10^{3}
8	2.611	0.3491	32.43	32.43×10^{3}
9	3.305	0.4418	41.04	41.04×10^{3}
10	4.080	0.5454	50.67	50.67×10^{3}
11	4.937	0.6600	61.31	61.31×10^{3}
12	5.875	0.7854	72.96	72.96×10^{3}
14	8.000	1.069	99.35	99.35×10^{3}
16	10.44	1.396	129.65	129.65×10^{3}
18	13.22	1.767	164.18	164.18×10^{3}
20	16.32	2.182	202.68	202.68×10^{3}
22	19.75	2.640	245.28	245.28×10^{3}
24	23.50	3.142	291.85	291.85×10^{3}
26	27.58	3.687	342.52	342.52×10^{3}
28	32.00	4.276	397.41	397.41×10^{3}
30	36.72	4.909	456.02	456.02×10^{3}
32	41.78	5.585	518.87	518.87×10^{3}
34	47.16	6.305	585.68	585.68×10^{3}
36	52.88	7.069	656.72	656.72×10^{3}

1 Gallon = 3.785 Liters
1 Meter = 3.281 Feet
1 Gallon Water Weighs 8.33 lbs. = 3.785 Kilograms
1 Liter Water Weighs 1 Kilogram = 2.205 lbs.
1 Gallon per foot of depth = 12.419 liters per foot of depth
1 Gallon per meter of depth = 12.419×10^{3} cubic meters per meter of depth

From Groundwater and Wells, Second Edition

CHAIN OF CUSTODY RECORD

PROJ. NO.	NAME
SAMPLERS: *(Signature)*	

NO.	DATE	TIME	Soil	Water	LOCATION	CONTAINER	Analyses Requested (2)							REMARKS

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Receive by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks	

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Soil, Foundation and Geological Engineers

SAMPLE MANAGEMENT

Sample Type: Soils, Oils, Solvents, Polids, Highly Contaminated Liquids (c)

General Composition	Sample Volume	Sample Container	Preservative	Holding Time (recommended/regulatory)
Weak Acids and Bases		plastic or glass		
Photosensitive materials		amber glass		
Volatile organics		40 ml glass vial with TFE lined septum		
Non-volatile organics		glass with TFE lined cap		
Measurement - General Chemical Categories, Inorganic				
Inorganics, general		plastic or glass		
Metals, total		plastic or glass		
Measurement - General Chemical Categories, Organic				
Acid extractables		glass with TFE lined cap		
Base/neutral extractables		glass with TFE lined cap		
Measurement Specific Chemicals - Inorganic				
Hydrofluoric acid		plastic		
Phosphoric acid		plastic		

SAMPLE MANAGEMENT

Sample Type: Waste

General Composition	Sample Volume	Sample Container	Preservative	Holding Time (d) (recommended/regulatory)
Measurement - Specific Chemicals, Inorganic				
Ammonia			add 1 ml conc H_3PO_4	24 hrs
Arsenic			add 6 ml conc HNO_3/L	6 months
Chlorine			cool 4°C	24 hrs
Chromium VI			add 6 ml conc H_2SO_4/L	24 Hrs
Cyanide, total			add 2.5 ml of 50% NaOH/L, cool 4°C	24 hrs
Fluoride			cool 4°C	7 days
Mercury, total			add 5 ml conc HNO_3L	38 days
Mercury, dissolved			filter, add 5 ml conc HNO_3/L	38 days
Selenius			add 5 ml conc HNO_3/L	6 months
Sulfide			add 2 ml conc HC1/1	24 hrs
Zinc			add 2 ml conc HC1/1	-

Sample Type: Soils, Oils, Solvents, Solids, Highly Contaminated Liquids (c)

Strong acids, pH<2	glass
Strong bases, pH>12.5	plastic

SAMPLE MANAGEMENT

Sample Type: Water and Wastewater

General Composition	Sample Volume	Sample Container	Preservative	Holding Time (d) (recommended/regulatory)
Sulfate	50 ml	plastic or glass	cool 4°C	7 days/28 days
Sulfide	500 ml	plastic or glass	cool 4°C, add 4 drops 2N Zn acetate/100 ml	24 hrs/28 days
Sulfite	50 ml	plastic or glass	determine on site	no holding
Measurement - Specific Chemicals, Organic				
NTA	50 ml	plastic or glass waterline & center	cool 4°C	24 hrs
Measurement - Physical Properties				
Acidity			cool 4°C	24 hrs
Alkalinity			cool 4°C	24 hrs
pH			determine on site	6 hrs
			cool 4°C	
Measurement - General Chemical Categories, Inorganic				
Metals, dissolved			filter on site, add 5 ml conc HNO_3/L	6 months
Metals, total			add 5 ml conc HNO_3/L	6 months
Measurement - General Chemical Categories, Organic				
Phenolics			add H_3PO_4 to pH 4 and 1 g $CuSO_4$/L, cool 4°C	24 hrs

SAMPLE MANAGEMENT

Sample Type: Water and Wastewater

General Composition	Sample Volume	Sample Container	Preservative	Holding Time (d) (recommended/regulatory)
Measurements - Specific Chemicals, Inorganic				
Ammonium	500 ml	plastic or glass	cool, 4°C, add H_2SO_4 to pH<2	24 hr/28 days
Boron	100 ml	plastic	none required	28 days/28 days
Chlorine	200 ml	plastic or glass	determine on site	no holding
Chromium VI	300 ml	plastic or glass, rinse with 1:1 HNO_3	cool, 4°C	24 hrs/28 days
Cyanide, total	500 ml	plastic or glass add NaOH to pH>12	cool, 4°C, dark	24 hrs/14 days
Cyanide, amenable to chlorination	50 ml	plastic or glass	add 100 mg NaS_2O_3	
Fluoride	300 ml	plastic	none required	7 days/28 days
Iodide	100 ml	plastic or glass	cool, 4°C	24 hrs/ -
Iodine	500 ml	plastic or glass	determine on site	1/2 hr/ -
Mercury, total	500 ml	plastic or glass rinsed with 1:1 HNO_3	cool, 4°C add HNO_3 to pH<2	28 days/28 days
Mercury, dissolved	100 ml	plastic or glass	filter on site add HNO_3 to pH<1	glass: 38 days hard plastic: 13 days
Nitrate	100 ml	plastic or glass	cool, 4°C add H_2SO_4 to pH<2	24 hrs/48 hrs
Nitrate & nitrate	200 ml	plastic or glass	cool, 4°C add H_2SO_4	24 hrs/28 days
Nitrate	100 ml	plastic or glass	cool, 4°C or freeze	

SAMPLE MANAGEMENT

Sample Type: Water and Wastewater

General Composition	Sample Volume	Sample Container	Preservative	Holding Time (d) (recommended/regulatory)
Measurement - General Chemical Categories, Organic				
Acid extractables		2 liter glass with TFE lined cap		
Base/neutral extractable		2 liter glass with TFE lined cap		
MBA's	250 ml	plastic or glass	cool, 4°C	24 hr
Oil and Grease	1000 ml	glass, wide mouthed, calibrated	cool, 4°C, H_2SO_4 to pH<2	24 hr/28 days 24 hr/28 days
Organics		glass rinsed with organic solvents, TFE cap		
Phenolics	500 ml	glass		24 hr/28 days
Purgeables by purge and trap	50 ml	glass, TFE lined cap		

SAMPLE MANAGEMENT

Sample Type: Water and Wastewater (a,b,c)

General Composition	Sample Volume	Sample Container	Preservative	Holdin Time (d) (recommended/regulatory)
Nonvolatile organics		2 liter glass with TFE lined cap		
Photosensitive materials		1 liter amber glass		
Volatile organics		40 ml glass vial with TFE lined cap (collect in duplicate)		
Volatile	100 ml	Plastic or glass	cool, 4°C	7 days
Measurement - Physical Properties				
Acidity	100 ml	plastic or borosilicate glass	cool, 4°C	24 hr/14/days
Alkalinity	200 ml	plastic or glass	cool, 4°C	24 hr/14/days
pH	25 ml	plastic or glass	determine on site	2 hr/2 hr
Temperature	1000 ml	plastic or glass	determine on site	no holding
Measurement - General Chemical Categories, Inorganic				
metals, dissolved	200 ml	plastic(g) or glass	filter on site (f)	6 mos (e)
metals, total	100 ml	plastic(g) or glass rinsed with 1:1 HNO_3	HNO_3 to pH<2 (g)	6 mos/6 mos (e)

Site Grading and Backfilling:

Site clearing, placement of fill and the control of grading operations at the site must be conducted in accordance with the following recommendations and under a supervision of a Project Engineer.

1) The depression left by the removal of contaminated soil should be cleaned of all debris and backfilled with clean soil. This backfill must be engineering fill. This operation must be conducted under the supervision of the Project Engineer.

2) All engineering fill, whether native or imported soil, should be placed in uniform horizontal lifts not more than 6 to 8 inches in uncompacted thickness and compacted to not less than 90% relative compaction according to ASTM D1557-78 procedure.

3) Before compaction begins, the fill material whether native or imported soil shall be brought to water content that will permit compaction by either:

   A) Aerating the material if it is too wet, or
   B) Spraying the material with water if it is too dry.

   Each lift shall be thoroughly mixed before compaction. No rocks larger than 4 inches in diameter should be used.

4) No soil shall be placed or compacted during periods of rain nor on ground which is not drained of all free water. Soil which has been soaked and wetted by rain or any other cause, shall

not be compacted until completely drained and the moisture content is within the limits herein described or approved by the Project Engineer. Prior approval by the Project Engineer shall be obtained before continuing the grading operations.

5) The contractor shall conduct all grading operations in such a manner as to preclude wind blow dirt, dust and related damage to neighboring properties. The means of dust control shall be left to the discretion of the contractor. the contractor shall assume liability for claims related to wind blow materials.

6) Any import soil for engineering fill shall be approved by the Project Engineer before the grading operation.

7) All grading shall be observed and approved by Project Engineer and shall prepare a final report upon completion of the back-filling operations.

File No. 8-90-421-SI

OUTLINE OF DRUM HANDLING PROCEDURES
FOR
KAMUR INDUSTRIES, INC.
PLAZA CAR WASH SITE
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

1. Test material per site-specific test requirements.

2. Classify Material as: Clean/Non-Hazardous.

3. Labeling of Drums:

   * Pending Label: Used to describe material pending final analytical testing. Labels must be immediately affixed to drum during field work.

   * Non-Hazardous Label: Required within 24 hours after analytical results are received.

   * Hazardous Label: Required within 24 hours after analytical results are received.

   * For Pick-Up Label: Must be affixed to drum prior to arranged pick-up date by certified hauler.

4. Remove within 21 days of generation. Empty drums, where material was disposed in bulk, must be removed the same day they are emptied.

5. Disposal of Material:

   * Clean: Any local landfill.

   * Non-Hazardous: Class III landfill.

   * Hazardous: Class I landfill.

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6. Manifests may be signed by the on-site contractor or consultant, owner, or other authorized representatives. The transporter should not sign the manifest.

   It is the responsibility of the contractor, consultant and owner to arrange for a person to sign the manifest on the day of pick-up.

7. Reporting:

   Reports shall include the following:

   * Completed soil and water worksheets.
   * Copy of the analytical results.
   * State how and where material was disposed.
   * If drums are emptied and material was disposed of in bulk, state how empty drums were handled.
   * The signed blue and yellow copies of the hazardous waste manifest.

SOIL:

1. Test Requirements and Methods: Per STE site-specific test requirements.

   * TPH: EPA Method 8015.
   * BTEX: EPA Method 8020.
   * O&G: 503 D&E.
   * Lead:

     -Total Lead - EPA Method 7421.

-Inorganic (soluble) Lead: DOS Title 22, Waste Extraction Test, §22-66700.

-Organic - EPA Method 8240.

* Ignitable:

2. Classification:

* Clean: TPH, BTEX, O&G, VOC and non-detectable (<100 ppm).

* Non-Hazardous if any are true:

-TPH less than 1,000 ppm.

-Lead - Inorganic (soluble) Lead less than 5 ppm (STLC) or less than 100 ppm (TTLC).
- Organic Lead less than 13 ppm (TTLC).

* Hazardous if any are true:

-TPH greater than 1,000 ppm.

-Lead - Inorganic (soluble) Lead greater than 5 ppm (STLC) or greater than 1,000 ppm (TTLC).
- Organic Lead greater than 13 ppm (TTLC).

-Ignitable - If TPH > 1,000 ppm, then conduct Bunsen Burner Test.
- If soil bums vigorously and presistently, soils are RCRA D001.

* VOC - less than 1,000 ppm.

3. Responsibility for Disposal:

* Clean: Consultant, contractor or owner.

* Non-Hazardous: Consultant, contractor or owner.

4. Types of Drums: DOT-17H for a solid, solidified, or sludge material.

5. Disposal Facility:

   * Clean: Any local landfill.

   * Non-Hazardous: Class III or II landfill.

   * Hazardous: Class I landfill.

WATER:

1. Test Requirements and Methods: Per site-specific test requirements.

   * TPH: EPA Method 8015.

   * BTEX: EPA Method 602.

2. Classification:

   * Clean Water: TPH and BTEX non-detectable.

   * Hazardous:

     -Water with dissolved product and detectable TPH and BTEX.

     -Water with free product.

     -Free product only.

3. Responsibility for Disposal:

   * Clean: Consultant/Contractor.

   * Non-Hazardous: Consultant, contractor or owner.

4. Types of Drums: DOT-17C or DOT-17E for liquid or slurry.

5. Disposal Facility:

   * Clean Water: Into sanitary sewer per Local Sewer District approval or into storm sewer with proper approval from Water Board.

   * Non-Hazardous:

     -Water with TPH and BTEX only.

     -Water with free product.

     -Arrange certified waste hauler to pick and dispose.

   * Hazardous:

     -Free product only.

     -Arrange disposal by a certified hazardous waste hauler.

SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 866-0919 ■ (415) 791-6406

GENERAL FORMAT
SOIL SAMPLING FOR DISPOSAL
and/or
SITE SUPERVISION

REPRESENTATIVE_____ DATE_____

FACILITY NAME AND ADDRESS_____

_____

FACILITY CONTACT/ENGINEER:_____ PHONE:(___)_____

DEALER/OWNER :_____ PHONE:(___)_____

CONTRACTOR :_____ PHONE:(___)_____

FIRE DEPARTMENT :_____ PHONE:(___)_____

COUNTY HEALTH DEPARTMENT :_____ PHONE:(___)_____

STATE AGENCY :_____ PHONE:(___)_____

SOIL DESCRIPTION(Circle one): SANDY SILTY CLAY SANDY/CLAY SILTY/SAND

ODOR DESCRIPTION (Circle one): NONE FAINT MINOR STRONG

SOIL SAMPLING

NUMBER OF COMPOSITE SAMPLES:_____DEPTH SAMPLES TAKEN AT:_____(FT)

NUMBER OF SAMPLES PER COMPOSITE:_____

SITE SUPERVISION

AERATION: DATE PERMISSION OBTAINED FROM BAAQMD:_____

TOTAL VOLUME OF SOIL TO BE AERATED :_____cu.yds.

VOLUME OF SOIL AERATED ON THIS DATE :_____cu.yds.

EXCAVATION: DESCRIBE PURPOSE:_____

_____

_____

APPROXIMATE VOLUME OF SOIL EXCAVATED:_____cu.yds.

_____

REMARKS:_____

_____

_____

File No. 8-90-421-SI

HEALTH AND SAFETY PLAN
FOR
KAMUR INDUSTRIES, INC.
PLAZA CAR WASH SITE
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

General:

This Health and Safety Plan (HSP) contains the minimum requirements for the subject site field work. The field activities include drilling, soil sampling and water sampling. All personnel and contractors will be required to strictly adhere with this HSP requirements.

The objective of the HSP plan is to describe procedures and actions to protect the worker, as well as unauthorized person, from inhalation and ingestion of, and direct skin contact with potentially hazardous materials that may be encountered at the site. The plan describes (1) personnel responsibilities and (2) protective equipment to be used as deemed when working on the site. At a minimum, all personnel working at the site must read and understand the requirements of this HSP. A copy of this HSP will be on-site, easily accessible to all staff and government field representative.

Personnel Responsibilities:

Key personnel directly involved in the investigation will be responsible for monitoring the implementation of safe work

practices and the provisions of this plan are (1) the drilling project supervisor and (2) Soil Tech Engineering, Inc. (STE) project field engineer. These personnel are responsible for knowing the provisions of the plan, communicating plan requirements to workers under their supervision and regulatory agencies inspectors and for enforcing the plan.

The personnel-protective equipment will be selected to prevent field personnel from exposure to fuel hydrocarbons that may be present at the site. To prevent direct skin contact, the following protective clothing will be worn as appropriate while working at the site:

1. Tyvek coveralls.
2. Butyl rubber or disposable vinyl gloves.
3. Hard hat with optional face shield.
4. Steel toe boots.
5. Goggles or safety glasses.

The type of gloves used will be determined by the type of work being performed. Drilling personnel will be required to wear butyl rubber gloves because they may have long duration contact with the subsurface materials. STE sampling staff will wear disposable gloves when handling any sample. These gloves will be charged between each sample.

Personnel protective equipment shall be put on before entering the immediate work area. The sleeves of the overalls shall be outside of the cuffs of the gloves to facilitate removal of clothing with

the least potential contamination of personnel. If at any time protective clothing (coveralls, boots or gloves) become torn, wet or excessively soiled, it will be replaced immediately.

Total organic vapors will be monitored at the site with a portable PID. Should the total organic vapor content approach that of the threshold limit value (TLV) for any of the substances listed in Table 1, appropriate safety measures will be implemented under the supervision of the site project engineer. These precautions include, but are not limited to, the following: (1) Donning of respirators (with appropriate cartridges) by site personnel, (2) forced ventilation of the site, (3) shutdown of work until such time as appropriate safety measures sufficient to insure the health and safety of site personnel can be implemented.

TABLE 1
THRESHOLD LIMIT VALUES
FOR
COMMON GASOLINE CONSTITUENTS

Benzene	10 ppm
Toluene	100 ppm
Ethylbenzene	100 ppm
Xylenes	100 ppm

No eating, drinking or smoking will be allowed in the vicinity of the drilling operations. STE will designate a separate area on site for eating and drinking. Smoking will not allowed at the

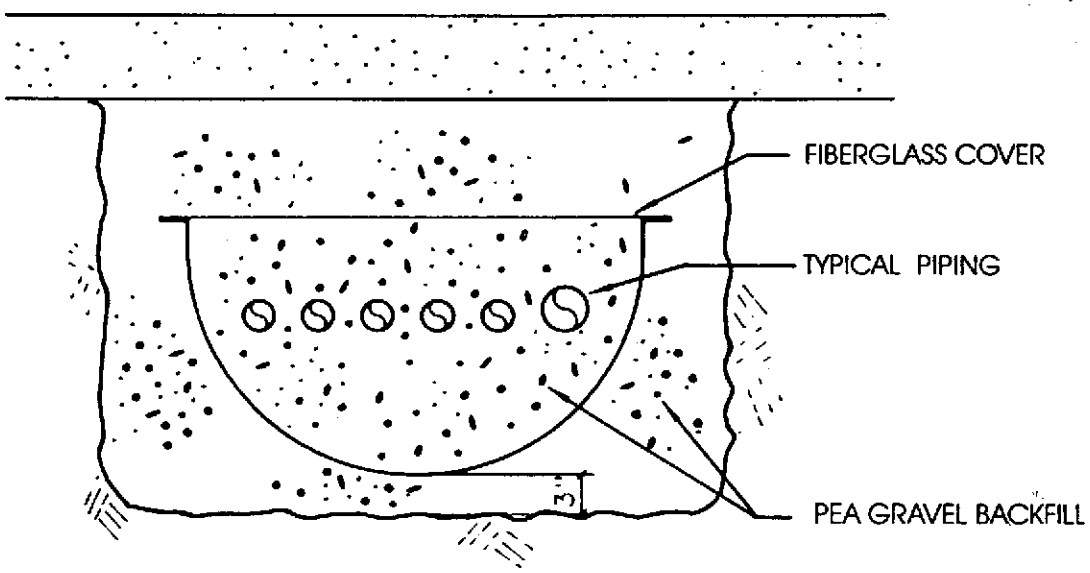
vicinity of the site except in designated areas. No contact lenses will be worn by field personnel.

Location and Phone Numbers of Emergency Facilities:

For emergency reasons, the closest facilities addresses and phone numbers are listed below:

Albany Fire Department	911
Alta Bates Hospital 3001 Colby at Ashby, Berkeley	(415) 540-0337

A revolutionary new design in secondary containment



TYPICAL FIBERGLASS – 6 ENVELOPE SECTION

CompSystem™

secondary containment

CompSystem...there simply is no better secondary containment system.

- ☐ Compatible with ethanol/methanol installations
- ☐ Available in four sizes
- ☐ Ideal for overhead or above ground use
- ☐ Available in fire retardant resin
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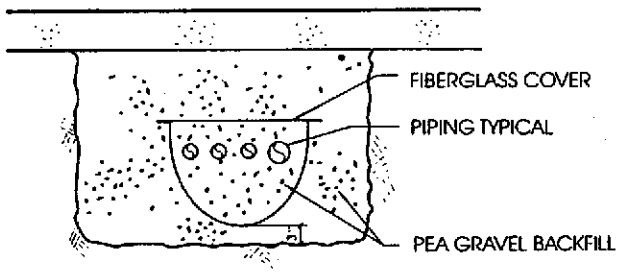
- ☐ Piping or Plot Plan same day quote service via FAX
- ☐ Vertical transitions for 45° or 90°



TYPICAL FIBERGLASS – 3 ENVELOPE SECTION

CompSystem is available from:

CompSystem by Western Fiberglass Inc.

At last! Secondary containment made simple and cost effective.

CompSystem is a revolutionary new design in secondary containment. From the patent pending elliptical shape to the optional removable hard lids, CompSystem is stronger, can be installed in less time, and costs less than vertical wall systems.

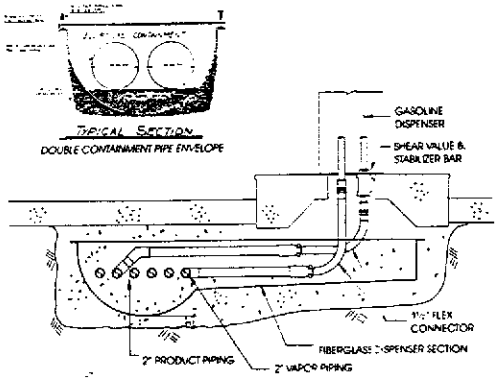
Elliptical Shape

The patent pending elliptical shape used by CompSystem provides superior strength and seismic qualities over conventional vertical wall construction and double wall pipe systems.

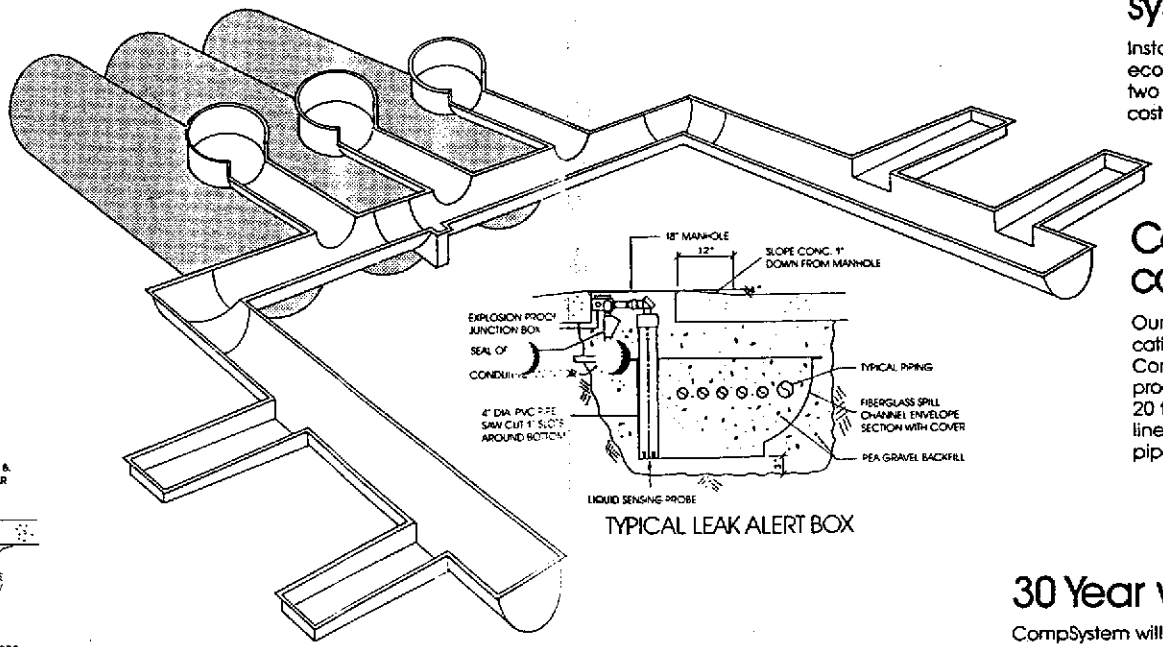
The eliptical shape also allows fluid contamination to remain in the center of the system reducing the amount of area contaminated in the pea-gravel fill in the event of a product leak.

Because the elliptical shape concentrates fluid in the center, detection by the leak warning system is faster than with conventional containment systems.

The unique shape provides ease of storage by allowing component parts to be stacked to 10 deep without wall distortion.



TYPICAL FIBERGLASS DISPENSER PAN SECTION AT M.P.D.



TYPICAL LEAK ALERT BOX

Installation is easier and faster than conventional systems.

Installation of CompSystem is both simple and economical. A typical system can be installed by two men in one or two days, thus saving time, labor costs, and station down time.

Costs 20 to 30% less than conventional systems.

Our new modern molding techniques and application equipment allow faster production enabling CompSystem to be cost effective while providing product consistency and quality. CompSystem costs 20 to 30% less than conventional vertical wall and liner systems. Even larger savings over double wall pipe.

Optional lids for totally sealed containment system.

CompSystem is the ONLY system that offers optional hard lids that provide a totally sealed containment system. The lids simply screw into the flange at the edge of the elliptical shape units. This unique removable lid provides easy access when entering the system for leak repair, restoration or future modification, and provides protection during re-excavation.

For more information and current price list contact:

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secondary containment

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Western Fiberglass Inc.
930 Shiloh Rd., Bldg. 2 P.O. Box [illegible] Windsor, CA 95492
or call (707) 838-3375, FAX (707) 838-3391

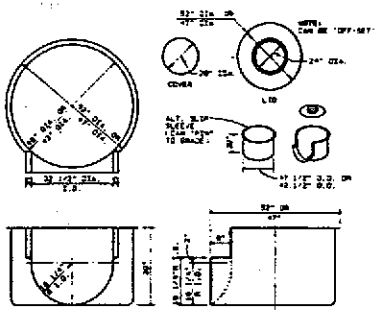
CompSystem...there simply is no better secondary containment system.

30 Year warranty

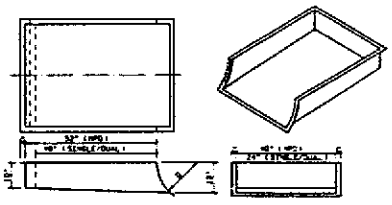
CompSystem will not fail for a period of 30 years due to external corrosion when used in accordance with our specifications and installed to our published instructions. (See complete warranty.)

Certifications

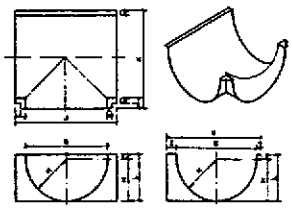
- Meets or exceeds Federal Standard PS 15-69
- Approved by major and independent oil companies including:
  - Arco
  - Chevron
  - Mobil
  - Shell
  - Beacon
  - Unocal
- Approved for installation by major tank manufacturers.
- Approved by environmental health and fire inspectors.
- UL listing applied for.
- Installed by city, county, state and federal facilities nationwide.



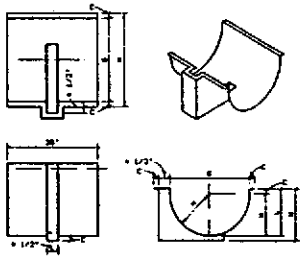
PUMP CONTAINMENT



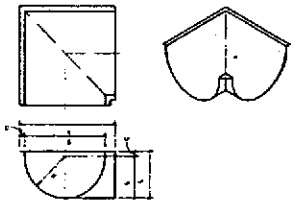
EQUIPMENT FLOOR SHROUD



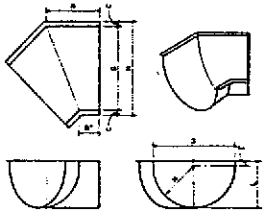
PERPENDICULAR FITTING



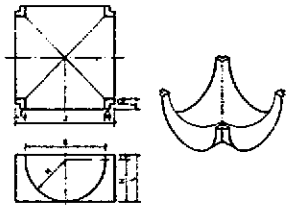
LEAK ALERT BOX



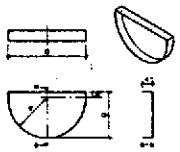
RIGHT ANGLE



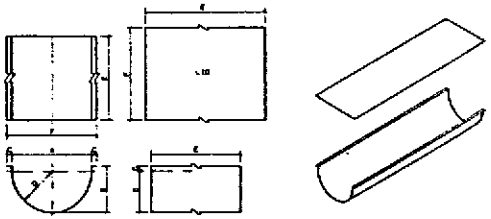
HALF ANGLE



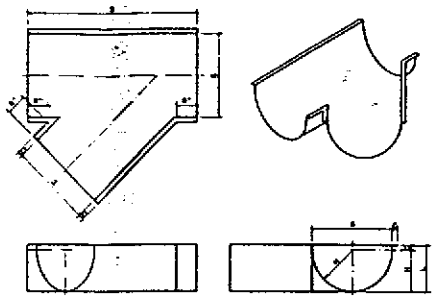
CROSS FITTING



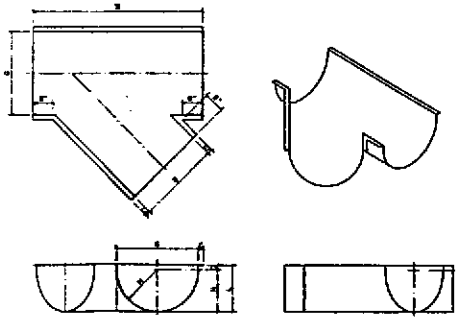
END DAM



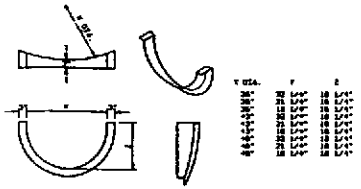
PIPE ENVELOPE



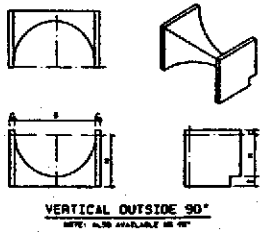
LEFT 45° WYE



RIGHT 45° WYE

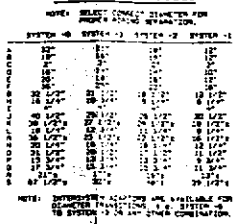


ENVELOPE/PUMP ADAPTOR

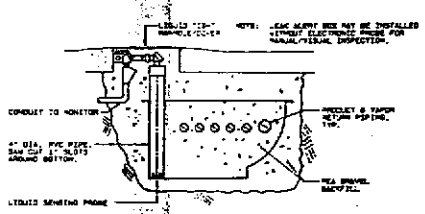


VERTICAL OUTSIDE 90°

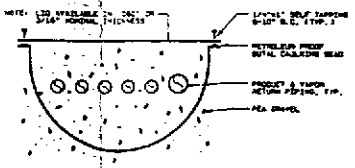
COMP SYSTEM SIZES



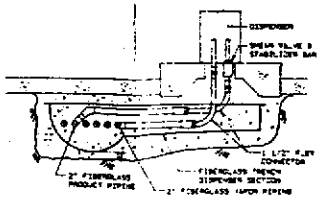
SEE MANUFACTURER'S ASSEMBLY INSTRUCTIONS FOR PROPER EXCAVATION/INSTALLATION TECHNIQUES.



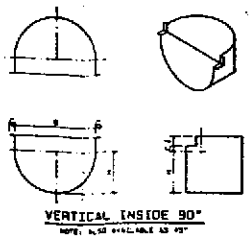
LEAK ALERT BOX/ ELECTRONIC MONITOR



PIPE ENVELOPE SECTION



TYPICAL FIBERGLASS DISPENSER PAN SECTION AT M.P.D.



VERTICAL INSIDE 90°

SEAM KITS ARE REQUIRED FOR COMPONENT ASSEMBLY - SEE MANUFACTURER'S ASSEMBLY INSTRUCTIONS

REVISIONS	BY

WESTERN FIBERGLASS, INC.
930 SHILOH ROAD, BLDG. 42 / P.O. BOX 1493
WINDSOR, CO 80522
(707) 838-3375 FAX (707) 838-3291

CompSystem™ secondary containment

Date 5/1/98

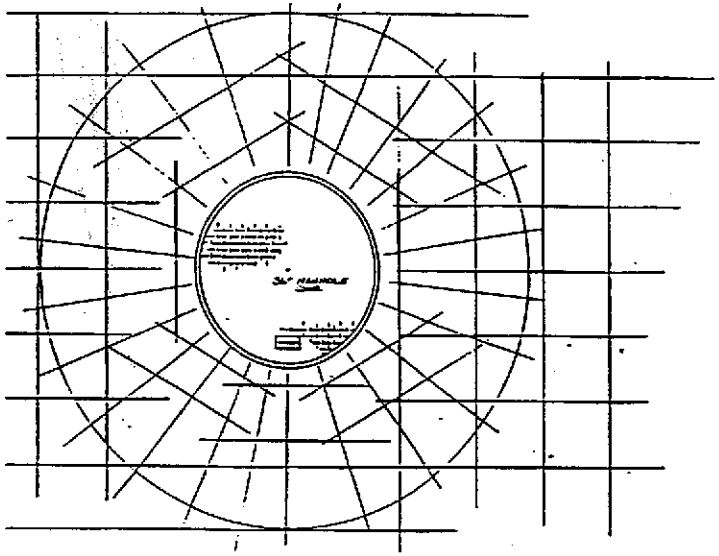
Scale NONE

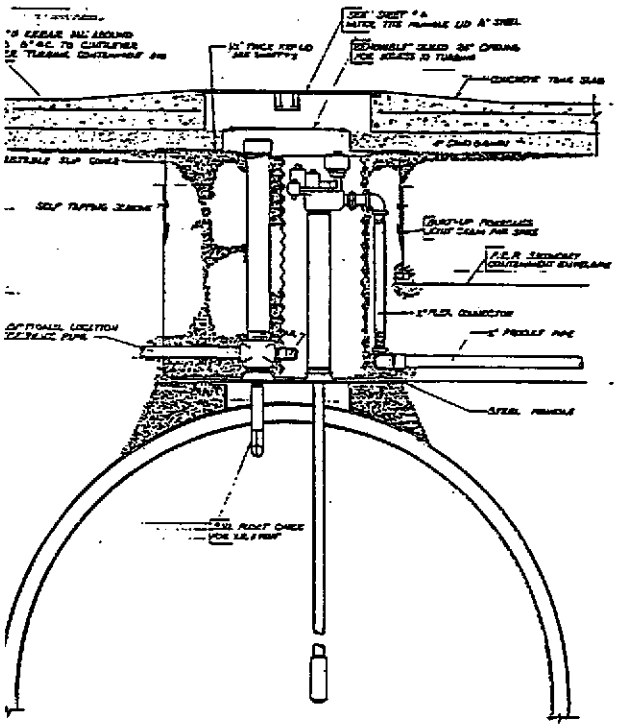
Drawn MKE / JL

Job 970604

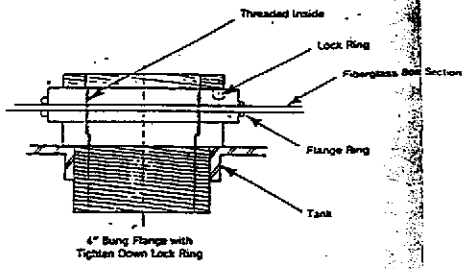
Sheet

Of Sheets

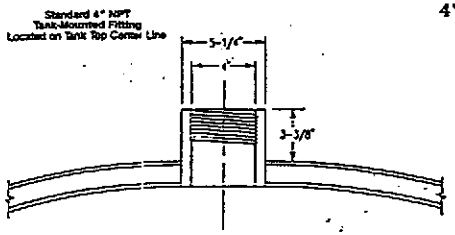


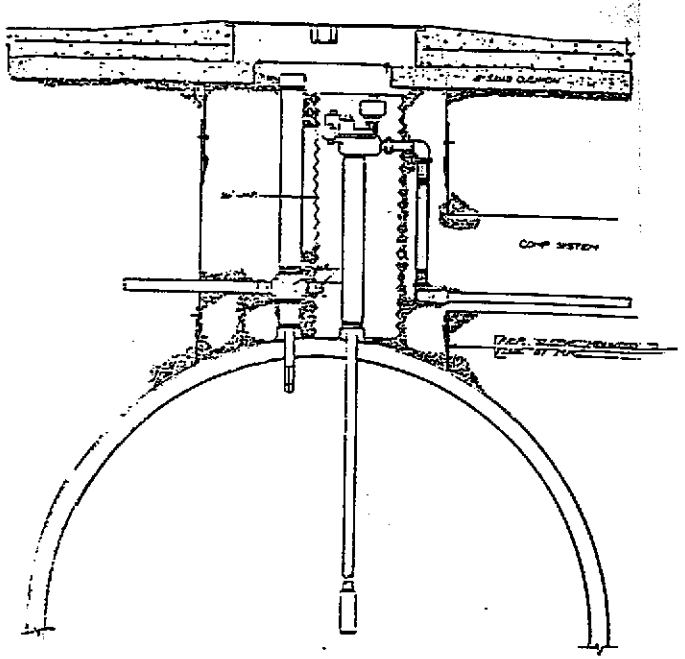


WITH STEEL MANHOLE ON TANK



4" NPT ADAPTOR





WITHOUT STEEL MANHOLE ON TANK

CompSyst
secondary conta

"WATER-TITE TURBIN
FOR COMP SYSTEM
TAINMENT SYSTEM
TITE LID INSTALL

CONF

MFG.
WEBSTER
930 Sh
WINDSOR

SHE