File No. 8-93-558-ST

PROPOSED REVISED WORK PLAN
FOR PRELIMINARY SITE ASSESSMENT
AT ZIMA CENTER CORPORATION
LOCATED AT 2951 HIGH STREET
OAKLAND, CALIFORNIA
SEPTEMBER 2, 1994

PREPARED FOR:
MR. MOHAMMAD A. MASHHOON
ZIMA CENTER CORPORATION
2951 HIGH STREET
OAKLAND, CALIFORNIA 94619

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

SOIL TECH ENGINEERING, INC.

File No. 8-93-558-ST

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SOIL TECH ENGINEERING, INC.

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SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 496-0265 OR (408) 496-0266

September 2, 1994

File No. 8-93-558-ST

Mr. Mohammad A. Mashhoon
Zima Center Corporation
2951 High Street
Oakland, California 94619

SUBJECT: PROPOSED REVISED WORK PLAN FOR PRELIMINARY SITE ASSESSMENT AT ZIMA CENTER CORPORATION
Located at 2951 High Street, in
Oakland, California

Dear Mr. Mashhoon:

Attached is the proposed revised work plan for preliminary site assessment for the project property located 2951 High Street, in Oakland, California. This revised proposal has been prepared to comply with Alameda County Health Care Services Agency--UST Local Over-sight Program (ACHCSA--USTLOP) request letter dated August 10, 1994, for the subject site.

Please submit this proposed work plan to Alameda County Health Care Services Agency and Regional Water Quality Control Board for approval and comments.

File No. 8-93-558-ST

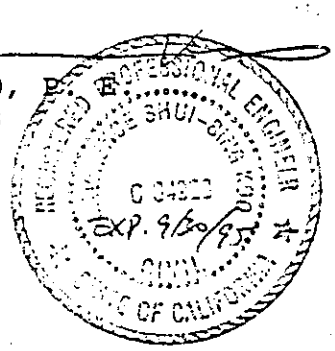
If you have any questions or require additional information, please feel free to contact our office at your convenience.

Sincerely,

SOIL TECH ENGINEERING, INC

NOORI AMELI
PROJECT ENGINEER

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



FRANK HAMEDI-FARD
GENERAL MANAGER

File No. 8-93-558-ST

PROPOSED REVISED WORK PLAN
FOR PRELIMINARY SITE ASSESSMENT
AT ZIMA CENTER CORPORATION
LOCATED AT 2951 HIGH STREET
OAKLAND, CALIFORNIA
SEPTEMBER 2, 1994

INTRODUCTION:

The revised work plan for the site investigation at Zima Center Corporation's property in Oakland was requested by the Alameda County Health Care Services Agencies--UST Local Oversight Program (ACHCSA--USTLOP) in a letter dated August 10, 1994.

The activities described in this proposal are intended to supply informations for characterizing the extent of dissolved petroleum hydrocarbons in the subsurface as they relate to past inadvertent leakage and/or spill.

BACKGROUND:

The site is located at the intersection of Penniman Avenue and High Street, in Oakland, California. The site is currently used as a gasoline service station. In September 1993, Alpha Geo Services removed one 300 gallon waste oil tank which was properly manifested and transported to H&H Environmental Services Company in San Francisco. Soil Tech Engineering, Inc. (STE) was retained by Zima Center Corporation to conduct soil sampling below the former waste

oil tank area. Two soil samples were collected, one from tank excavation at approximately 9 feet below grade, and the other from the excavated stockpiled soil. All sampling was conducted under the supervision of Alameda County Health Department inspection Mr. Barney Chan. Soil samples from the waste oil tank excavation did detect a moderate levels of Total Petroleum Hydrocarbons and very low levels of Trichloroethane and Tetrachloroethane. The detail of the soil sampling is described in the STE's report dated September 30, 1993.

In October 1993, STE excavated grossly contaminated soil from the former waste oil tank area nd conducted additional soil sampling. The detail of the soil excavation is described in the STE's report dated December 15, 1993.

The excavated contaminated soil was treated on-site in accordance with Bay Area Air Quality Control Management District Regulation (BAAQCMDR). The treated soil (approximately 18 cubic yards) was hauled to an approved facility in Stockton, known as Forward Inc. A copy of disposal and trucking manifest are attached in Appendix "E".

SITE DESCRIPTION:

A vicinity map showing the subject site is provided in Figure 1. Figure 2 shows the locations of the building, the former waste oil tank proposed borings and monitoring wells.

The proposed activities are as follow:

- Health and Safety Plan.
- Obtain necessary permit(s).
- Drill and sample four soil borings.
- Install three monitoring wells.
- Develop and sample monitoring wells.
- Stockpiled soil characterization and disposal.
- Laboratory analyses.
- Data analyses and report preparation.

A detailed description of the activities are as follow:

METHODS OF PROCEDURES:

The methods and procedures for drilling, installation of monitoring wells, soil and groundwater sampling will be consistent with the (1) Regional Water Quality Control Board (RWQCB) "Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" as revised August 10, 1990, (2) State of California "Leaking Underground Storage Tank Field (LUFT) Manual, Guidelines for Site Assessment, Cleanup and Underground Storage Tank Closure" and in accordance with ACHCSA--USTLOP Fuel Leak requirements.

PROPOSED SOIL AND GROUNDWATER INVESTIGATION:

HEALTH AND SAFETY PLAN:

Per OSHA requirements, a site Health and Safety Plan has been prepared. The main purpose of the plan is to protect the staff including uninvolved personnel against potential physical and chemical hazards associated with drilling, sampling and field activities. All employee and subcontractor will be required to read and comply with the plan. The site Health and Safety Plan is developed for the project and attached in Appendix "D".

OBTAIN PERMITS:

Off-site sampling stations are generally planned to be on city property. STE's staff will make the initial contacts to gain permission to access city property. Some modifications to sampling locations may need to be made if access is not easily granted.

Well drilling permits and utility clearances will also be obtained, as required, for installation of the monitoring wells once locations have been selected and approved by the City.

SOIL BORINGS:

The objectives of our soil investigation are to evaluate concentrations of dissolved hydrocarbons, Volatile Organic Compounds

(VOC's) and Total Oil & Grease (TOG) in the vadose zone; and to evaluate the limits of detectable concentrations of these compounds in vadose zone.

We propose to drill four soil borings to depths of 20 feet, or to the top of the saturated zone, at locations shown on Figure 2. Soil samples will be collected at 5 feet interval.

The borings will be advanced using truck-mounted, 8-inch, hollow-stem augers, and using a 2½-inch inside diameter(I.D.), split-barrel sampler lined with 6-inch long brass tubes. Drilling will be performed under the direction of an STE field engineer, who will log the borings in accordance with the Unified Soil Classification System. Soil samples will be screened in the field with a photoionization detector (PID), and measurements will be documented on the logs. PID readings indicate relative concentrations of Volatile Organic Compounds (VOC's) in soil.

All soil and water samples will be analyzed for TPH as diesel and gasoline; Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX); Metals (Cd, Cr, Pb, Ni, Zn); Total Oil & Grease (TOG) (EPA Method 503 D&E); Chlorinated Hydrocarbons (EPA Method 8010 or 8240) and metals as requested by the County Health Department.

Sampling equipment will be washed with a trisodium phosphate (TSP) solution and rinsed with clean water between sampling intervals. All drilling equipment will be steam-cleaned before and after each boring.

The borings which are not used as monitoring wells will be backfilled to the ground surface with cement-bentonite grout.

GROUNDWATER MONITORING WELL INSTALLATION:

Three of four borings will be converted to monitoring wells. The wells will be installed to a depth of approximately 25 to 35 feet at proposed locations shown on Figure 2. The wells will be located to provide definition of the local hydraulic gradient and can be used to determine changes that may occur in the hydraulic gradient with time.

The monitoring well will be constructed of 2-inch diameter, clean flush-threaded, Schedule 40 PVC blank and screened (.020 inch slot size) casing and the required filter pack. The screened will start at 5 feet above the saturated zone and extend to the depth of 10 feet below the saturated zone.

Construction details for the monitoring wells will be presented in tabular form in the summary report and will include the borehole diameter and depth, casing size, screened interval, filter pack interval and surface seal interval. Drilling, soil sampling and construction of the groundwater monitoring wells will be in conformance with the Alameda County Water District and State Water Resources Control Board Standards, specifically as provided in the "Guidelines for Addressing Fuel Leaks" by the RWQCB.

DEVELOP AND SAMPLE MONITORING WELLS:

The new monitoring wells will be developed by pumping, surging and/or bailing to remove finer particles near the well screen and improve hydraulic communication with the surrounding formation. Water Clarity, pH, temperature, specific conductance and volume extracted will be measured during development. Development will terminate when the well visually produces little or no sediment and water-quality indicators measured during development and sampling stabilize. All water will be stored in temporary holding tanks pending receipt of the water-quality results.

The new wells will be sampled after at least three well casing volumes have been withdrawn from each well, or if the water levels recover slowly after purging, after water-level recovery. Samples will be collected using a Teflon bailer. The bailer will be cleaned with laboratory-grade detergent followed by a deionized water rinsed between each sampling. Samples will be decanted from the bailer into 40-ml VOA vials with Teflon septa and stored in a chilled cooler for delivery to the laboratory.

GROUNDWATER MONITORING WELL SURVEY:

The top of each groundwater monitoring well casing will be surveyed using standard surveying equipment. The groundwater elevation will be determined in each well, and the data will be used to evaluate hydraulic gradient and direction of groundwater flow at the site.

STOCKPILED SOIL:

The existing stockpiled soil will be analyzed for TPHd, TPHg, BTEX, Cadmium, Chromium, Lead, Nickel and Zinc, TOG and Chlorinated Hydrocarbons (EPA Methods 8010 or 8240). Based on the analytical results appropriate disposal methods will be determined. The local county health will be notified including the Air Quality Management District prior to sampling.

LABORATORY ANALYSES:

Approximately 4 water samples (three sets of samples from three new wells, one set from the existing wells, selected blanks and duplicates) will be chemically analyzed for Total Petroleum Hydrocarbons as diesel and gasoline (TPHd and TPHg), Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) using modified EPA Method 8015 and Volatile Organic Compounds (VOC's) using EPA Method 602. Metals and Chlorinated Hydrocarbons will also be analyzed per County and Water Board requirements.

Selected soil samples will be analyzed for Total Petroleum Hydrocarbons using modified EPA Method 8015, Volatile Aromatic Compounds using EPA Method 8020, metals and Chlorinated Hydrocarbons.

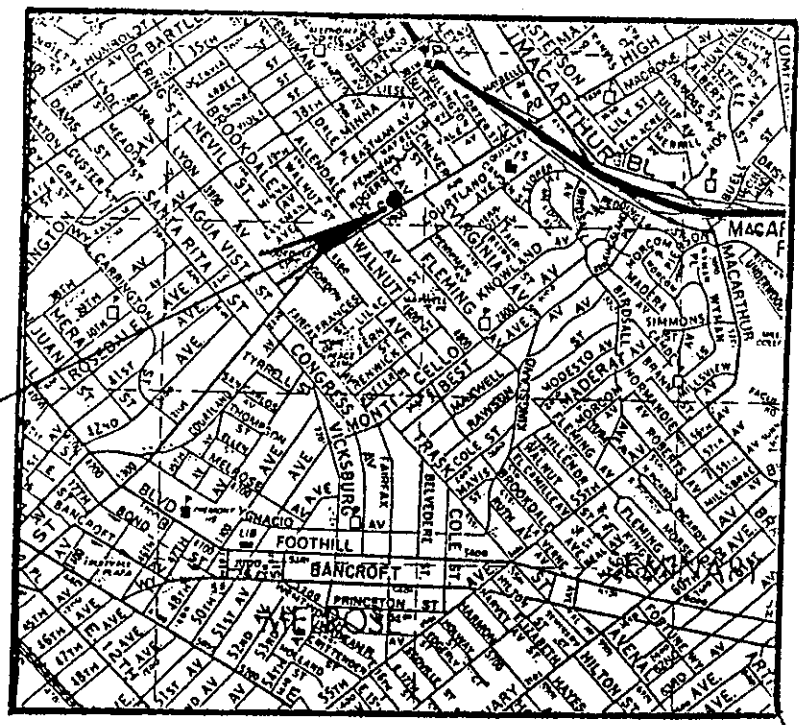
All these samples analyses have been budgeted for normal two-week laboratory turn-around time. All samples will be analyzed by a state-certified laboratory.

DATA ANALYSES AND REPORT PREPARATION:

The data gathered during the course of investigation will be evaluated and a report prepared. The report will present an assessment of the extent and concentration of chemicals detected in the samples area. The report will include details descriptions of the methodologies used to collect and analyze data, the interpretations of such data, and the technical rationale for the conclusions reached.

SCHEDULE:

The field activities will be initiated within two weeks of approval of the proposed revised work plan by the County Health Department. The technical report will be submitted within six weeks of completion of the field activities.



Site Location

Thomas Brothers Map 1993 Edition
San Francisco, Alameda
and Contra Costa Counties

Page 12 C2

Figure 1

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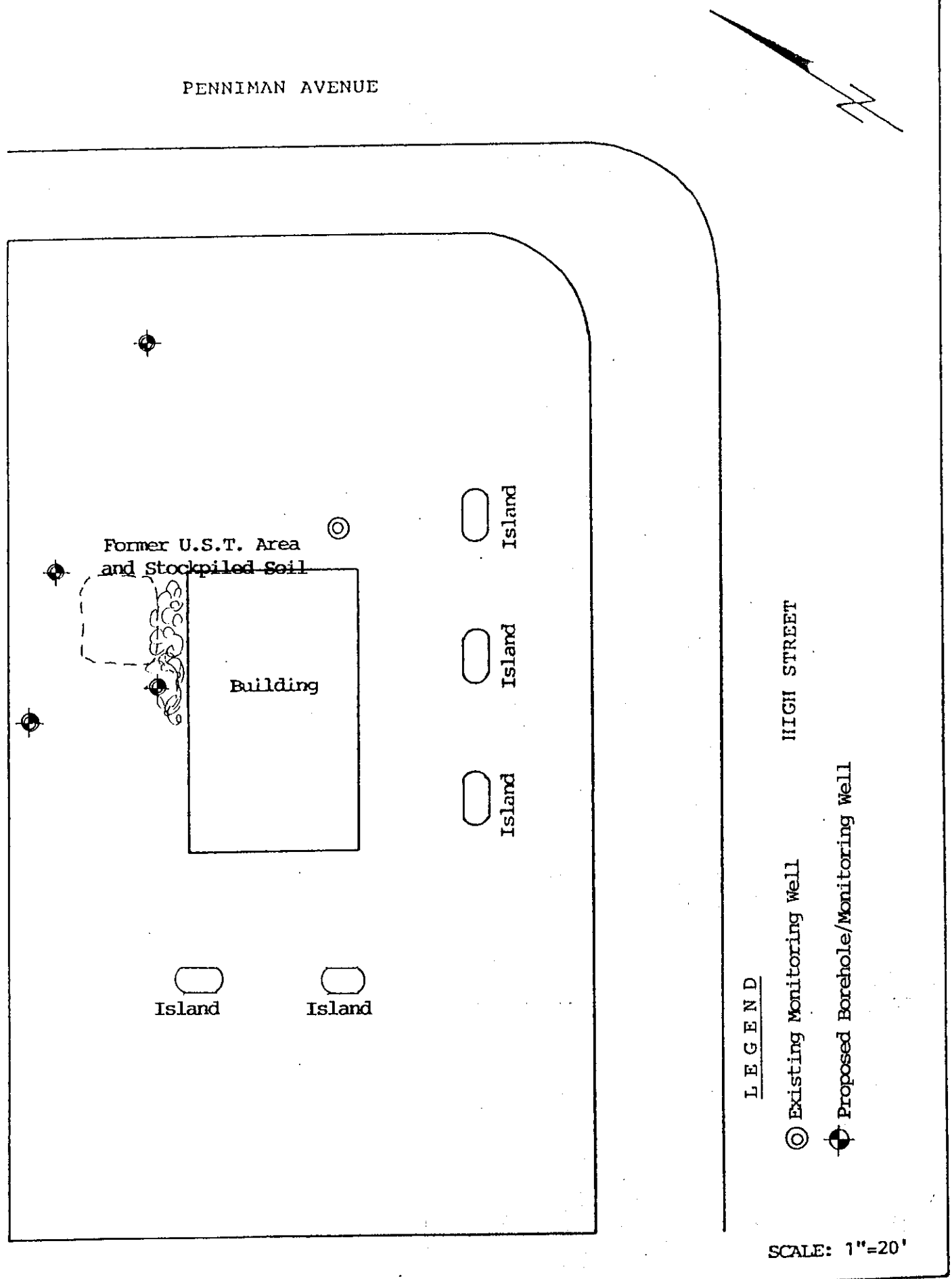


Figure 2

SOIL TECH ENGINEERING, INC.

M2

File No. 8-93-558-ST

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.

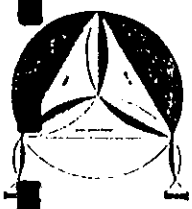
The samplers will contain relatively undisturbed soil. In general, the first section of soil from the sampler (shoe) will be used in the field for lithologic inspection and evidence of contamination. The selected brass liner will be immediately trimmed, and the ends of the brass liner will be covered 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.



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File No._____

Date_____

By_____

Job_____

Site Description_____ (continued on reverse side)

Type of Drill Rig_____ Hole Diameter_____

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

Elevation_____ Datum_____

Sample Quality	Blows/6 inches	Sample Loc.	Sample Number	Depth		Soil Characterization	Penetrometer
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				0			
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			SOP3

File No. 8-93-558-ST

MONITORING 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.

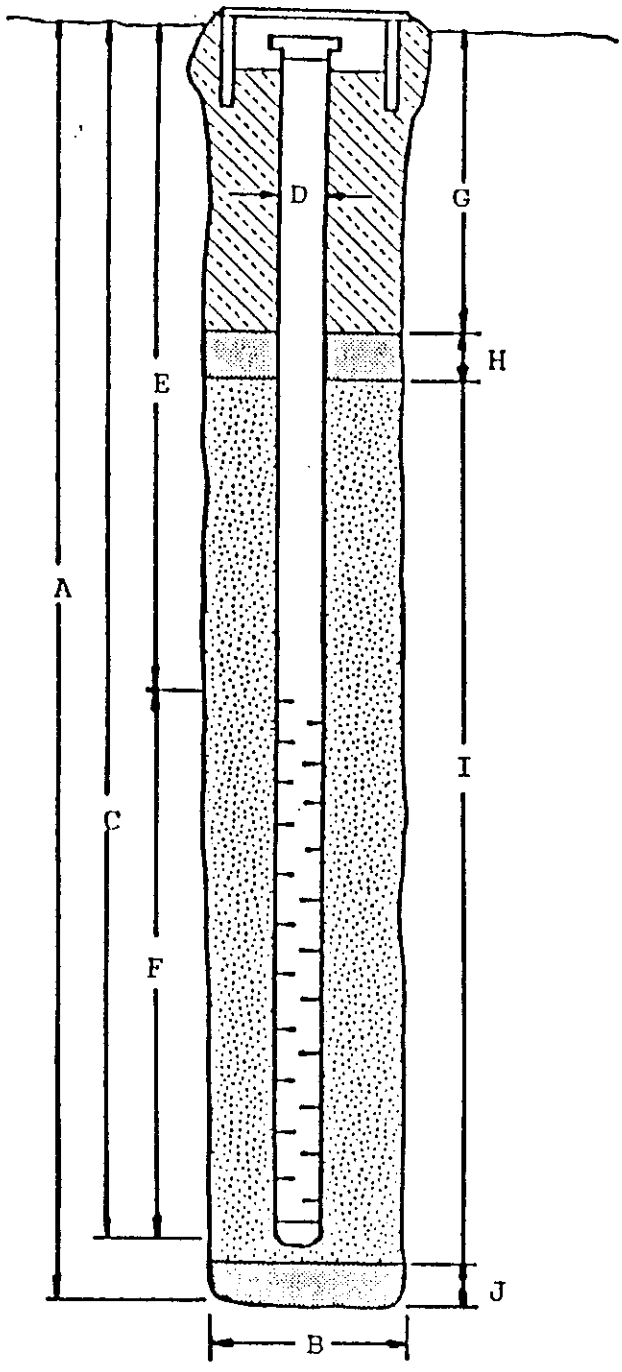
WELL DETAILS

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: _____

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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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Soil, Foundation and Geological Engineers

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FILE NO:_____ WELL NO:_____

DATE:_____ SAMPLER:_____

DEPTH TO WELL:_____ 1 WELL VOLUME:_____

DEPTH TO WATER:_____ 5 WELL VOLUMES:_____

HEIGHT OF WATER COLUMN:_____ ACTUAL PURGED VOLUME:_____

CASING DIAMETER: ___ 2" ___ 4"

CALCULATIONS:

2" - X 0.1632 _____

4" - 0.653 _____

PURGE METHOD: ___ BAILER ___ DISPLACEMENT PUMP ___ OTHER

SAMPLE METHOD: ___ BAILER ___ OTHER

SHEEN: ___ NO ___ YES, DESCRIBE_____

ODOR: ___ NO ___ YES, DESCRIBE_____

FIELD MEASUREMENTS

TIME	VOLUME	pH	TEMP.	E.C.

SOP8

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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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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	

SOP12

SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

[redacted]-298 [redacted]OKA[redacted]ROAD, [redacted]NTA [redacted]RA, [redacted]95050 [redacted] (408) 866-0919 [redacted] (415) 791-6406

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 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 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 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
Organics		glass rinsed with organic solvents, TFE cap		24 hr/28 days
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)

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. 8-93-558-ST

OUTLINE OF DRUM HANDLING PROCEDURES FOR THE PROPERTY LOCATED AT 2951 HIGH STREET OAKLAND, 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.

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 persistently, 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.

File No. 8-93-558-ST

HEALTH AND SAFETY PLAN
FOR THE PROPERTY
LOCATED AT 2951 HIGH STREET
OAKLAND, 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.

Hazard Assessment:

The major contaminants expected to be encountered on the project are gasoline and its hydrocarbon constituents. The anti-

cipated contaminants and their exposure standards are listed in Table 1. It is not anticipated that the potential levels of exposure will reach the permissible exposure limits (PEL) or threshold limit values (TLV). Inhalation and dermal contact are the potential exposure pathways. Protective clothing will be mandatory for field personnel specified in this Plan. In addition, respiratory protective devices are required to be worn by each person on-site or to be within easy reach should irritating odors be detected or irritation of the respiratory tract occur.

TABLE 1
EXPOSURE LIMITS OF ANTICIPATED CHEMICAL CONTAMINANTS
IN PARTS PER MILLION (ppm)

Contaminant	PEL	EL	ED	CL	TWA	STEL
Benzene* [skin] & [carc]	1	---	--------	---	10	5
Ethylbenzene	100	---	--------	---	100	125
Toluene [skin]	100	200	10 min per 8 hours	500	100	150
Xylene (o, m, & p isomers) [skin]	100	200	30 min per 8 hours	300	100	150

PEL - permissible exposure limit: 8 hours, time-weighted average, California Occupational Safety and Health Administration Standard (CAL-OSHA).

EL - excursion limit: maximum concentration of an airborne contaminant to which an employee may be exposed without regard to duration provided the 8 hours time-weighted average for PEL is not exceeded (CAL-OSHA).

ED - excursion duration: maximum time period permitted for an exposure above the excursion limit but not exceeding the ceiling limit (CAL-OSHA).

CL - Ceiling limit: maximum concentration of airborne contaminant which employees may be exposed permitted (CAL-OSHA).

TWA - time-weighted average: 8 hours, [same as threshold limit value (TLV)], American Conference of Governmental Industrial Hygienists (ACGIH).

STEL - short-term exposure limit: 15 minutes time-weighted average (ACGIH).

[carc] - substance identified as a suspected or confirmed carcinogen.

[skin] - substance may be absorbed into the bloodstream through the skin, mucous membranes or eyes.

* - Federal OSHA benzene limits given for PEL and STEL; STEL has a 50 minutes duration limit.

A brief description of the physical characteristics, incompatibilities, toxic effects, routes of entry and target organs has been summarized from the NIOSH Pocket Guide to Chemical Hazards for the contaminants anticipated to be encountered. This information is used in on-site safety meetings to alert personnel to the hazards associated with the expected contaminants.

Benzene:

Benzene is a colorless, aromatic liquid. Benzene may create an explosion hazard. Benzene is incompatible with strong oxidizers, chlorine, and bromine with iron. Benzene is irritating to the eyes, nose and respiratory system. Prolonged exposure may result in giddiness, headache, nausea, staggering gait, fatigue, bone marrow depression or abdominal pain. Routes of entry include inhalation, absorption, ingestion and skin or eye contact. The target organs are blood, the central nervous system (CNS), skin, bone marrow, eyes and respiratory system. Benzene is carcinogenic.

Ethylbenzene:

Ethylbenzene is a colorless, aromatic liquid. Ethylbenzene may create an explosion hazard. Ethylbenzene is incompatible with strong oxidizers. Ethylbenzene is irritating to the eyes and mucous membranes. Prolonged exposure may result in headache, dermatitis, narcosis or coma. Routes of entry include inhalation, ingestion and skin or eye contact. The target organs are the eyes, upper respiratory system, skin and the CNS.

Toluene:

Toluene is a colorless, aromatic liquid. Toluene may create an explosion hazard. Toluene is incompatible with strong oxidizers. Prolonged exposure may result in fatigue, confusion, euphoria, dizziness, headache, dilation of pupils, lacrimation,

insomnia, dermatitis or photophobia. Routes of entry are inhalation, absorption, ingestion and skin or eye contact. The target organs are the CNS, liver, kidneys and skin.

Xylene Isomers:

Xylene is a colorless, aromatic liquid. Xylene may create an explosion hazard. Xylene is incompatible with strong oxidizers. Xylene is irritating to the eyes, nose and throat. Prolonged exposure may result in dizziness, excitement, drowsiness, staggering gait, corneal vacuolization, vomiting, abdominal pain or dermatitis. Routes of entry are inhalation, absorption, ingestion and skin or eye contact. The target organs are the CNS, eyes, gastrointestinal tract, blood, liver, kidneys and skin.

General Project Safety 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.

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.

WORK ZONES AND SECURITY MEASURES:

The Project Engineer will call Underground Service Alert (USA) and the utilities will be marked before any drilling is conducted on-site, and the borings will be drilled at safe distances from the utilities. The client will also be advised to have a representative on-site to advise us in selecting locations of borings with respect to utilities or underground structures. Soil Tech Engineering, Inc. assumes no responsibility to utilities not so located. The first 5 feet will be hand augered before any drilling equipment is operated.

Each of the areas where the borings will be drilled will be designated as Exclusion Zones. Only essential personnel will be allowed into an Exclusion Zone. When it is practical and local topography allows, approximately 25 to 75 feet of space surrounding those Exclusion Zones will be designated as Contamination Reduction Zones.

Cones, wooden barricades or a suitable alternative will be used to deny public access to these Contamination Reduction Zones. The general public will not be allowed close to the work area under any conditions. If for any reason the safety of a member of the public (e.g. motorist or pedestrian) may be endangered, work will cease until the situation is remedied. Cones and warning signs will be used when necessary to redirect motorists or pedestrians.

Location and Phone Numbers of Emergency Facilities:

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

City of Oakland Fire Department 911

Highland General Hospital (510) 634-8055
1411 East 31st Street, Oakland, CA

Additional Contingency Telephone Numbers:

Poison Control Center . . . . . (800) 523-2222

Soil Tech Engineering Administrative Office . . . . (408) 496-0265

CHEMTREC . . . . . (800) 424-9300

Note: Only call CHEMTREC stands for Chemical Transportation Emergency Center, a public service of the Chemical Manufacturer's Association. CHEMTREC can usually provide hazard information, warnings and guidance when given the identification number or the name of the product and the nature of the problem. CHEMTREC can also contact the appropriate experts.

This Site Safety Plan has been reviewed by the project engineer, STE field personnel and all subcontractors.

Amendments or modifications to this Plan may be written on a separate page and attached to this Plan. Any amendments or modifications must be reviewed and approved by the personnel name above.

File No. 8-93-558-ST

TYPES OF PROTECTIVE CLOTHING AND RESPIRATION THAT SHOULD BE USED AT HAZARDOUS WASTE SITES LOCATED AT 2951 HIGH STREET OAKLAND, CALIFORNIA

The degree of hazard is based on the waste material's physical, chemical, and biological properties and anticipated concentrations of the waste. The level of protective clothing and equipment worn must be sufficient to safeguard the individual. A four category system is described below.

LEVEL A

Level A consists of a pressure-demand SCBA (air supplying respirator with back mounted cylinders), fully encapsulated resistant suit, inner and outer chemical resistant gloves, chemical resistant steel safety boots (toe, shank, and metatarsal protection), and hard hat. Optional equipment might include cooling systems, abrasive resistant gloves, disposable oversuit and boot covers, communication equipment, and safety line. Level A is worn when the highest level of respiratory, skin, and eye protection is required. Most samplers will never wear Level A protection.

LEVEL B

Level B protection is utilized in areas where full respiratory protection is warranted, but a lower level of skin and eye protection is sufficient (only a small area of head and neck is exposed). Level B consists of SCBA, splash suit (one or two piece) or disposable chemical resistant coveralls, inner and outer chemical resistant gloves, chemical resistant safety boots, and hard hat with face shield. Optional items include glove and boot covers and inner chemical resistant fabric coveralls.

LEVEL C

Level C permits the utilization of air-purifying respirators. Level B body, foot, and hand protection is normally maintained. Many organizations will permit only the use of approved full-face masks equipped with a chin or harness-mounted canister. However, many sites are visited by personnel wearing a half-mask cartridge respirator.

LEVEL D

Level D protection consists of a standard work uniform of coveralls, gloves, safety shoes or boots, hard hat, and goggles or safety glasses.

Two basic types of respirators are air-purifying and air-supplying. Air-purifying respirators are designed to remove specific contaminants by means of filters and/or sorbents. Air-purifying respirators come in various sizes, shapes, and models and can be outfitted with a variety of filters, cartridges, and canisters. Each mask and cartridge or canister is designed for protection against certain contaminant concentrations. Just because a cartridge says it is for use against organic vapors does not mean that it is good for all organic vapors.

Air-supplying respirators are utilized in oxygen-deficient atmospheres (less than 19.5 percent) or when an air-purifying device is not sufficient. Air is supplied to a face-mask from an uncontaminated source of air via and air line from stationary tanks, from a compressor, or from air cylinders worn on the back (SCBA). Rated capacities of the SCBA's are normally between 30 and 60 minutes. Only positive pressure (pressure demand) respirators should be used in high concentration hazardous environments.

Respirators often malfunction during cold weather or after continued use. Only NIOSH (National Institute for Occupational Safety and Health) MSHA (Mine Safety and Health Administration) approved respirators should be used.

Contact lenses are not permitted for use with any respirator. Contact lenses should not be worn at any site since they tend to concentrate organic materials around the eyes; soft plastic contact

lenses can absorb chemicals directly. In addition, rapid removal of contact lenses may be difficult in an emergency. Since eye glasses can prevent a good seal around the temple when wearing goggles or full face masks, spectacle adapters are available for masks and goggles.

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 10/22/93

Project ID: 8-93-558-ST

Matrix: Soil

TOTAL OIL & GREASE

Sample Number	Sample Description	Detection Limit	Gravimetric Waste Oil as Petroleum Oil
		ppm	ppm
T310161	S-1-10	50	120
T310162	S-2-9	50	50
T310163	S-3-7	50	<50
T310164	S-4-6	50	3,700
T310165	B-1-13	50	<50
T310166	ST(1,2,3,4)	50	210

QA/QC: Freon Blank is none detected.
88% Spike Recovery T310161
96% Duplicate Spike Recovery

Note: Analysis was performed by standard EPA methods 3550/5520
ppm = mg/Kg

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Hiram Cueto
Lab Director

Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 11/01/93

Project ID: 8-93-558-ST

Matrix: Soil

Sample ID: S-4-6

Lab ID: T310164

CAM STLC
EPA Method : WET

Name	Detection Limit	Results
	ppm	ppm
Chromium (Cr)	0.010	0.67

QA/QC: 66% Matrix Spike Recovery
80% Laboratory Control Spike Recovery

Note: ppm = mg/L

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Lab Director

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SOIL TECH ENGINEERING, INC
298 Brokaw Rd.
Santa Clara CA. 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 10/21/93

Project ID: 8-93-558-ST

Matrix: Soil

Sample Number	Sample Description	TPH-Diesel Detection Limit	Total Petroleum Hydrocarbons as Diesel
		ppm	ppm
T310161	S-1-10	5.0	<5.0
T310162	S-2-9	5.0	<5.0
T310163	S-3-7	5.0	<5.0
T310164	S-4-6	5.0	<5.0 (*)
T310165	B-1-13	5.0	<5.0
T310166	ST(1,2,3,4)	5.0	<5.0

QA/QC: Blank is none detected.
88% Spike Recovery T310161
1.0% Duplicate Spike Deviation

(*) = A hydrocarbon mixture lighter than diesel was detected in this sample. Possibly paint thinner.
Note: Analysis was performed by EPA methods 3550/TPH-LUFT
ppm = mg/Kg

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Lab Director

Argon Mobile Labs

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SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 10/25/93

Project ID: 8-93-558-ST
Sample ID: ST(1,2,3,4)

Lab Number: T310166
Matrix: Soil

TPH-gas/BTXE

ANALYTE	Detection Limit ppm	Sample Results ppm
Total Petroleum Hydrocarbons as Gasoline	1.0	1.2
Benzene	0.005	<0.005
Toluene	0.005	<0.005
Xylenes	0.005	0.028
Ethylbenzene	0.005	<0.005

QA/QC: 104% Surrogate Spike Recovery

Note: Analysis was performed using EPA methods 5030/8015/8020
ppm = mg/Kg

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Lab Director

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SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Analyzed: 10/25/93

Project ID: 8-93-558-ST
Sample ID: ST(1,2,3,4)

Lab No: T310166
Matrix: Soil

8010 Halogenated Volatile Organics

	Det. Lim. (ppm)		Results (ppm)
Bromodichloromethane	0.0010	-----	ND
Bromoform	0.0020	-----	ND
Bromomethane	0.0008	-----	ND
Carbon Tetrachloride	0.0012	-----	ND
Chlorobenzene	0.0025	-----	ND
Chloroethane	0.0052	-----	ND
Chloroform	0.0005	-----	ND
2-Chloroethylvinyl ether	0.0013	-----	ND
Chloromethane	0.0008	-----	ND
Dibromochloromethane	0.0009	-----	ND
Dibromomethane	0.0009	-----	ND
1,2-Dichlorobenzene	0.0015	-----	ND
1,3-Dichlorobenzene	0.0032	-----	ND
1,4-Dichlorobenzene	0.0024	-----	ND
Dichlorodifluoromethane	0.0020	-----	ND
1,1-Dichloroethane	0.0007	-----	ND
1,2-Dichloroethane	0.0003	-----	ND
1,1-Dichloroethylene	0.0013	-----	ND
t-1,2-Dichloroethylene	0.0010	-----	ND
Dichloromethane	0.0050	-----	ND
1,2-Dichloropropane	0.0040	-----	ND
t-1,3-Dichloropropylene	0.0034	-----	ND
1,1,2,2-Tetrachloroethane	0.0003	-----	ND
1,1,1,2-Tetrachloroethane	0.0003	-----	ND
Tetrachloroethylene	0.0003	-----	0.006
1,1,1-Trichloroethane	0.0003	-----	ND
1,1,2-Trichloroethane	0.0002	-----	ND
Trichloroethylene	0.0012	-----	ND
Trichlorofluoromethane	0.0030	-----	ND
Trichloropropane	0.0030	-----	ND
Vinyl Chloride	0.0018	-----	ND

110% Surrogate Spike Recovery 2-Bromo-1-Chloropropane
Note: ppm = mg/Kg

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3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 10/28/93

METALS, CAM 5
EPA Method 6010

Project ID: 8-93-558-ST
Sample ID: ST(1,2,3,4)

Matrix: Soil
Lab No: T310166

Name	Amount	Detection Limit	Units (ppm)
Cadmium (Cd)	ND	0.25	mg/Kg
Chromium (Cr)	150	0.25	mg/Kg
Lead (Pb)	6.6	0.25	mg/Kg
Nickel (Ni)	310	1.0	mg/Kg
Zinc (Zn)	88	0.25	mg/Kg

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Argon Mobile Labs

3008 McKittrick Ct., Suite N • Ceres, CA 95307 • (209) 537-7836

SOIL TECH ENGINEERING, INC.
298 Brokaw Rd.
Santa Clara, CA 95050

Date Sampled: 10/15/93
Date Received: 10/19/93
Date Reported: 10/28/93

QA/QC
METALS, CAM 5
LCS / LCSD Recoveries

Project ID: 8-93-558-ST

Sample ID: LCS/LCSD

Matrix: Soil

Lab No: ST9310028 LCS
ST9310028 LCSD

Element	Spike Conc.	LCS	LCS% Recovery	LCSD	LCSD% Recovery	%RSD
Cadmium (Cd)	50	44	88%	45	90%	2%
Chromium (Cr)	50	44	88%	45	90%	2%
Lead (Pb)	50	40	80%	40	80%	0%
Nickel (Ni)	50	48	96%	43	86%	10%
Zinc (Zn)	50	46	92%	45	90%	2%

ARGON MOBILE LABS

Hiram Cueto
Lab Director

CHAIN OF CUSTODY RECORD

AML

PROJ. NO.	NAME
8-93-558-ST	2951 High St. OAKLAND

SAMPLERS: (Signature) N.A.

NO.	DATE	TIME	SOIL	WATER	LOCATION	CONTAINER	Analyses Requested ② TPHG/BTE&X	TPHD	TOLG	8010	Cd,Cr,Pb,Zn,Ni	REMARKS
1	10/15/93	15:45	✓		ST-1	1	✓	✓	✓	✓	✓	COMP.
2	10/15/93	15:50	✓		ST-2	1	✓	✓	✓	✓	✓	
3	10/15/93	15:55	✓		ST-3	1	✓	✓	✓	✓	✓	
4	10/15/93	16:00	✓		ST-4	1	✓	✓	✓	✓	✓	

COMP.

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Receive by: (Signature)
N.A.	10/19/93 1:50	Kiran Lucio			
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	

SOIL TECH ENGINEERING
Soil, Foundation and Geological Engineers
[redacted] BROKAW ROAD, SANTA CLARA, CA 95050 [redacted] (408) 496-0285 OR (408) [redacted]

CHAIN OF CUSTODY RECORD

AML

CK03197

PROJ. NO. 8-93-558-5T

NAME 2951 High St. OAKLAND

SAMPLERS: (Signature) N.A.

NO.	DATE	TIME	SOIL	WATER	LOCATION	CONTAINER	TPHG/BTE&X	TPHD	TO&G	8010	Cd,Cr,Pb,Zn,Ni		REMARKS
1	10/15/93	15:45	✓		ST-1	1	✓	✓	✓	✓	✓		COMP.
2	10/15/93	15:50	✓		ST-2	1	✓	✓	✓	✓	✓		COMP.
3	10/15/93	15:53	✓		ST-3	1	✓	✓	✓	✓	✓		COMP.
4	10/15/93	16:00	✓		ST-4	1	✓	✓	✓	✓	✓		COMP.

DMP.

T310166

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
N.A.	10/19/93 1:50	Wilson Lucio			

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

SOIL TECH ENGINEERING
Soil Foundation and Geological Engineers
298 BROKAW ROAD, SANTA CLARA, CA 95050 ■ (408) 496-0265 OR (408) 496-0266

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: FRANK HAMIDI

Project NONE
Reported 09-February-1994

ANALYSIS FOR CAM 17 METALS
California Administration Code Title 22, Paragraph 66700 & EPA Methods SW-846 6010 & 7000 series.

Chronology

Laboratory Number 91057

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
ST-1,2,3,4	01/27/94	02/02/94	02/04/94	02/08/94		1

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: FRANK HAMIDI

Project NONE
Reported 09-February-1994

ANALYSIS FOR CAM 17 METALS

Laboratory Number	Sample Identification	Matrix
91057- 1	ST-1,2,3,4	Soil

RESULTS OF ANALYSIS

Laboratory Number: 91057- 1

Antimony	(Sb):	ND<5
Arsenic	(As):	ND<1
Barium	(Ba):	140
Beryllium	(Be):	ND<0.5
Cobalt	(Co):	21
Copper	(Cu):	50
Mercury	(Hg):	0.14
Molybdenum	(Mo):	ND<5
Selenium	(Se):	ND<1
Silver	(Ag):	ND<5
Thallium	(Tl):	ND<5
Vanadium	(V):	59

Concentration: mg/Kg

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

ANALYSIS FOR CAM 17 METALS
Quality Assurance and Control Data - Soil

Laboratory Number 91057

Compound		Method Blank (mg/Kg)	RL (mg/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Antimony	(Sb):	ND<5	5	101/96	75-125	5%
Arsenic	(As):	ND<1	1	110/106	75-125	4%
Barium	(Ba):	ND<5	5	102/107	75-125	5%
Beryllium	(Be):	ND<0.5	0.5	103/100	75-125	3%
Cobalt	(Co):	ND<5	5	102/101	75-125	1%
Copper	(Cu):	ND<5	5	105/105	75-125	0%
Mercury	(Hg):	ND<0.05	0.05	110/95	75-125	15%
Molybdenum	(Mo):	ND<5	5	99/100	75-125	1%
Selenium	(Se):	ND<1	1	103/86	75-125	18%
Silver	(Ag):	ND<5	5	103/101	75-125	2%
Thallium	(Tl):	ND<5	5	90/87	75-125	3%
Vanadium	(V):	ND<5	5	107/104	75-125	3%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 91057

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: FRANK HAMIDI

Project NONE
Reported 09-February-1994

ANALYSIS FOR SOLUBLE CHROMIUM & NICKEL
by California Administrative Code Title 22 & SW-846 Method 6010

Chronology

Laboratory Number 91057

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
ST-1,2,3,4	01/27/94	02/02/94	02/07/94	02/09/94		1

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: FRANK HAMIDI

Project NONE
Reported 09-February-1994

ANALYSIS FOR SOLUBLE CHROMIUM & NICKEL

Laboratory Number	Sample Identification	Matrix
91057- 1	ST-1,2,3,4	Soil

RESULTS OF ANALYSIS

Laboratory Number: 91057- 1

Soluble Chromium (Cr): ND<0.5
Soluble Nickel (Ni): 2.3

Concentration: mg/L

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

ANALYSIS FOR SOLUBLE CHROMIUM & NICKEL
Quality Assurance and Control Data - Extract

Laboratory Number 91057

Compound	Method Blank (mg/L)	RL (mg/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Soluble Chromium (Cr):	ND<0.5	0.5	101/99	75-125	2%
Soluble Nickel (Ni):	ND<0.5	0.5	91/93	75-125	2%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/L = Parts per million (ppm)
QC File No. 91057

Afsaneh Salimpour
Senior Chemist
Account Manager

PEL

CHAIN OF CUSTODY RECORD

PROJ. NO. 8-93-558-ST | NAME 2951 High st. OAKLAND

SAMPLERS. (Signature) N. Amelio

NO.	DATE	TIME	SOIL	WATER	LOCATION	CON-TAINER	Analyses Requested (2) Ni & Cr (STLC)	CAM17 EXCEPT (Ni,Cd,Cr,Zn,Pb)						REMARKS
1	1/27/94	10:35	✓		ST-1	1	✓	✓						
2	1/27/94	10:42	✓		ST-2	1	✓	✓						
3	1/27/94	10:48	✓		ST-3	1	✓	✓						COMP.
4	1/27/94	10:55	✓		ST-4	1	✓	✓						

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Receive by: (Signature)
N. Amelio	2/1/94 10:14				
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	
	2/1/94 10:15	PEL			

SOIL TECH ENGINEERING
Soil, Foundation and Geological Engineers
298 BROKAW ROAD, SANTA CLARA, CA 95050 (408) 866-0919 (415) 791-6406

Priority Environmental Labs
1764 Houret Court
Milpitas, CA 95035
(408) 946-9636

1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:408-946-9663

S

[redacted]

91057

Chain of Custody

DATE:____/____/____ PAGE:____ OF:____

PROJECT MGR.:
COMPANY:
ADDRESS:
PHONE: 408-946-9636 FAX: 408-946-9663
SIGNATURE: Dan Deane

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH-Gasoline (EPA 5030,8015)	TPH-Gasoline(50,30,8015) w/BTEX(EPA 602,8020)	TPH-Diesel (EPA 3510/3550,8015)	PURGEABLE AROMATICS BTEX (EPA 602,8020)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608,8080)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1	STLC Ni & Cu	TTLC CAM 17 EXCEPT Ni, Cu, Zn, Pb	NUMBER OF CONTAINERS
ST-1,2,3,4												✓	✓	01

Please read NOTE 1!

MC
NO
N/A
N/D
Sample will in a bix

Comments:

PROJECT INFORMATION	SAMPLE RECEIPT
PROJECT NAME::	TOTAL # OF CONTAINERS: 01
PROJECT NUMBER:	RECD. GOOD COND./COLD:

INSTRUCTIONS & COMMENTS: Please read Chain of Custody. Send report & INVOICE DIRECTLY to MR. FRANK HAMEDI

RELINQUISHED BY: 1	RECEIVED BY: 1	RELINQUISHED BY: 2	RECEIVED BY: 2
SIGNATURE: Dan Deane Date: 2/4/94	SIGNATURE: Sher Ridge Date: 2/4/94	SIGNATURE: Sher Ridge Date: 2-2-94	SIGNATURE: Date:
NAME: DAVID DEANE Time: 9.40 AM	NAME: Sher Ridge Time: 9:40	NAME: Sher Ridge Time: 11-25	NAME: Time:
COMPANY: PEC	COMPANY: HERO	COMPANY: FEIO	COMPANY: SUPERIOR

[redacted] SOIL TECH ENGINEERING (408) 496-0255 298 Broklew road SANTA CLARA CA 95050

2/2/94 11:25

Priority Environmental Labs
1764 Houret Court
Milpitas, CA 95035
(408) 946-9636

1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:408-946-9663

S

91057

[redacted]

Chain of Custody

DATE: / / PAGE: OF:

PROJECT MGR.:
COMPANY:
ADDRESS:
PHONE: 408 946 9636 FAX: 408 946 9663
SIGNATURE:

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)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608,8080)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1		STLC Ni & Cu	TTLC CAM 17 EXCEPT Ni, Cu, Zn, Pb						NUMBER OF CONTAINERS
ST-1 2 3,4													✓	✓						01

Please read NOTE 11

NO

N/A N/D

Sample was in a box

PROJECT INFORMATION	SAMPLE RECEIPT
PROJECT NAME:	TOTAL # OF CONTAINERS: 01
PROJECT NUMBER:	RECD. GOOD COND./COLD:

INSTRUCTIONS & COMMENTS: Please read Chain of Custody. Send report & INVOICE DIRECTLY to Mr. FRANK HAMEDI

RELINQUISHED BY: 1	RECEIVED BY: 1	RELINQUISHED BY: 2	RECEIVED BY: 2
SIGNATURE: Date: 2/4/94	SIGNATURE: Date: 2/2/94	SIGNATURE: Date: 2-2-94	SIGNATURE: Date:
NAME: DAVID DUONG Time: 9:40 AM	NAME: Sher. Ridge Time: 9:40	NAME: Sher. Ridge Time: 11:25	NAME: ONYI A NWOJO Time: 11:25
COMPANY: PEL	COMPANY: HERO	COMPANY: PEL	COMPANY: SUPERIOR

[redacted] IC [redacted] ECH [redacted] NG [redacted] EIN [redacted] (408) 496-0255 [redacted] -93 broken road [redacted] SANTA [redacted] (95[redacted]

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: NORI AMELI

Project 8-93-558-ST
Reported 03-March-1994

ANALYSIS FOR STLC ANTIMONY, MERCURY, & VANADIUM
by California Admin. Code Title 22 & SW-846 6010 & 7470

Chronology

Laboratory Number 91186

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
ST-1,2,3,4	01/27/94	02/24/94	02/07/94	03/02/94		1

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: NORI AMELI

Project 8-93-558-ST
Reported 03-March-1994

ANALYSIS FOR STLC ANTIMONY, MERCURY, & VANADIUM

Laboratory Number	Sample Identification	Matrix
91186- 1	ST-1,2,3,4	Soil

RESULTS OF ANALYSIS

Laboratory Number: 91186- 1

Antimony	(Sb):	ND<0.2
Mercury	(Hg):	ND<0.006
Vanadium	(V):	0.6

Concentration: mg/L

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

ANALYSIS FOR STLC ANTIMONY, MERCURY, & VANADIUM
Quality Assurance and Control Data - Extract

Laboratory Number 91186

Compound		Method Blank (mg/L)	RL (mg/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Antimony	(Sb):	ND<0.2	0.2	93/94	75-125	1%
Mercury	(Hg):	ND<0.006	0.006	100/93	75-125	7%
Vanadium	(V):	ND<0.5	0.5	99/97	75-125	2%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/L = Parts per million (ppm)
QC File No. 91186

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: NORI AMELI

Project 8-93-558-ST
Reported 03-March-1994

ANALYSIS FOR TOTAL THALLIUM
by EPA Method SW-846 7841

Chronology

Laboratory Number 91186

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
ST-1,2,3,4	01/27/94	02/24/94	02/25/94	03/01/94		1

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

SOIL TECH ENGINEERING
Attn: NORI AMELI

Project 8-93-558-ST
Reported 03-March-1994

ANALYSIS FOR TOTAL THALLIUM

Laboratory Number	Sample Identification	Matrix
91186- 1	ST-1,2,3,4	Soil

RESULTS OF ANALYSIS

Laboratory Number: 91186- 1

Thallium	(Tl):	ND<1
Concentration:		mg/Kg

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

ANALYSIS FOR TOTAL THALLIUM
Quality Assurance and Control Data - Soil

Laboratory Number 91186

Compound	Method Blank (mg/Kg)	RL (mg/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Thallium (Tl):	ND<1	1	102/102	75-125	0%

ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 91186

Senior Chemist
Account Manager

CHAIN OF CUSTODY RECORD

SUPERIOR

PROJ. NO.	NAME
8-93-558-ST	2951 High st. OAKLAND

SAMPLERS: *(Signature)*

NO.	DATE	TIME	SOIL	WATER	LOCATION	CONTAINER	Analyses Requested (2) Hg & V (STLC)	REMARKS
1	1/27/94	10^{35}	✓		ST-1	1	✓	COMP.
2	1/27/94	10^{42}	✓		ST-2	1	✓	
3	1/27/94	10^{48}	✓		ST-3	1	✓	
4	1/27/94	10^{55}	✓		ST-4	1	✓	

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Receive by: *(Signature)*
	2/24/94 9^{43}				
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	

SOIL TECH ENGINEERING

Soil, Foundation and Geological Engineers

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

CHAIN OF CUSTODY RECORD

SUPERIOR

PROJ. NO.	NAME
8-93-558-ST	2951 High St. OAKLAND

SAMPLERS: (Signature)

NO.	DATE	TIME	SOIL	WATER	LOCATION	CONTAINER	Analyses Requested (2) Hg & V (STLC)	REMARKS
1	1/27/94	10:35	✓		ST-1	1	✓	91186
2	1/27/94	10:42	✓		ST-2	1	✓	Comp.
3	1/27/94	10:48	✓		ST-3	1	✓	
4	1/27/94	10:55	✓		ST-4	1	✓	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	2/24/94 9:43				
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	
			02/24/94 14:30		

SOIL TECH ENGINEERING
Soil, Foundation and Geotechnical Engineers
298 BROKAW ROAD, SANTA CLARA, CA 95050 (408) 866-0919

Zima Center Corporation
5 Admiral Dr., #101
Emeryville, Ca. 94608
(415) 420-5444 or 420-1985

BFI Vasco Road Sanitary Landfill
4001 Vasco Road
Livermore, California 94550

To Whom It May Concern:

To the best of my knowledge, there's no record of using Tetrachloroethylene, Bromomethane, Tetrachloroethane and Trichloroethane Solvents at the property located at 2951 High Street, in Oakland, California.

If you have any questions or require additional information, please feel free to contact me at (510) 436-4700.

Sincerely,

2/28/94

Mohammad A. Mashhoon
Property Owner

FORWARD, INC.

P. O. Box 6336,
Stockton, California 95206

WASTE CHARACTERIZATION FORM

SECTION A: GENERATOR/TRANSPORTER INFORMATION

Waste Generator: Zima Center Corporation
Contact Person: Mr. Mohammad A. Mashhoon Phone: (510) 436-4700
Address: 2951 High Street
City: Oakland State: CA Zip: 94619
Transporter, Company Name: E. J. Pires Trucking
Contact Person: Dean Phone: (408) 279-8775
Consultant, Company Name: SoilTech Engineering, Inc.
Contact Person: Noori Ameli Phone: (408) 496-0265

SECTION B: WASTE STREAM IDENTIFICATION

General Description of waste: SOIL FROM SERVICE STATION
Process generating waste: EXCAVATION AROUND WASTE OIL TANK.

SECTION C: PHYSICAL CHARACTERISTICS

Color: Br. Physical State: __ Solid __ Slurry __ Paste __ Powder Free Liquids: __ Yes ✓ No
pH: 6.9 Odor: __ Strong __ Mild ✓ None Soil Type (%): Sand 25 Silt 25 Clay 50

SECTION D: WASTE COMPOSITION (see SECTION E for asbestos)

Method	Constituent	Average	High	Units
3550/5520	T.O.&G.	210	210	PPM
3550	TPHD	<50=ND	45.0=ND	ppm
5030/8015/8020	TPHG	1.2	1.2	ppm
8010	Tetrachloroethylene	0.006	0.006	ppm

Element	TTLC		STLC		TCLP	
	High	Avg.	High	Avg.	High	Avg.
Cadmium	<.25=ND	N/A				
Chrom. total	150	N/A				
Chrom. VI	—	N/A				
Nickel	310	N/A				
Zinc	88	N/A				
Other... LEAD	6.6	N/A				

SECTION E: ASBESTOS

Indicate containment for asbestos: __ bags __ cartons __ drums __ wrapping __ other

NOTE: All asbestos must be prepared for transportation to and disposal at the Forward Landfill in accordance with all applicable regulatory requirements.

SECTION F: SHIPPING INFORMATION

Method: __ bulk liquid ✓ bulk solid __ containerized (type):

Quantity: 30 ✓ cubic yards __ gallons Per: __ month __ year ✓ one time only __ other

NOTE: All shipments must be approved by the Forward, Inc. Environmental Compliance Officer.

SECTION G: CERTIFICATION/INDEMNIFICATION STATEMENT

THE BELOW-NAMED COMPANY WARRANTS THAT THE ABOVE AND ANY ATTACHED OR SUBMITTED WASTE CHARACTERIZATION IS COMPLETE AND ACCURATE AND THAT BASED UPON TESTING AND ANALYSIS PERFORMED ON THE WASTE MATERIALS, NONE OF THE WASTE MATERIALS ARE HAZARDOUS AS DEFINED BY 40 CFR, PART 261, AND THE CALIFORNIA CODE OF REGULATIONS, TITLE 22. WITH THE EXCEPTION OF ASBESTOS WHICH IS PROPERLY DESCRIBED IN SECTIONS E AND F ABOVE. IN THE EVENT THAT ANY PORTION OF THE WASTE MATERIALS (OTHER THAN ASBESTOS PROPERLY DESCRIBED IN SECTIONS E AND F ABOVE) IS DETERMINED TO BE HAZARDOUS ("HAZARDOUS MATERIALS") ACCORDING TO ANY OF THE ABOVE MENTIONED REGULATIONS, EACH PARTY SHALL NOTIFY THE OTHER IN WRITING IMMEDIATELY UPON LEARNING OF SUCH DETERMINATION. THE BELOW-NAMED COMPANY SHALL WITHIN TEN (10) DAYS AFTER RECEIVING SUCH WRITTEN NOTIFICATION REGARDING A HAZARDOUS DETERMINATION, AND AT THE BELOW-NAMED COMPANY'S SOLE EXPENSE, REMOVE THE HAZARDOUS MATERIAL FROM THE FORWARD LANDFILL AND PROPERLY DISPOSE OF THEM ELSEWHERE. THE BELOW-NAMED COMPANY WARRANTS THAT ANY ASBESTOS DELIVERED TO THE FORWARD LANDFILL HAS BEEN PROPERLY DESCRIBED IN SECTIONS E AND F ABOVE AND HAS BEEN PREPARED FOR TRANSPORTATION TO AND DISPOSAL AT THE FORWARD LANDFILL IN FULL COMPLIANCE WITH APPLICABLE REGULATORY REQUIREMENTS.

THE BELOW-NAMED COMPANY SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS FORWARD, INC., ITS AFFILIATES, THEIR OFFICERS, DIRECTORS, AGENTS, REPRESENTATIVES AND EMPLOYEES AND THEIR SUCCESSORS AND ASSIGNS FROM ANY LIABILITY, CLAIMS, LOSSES, DAMAGES, COSTS, LIENS, JUDGMENTS, ORDERS, GOVERNMENT DIRECTIVES, OR EXPENSES OF ANY KIND IN CONNECTION WITH THE HAZARDOUS MATERIALS AND/OR NON-CONFORMING WASTE AND IN CONNECTION WITH ANY BREACH OF THE BELOW-NAMED COMPANY'S WARRANTIES GIVEN OR THE BELOW-NAMED COMPANY'S OBLIGATIONS UNDERTAKEN HEREIN.

THE BELOW-NAMED COMPANY AGREES THAT, IN THE EVENT THAT IT LEARNS THAT THE WASTE CONSTITUENTS VARY FROM THOSE SET FORTH ABOVE OR ON ANY ATTACHED OR SUBMITTED DOCUMENTS, IT WILL IMMEDIATELY SUBMIT A CORRECTED WASTE CHARACTERIZATION FORM.

COMPANY: Soil Tech Engineering Inc.

BY: (Print Name) Noori Amli TITLE: PROJECT ENGINEER

SIGNATURE: N. Amli DATE: 3/4/94

FORWARD INC.

NON-HAZARDOUS WASTE MANIFEST
WASTE TREATMENT AND DISPOSAL FACILITY

JOB ACCEPTANCE NO. SHR - 0797

GENERATOR
ZIMA CENTER CORPORATION
MAILING ADDRESS
2951 HIGH STREET
CITY, STATE, ZIP
OAKLAND, CALIFORNIA 94619
PHONE
510 - 436-4700
CONTACT PERSON
MOHAMMAD A. MASHHOON
SIGNATURE OF AUTHORIZED AGENT / TITLE | DATE
* | 4/28/94

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
☒ GLOVES ☐ GOGGLES ☐ RESPIRATOR ☒ HARD HAT
☐ TY-VEK ☐ OTHER

SPECIAL HANDLING PROCEDURES:

WASTE TYPE
☑ TREATMENT SOIL
☒ DISPOSAL SOIL
☐ CONSTRUCTION SOIL
☐ SLUDGE
☐ NON-FRIABLE ASBESTOS
☐ WOOD
☐ ASH
☒ OTHER

RECEIVING FACILITY
FORWARD INC. LANDFILL
9999 SOUTH AUSTIN ROAD
MANTECA, CALIFORNIA 95336
(209) 982-4298 PHONE
(209) 982-1009 FAX

GENERATING FACILITY
HIGH STREET GASS STATION

TO BE COMPLETED BY TRANSPORTER / HAULER MUST COMPLETE

NAME E.J. PIRES TRUCKING
ZIMA CENTER CORPORATION
ADDRESS 239 LEO AVE
2951 HIGH STREET
CITY, STATE, ZIP SAN JOSE, CA 95112
OAKLAND, CALIFORNIA 94619
PHONE
277-8775
SIGNATURE OF AUTHORIZED AGENT OR DRIVER | DATE
* B. Vist | 4/29/94

NOTES

TRUCK NUMBER
T-90

☐ END DUMP ☐ BOTTOM DUMP ☒ TRANSFER
☐ ROLL-OFF(S) ☐ FLAT-BED ☐ VAN ☐ DRUMS

FACILITY REQUIREMENTS

FORWARD INC. LANDFILL

Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.

REMARKS 8000C

FACILITY TICKET NUMBER

SIGNATURE OF AUTHORIZED AGENT | DATE
* C. Campbell | 4-29-94

CUBIC YARDS
18

DISPOSAL METHOD (TO BE COMPLETED BY FORWARD)

	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
☒ SOIL					
☐ SLUDGE					
☐ NON-FRIABLE ASBESTOS					
☐ WOOD					
☐ ASH					
☐ OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.
TO SCHEDULE CALL (209) 982-4298

MANIFEST # 31904

TRANSPORTER COPY