

 **Krazan** & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

January 31, 2001

Project No. 044-00006

Ms. Susan Hugo, Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 230
Alameda, California 94502

RE: Underground Storage Tank Removal
229 Second Street
Oakland, California

ENVIRONMENTAL
PROTECTION
00 JAN 32 AM 8:35

Dear Ms. Hugo:

Per the request of M.A. Mortenson Company, attached please find one copy of the above referenced document for your records. You may contact me at (408) 271-2200 if you have questions regarding the information in this letter.

Very truly yours,
KRAZAN & ASSOCIATES, INC.



ALEX J. GALLEGO, RG 6349
Environmental Division Manager

cc: Mr. Stuart Block, Cox, Castle & Nicholson LLP
Mr. Marvin Doster, M.A. Mortenson Company
Mr. James Fey
Ms. Leslie Gould, City of Oakland CEDA Planning Office
Mr. Doug Herman, Port of Oakland
Ms. Yana Nordhay, Baseline Environmental Consulting



Alameda County
NOV 21 2003
Environmental Health

**UNDERGROUND STORAGE
TANK REMOVAL
229 CASTRO STREET
OAKLAND, CALIFORNIA**

Project No. 044-00006
January 31, 2001

Prepared for:
M.A. Mortenson Company
700 Meadow Lane North
Minneapolis, Minnesota 55422

Prepared by:
Krazan & Associates, Inc.
545 Parrott Street
San Jose, California 95112
(408) 271-2200



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CONSTRUCTION TESTING AND INSPECTION

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January 31, 2001

Project No. 044-00006

**UNDERGROUND STORAGE TANK REMOVAL
229 CASTRO STREET
OAKLAND, CALIFORNIA****1.0 INTRODUCTION**

The following report summarizes the field activities and results of soil sample and groundwater analyses related to the removal of one underground storage tank (UST) located at 229 Castro Street in Oakland, California (Site; Figure 1). The work was conducted by Krazan & Associates, Inc. (Krazan) on behalf of M.A. Mortenson Company (Mortenson), the current owner of the subject site.

2.0 SITE LOCATION AND DESCRIPTION

The Site occupies a square block of land in the City of Oakland bound by 2nd and 3rd Streets and Castro and Brush Street. It consists of three parcels: one historically known as 229 Castro Street and recently acquired by Mortenson and two adjacent parcels under contract for purchase by Mortenson and owned by the Port of Oakland (Port). The Site measures approximate 300 feet by 200 feet and encompasses an approximate area of 1.4 acres. The UST was located adjacent to the sidewalk along Third Street near the intersection with Castro Street on the part of the property with the historical address of 229 Castro Street (Figure 2). Structures at the Site have been removed and the Site is being redeveloped as the Oakland Telecom Access Center (OTAC).

The Site is located in an area of Oakland currently utilized for industrial and commercial purposes. Businesses adjacent to the Site include a retail office supplies store, a plating shop, a self-storage business, warehouses, and Port of Oakland storage and administrative facilities. The nearest current residential neighborhood is located at least 1,500 feet north of the Site. According to the United States Geological Survey, 7.5 minute Oakland West, California topographic quadrangle map, photorevised 1993, the subject site is located at an elevation of approximately 5 feet above mean sea level (Figure 1).

3.0 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Site is located in the eastern portion of the San Francisco Bay Area, approximately 1,500 feet north of the Oakland Inner Harbor and approximately 2.5 miles from the San Francisco Bay. The Site is at an elevation of approximately 10 feet above mean sea level with the topography in the area being relatively level with a gentle slope to the southwest. No surface water drainages are located near the Site, and the nearest surface water bodies are the Oakland Inner Harbor to the south and Lake Merritt, located over a mile to the northeast.

The Site is located within the Coast Ranges Geomorphic Province of California, which is characterized by northwest-trending structural features, including faults and geologic units. Based on investigations conducted by Krazan, the Site is underlain by approximately five feet of fill material which is underlain by beach and dune sand deposits of the Merritt Formation. The Merritt Formation is described as loose, well-sorted, fine- to medium-grained sand with silt and clay.

Based on a review of the USGS topographic map for the area and file information for investigations conducted in the vicinity of the Site, the direction of groundwater flow is approximately south-southwest.

4.0 PROCEDURES AND FINDINGS

A tank removal application, which included a site specific health and safety plan, was required by the Alameda County Health Care Services Agency, Environmental Health Services (ACEHS), and was completed and submitted with required fees. Additionally, a UST removal application was completed and submitted to the Oakland Fire Department (OFD). Copies of applicable permits are included in Appendix A.

Following approval of the tank removal applications by the ACEHS and OFD, the UST removal was conducted by Peak Engineering (Peak) and Fuller Excavation and Demolition, Inc. (Fuller) under subcontract to Krazan. Ms. Susan Hugo of the ACEHS and Mr. Stephen Craford of the OFD were present during the removal activities. The OFD inspection report is included in Appendix B. The UST was removed by Fuller on September 26, 2000. Krazan was present to observe field activities and to collect the soil samples.

The UST was estimated at 600-gallons and based on previous investigations at the Site, was historically used for gasoline storage. The fill port and associated piping located above the UST were removed. Subsurface piping was not associated with the UST. The UST was then uncovered and soil around the UST was excavated on two sides to allow for removal. The overburden excavated soil was placed aside during the removal activities. The UST was found to contain approximately 6-inches of product (approximately 110 gallons), that was removed from the UST by Asbury Environmental Service and transported under manifest to Ramon Environmental of West Sacramento, California. Approximately 100 pounds of dry ice was placed into the UST to displace residual fuel vapors. Measurements of available oxygen and lower explosive limits (LEL) were taken prior to removal of the UST, and measured 10 and 25 percent, respectively. The UST was then removed with the approval of the OFD. During excavation, petroleum hydrocarbon (PHC) odor was noted during the excavation activities and staining of soil was noted at the base of the UST. The OFD field inspection record is included in Appendix A. The UST, numbered 28625, was placed on a flatbed truck and inspected. The UST was single wall, steel construction. The UST appeared to be in relatively poor condition with seven 0.5 to 1-inch holes on the sides and bottom. The UST was transported under manifest by Fuller to Ecology Control Industries of Richmond, California for recycling. The manifests for the rinsate and UST, and other pertinent documents are presented in Appendix B.

The soils present in the excavation area appeared to be brown silty to clayey fine sand. Groundwater was not encountered during the excavation and tank removal activities, however it is expected that groundwater is present at approximately 7 feet below the ground surface (BGS).

As directed by Ms. Hugo, Krazan's representative collected one soil sample from beneath each end of the UST. The samples from the excavation were obtained from a excavator bucket using a brass sleeve in accordance with ACEHS guidelines. Soil samples were collected at a depth of approximately 7 feet BGS, approximately 1 foot beneath the historical bottom of the UST. Refer to the attached Figure 3 for the soil sample locations.

Following sample collection, the ends of the sample sleeves were covered by Teflon® film and sealed with tight fitting plastic caps and secured in plastic bags. The samples were labeled and placed in a cooler chest, which contained ice to minimize loss of volatile constituents. The samples were then transported under Chain-of-Custody protocol to Entech Analytical Labs, Inc. (Entech), a State-certified analytical laboratory for analysis. As directed by Ms. Hugo, the soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), and benzene, toluene, ethylbenzene, and xylenes (BTEX)

by Environmental Protection Agency (EPA) Method 8015 Modified and 8020. In addition, the soil samples were analyzed for tetraethyl lead and fuel oxygenates by Title 22 Method and EPA Method 8260, respectively. The analytical results for the soil samples, given in milligrams per kilogram (mg/kg) are summarized in the following table. Fuel oxygenates were not detected in the soil samples at concentrations greater than the detection reporting limits of 1 to 4 mg/kg. Tetraethyl lead was not detected in the soil samples at concentrations greater than the detection reporting limit of 1 mg/kg.

Sample No.	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Tetra ethyl Lead (mg/kg)	Fuel Oxygenates (mg/kg)
S-N	1800	8.3	66	27	130	<1	<1 to <4
S-S	2300	12	91	42	210	<1	<1 to <4

Soil around and beneath the former UST was then over-excavated as part of the overall excavation at the Site for placement of a matt foundation. The excavated soil from the matt excavation was characterized and disposed of in accordance with applicable laws.

Two confirmation soil samples were collected from the former UST area following the over-excavation. The soil samples were analyzed for TPH-G, BTEX, and fuel oxygenates. The analytical results for the confirmation soil samples, given in mg/kg are summarized in the following table. Fuel oxygenates were not detected in the soil samples at concentrations greater than the detection reporting limit.

Sample No.	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total xylenes (mg/kg)	Fuel Oxygenates (mg/kg)
S-N2W	<1	<0.005	<0.005	<0.005	<0.005	<0.005 to <0.02
S-S2E	77	0.089	0.35	0.36	0.11	<1 to <4

Copies of the Analytical Results and Chain-of-Custody records for these samples are included in Appendix C.

5.0 GROUNDWATER ASSESSMENT

As part of previous site characterization conducted in February 2000, a boring was installed adjacent to the former UST and a grab groundwater sample was collected. The sample contained elevated concentrations of TPH-G and BTEX. To further assess groundwater conditions at the Site, Krazan advanced two borings approximately 40 feet downgradient of the former UST on October 11, 2000. The

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location of the borings, designated G-1 and G-2, are presented in Figure 2. Grab groundwater samples were collected from these borings and analyzed for TPH-G, BTEX, and fuel oxygenates. Neither groundwater sample contained detectable levels of TPH-G, BTEX, or fuel oxygenates. Copies of the Analytical Results and Chain-of-Custody records for these samples are included in Appendix C. Additionally, as part of the previous characterization activities conducted in February 2000, seven grab groundwater samples were collected from the parcels of the Site owned by the Port and analyzed for volatile organic compounds. None of the seven grab groundwater samples contained BTEX or methyl tert butyl ether (MTBE) compounds.

6.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Soil samples collected from the bottom of the UST immediately following the excavation detected TPH-G and BTEX constituents. Tetraethyl lead and fuel oxygenates were not detected in the samples. Following over-excavation of the area, two confirmation soil samples were collected and analyzed for TPH-G, BTEX, and fuel oxygenates. One of the confirmation soil samples was non-detect for all constituents. The other contained only low concentrations of TPH-G and BTEX. The low concentrations of BTEX in the one confirmation soil sample were well below their respective EPA Region IX Preliminary Remedial Goals (PRGs) for dermal contact and soil ingestion for an industrial land use setting. The PRGs are conservative values used for screening human-health risks associated with contaminated media.

Based on this information, it is our opinion that all significant concentrations of contaminants have been removed and that no further action is required with respect to the UST removal. Also, any exposure to the area of the former UST has been prevented by the construction of a matt foundation for the structure at the Site. The matt foundation consists of a 4-foot thick, solid concrete foundation.

A groundwater sample collected in February 2000 adjacent to the former UST contained elevated concentrations of petroleum hydrocarbons. However, two more recent grab groundwater samples collected downgradient from the former UST did not contain petroleum hydrocarbons. Based on this information, the extent of petroleum affected groundwater is interpreted to be limited to the immediate vicinity of the former UST. Furthermore, given the fact that the UST had not been used in many years, and groundwater downgradient of the UST is not affected with petroleum hydrocarbons, any residual contaminants in groundwater appear to stable and are not likely to migrate. Additionally, there are no known domestic or municipal production water wells in the vicinity of the Site and there is a very low

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likelihood that shallow groundwater at and near the Site will be used for public consumption. As such, there are no known risks to human health or the environment posed by any residual petroleum hydrocarbons presents in groundwater.

Based on the discussion and conclusions presented above, no further investigation and/or remediation appears warranted with respect to the UST and closure of the Site is appropriate.

7.0 LIMITATIONS

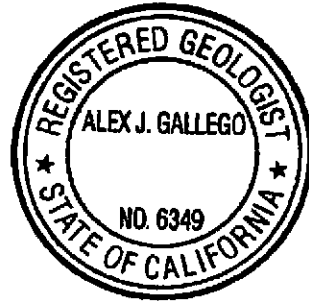
The findings of this report were based upon the results of our field and laboratory investigations, coupled with the interpretation of subsurface conditions associated with the UST excavation. Therefore, the data are accurate only to the degree implied by review of the data obtained and by professional interpretation.

The excavation and sample location were located in the field by review of available maps and by pacing or tape measurements from existing landmarks. Therefore, the excavation and soil sample location should be considered accurate only to the degree implied by the methods used to locate them.

Chemical testing was done by a laboratory approved by the State of California Certified Hazardous Waste Laboratory. The results of the chemical testing are accurate only to the degree of care of ensuring the testing accuracy and the representative nature of the soil samples obtained.

The findings presented herewith are based on professional interpretation using state of the art methods and equipment and a degree of conservatism deemed proper as of this report date. It is not warranted that such data cannot be superseded by future geotechnical, environmental, or technical developments.

If you have any questions or if we can be of further assistance, please do not hesitate to contact our office at (408) 271-2200.



Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

A handwritten signature in black ink that reads "Alex J. Gallego".

Alex J. Gallego, RG 6349
Director of Environmental Services

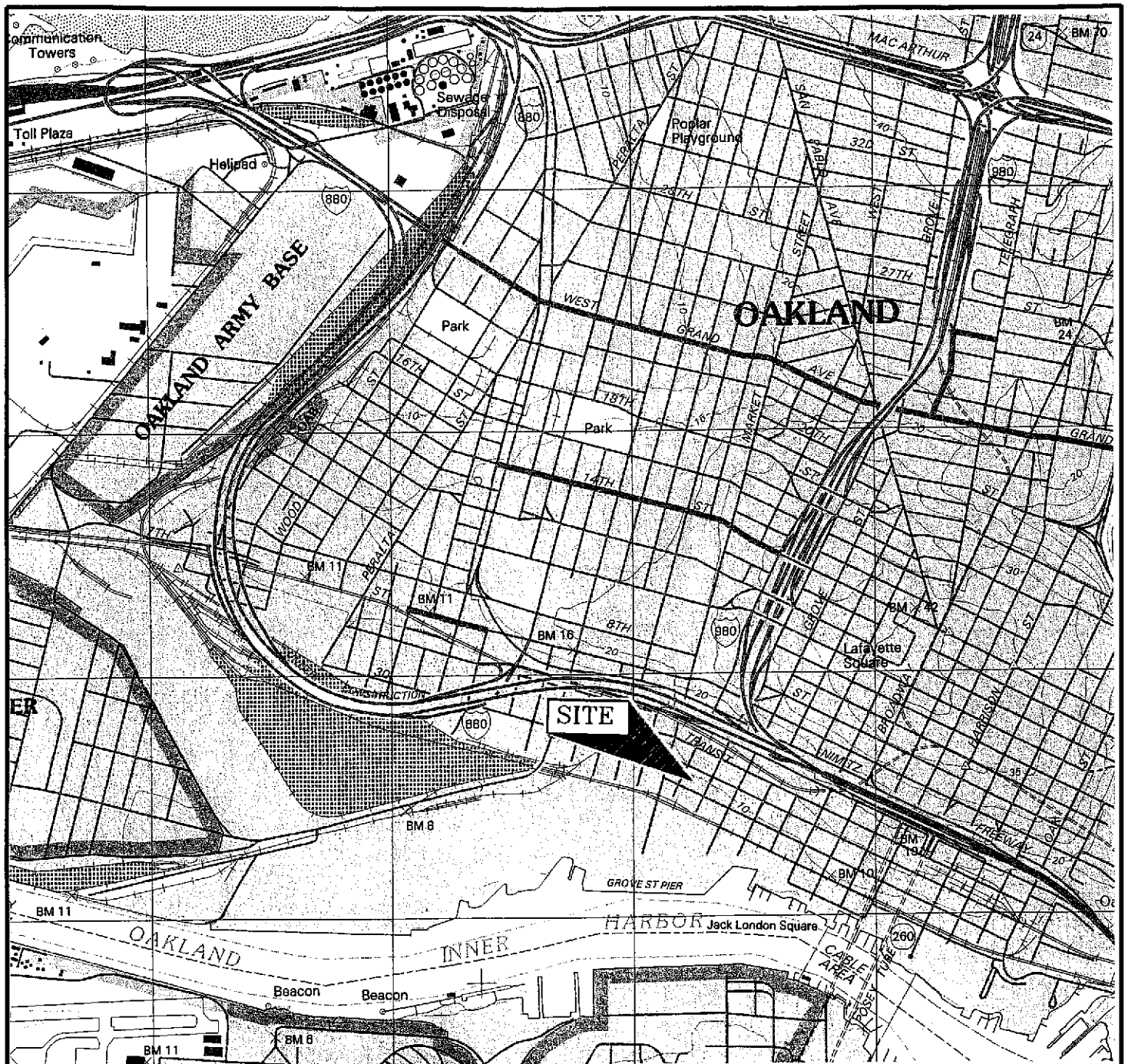


A handwritten signature in black ink that reads "Dean Alexander".

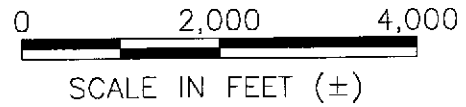
Dean Alexander
Principal Engineer
RGE #002051/RCE #34274


AJG/DA/lk

2c: herewith



MAP SOURCE:
 USGS QUADRANGLE, 7.5-MINUTE (TOPOGRAPHIC)
 OAKLAND WEST (DATED 1993)

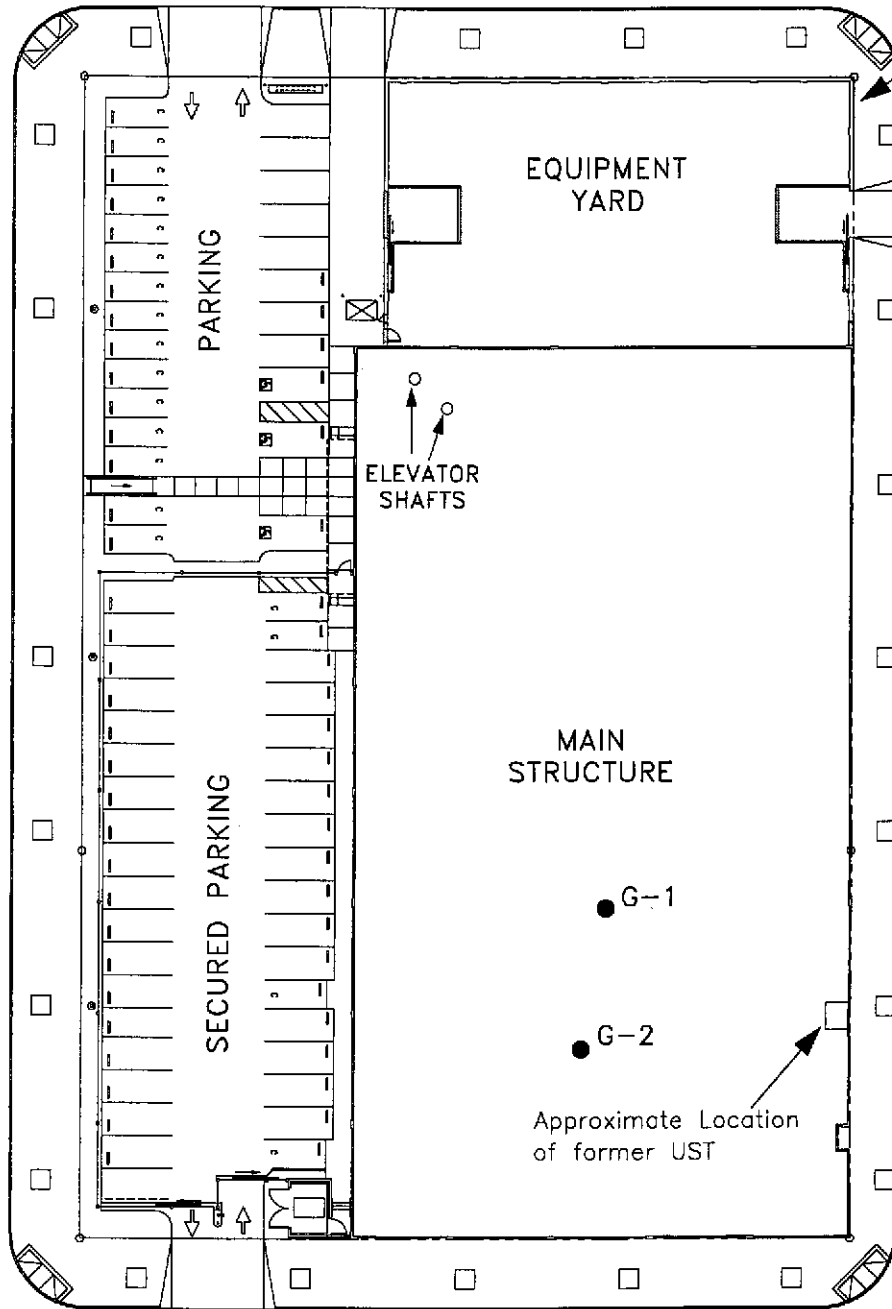


VICINITY MAP	Scale: AS SHOWN	Date: 2/00	 Krazan ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS <i>Offices Serving the Western United States</i>
	Drawn by: AJG	Approved by: AJG	
City Block Bound By: Second, Third, Castro, & Brush Streets Oakland, California	Project No. 044-00006	Figure No. 1	

BRUSH STREET

Approximate Property Boundary

SECOND STREET



THIRD STREET

MAIN STRUCTURE

G-1

G-2

Approximate Location of former UST

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

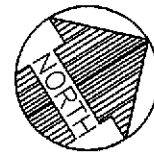
CASTRO STREET

EXPLANATION

● G-1 SOIL BORING AND GROUNDWATER LOCATION AND DESIGNATION

NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2. BASE MAP FROM CARILLO ARCHITECTURAL GROUP
3. STRUCTURES PRESENTED ARE CURRENTLY UNDER CONSTRUCTION.



SCALE IN FEET (±)

SITE MAP

City Block Bound By:
Second, Third, Castro, &
Brush Streets
Oakland, California

Scale: AS SHOWN	Date: 01/01
Drawn by: AJG	Approved by: AJG
Project No. 044-00006	Figure No. 2

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ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS
Offices Serving the Western United States

S-N &
S-N2W

S-S &
S-S2E

Approximate Location
of former UST

FUTURE NEW BUILDING

SIDEWALK

THIRD STREET

SIDEWALK

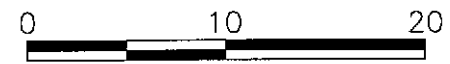
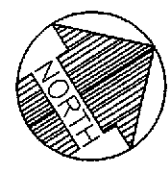
CASTRO STREET

EXPLANATION

● S-S2E SOIL SAMPLE LOCATION AND DESIGNATION

NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2. BASE MAP FROM FIELD MEASUREMENTS AND SANBORN MAPS



SCALE IN FEET (±)

SOIL SAMPLE LOCATION MAP 229 Castro Street Oakland, California	Scale:	Date:	
	AS SHOWN	01/01	
	Drawn by:	Approved by:	
	AJG	AJG	
Project No.	Figure No.		
044-00006	3	ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS <i>Offices Serving the Western United States</i>	

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
 ENVIRONMENTAL HEALTH SERVICES
 1131 HARBOR BAY PARKWAY, RM 250
 ALAMEDA, CA 94502-6577
 PHONE # 510/567-6700

*# need copy of
 by Waste Certification
 Submittal*

ACCEPTED
 Underground Storage Tank Closure Permit Application
 Alameda County Division of Hazardous Materials
 1131 Harbor Bay Parkway, Suite 250
 Alameda, CA 94502-6577

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction/renovation.

One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any changes or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspectors Department to determine if such changes meet the requirements of State and local laws. Notify the Department at least 72 hours prior to the following required inspections:

- Removal of Tank(s) and Piping
- Sampling
- Final Inspection

Issuance of a) permit to operate, b) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

***THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:**

Contact Specialist:

Shawn F. Hayes
 2/21/88/9

UNDERGROUND TANK CLOSURE PLAN

* * * Complete plan according to attached instructions * * *

1. Name of Business M. A. Mortenson Company
 Business Owner or Contact Person (PRINT) Mr. Marvin Doster
2. Site Address 229 Castro Street
 City Oakland Zip 94607 Phone _____
3. Mailing Address 108 First Avenue South
 City Seattle, WA Zip 98104 Phone 206-748-7937
4. Property Owner M. A. Mortenson Company
 Business Name (if applicable) N/A
 Address 700 Meadow Lane North
 City, State Minneapolis, MN. Zip 55422
5. Generator name under which tank will be manifested
M. A. Mortenson Company
 EPA ID# under which tank will be manifested CA 00 2279465

6. Contractor M. A. Mortenson Company
Address 720 Second Street

City Oakland, Ca. 94607 Phone 510-625-0201

License Type A, B, C General ID# 411701
San Bernardino County

7. Consultant (if applicable) Krazer & Associates, Inc.

Address 545 Parrott Street

City, State San Jose, Ca. 95112 Phone 408-271-2200

8. Main Contact Person for Investigation (if applicable)

Name Alex Gallego Title Division Manager

Company Krazer & Associates, Inc.

Phone 408-271-2200

9. Number of underground tanks being closed with this plan 1

Length of piping being removed under this plan unknown

Total number of underground tanks at this facility (**confirmed with owner or operator) 1

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground storage tanks must be handled as hazardous waste **

a) Product/Residual Sludge/Rinsate Transporter

Name Ecology Control Industries EPA I.D. No. CAD 982030173

Hauler License No. 1533 License Exp. Date 3-01

Address 255 Parr Blvd.

City Richmond State Ca. Zip 94801

b) Product/Residual Sludge/Rinsate Disposal Site

Name N/A EPA ID# _____

Address _____

City _____ State _____ Zip _____

c) Tank and Piping Transporter

Name N/A ECI EPA I.D. No. CAD 982030173
Hauler License No. 1533 License Exp. Date 3-01
Address 255 PARR BLVD
City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Ecology Control Industries EPA I.D. No. CAD 009466392
Address 255 Parr Blvd.
City Richmond State Ca. Zip 94801

11. Sample Collector

Name Alex Gallego
Company Krazan & Associates, Inc.
Address 545 Parrott Street
City San Jose State Ca Zip 95112 Phone 408-271-226

12. Laboratory

Name Entela Analytical Labs, Inc.
Address 525 Del Rey Avenue, Ste. E.
City Sunnyvale State Ca. Zip 94086
State Certification No. CA Elap # 2346

13. Have tanks or pipes leaked in the past? Yes No Unknown

If yes, describe. Soil and Groundwater samples collected adjacent to tank contain gasoline compounds.

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

Dry Ice

Before tanks are pumped out and inerted, all associated piping must be flushed back into the tank(s). All accessible piping must then be removed. Inaccessible piping must be permanently plugged using grout.

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

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

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
500 gal ±	unknown	Soil Groundwater	Sidewalls (6') Tank Pit.

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

Excavated/Stockpiled Soil

Stockpiled Soil Volume
(estimated)

Sampling Plan

Unknown
Stockpiled soil must be
properly disposed. Any
approval from County.

Characterized &
reuse of soil must have

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

Will the excavated soil be returned to the excavation immediately after tank removal? yes no unknown

If yes, explain reasoning _____

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

16. Chemical methods and associated detection limits to be used for analyzing samples:

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

17. Submit Site Health and Safety Plan (See Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
TPH motor oil			
TPH Gas	8015 M		SOIL WATER
TPH Diesel	8020		1ppm 50ppb
BTEX			5ppb 0.5ppb
TEL	DHS LVFT		0.5ppm 0.1ppm
MTBE			
Chlorinated Solvents			
semi VOCs			
metals Cd, Cr, <u>Pb</u> , Zn, Ni			

18. Submit Worker's Compensation Certificate copy

Name of Insurer * Willis Corvorn Corp. of Minnesota

19. Submit Plot Plan ***** (See Instructions) *****

20. Enclose Deposit (See Instructions)

21. Report all leaks or contamination to this office within 5 days of discovery.

The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.

22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one-B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business M. A. Mortenson Company

Name of Individual JIM CALL

Signature J. E. Call Date 9/18/00

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business M. A. Mortenson Company

Name of Individual Jim Call

Signature J. E. Call Date 9/18/00

INSTRUCTIONS

General Instructions

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

Line Item Specific Instructions

2. SITE ADDRESS

Address at which closure is taking place.

5. EPA I.D. NO. under which the tanks will be manifested

EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781.

6. CONTRACTOR

Prime contractor for the project.

10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES

- a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
- c) Tanks must be hauled as hazardous waste.
- d) This is the place where tanks will be taken for cleaning.

15. TANK HISTORY AND SAMPLING INFORMATION

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

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

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

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS

See attached Table 2.

17. SITE HEALTH AND SAFETY PLAN

A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

- a) The name and responsibilities of the site health and safety officer;
- b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
- c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;
- d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
- e) Description of the work habit changes triggered by the above action levels or physical conditions;
- f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
- g) Confined space entry procedures (if applicable);
- h) Decontamination procedures;
- i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
- j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
- k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
- l) A page for employees to sign acknowledging that they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

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

19. PLOT PLAN

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

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

20. DEPOSIT

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

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

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;
- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
- d) Detailed description of sampling methods; i.e. backhoe bucket, drive sampler, bailer, bottle(s), sleeves
- e) Description of any remedial measures conducted at the time of tank removal;
- f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Documentation of the disposal of/and volume and final destination of all non-manifested contaminated soil disposed offsite.

Approximate Location
of UST

VENT PIPE NEAR
CONCRETE PATCH

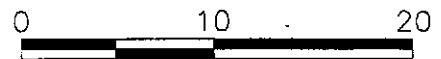
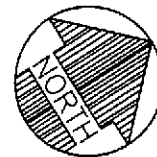
229 CASTRO STREET
THAI KITCHEN FOOD DISTRIBUTORS
WAREHOUSE BUILDING

SIDEWALK

THIRD STREET

SIDEWALK

CASTRO STREET



SCALE IN FEET (±)

NOTES:

- 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
- 2. BASE MAP FROM FIELD MEASUREMENTS AND SANBORN MAPS

SITE MAP

229 Castro Street
Oakland, California

Scale: AS SHOWN	Date: 07/00
Drawn by: AJG	Approved by: AJG
Project No. 044-00006	Figure No. 2



ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SPECIALISTS

Offices Serving the Western United States

DECLARATION OF SITE ACCOUNT REFUND RECIPIENT

There may be excess funds remaining in the Site Account at the completion of this project. The PAYOR (person or company that issues the check) will use this form to predesignate another party to receive any funds refunded at the completion of this project. In the absence of this form, the PAYOR will receive the refund.

SITE INFORMATION:

Site ID Number
(if known)

OAKLAND TELE. ACCESS CENTER
Name of Site

720 SECOND ST
Street Address

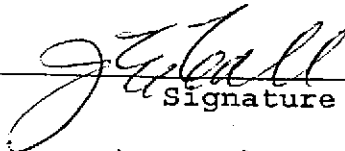
OAKLAND CA 94607
City, State & Zip Code

I designate the following person or business to receive any refund due at the completion of all deposit/refund projects:

MA MORTENSON
Name

720 SECOND ST
Street Address

OAKLAND CA 94607
City, State & Zip Code


Signature of Payor

9/18/00
Date

Jim Carr
Name of Payor
(PLEASE PRINT CLEARLY)

MA MORTENSON
Company Name of Payor

RETURN FORM TO:

County of Alameda, Environmental Protection
1131 Harbor Bay Parkway, Rm 250
Alameda CA 94502-6577
Phone#(510) 567-6700

RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR
UNDERGROUND TANK LEAKS

HYDROCARBON LEAK

SOIL ANALYSIS

WATER ANALYSIS

Unknown Fuel

TPH G GCFID(5030)
TPH D GCFID(3550)
BTX&E 8020 or 8240
TPH AND BTX&E 8260

TPH G GCFID(5030)
TPH D GCFID(3510)
BTX&E 602, 624 or
8260

Leaded Gas

TPH G GCFID(5030)
BTX&E 8020 OR 8240
TPH AND BTX&E 8260
TOTAL LEAD AA

TPH G GCFID(5030)
BTX&E 602 or 624
TOTAL LEAD AA

-----Optional-----

TEL DHS-LUFT
EDB DHS-AB1803

TEL DHS-LUFT
EDB DHS-AB1803

Unleaded Gas

TPH G GCFID(5030)
BTX&E 8020 or 8240
TPH AND BTX&E 8260

TPH G GCFID(5030)
BTX&E 602, 624 or
8260

Diesel, Jet Fuel and
Kerosene

TPH D GCFID(3550)
BTX&E 8020 or 8240
TPH AND BTX&E 8260

TPH D GCFID(3510)
BTX&E 602, 624 or
8260

Fuel/Heating Oil

TPH D GCFID(3550)
BTX&E 8020 or 8240
TPH AND BTX&E 8260

TPH D GCFID(3510)
BTX&E 602, 624 or
8260

Chlorinated Solvents

CL HC 8010 or 8240
BTX&E 8020 or 8240
CL HC AND BTX&E 8260

CL HC 601 or 624
BTX&E 602 or 624
CL HC AND BTX&E 8260

Non-chlorinated Solvents

TPH D GCFID(3550)
BTX&E 8020 or 8240
TPH AND BTX&E 8260

TPH D GCFID(3510)
BTX&E 602 or 624
TPH and BTX&E 8260

Waste and Used Oil
or Unknown

(All analyses must be
completed and submitted)

TPH G GCFID(5030)
TPH D GCFID(3550)
TPH AND BTX&E 8260
O & G 5520 D & F
BTX&E 8020 or 8240

TPH G GCFID(5030)
TPH D GCFID(3510)
O & G 5520 C & F
BTX&E 602, 624 or
8260

CL HC 8010 or 8240

CL HC 601 or 624

ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni
METHOD 8270 FOR SOIL OR WATER TO DETECT:

PCB*
PCP*
PNA
CREOSOTE

PCB
PCP
PNA
CREOSOTE

* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary
Evaluation and Investigation of Underground Tank Sites,
10 August 1990

EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

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

	<u>SOIL PPM</u>	<u>WATER PPB</u>
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

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

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

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

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

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chromatogram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.
12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal

from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS - FACILITY

(one page per site)

Page 1 of 1

TYPE OF ACTION (Check one item only) 1. NEW SITE PERMIT 3. RENEWAL PERMIT 5. CHANGE OF INFORMATION (Specify change - local use only) PERMANENTLY CLOSED SITE 8. TANK REMOVED 400
 4. AMENDED PERMIT 6. TEMPORARY SITE CLOSURE

I. FACILITY SITE INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3 <i>M. A. Mortenson Co.</i>		FACILITY ID	
NEAREST CROSS STREET 401 <i>3rd Street</i>	FACILITY OWNER TYPE		<input type="checkbox"/> 4. LOCAL AGENCY/DISTRICT*
BUSINESS TYPE <input type="checkbox"/> 1. GAS STATION <input type="checkbox"/> 3. FARM <input type="checkbox"/> 5. COMMERCIAL <input checked="" type="checkbox"/> 2. DISTRIBUTOR <input type="checkbox"/> 4. PROCESSOR <input type="checkbox"/> 6. OTHER 403	<input checked="" type="checkbox"/> 1. CORPORATION <input type="checkbox"/> 2. INDIVIDUAL <input type="checkbox"/> 3. PARTNERSHIP		<input type="checkbox"/> 5. COUNTY AGENCY* <input type="checkbox"/> 6. STATE AGENCY* <input type="checkbox"/> 7. FEDERAL AGENCY*
TOTAL NUMBER OF TANKS REMAINING AT SITE <i>1</i> 404	Is facility on Indian Reservation or trustlands? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 405	*If owner of UST a public agency: a name of supervisor of division, section or office which operates the UST. (This is the contact person for the tank records.) 406	

II. PROPERTY OWNER INFORMATION

PROPERTY OWNER NAME 407 <i>M. A. Mortenson Company</i>	PHONE 408 <i>206-748-7837</i>
MAILING OR STREET ADDRESS 409 <i>229 Castro Street</i>	
CITY 410 <i>Oakland</i>	STATE 411 <i>Ca</i>
PROPERTY OWNER TYPE <input checked="" type="checkbox"/> 1. CORPORATION <input type="checkbox"/> 2. INDIVIDUAL <input type="checkbox"/> 3. PARTNERSHIP	ZIP CODE 412 <i>94607</i>
<input type="checkbox"/> 4. LOCAL AGENCY / DISTRICT <input type="checkbox"/> 5. COUNTY AGENCY <input type="checkbox"/> 6. STATE AGENCY <input type="checkbox"/> 7. FEDERAL AGENCY 413	

III. TANK OWNER INFORMATION

TANK OWNER NAME 414 <i>M. A. Mortenson Company</i>	PHONE 415 <i>206-748-7837</i>
MAILING OR STREET ADDRESS 416 <i>700 Meadow Lane North</i>	
CITY 417 <i>Minneapolis</i>	STATE 418 <i>MN</i>
TANK OWNER TYPE <input checked="" type="checkbox"/> 1. CORPORATION <input type="checkbox"/> 2. INDIVIDUAL <input type="checkbox"/> 3. PARTNERSHIP	ZIP CODE 419 <i>55422</i>
<input type="checkbox"/> 4. LOCAL AGENCY / DISTRICT <input type="checkbox"/> 5. COUNTY AGENCY <input type="checkbox"/> 6. STATE AGENCY <input type="checkbox"/> 7. FEDERAL AGENCY 420	

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER

TY (TK) HQ <i>4 4 -</i>	Call (916) 322-9669 if questions arise 421
-------------------------	--

V. PETROLEUM UST FINANCIAL RESPONSIBILITY

INDICATE METHOD(S) <input checked="" type="checkbox"/> 1. SELF INSURED <input type="checkbox"/> 2. GUARANTEE <input type="checkbox"/> 3. INSURANCE	<input type="checkbox"/> 4. SURETY BOND <input type="checkbox"/> 5. LETTER OF CREDIT <input type="checkbox"/> 6. EXEMPTION	<input type="checkbox"/> 7. STATE FUND <input type="checkbox"/> 7. STATE FUND & CFO LETTER <input type="checkbox"/> 7. STATE FUND & CD	<input type="checkbox"/> 10. LOCAL GOV'T MECHANISM <input type="checkbox"/> 99. OTHER: _____ 422
--	--	--	---

VI. LEGAL NOTIFICATION AND MAILING ADDRESS

Check one box to indicate which address should be used for legal notification and mailing. Legal notifications and mailings will be sent to the tank owner unless box 1 or 2 is checked.

1. FACILITY 2. PROPERTY OWNER 3. TANK OWNER 423

VII. APPLICANT SIGNATURE

Certification: I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF APPLICANT <i>Jim Call</i>	DATE 414 <i>9/18/00</i>	PHONE 425 <i>(510)-625-0201</i>
NAME OF APPLICANT (print) 426 <i>JIM CALL</i>	TITLE OF APPLICANT 427 <i>Project Manager</i>	

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS - TANK PAGE 1

(two pages per tank)

Page ____ of ____

TYPE OF ACTION (Check one item only)

1. NEW SITE PERMIT 4. AMENDED PERMIT 5. CHANGE OF INFORMATION 6. TEMPORARY SITE CLOSURE

3. RENEWAL PERMIT (Specify reason - for local use only) (Specify change - for local use only) 7. PERMANENTLY CLOSED ON SITE

8. TANK REMOVED

430

BUSINESS NAME (Same as FACILITY NAME or DBA - doing Business As) FACILITY ID#

M. A. Mortenson Company [REDACTED]

LOCATION WITHIN SITE (Optional) 431

[REDACTED]

I. TANK DESCRIPTION

TANK ID # 432 TANK MANUFACTURER 433 COMPARTMENTALIZED TANK Yes No 434

unknown If "Yes," complete one page for each compartment.

DATE INSTALLED (YEAR/MO) 435 TANK CAPACITY IN GALLONS 436 NUMBER OF COMPARTMENTS 437

unknown 500 ± 1

ADDITIONAL DESCRIPTION (For local use only) 438

[REDACTED]

II. TANK CONTENTS

TANK USE PETROLEUM TYPE 440

1. MOTOR VEHICLE FUEL (If marked, complete Petroleum Type) 1a. REGULAR UNLEADED 2. LEADED 5. JET FUEL

2. NON-FUEL PETROLEUM 1b. PREMIUM UNLEADED 3. DIESEL 6. AVIATION FUEL

3. CHEMICAL PRODUCT 1c. MIDGRADE UNLEADED 4. GASOHOL 99. OTHER _____

4. HAZARDOUS WASTE (Includes Used Oil)

95. UNKNOWN

COMMON NAME (from Hazardous Materials Inventory page) 441 CAS # (from Hazardous Materials Inventory page) 442

[REDACTED]

III. TANK CONSTRUCTION

TYPE OF TANK (Check one item only) 443

1. SINGLE WALL 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM

2. DOUBLE WALL 95. UNKNOWN

4. SINGLE WALL IN A VAULT 99. OTHER _____

TANK MATERIAL - primary tank (Check one item only) 444

1. BARE STEEL 3. FIBERGLASS / PLASTIC 5. CONCRETE 95. UNKNOWN

2. STAINLESS STEEL 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) 8. FRP COMPATIBLE W/100% METHANOL 99. OTHER _____

TANK MATERIAL - secondary tank (Check one item only) 445

1. BARE STEEL 3. FIBERGLASS / PLASTIC 8. FRP COMPATIBLE W/100% METHANOL 95. UNKNOWN

2. STAINLESS STEEL 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) 9. FRP NON-CORRODIBLE JACKET 99. OTHER _____

5. CONCRETE 10. COATED STEEL

TANK INTERIOR LINING OR COATING (Check one item only) 446 DATE INSTALLED 447

1. RUBBER LINED 3. EPOXY LINING 5. GLASS LINING 95. UNKNOWN (For local use only)

2. ALKYD LINING 4. PHENOLIC LINING 6. UNLINED 99. OTHER _____

OTHER CORROSION PROTECTION IF APPLICABLE (Check one item only) 448 DATE INSTALLED 449

1. MANUFACTURED CATHODIC PROTECTION 3. FIBERGLASS REINFORCED PLASTIC 95. UNKNOWN (For local use only)

2. SACRIFICIAL ANODE 4. IMPRESSED CURRENT 99. OTHER _____

SPILL AND OVERFILL (Check all that apply) YEAR INSTALLED 450 TYPE (For local use only) 451 OVERFILL PROTECTION EQUIPMENT: YEAR INSTALLED 452

1. SPILL CONTAINMENT _____ 1. ALARM _____ 3. FILL TUBE SHUT OFF VALVE _____

2. DROP TUBE _____ 2. BALL FLOAT _____ 4. EXEMPT

3. STRIKER PLATE _____

IV. TANK LEAK DETECTION

IF SINGLE WALL TANK (Check all that apply): 453

1. VISUAL (EXPOSED PORTION ONLY) 5. MANUAL TANK GAUGING (MTG)

2. AUTOMATIC TANK GAUGING (ATG) 6. VADOSE ZONE

3. CONTINUOUS ATG 7. GROUNDWATER

4. STATISTICAL INVENTORY RECONCILIATION (SIR)+ BIENNIAL TANK TESTING 8. TANK TESTING

99. OTHER unknown

IF DOUBLE WALL TANK OR TANK WITH BLADDER (Check one item only): 454

1. VISUAL (SINGLE WALL IN VAULT ONLY)

2. CONTINUOUS INTERSTITIAL MONITORING

3. MANUAL MONITORING

V. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY) 455 ESTIMATED QUANTITY OF SUBSTANCE REMAINING 456 TANK FILLED WITH INERT MATERIAL? 457

unknown unknown gallons Yes No

UNIFIED PROGRAM CONSOLIDATED FORM
UNDERGROUND STORAGE TANKS - TANK PAGE 2

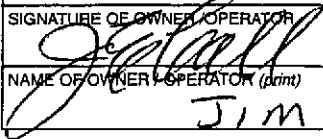
TANKS

Page ____ of ____

VI. PIPING CONSTRUCTION (Check all that apply)				
UNDERGROUND PIPING		ABOVEGROUND PIPING		
SYSTEM TYPE	<input type="checkbox"/> 1. PRESSURE <input checked="" type="checkbox"/> 2. SUCTION <input type="checkbox"/> 3. GRAVITY.	458	<input type="checkbox"/> 1. PRESSURE <input type="checkbox"/> 2. SUCTION <input type="checkbox"/> 3. GRAVITY.	459
CONSTRUCTION/ MANUFACTURER	<input type="checkbox"/> 1. SINGLE WALL <input type="checkbox"/> 3. LINED TRENCH <input type="checkbox"/> 99. OTHER	460	<input type="checkbox"/> 1. SINGLE WALL <input type="checkbox"/> 95. UNKNOWN	462
	<input type="checkbox"/> 2. DOUBLE WALL <input checked="" type="checkbox"/> 95. UNKNOWN	461	<input type="checkbox"/> 2. DOUBLE WALL <input type="checkbox"/> 99. OTHER	463
MATERIALS AND CORROSION PROTECTION	<input type="checkbox"/> 1. BARE STEEL <input type="checkbox"/> 6. FRP COMPATIBLE W/100% METHANOL	484	<input type="checkbox"/> 1. BARE STEEL <input type="checkbox"/> 6. FRP COMPATIBLE W/100% METHANOL	465
	<input type="checkbox"/> 2. STAINLESS STEEL <input type="checkbox"/> 7. GALVANIZED STEEL		<input type="checkbox"/> 2. STAINLESS STEEL <input type="checkbox"/> 7. GALVANIZED STEEL	
	<input type="checkbox"/> 3. PLASTIC COMPATIBLE WITH CONTENTS <input checked="" type="checkbox"/> 95. UNKNOWN.		<input type="checkbox"/> 3. PLASTIC COMPATIBLE WITH CONTENTS <input type="checkbox"/> 8. FLEXIBLE (HDPE)	
	<input type="checkbox"/> 4. FIBERGLASS <input type="checkbox"/> 8. FLEXIBLE (HDPE) <input type="checkbox"/> 99. OTHER		<input type="checkbox"/> 4. FIBERGLASS <input type="checkbox"/> 9. CATHODIC PROTECTION <input type="checkbox"/> 99. OTHER	
	<input type="checkbox"/> 5. STEEL W/COATING <input type="checkbox"/> 9. CATHODIC PROTECTION		<input type="checkbox"/> 5. STEEL W/COATING <input type="checkbox"/> 95. UNKNOWN	

VII. PIPING LEAK DETECTION (Check all that apply)	
UNDERGROUND PIPING	ABOVEGROUND PIPING
<p align="center">SINGLE WALL PIPING</p> <p>458</p> <p>PRESSURIZED PIPING (Check all that apply):</p> <p><input type="checkbox"/> 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS</p> <p><input type="checkbox"/> 2. MONTHLY 0.2 GPH TEST</p> <p><input type="checkbox"/> 3. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p>CONVENTIONAL SUCTION SYSTEMS:</p> <p><input type="checkbox"/> 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)</p> <p>SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):</p> <p><input type="checkbox"/> 7. SELF MONITORING</p> <p>GRAVITY FLOW:</p> <p><input type="checkbox"/> 9. BIENNIAL INTEGRITY TEST (0.1 GPH)</p> <p align="center">SECONDARILY CONTAINED PIPING</p> <p>PRESSURIZED PIPING (Check all that apply):</p> <p>10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)</p> <p><input type="checkbox"/> a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS</p> <p><input type="checkbox"/> b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION</p> <p><input type="checkbox"/> c. NO AUTO PUMP SHUT OFF</p> <p><input type="checkbox"/> 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION</p> <p><input type="checkbox"/> 12. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p>SUCTION/GRAVITY SYSTEM:</p> <p><input type="checkbox"/> 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS</p> <p align="center">EMERGENCY GENERATORS ONLY (Check all that apply)</p> <p><input type="checkbox"/> 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS</p> <p><input type="checkbox"/> 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION</p> <p><input type="checkbox"/> 16. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p><input type="checkbox"/> 17. DAILY VISUAL CHECK</p>	<p align="center">SINGLE WALL PIPING</p> <p>467</p> <p>PRESSURIZED PIPING (Check all that apply):</p> <p><input type="checkbox"/> 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS</p> <p><input type="checkbox"/> 2. MONTHLY 0.2 GPH TEST</p> <p><input type="checkbox"/> 3. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p><input type="checkbox"/> 4. DAILY VISUAL CHECK</p> <p>CONVENTIONAL SUCTION SYSTEMS (Check all that apply):</p> <p><input type="checkbox"/> 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM</p> <p><input type="checkbox"/> 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)</p> <p>SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):</p> <p><input type="checkbox"/> 7. SELF MONITORING</p> <p>GRAVITY FLOW (Check all that apply):</p> <p><input type="checkbox"/> 8. DAILY VISUAL MONITORING</p> <p><input type="checkbox"/> 9. BIENNIAL INTEGRITY TEST (0.1 GPH)</p> <p align="center">SECONDARILY CONTAINED PIPING</p> <p>PRESSURIZED PIPING (Check all that apply):</p> <p>10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)</p> <p><input type="checkbox"/> a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS</p> <p><input type="checkbox"/> b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION</p> <p><input type="checkbox"/> c. NO AUTO PUMP SHUT OFF</p> <p><input type="checkbox"/> 11. AUTOMATIC LEAK DETECTOR</p> <p><input type="checkbox"/> 12. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p>SUCTION / GRAVITY SYSTEM:</p> <p><input type="checkbox"/> 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS</p> <p align="center">EMERGENCY GENERATORS ONLY (Check all that apply)</p> <p><input type="checkbox"/> 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS</p> <p><input type="checkbox"/> 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)</p> <p><input type="checkbox"/> 16. ANNUAL INTEGRITY TEST (0.1 GPH)</p> <p><input type="checkbox"/> 17. DAILY VISUAL CHECK</p>

VIII. DISPENSER CONTAINMENT	
DISPENSER CONTAINMENT	<input type="checkbox"/> 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
DATE INSTALLED	468 <input type="checkbox"/> 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
	<input type="checkbox"/> 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
	<input type="checkbox"/> 4. DAILY VISUAL CHECK
	<input type="checkbox"/> 5. TRENCH LINER / MONITORING
	<input checked="" type="checkbox"/> 6. NONE
	469

IX. OWNER / OPERATOR SIGNATURE	
I certify that the information provided herein is true and accurate to the best of my knowledge.	
SIGNATURE OF OWNER / OPERATOR	DATE
	9/18/00
NAME OF OWNER / OPERATOR (print)	TITLE OF OWNER / OPERATOR
JIM CALL	Project Manager
471	472

Permit Number (For local use only)	473	Permit Approved (For local use only)	474	Permit Expiration Date (For local use only)	475
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**HEALTH & SAFETY PLAN
UNDERGROUND STORAGE TANK REMOVAL
229 CASTRO STREET
OAKLAND, CALIFORNIA**

Project No. 044-00006
September 8, 2000

Prepared for:
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Project No. 044-00006

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September 8, 2000

Project No.044-00006

**HEALTH & SAFETY PLAN
UNDERGROUND STORAGE TANK REMOVAL
229 CASTRO STREET
OAKLAND, CALIFORNIA**

1.0 INTRODUCTION

This plan describes the health and safety procedures for the activities planned for the removal of a gasoline underground storage tank (UST) at the subject site. Krazan & Associates, Inc. (Krazan) employees and field personnel will abide by this plan. It is intended that project work will comply with applicable codes and regulations of the United States Occupational Safety and Health Administration (OSHA). Each field team member working on this project will have the general responsibility to identify and correct any health and safety hazards and strive to make the work place safe.

1.1 Project Description

This project will consist of the removal of a small (500± gallon) UST located within the sidewalk adjacent to 229 Castro Street in Oakland, California. The scope of the project will include exposing the UST and removal by a licensed contractor. Potential activities could include the excavation of contaminated soil and extraction of contaminated groundwater. Sample labeling, preparation, shipment and analyses will also be conducted.

1.2 Key Personnel & Responsibilities

The following personnel will have the overall responsibility for the safe operation of this investigation:

Project Directors:	Dean Alexander
Corporate Safety Officer:	Dean Alexander
Task Leader:	Alex Gallego
On-site Safety Task Leader:	Alex Gallego

It is the responsibility of the above-designated safety officers and task leaders to:

- Implement the site safety training program for project field team members as described in this document.
- Insure that field personnel meet or exceed the minimum requirements for health and safety training, medical monitoring, and respiratory fit testing as required by OSHA 29 CFR 1910.120.
- Assure that field personnel have read and understand this Health and Safety Plan.
- Establish effective traffic and pedestrian control around the subject site.
- Insure that adequate site security is maintained.
- Perform work place surveillance for flammable/explosive conditions and insure that a portable fire extinguisher is located on-site.
- Observe activities to insure the proper use of personal protective equipment such as hard hats, protective eyewear, coveralls (Tyvek® etc.), respirators, gloves, steel-toe boots, etc.
- Inspect safety equipment for use by field personnel to insure that it has been maintained and is in a useable condition.
- Shut down or modify field work activity based on the criteria presented in Section 11.0 of this Plan.
- Initiate outside emergency phone calls when an emergency or accident requires medical attention.

Field personnel will have a responsibility to:

- Read, understand, and follow this plan.
- Perform work safety.
- Cooperate with safety personnel.
- Report any unsafe conditions to the immediate supervisor.
- Be aware and alert for signs and symptoms of potential exposure to site contaminants and health concerns.
- Attend the site safety training program/meeting.
- Insure drilling equipment and other machines are properly inspected and maintained and in compliance with applicable sections of the California and United States Occupational Health and Safety Codes.
- Maintain safety related protective equipment such as hard hats, Tyvek® coveralls (or equivalent), gloves, safety eyewear, respirators, etc., as specified in this plan.

2.0 HAZARD EVALUATION

This Health and Safety Plan (H&S Plan) addresses specific on-site work activities related to the collecting of samples and data from the project site.

Based on the historical and technical data available, this plan covers anticipated activities and hazards, and makes provision for modification or amendment as health-related data is obtained during this assessment. This plan will be amended with site-specific hazards identified as posing a potential health hazard for workers. For select sites, the Corporate Safety Officer will conduct a preliminary survey involving air and bulk solid sample analysis and amend the H&S Plan as needed.

As analytical data become available, the information will be evaluated by a Health and Safety Task Leader. Appropriate action in the form of Work/Health and Safety Plan modifications will be initiated by the Corporate Safety Officer or the Health and Safety Task Leader.

The anticipated activities of this investigation will include:

- Exposure of the UST with an excavator or backhoe.
- Removal of residual contents of the UST by a licensed hazardous waste transporter.
- Rinsing the interior of the UST with a pressure washer and removal of the rinsate.
- The UST will rendered inert using dry ice.
- Removal of the UST by a licensed hazardous waste transporter.
- Collection of soil and groundwater samples from the excavation.
- Securing the excavation area with temporary fencing and trench plates.

The general categories of hazards associated with this investigation are:

- *Mechanical hazards:* cuts, contusions, slips, trips, falls, being struck by moving objects, being caught by rotating objects; also muscular injury potential caused by overexertion or improper movement (e.g. back injury due to improper lifting).
- *Electrical hazards:* possible excavation of buried cables, exposure to overhead power lines, wet electrical cords.
- *Chemical hazards:* exposure to chemicals/contaminants listed in Section 4.0 of this plan and exposure to extraction solvents.

- *Fire hazards:* possible excavation of buried utilities, equipment fires, flammable petroleum hydrocarbons.
- *Thermal (heat stress) hazards:* exposure to outside temperature extremes and/or increased body temperatures while wearing protective clothing/equipment.
- *Acoustical hazards:* exposure to excessive noise created by excavation operations and/or related to the site-specific operations.
- *Routine job-related hazards* in the subcontractor's laboratory. Neither these hazards nor any activities conducted in the subcontractor's laboratory are covered by this plan.

Job hazard analyses associated with most major work activities are presented in the following sections.

2.1 Excavation

Excavation activities by an excavator or backhoe will potentially expose field personnel to the following hazards:

Chemical hazards:

- Exposure to various chemical substances, including but not limited to petroleum hydrocarbon residue and vapors, and petroleum contaminated soils, sludge or liquids. Certain precautions may be necessary to properly control the potential fire/explosion/health hazards associated with these chemicals.

Physical hazards:

Potential exposure to physical hazards associated with the UST removal include the following:

- Brush, equipment, gas-main, or hydrocarbon fires
- Being hit by equipment
- Falling objects
- Exposure to excessive noise
- Exposure to outside temperature extremes
- Exposure to the potential for heat exhaustion due to protective clothing
- Slips, trips, and falls
- Buried cables and underground utilities
- Overhead utility hazards
- Injury due to using improper tool for the job

2.2 Heat Stress/Stroke

During day-to-day field work, the on-site engineer/geologist and/or safety officer will be alert for the signs and symptoms of heat stress. Hazard exists when individuals are required to work in warm or hot temperatures while wearing protective clothing. When the ambient air temperature exceeds 85°F, heat stress may become a problem. For an unacclimatized person this temperature may be less. If these conditions are encountered, the following precautions will be taken:

- The on-site geologist/engineer or safety officer will regularly monitor the ambient air temperature.
- Field team members will be observed for the following signs and symptoms of heat stress (i.e. heat exhaustion/heat stroke):

Heat Exhaustion

- Profuse sweating
- Skin color change
- Increased heart rate
- Vision problems
- Heat cramps

Any team member who exhibits any signs or symptoms of heat exhaustion will be removed immediately from field work, be requested to remove impervious clothing, and consume electrolyte fluid or cool water while resting in a shaded area. The individual will be instructed to rest until the symptoms are no longer recognizable. If the symptoms appear critical, persist or get worse, immediate medical attention will be sought.

Heat Stroke

- Hot, dry, unusually red skin
- Delirium
- Elevated temperature of 103-105°F
- Convulsions

Any team member who exhibits any signs or symptoms of heat stroke will be removed immediately from field work, be requested to remove impervious clothing, be immersed in cool water and immediate medical attention will be sought.

2.3 Noise

While working around excavation drilling equipment the potential exists for exposure to excessive noise. If noise levels are known/believed to exceed 85 dBA 8-hours per day, individuals will be instructed to use adequate hearing protectors (ear plugs). Random monitoring using a noise dosimeter may be used to document noise levels. Field team members will be given annual evaluations. Field team members have been/will be trained in noise hazards and how to wear the protective equipment.

2.4 Sampling for Chemical Analysis

Samples will be collected for the purpose of chemical analysis. Additionally, selected samples may be submitted for chemical analysis. Some of these samples may contain high levels of hazardous materials creating the potential for chemical inhalation exposure, skin contact and possibly even ingestion. These activities may pose one of the greatest risks of chemical exposure for the site assessment activities. Appropriate worker training, protective measures and annual medical monitoring will be enforced to control this health hazard potential.

2.5 Packaging and Shipment of Samples

After the samples have been collected into sample containers, they will be properly packaged to protect shipping personnel. The hazards associated with shipping samples are minimal, provided care is taken to prevent the containers from leaking or breaking. Additionally, sample containers will be plainly marked in case of exposure.

2.6 Sampling for Chemical Analysis

The preparation of samples for analysis may expose the technician to routine hazards associated with laboratory work. Standard laboratory safety procedures should be used to prepare and analyze these samples. The samples should be treated carefully and handled inside a properly operating fume hood due to their potentially volatile and hazardous nature. In the event of a mishap, the laboratory supervisor should be notified immediately.

3.0 SAFE WORK PRACTICES AND LEVEL OF PERSONAL PROTECTION

The following sections present procedures on how to adequately address the primary potential hazards encountered in the different task of this project. The standard level of personal protection is also defined.

Based on the work to be performed and the type of chemical hazards that may be encountered, EPA Level D personal protection has been determined to be adequately protective and suitable for most of the tasks in this project. It is unlikely that certain tasks may require a higher level of protection, such as air-purifying or air-supplied respirators. These determinations will be made by the Safety Officer or Safety Task Leader and will be specified as amendments to this section of the plan.

3.1 Potential Health Hazards

Depending on the conditions encountered, the Task Leader in coordination with the Project Safety Officer may increase or decrease the level of personal protection required of all field team members. Such decisions will be made based on initial and periodic measurements of breathing zone concentrations of petroleum constituents by PID and on other data collected as work is conducted on a given site.

Generally speaking, EPA Level D Personal Protection will be in accordance with the following guidelines:

- Krazan & Associates technician uniform
- Hard hat
- Safety glasses
- Ear plugs (as required)
- Steel-toe boots.

Some general guidelines representing EPA Level C personal protection that may be used are:

- Tyvek® coveralls (or equivalent), neoprene boots and rubber gloves (to be worn by any personnel who handle contaminated equipment.
- Individuals at sites not directly exposed to contaminated soils or liquids may not need to wear Tyvek® coveralls due to the increased hazards of heat stress when wearing this type of clothing.
- Latex or PVC disposable gloves should be worn under butyl rubber or nitrile gloves to provide an extra measure of hand protection when handling heavily contaminated soils and water samples.
- Chemical splash goggles will be worn when increased splash hazards exist, such as steam cleaning activities, during or the handling of contaminated liquid samples.
- Respiratory protection will be worn during drilling activities which have the potential to expose workers to hazardous levels of airborne contaminants. Direct-reading personal breathing zone monitoring will be performed. The criteria established for the use of respiratory protection are discussed in Section 4.0. of this Plan.

3.2 Potential Heat Stress Hazards

During conditions when the temperature, humidity, and/or radiant heat are high and air movement is low, the following procedures will be followed to prevent heat stress hazards for workers wearing protective clothing/equipment:

- Work activity will be limited to reduce the amount of heat naturally produced by the body. Alternating work and rest periods will be used in high potential conditions. For example, in moderately hot conditions, 5 minute rest breaks in the shade with 60 minute work periods in the sun may be desirable. Under severe conditions, the duration of rest periods will be increased as necessary.
- Heavy work will be performed during the cooler periods of the day when feasible.
- Under heat stress conditions special attention will be given toward assuring workers replace lost body fluids. Adequate supplies of cool drinking water or electrolyte solution will be provided by each company for their own employees' use. Workers will be instructed in the need to replace the fluids throughout the working day.
- Special care and attention will be paid to field crew members that may not be acclimatized to the area.

3.3 Potential Noise Hazards

Exposure to excessive noise will be controlled by issuance and use of hearing protection as instructed by the Task Leader or Safety Officer. Noise levels may be periodically monitored by the Safety Officer.

4.0 HYDROCARBON VAPOR HAZARD CRITERIA

Exposure to elevated levels of hydrocarbon vapors presents potential health risks that must be addressed. Work practices and methods will be used to limit exposures. Where elevated exposures persist, respiratory protection will be used to protect personnel from inhalation of hydrocarbon vapors. The hydrocarbon vapors expected to be encountered during the field portion of this investigation are composed of a variety of volatile refined petroleum constituents. Most of these chemicals have limited toxicity thus requiring minimal controls at the concentrations that are anticipated to be encountered. There are certain components, such as benzene vapors, that present significant toxicological hazards and must be properly controlled. Water, soil, and vapor samples collected near the point of release commonly contain benzene at 1% of the total hydrocarbon constituents. Criteria for the use of respiratory protection is based on limiting potential exposures to benzene.

A limit of 100 ppmv total hydrocarbon is proposed as the maximum acceptable hydrocarbon level of exposure without respiratory protection. An H-nu® photoionization detector (PID) will be used to measure total hydrocarbon levels of the sample. When levels of the sample are above 50 ppm, breathing zone concentrations will be monitored and documented every 15 minutes. When a persistent level of 50 ppmv is noted to exist at the breathing zone, an appropriate respirator will be donned by that field team member. In a typical situation, with 1% of the hydrocarbon vapors being benzene, a 50 ppmv

concentration of total hydrocarbon would result in a breathing zone level of 0.5 ppmv benzene. This level is half of the current Permissible Exposure Limit (PEL) of 1 ppm for an 8-hour occupational exposure to benzene.

When possible, to assure benzene exposures are below a 1 ppmv limit, Dräger® benzene detector tubes will be used if PID measurements of the breathing zone concentrations indicated persistent hydrocarbon levels above 50 ppmv. These detector tubes are not compound specific and may respond to other less hazardous petroleum hydrocarbons such as toluene, xylene and ethylbenzene. In the event that benzene detector tube measurements indicate that levels exceed 0.5 ppmv in the breathing zone; respirators will be required. This is considered a conservative approach since the Dräger® detector tubes may respond to several hydrocarbons other than benzene.

Table I summarizes the various hydrocarbon vapor concentration and appropriate responses to prevent exposure to these potential vapor hazards.

TABLE 1
HYDROCARBON VAPOR CRITERIA AND RESPONSES

HYDROCARBON CONCENTRATIONS	RESPONSE
<50 ppmv TVH	Limited hazard, no special action.
50-100 ppmv TVH General Work Areas	Half-mask OV Respirators worn by all potential exposed in work area.
50-1400 ppmv TVH General Work Areas	Half-mask OV Respirators worn by all potentially exposed in work area. Benzene detector tube measurements taken each 15 minutes until levels below 1 ppm.
>1400 ppmv TVH General Work Areas and/to well head emissions	Work stops; procedures taken to subdue excessive vapor levels.
>1 ppmv Benzene at Breathing zone	Half-mask OV Respirators worn by all potentially exposed in work area. Benzene detector tube measurements taken each 15 minutes until levels below 1 ppm.

ppmv = parts per million vapor
 TVH = Total Volatile Hydrocarbons
 OV = Organic Vapor

5.0 PERSONAL PROTECTIVE CLOTHING/EQUIPMENT REQUIREMENTS

This section specifies personal protective clothing/equipment required for the various tasks to be performed during this investigation. Table 2 summarizes these requirements.

5.1 Excavation Operations

- *Respiratory Protection:* Field personnel will be required to have available for use a properly fit tested half-mask air purifying respirator with organic vapor cartridges and particulate pre-filters. These will be required to be worn based on the criteria listed in Section 4.0.
- *Protective Clothing:* Field personnel who handle contaminated soils, liquid, or auger flights will wear semi-permeable (white) Tyvek® coveralls (or equivalent) during Level C activities. Safety helmets (hard hats) will be worn by personnel during field work.
- *Hand Protection:* Butyl rubber or nitrile gloves will be worn by personnel handling contaminated equipment and soils as necessary. Wearing disposable latex or PVC gloves under the butyl gloves will provide added protection and aid in a more effective decontamination process.
- *Hearing Protection:* Based on anticipated on-site noise measurements, field personnel may be required by the Task Safety Leader or Safety Officer to wear hearing protection devices (ear plugs) during excavation operations.
- *Eye Protection:* Each field team member will wear a minimum of impact-resistant safety glasses with attached side shield. Where splashes of potentially hazardous liquid or flying particles are likely, chemical safety goggles will be required in place of safety glasses.
- *Foot Protection:* Field personnel will wear leather neoprene rubber boots (as needed) with steel toes and shanks. Under non-liquid exposure conditions, leather boots with steel toes and shanks are permissible. The boots will be taped to the leg of Tyvek® suits during Level C activities.

At the discretion of the on-site Safety Task Leader, rubber gloves, Tyvek® coveralls and neoprene boots may not be required if soil or water is not obviously contaminated, or if PID measurements of the confirmation soil samples are below 500 ppmv.

5.2 Sample Collection

Personnel who may be exposed to contaminated samples and/or liquid splashes will be required to wear the following equipment:

- *Respiratory Protection:* Sampling personnel will be required to have available for use a properly fit tested half-mask air purifying respirator with organic vapor cartridges with particulate pre-filters. Respirators will be worn based on criteria listed in Section 4.0 of this Plan.
- *Body Protection:* Sampling personnel will wear semi-permeable (white) Tyvek® coveralls when contact with contaminated soil or liquids is likely to occur. Safety helmets (hard hats) will be worn when overhead hazards exist.
- *Hand Protection:* Butyl rubber or nitrile gloves will be worn over disposal latex or PVC gloves as needed.
- *Eye Protection:* Impact-resistant safety glasses with attached side shields must be worn during sampling activities. Where splashes may occur, chemical goggles must be worn.
- *Foot Protection:* Leather work boots or neoprene rubber boots with steel toes and shanks will be worn, as needed.

5.3 Packaging and Shipment of Samples

- *Eye Protection:* Impact-resistant safety glasses with attached side shields must be worn while packaging samples for shipment, as needed.
- *Hand Protection:* Butyl rubber or nitrile gloves will be worn under disposal PVC gloves, as needed.

Samples will be shipped strictly to a state-approved laboratory. Shipping must comply with Department of Transportation (DOT) regulations. The following instructions will be followed to comply with DOT regulations:

- Tape lids with electrical or other tape
- Wrap the primary container with absorbent brown paper (wadding)
- Place the primary container in a plastic bags (zip-lock, or equivalent)
- Place into an "ice chest" with a synthetic or water ice
- Tape or secure the "ice chest" lid and secure with a Chain-of-Custody seal (if applicable)
- Labels identifying the generator's name, address, and known content of the drum

In the event that samples are to be personally transported to the state-approved laboratory, some of the above packaging and shipping requirements may not apply. Any questions should be referred to the project manager.

5.4 Sample Preparation and Analysis

Laboratory safety practices should be accomplished in accordance with the specific labs policy. Krazan, its owners, clients, employees, and representatives are not responsible for safety on laboratory premises. Therefore, both shall be held harmless in the event of any mishap, accident or long-term adverse health effects occurring or originating at the subcontractor laboratory.

TABLE 2
PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS
EXCAVATION OPERATIONS

Excavation Crew

<u>MANDATORY ITEMS</u>	<u>AVAILABLE ITEMS</u>
Safety Glasses	Respirator
Chemically Resistant Gloves*	Splash Goggles
Safety Boots*	Ear Plugs
Safety Helmet	Tyvek® Coveralls*

Geologist/Engineers

<u>MANDATORY ITEMS</u>	<u>AVAILABLE ITEMS</u>
Safety Boots*	Respirator
Safety Glasses	Tyvek® Coveralls
Safety Helmet	Chemically Resistant Gloves
	Splash Goggles
	Ear Plugs

Surveyors/Safety Personnel

<u>MANDATORY ITEMS</u>	<u>AVAILABLE ITEMS</u>
Safety Boots*	Respirator
Safety Glasses	Tyvek® Coveralls
Safety Helmet	Chemically Resistant Gloves
	Splash Goggles
	Ear Plugs

PACKAGING AND SHIPPING SAMPLES

Sample Controller

<u>MANDATORY ITEMS</u>	<u>AVAILABLE ITEMS</u>
Safety Glasses	Respirator
	Chemically Resistant Gloves

SAMPLE PREPARATION AND ANALYSIS

Analyst

MANDATORY ITEMS

Safety Glasses

AVAILABLE ITEMS

Respirator

Chemically Resistant Gloves

** Not required if soil or water is not visibly contaminated, or if PID measurements of the soil samples are below 100 ppmv.*

6.0 WORK ZONE ACCESS

During excavation operations, a work zone should be established and roped off. This zone should include excavation equipment and its immediate vicinity. Only authorized personnel will be permitted to enter this work zone. Authorized personnel will include those who have duties requiring their presence in the work zone, have received appropriate health and safety training, and whose background medical records may be obtained to verify that the health of that individual is not at extreme risk by his/her presence.

7.0 DECONTAMINATION PROCEDURES

The scope of work proposes that soil excavation and sampling activities occur at areas where chlorinated solvents and petroleum hydrocarbon contaminated soils, sludge, liquids and/or vapors are anticipated. Due to the volatile nature of materials that may be encountered during the initial excavation drilling and sampling operations, decontamination of equipment and vehicles will be of minimal importance since the volatile constituents will rapidly vaporize. However, contaminated sampling equipment and any obvious contaminant accumulations will not leave the project site. Field team members will also abide by the following guidelines to insure that contaminants will not remain in contact with their body.

- Personnel involved in the field portion of this investigation will be instructed to wash their hands, face, neck and arms at the end of each work day. Krazan will assure the presence of soap, water and towels at the drilling site for this purpose. Crews will be instructed to shower at their home or lodge at the end of each workday.
- No eating, drinking, smoking, or chewing of gum or tobacco will be permitted in the work zone.

- During this investigation, the nature of materials handled and the extent of contamination may require formal decontamination procedures and delineated work/clean zones. At the discretion of the Task Leader, the following work zones and decontamination procedures will be used to minimize the transfer of hazardous substances from the site so as to protect the environment and public health.

7.1 Work Zones

The field team shall prevent the uncontrolled movement of waste materials or hazardous substances from the drilling site. The team will prevent migration of site contaminants by using the following work zones and equipment/personnel decontamination procedures.

Exclusion Zone: A circle around the UST will be defined before removal begins. The zone will be "roped off" with an applicable barricade tape. This designated area will constitute the "Exclusion Zone". This zone is where potentially hazardous surface contaminants, as a result of the activities, and physical hazards to the workers, will be contained. Personal protection equipment will be required in this area according to the discretion of the Task Leader and/or in accordance with the guidelines contained in this plan. The size of the Exclusion Zone may be changed to accommodate site conditions and to ensure contaminant containment at the discretion of the project manager, the safety officer, or the task leader. No personnel will be permitted into the Contamination Reduction Zone or the Exclusion Zone unless they are in full compliance with the existing Safety Plan. The buddy system must be maintained by all personnel while in this zone. Intrinsically safe communications will be maintained with all personnel in this area.

Contamination Reduction Zone: An area surrounding the Exclusion Zone will be defined. All personal decontamination activities will occur in this area. A waste container may be placed in this area so that contaminated disposal equipment can be placed inside and covered. Surface/soil contamination in this area may be controlled by use of some form of plastic sheeting.

Support Zone: A Support Zone, must be defined for each field activity. Support personal and/or equipment are located in this uncontaminated (clean) area. Normal Kraزان field uniforms are appropriate within this zone. The location of this zone depends on factors such as accessibility, wind direction, nearby roads, utilities, traffic patterns, shelter.

7.2 Decontamination Protocol

Decontamination of personnel and equipment will be important to ensure that contamination does not spread to others. Personal decontamination mainly involves the removal of some outer wear and good personal hygiene habits. Contamination should never be in contact with the skin. Field team members must follow this plan to ensure that contamination does not remain on equipment, sample containers or their body.

Field team members should remove their personal protective clothing in a certain sequence to avoid contaminating their inner clothing or themselves. When removing personal protective equipment, the following steps should be observed:

- Step 1:* Remove equipment, sample containers, and notes and non-essential items while in the Contamination Reduction Zone. Obtain decontamination solutions or a steam cleaner and decontaminate all tools and sampling equipment. Under most circumstances, all wastes and rinsate will be properly contained.
- Step 2:* Remove outer gloves and boot covers and place them inside a garbage bag or drum.
- Step 3:* Remove tape from boots and gloves and remove the Tyvek® coverall (if used). Tyvek® coverall removal should be accomplished by rolling the outside of the coverall inside itself so that only the inside of it is exposed. Boots, inner gloves, and respirator should still be worn.
- Step 4:* Remove the inner gloves and respirator when in the Support Zone.

7.3 Personal Hygiene Requirements

The following procedures should always be observed in the support zone:

- Personnel must wash their hands, face, neck and forearms before consuming any food or liquids, smoking, or using the rest room.
- Personnel must take a shower at the end of each work day. Particular attention should be given to areas of the body that are typically overlooked.

8.0 SAFETY AND HEALTH TRAINING

Field personnel will be trained in methods of safely conducting field activities. This plan is intended to provide additional site specific information to accomplish this goal. It will be the responsibility of the Project Directors, the Safety Officer, and the Safety Task Leader to ensure the field team has access to, reads, and understands this plan. It will be the individual's responsibility to bring to the attention of the Project Director or Safety Officer any portion of this plan and related training they do not fully

understand. Prior to the commencement of the field portion of this investigation, the field team will meet to discuss the contents of this plan and make sure all members understand it.

At the site meeting, field team members will be instructed regarding the health and safety hazards.

Especially:

- Physical safety hazards
- Emergency procedures
- Explosive/flammability hazards
- The hazardous materials that may be encountered and their potential routes of exposure
- Personal hygiene practices
- The types, proper use, inspection, limitations, maintenance, and storage of protective clothing and equipment (as applicable).
- In the event that the ambient air temperature exceeds 85°F, a review of heat stress symptom recognition/corrective procedures will be conducted. For an unacclimatized person, this value may be less.

Special emphasis will concern the use and limitations of respiratory protection. Half-mask respirators (or equivalent) equipped with air purifying organic vapor cartridges will be used. Full-face respirators will be used if eye irritation or skin contact exposure potential exists.

Medical/physical fitness requirements to wear respiratory protection will be established by a physician, and individuals will be trained in use limitations and maintenance of half-mask and full-face respirators including qualitative fit testing, routine inspection, replacement of parts, cleaning, disinfection, and storage requirements.

Copies of this entire plan will be provided for each field team member at the project site, or prior to arrival.

9.0 MEDICAL MONITORING PROGRAM

The field investigation at this project site is expected to involve active physical work and potential exposure to petroleum hydrocarbons, and possibly other related hazardous substances. Exposure to heat stress, noise and physical safety hazards may also be encountered. The work will require people of good health with normal vision and hearing. Krazan's industrial physician is periodically asked to provide documentation of employee medical fitness to perform the required work in the form of signed document. This documentation should also indicate the employee's ability to perform the required work while wearing a respirator.

10.0 EMERGENCY RESPONSE PLAN

The emergency procedures described in this plan are designed to give the field team guidance in the handling of medical emergencies, fires, explosions, and excessive emissions. These emergency procedures will be carefully explained to the field team during the on-site health and safety meeting.

10.1 Injuries

Medical problems must be quickly dealt with; a road map to the nearest emergency medical facility is kept in an envelope on the dash of each Krazan field vehicle of drill rig. A map with a route to the hospital is included in this plan. The local emergency numbers are:

Police:	911
Fire:	911
Paramedics:	911
Hospital: (Kaiser Foundation)	(510) 596-1000

The field team is to seek immediate professional medical attention for all serious injuries. A first aid kit will be present at the site for use in case of minor injuries. If any field team member receives a splash or particle in the eye, the eye is to be flushed for 15 minutes. Clean water or a portable eye wash will be available for this purpose. Instruction will also be provided to wash any skin areas with soap and water if direct contact with contaminants has occurred.

During normal field activities work clothes may become wet. If a field team member's clothing becomes saturated with an obviously contaminated liquid/sludge, the possibility for dermal exposure to contaminants may exist. Under these circumstances, that field team member will change out of the contaminated clothing, clean off any residual liquid/sludge with water, and change into clean clothing of the proper level of protection.

10.2 Fire and Explosion Hazards

Fires are a potential concern during this investigation due to the possibility of encountering flammable petroleum hydrocarbon liquid or vapors. An adequate multi-purpose (A,B,C) fire extinguisher will be located on-site on the drill rig at all times.

The local fire department will be notified by a Krazan representative of the location and anticipated activities in order to provide a more timely response in the event of an emergency. In the remote chance that a fire does occur, the local fire department will be notified immediately. Additional calls to the main office of Krazan will be made. The project director would then notify the client.

10.3 Operations Shutdown

Under certain extremely hazardous situations, the Task Leader, Project Director or Task Safety Officer may request that field operations be temporarily suspended while the underlying hazard is corrected or controlled.

11.0 RECORD KEEPING REQUIREMENT

The following record keeping requirements will be maintained in the health and safety or program file indefinitely:

- Copy of this Health and Safety plan
- Health and Safety training certification forms
- Written respiratory protection program
- Respirator training certification
- Any accident/illness report forms documentation of employees medical ability to perform work and wear respirators

12.0 SITE SECURITY

During tank removal, the area will be cordoned off with barricades and caution tape. Any open excavation remaining opened without supervision will be enclosed with temporary fencing to minimize any unauthorized access to the excavation. Caution flagging will also be placed around any excavation.



ENVIRONMENTAL ENGINEERING • GEOTECHNICAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

KRAZAN & ASSOCIATES, INC.
HEALTH AND SAFETY PLAN
FIELD PERSONNEL RELEASE FORM

I, _____ do hereby confirm that I have read and understand the H&S plan for Project Number _____, _____ located on _____. I agree to follow this plan, and to make every effort to make the work place safe. I will report any health or safety hazard that I observe to the Safety Task Leader, Project Safety Officer, or the Project Director.

I agree to defend, indemnify, and hold harmless Krazan & Associates, Inc., its owners, employees, representatives, clients, and the property owner for any accidents, sickness, or injuries resulting from the violation, alleged violation, or non-compliance of this Health & Safety Plan.

Name: _____ Title: _____

Signature: _____ Date: _____



State of California
CONTRACTORS STATE LICENSE BOARD
ACTIVE LICENSE



License Number **631610**

Entity **CORP**

Business Name **PEAR ENGINEERING INC**

Classification(s) **A C21 HIC**

Expiration Date **11/30/2001**



Certificate of Insurance

Issue Date:
September 11, 2000

PRODUCER:

Willis Corroon Corporation of Minnesota
4000 Olson Memorial Hwy Suite 300
Minneapolis, MN 55422
612-302-7100 Fax 612-588-1910
Contact: Pat Coyne/Kathy Warner

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

Insured:

M.A. Mortenson Company
700 Meadow Lane North
Minneapolis, MN 55422

Company Letter	A	St Paul Mercury
Company Letter	B	St Paul Fire and Marine Insurance Company
Company Letter	C	
Company Letter	D	
Company Letter	E	

Coverages:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CD LTR	Type of Insurance	Policy Number	Policy Effective Date	Policy Expiration Date	Limits	
A	General Liability <input checked="" type="checkbox"/> Commercial General Liability <input type="checkbox"/> Claims Made <input checked="" type="checkbox"/> Occur. <input type="checkbox"/> Owner's & Contractor's Prot <input type="checkbox"/>	* KK06300666	05/01/00	05/01/01	General Aggregate	\$ 2,000,000
					Products-Comp Ops Agg.	\$ 2,000,000
					Personal & Adv. Injury	\$ 2,000,000
					Each Occurrence	\$ 2,000,000
					Fire Damage (any One Fire)	\$ 100,000
					Med. Expense (Any one Person)	\$ 5,000
	Automobile Liability <input checked="" type="checkbox"/> Any Auto <input type="checkbox"/> All Owned Autos <input type="checkbox"/> Scheduled Autos <input checked="" type="checkbox"/> Hired Autos <input checked="" type="checkbox"/> Non-Owned Autos <input type="checkbox"/> Garage Liability <input type="checkbox"/>				Combined Single Limit	\$
					Bodily Injury (Per Person)	\$
					Bodily Injury (Per Accident)	\$
					Property Damage	\$
A	Excess Liability <input checked="" type="checkbox"/> Umbrella Form <input type="checkbox"/> Other than Umbrella Form	* KK06300666	05/01/00	05/01/01	Each Occurrence	\$ 3,000,000
					Aggregate	\$ 3,000,000
B	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/PARTNER EXECUTIVE OFFICERS ARE <input type="checkbox"/> INCL <input type="checkbox"/> EXCL	WVK6300884 WVK6300885	05/01/00	05/01/01	XX Statutory Limits	
					Each Accident	\$ 500,000
					Disease - Policy Limit	\$ 500,000
					Disease - Each Employee	\$ 500,000
	Other					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

NAME: 990101 PROJECT: Oakland Telecom Access Center.
As respects to M. A. Mortenson Company operations on this project reference above, the Port of Oakland is included as Additional Insured under the policies marked "A" above.

CERTIFICATE HOLDER

Port of Oakland
530 Water Street
P.O. Box 2064
Oakland, CA 94604-2064

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.

AUTHORIZED REPRESENTATIVE





Additional Protected Persons Endorsement - Contractors General Liability - Including Completed Work

This endorsement changes your Contractors Commercial General Liability Protection.

How Coverage Is Changed

There are two changes which are described below.

1. The following is added to the Who Is Protected Under This Agreement section. This change adds certain protected persons and limits their protection.

Additional protected person. The person or organization named below is an additional protected person as required by a contract or agreement with you. But only for covered injury or damage arising out of :

- * your work for that person or organization; or
- * your completed work for that person or organization only if required by your contract or agreement; or
- * premises you own, rent, or lease.

We explain what we mean by your work and your completed work in the Products and completed work total limit section.

If the additional protected person is an architect, engineer, or surveyor, we won't cover injury or damage arising out of the performance or failure to perform architect, engineer, or surveyor professional services.

Architect, engineer, or surveyor professional services includes:

- * the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specification; and
- * supervisory, inspection, or engineering services.

2. The following is added to the Other primary insurance section. This change broadens coverage.

We'll consider this insurance to be primary and non-contributory to the additional protected persons listed below if:

- * your contract or agreement requires that we consider this insurance to be primary or primary and non-contributory; or
- * you request that we consider such insurance to be primary or primary and non-contributory insurance.

Other Terms

All other terms of your policy remain the same.

Person or Organization:

Port of Oakland
530 Water Street
P.O. Box 2064
Oakland, CA 94604-2064

Name of Insured M.A. MORTENSON COMPANIES, INC.	Policy Number KK06300668 Processing Date 09/11/00	Effective Date 05/01/00
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OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address: 720 2ND ST	Name of Facility: VACUUM
Inspector: CRAPFORD	Contact on site: CATEESH STAYTON - 760
Date and Time of Arrival: 1 PM	Contractor/Consultant: 443

General Requirements	Yes	No	N/A
Approved closure plan on site			
Changes to approved plan noted			
Residuals properly stored/transported	✓		
Receipt for adequate dry ice noted	✓		

General Requirements	Yes	No	N/A
Site Safety Plan properly signed	✓		
40B:C fire extinguisher on site	✓		
"No Smoking" signs posted			✓
Gas detector challenged by inspector	✓		

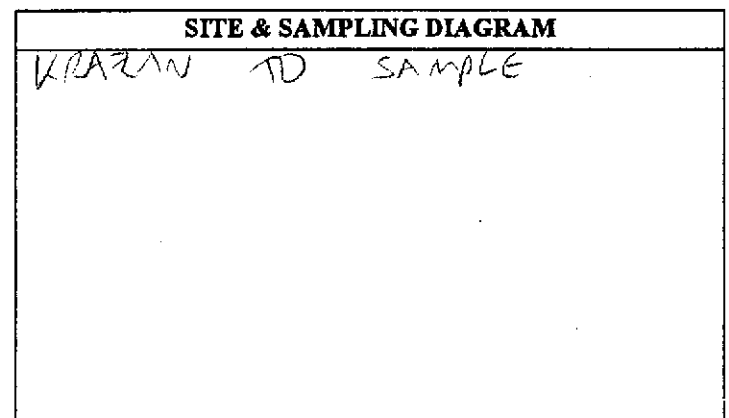
Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)	600			
Material last stored	GAS			
Dry ice used (pounds)	100			
Combustible gas concentration as %LEL. (Note time & sampling point)				
(1)	25%			
(2)				
(3)				
Oxygen concentration as % volume. (Note time & sampling point)				
(1)	10%			
(2)				
(3)				
Tank Material				
Wrapping/Coating, if any				
Obvious holes?				

Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?	Y			
Obvious odors from tank?	Y			
Seams intact?	Y			
Tank bed backfill material	-			
Obvious discoloration?	Y			
Obvious odors ex tank bed?	Y			
Water in excavation?	N			
Sheen/product on water?	N			
Tank tagged by transporter?	Y			
Tank wrapped for transport?	Y			
Tank plugged w/ vent cap?	Y			
Date/time tank hauled off?	Y			
No. of soil samples taken?	2			
Depth of soil samples (ft. bgs)	10			

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?	✓		
Obvious holes on pipes?		✓	
Obvious odors from pipes?		✓	
Obvious soil discoloration in piping trench?		✓	
Obvious odors from piping trench?		✓	
Water in piping trench?		✓	
Number & depth of soil samples from piping trench?			
Number & depth of water samples from piping trench?			

General Observations	Yes	No	N/A
Leak from any tank suspected?	✓		
"Leak Report" form given to the operator?			
Obviously contaminated soil excavated?	✓		
Soil stockpile sampled?	✓		
Stockpile lined AND covered?	✓		
Water in excavation sampled?		✓	
Number/depth of water samples taken?		2	
All samples properly preserved for transport?	✓		

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?	✓		
Sampling "chain of custody" noted?	✓		
Tank pit filled in or covered?			
Tank pit fenced or barricaded?			
Transporter a registered HW hauler?			
Uniform HW Manifest completed?			
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?			
Date/Time removal/closure operations completed?			
OT hours or additional charges due from contractor?			



Notes/Comments: 2 SAMPLES - SUSAN HUGO FROM ALCO PRESENT - REMOVAL FROM SITE @ 2:05 PM 9/26/03

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550
 GENERATOR
 TRANSPORTER
 FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA002279465		Manifest Document No. 315681		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.													
3. Generator's Name and Mailing Address M.A. MORTENSON P.O. 720 SECOND ST., OAKLAND, CA 94607						A. State Manifest Document Number 99631568															
4. Generator's Phone (510) 625-0201						B. State Generator's ID															
5. Transporter 1 Company Name FULLER EXCAVATION			6. US EPA ID Number CA0951443781			C. State Transporter's ID [Reserved]															
7. Transporter 2 Company Name						D. Transporter's Phone 916-858-8300															
8. US EPA ID Number						E. State Transporter's ID [Reserved]															
9. Designated Facility Name and Site Address ECOLOGY CONTROL INDUSTRIES 265 PARR BLVD RICHMOND CA 94801						F. Transporter's Phone															
10. US EPA ID Number CA073004455302						G. State Facility's ID															
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		I. Waste Number									
a. WASTE EMPTY STORAGE TANK NON-PCPA HAZARDOUS WASTE SOLID						No.		Quantity		Wt/Vol		State									
						Type						EPA/Other									
b.						001		TP 30300		P		State NONE									
c.												EPA/Other									
d.												State									
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above															
QTY 1 EMPTY STORAGE TANK # 28625						a.															
TANK(S) HAVE BEEN INERTED WITH 15 LBS DRY ICE PER 1000 GALLON CAPACITY						b.															
15. Special Handling Instructions and Additional Information						c.															
Wear proper protective equipment while handling. Weights or volumes are approximate.						d.															
24 Hour emergency telephone number:						DOT ERG# 171															
24 Hour emergency contact:																					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.										If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name Marvin Doder				Signature <i>[Signature]</i>				Month Day Year 09/26/00													
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed/Typed Name Daniel A. Murphy				Signature <i>[Signature]</i>				Month Day Year 09/26/00									
18. Transporter 2 Acknowledgement of Receipt of Materials				Printed/Typed Name				Signature				Month Day Year									
19. Discrepancy Indication Space																					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										Printed/Typed Name				Signature				Month Day Year			

DO NOT WRITE BELOW THIS LINE.

UNIFORM HAZARDOUS WASTE MANIFEST

Generator's US EPA ID Number

Manifest Document No.

2, Page 1

Information in the shaded areas is not required by Federal law.

CA002279465

315681

of 1

3. Generator's Name and Mailing Address

M.A. MURPHY & SONS, P.O.
770 SECOND ST., DAKLAND, CA 94607

4. Generator's Phone (SIC) 625-0201

A. State Manifest Document Number

99631568

5. Transporter 1 Company Name

FULLER EXCAVATOR

6. US EPA ID Number

CA0981443761

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

ECOCOLY CONTROL INDUSTRIES
258 PARK BLVD
DICKENSON, CA 94504

10. US EPA ID Number

CA0981443761

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

WASTE EMPTY STORAGE TANK
NON-FLAMMABLE HAZARDOUS WASTE SOLID

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Yol

001

TP

30300

P

15. Special Handling Instructions and Additional Information

Wear proper protective equipment while handling. Weights or volumes are approximate.
24 Hour emergency telephone number: 510-625-0201
24 Hour emergency contact: JIM CALL DOT ERGE 174

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Mervin Doster

Signature

[Signature]

Month Day Year
07 26 00

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed/Typed Name

DANIEL MURPHY

Signature

[Signature]

Month Day Year
09 26 00

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

DAVID SATO

Signature

[Signature]

Month Day Year
09 26 00

DO NOT WRITE BELOW THIS LINE.



SERVICE ORDER

NO. N 326138

ASBURY ENVIRONMENTAL SERVICES

2100 NORTH ALAMEDA STREET □ COMPTON, CALIFORNIA 90222 □ (310) 886-3400

SAN DIEGO OFFICE
1-800-748-5744

EPA NO. CAD028277036

NORTHERN OFFICE
1-800-727-2879
1-800-933-9194

DATE <u>9-26-00</u>	ONE TIME PICK UP <input type="checkbox"/> YES or <input type="checkbox"/> NO
CUSTOMER <u>MA Mortenson</u>	RESIDENT <input type="checkbox"/> YES or <input type="checkbox"/> NO
BILLING ADDRESS <u>Krazer Ave 545 Point St San Diego CA 95112</u>	CONTRACT CUSTOMER <input type="checkbox"/> YES or <input type="checkbox"/> NO
PHONE <u>510-225-0201</u> CONTACT _____	ACCOUNT NUMBER _____
CUSTOMER EPA # _____	AMOUNT _____
JOB SITE ADDRESS <u>720 2nd St San Diego CA</u>	CHECK NUMBER _____
CROSS STREETS _____	P.O. NUMBER _____
NOTES: <u>CS. 1 hr + 1.25 x 110</u>	CASH RECEIVED _____ (AMOUNT)
	COMMODITY <u>oil</u>
	HALIDES _____ P.P.M.

NON RCRA HAZARDOUS WASTE LIQUID (Used Oils/Mixed Oils) NO PLACARD REQUIRED

NON RCRA HAZARDOUS WASTE LIQUID, CALIFORNIA REGULATED WASTE ONLY (Glycol & Water) NO PLACARDS REQUIRED

OTHER _____

MANIFEST NO. 20092614

DRIVER J. L.

NON HAZARDOUS DRAINED USED FILTERS _____

NEXT SERVICE DATE _____

DRUMS _____ DRUM SIZE _____

NO. OF GALLONS 110

TRUCK NO. & RT. 58

DESIGNATED TSDF:

- ALVISO INDEPENDENT OIL—5002 Archer St., - Alviso, CA 95002
- BAYSIDE OIL II, INC.—210 Encinal St.—Santa Cruz, CA 95060
- OTHER FACILITY 7306 Mortenson San Diego Co.
- DeMENNO/KERDOON—2000 N. Alameda St.—Compton, CA 90222
- OCS—3256 N. Marks St.—Fresno, CA 93722
- RAMOS ENVIRONMENTAL—1515 S. River Road—W. Sacramento, CA 95691

This is to certify that the above named articles are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

I HEREBY CERTIFY THAT I HAVE NOT MIXED THIS WASTE WITH ANY OTHER WASTE, AND THE TOTAL HALIDES ARE LESS THAN 1000 P.P.M.

X [Signature] 12/17/00
CUSTOMER SIGNATURE DATE

I FURTHER AGREE TO ACCEPT THE ADDITIONAL CHARGES FOR LEGAL DISPOSAL IF THIS WASTE IS OVER 1000 P.P.M. TOTAL HALIDES

X Alex Gaudin
PRINT NAME



ECOLOGY CONTROL INDUSTRIES

A Full Service Environmental Company

Tank Processing JOB # _____
TANK CERIFICATION

***** PART 1 - To be completed by the Customer*****

CUSTOMER: KIRAZAN ASSOCI. GENERATOR: M.A. MORSEYSON CO. State Waste Codes: 512
LOCATION: 2th BRUSH EPA ID #: CA002279405 EPA Waste Codes: _____
TRANSPORTER: FULLER EX. MANIFEST #: 99631568 None
 See Attached

	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5	TANK 6
TANK #:	28625 <u>28625</u>	_____	_____	_____	_____	_____
CAPACITY:	<u>600</u>	_____	_____	_____	_____	_____
DIAMETER:	<u>4X"</u>	_____	_____	_____	_____	_____
LENGTH:	<u>7.5'</u>	_____	_____	_____	_____	_____
STEEL/GLASS:	_____	_____	_____	_____	_____	_____
LAST CONTAINED:	<u>UNLEADED GAS</u>	_____	_____	_____	_____	_____

LG = Leaded Gas, UG = Unleaded Gas, D = Diesel, UO = Used Oil, FO = Fuel Oil
Specify the material Last Contained if other than above.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

The waste represented on this manifest is not generated by a chemical manufacturing plant, coke-by product recovery plant of petroleum refinery. As such, it is not regulated under 40 CFR Part 61, Subpart FF (NESHAPS for Benzene Operations).

Pursuant to 40 CFR 268.7 I am notifying Ecology Control Industries that the material described by the above manifest is a nonwastewater, Non-RCRA solid hazardous waste and not currently subject to EPA Land Disposal Restrictions.

Pursuant to CCR 22 66268.7 I am notifying Ecology Control Industries that the material described by the manifest is a metal containing Non-RCRA solid hazardous waste (662683.29(g)), and an organics containing Non-RCRA solid hazardous waste (66268.29(k)). The treatment standards for these wastes have been repealed. This waste is no longer subject to land disposal restrictions.

I am an authorized agent/representative of the generator. I certify that all information submitted in this and associated documents is complete and accurate to the best of my knowledge. The tanks on the transport equipment have been numbered to correspond with the information provided above. In the event that the tanks do not correspond to the form, I will pay any and all costs incurred in rectifying the discrepancy(ies) between the tank(s) and the form. In the event that the tank(s) contain excessive solids or liquids, I agree to pay the cost of preparation, transportation and disposal/recycling of the excess material according to the schedule of charges in effect at the time of receipt of the tank(s). Further, I will not hold Ecology Control Industries responsible for any damage to tanks which occurs after the tanks are removed from the ground.

AUTHORIZED REPRESENTATIVE

SIGNATURE: [Signature] DATE: 09/26/00
PRINT NAME: Marvin Doster TITLE: Sr. Proj. Mgr.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.		
REPORT DATE 0 9 M 2 9 D 0 Y 0		CASE #		SIGNED _____ DATE _____		
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT ALEX CALLEDO		PHONE (408) 271 2200		SIGNATURE 	
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME KRAZAN & ASSOCIATES INC.			
	ADDRESS 545 PARROTT ST. SAN JOSE CA 95112					
RESPONSIBLE PARTY	NAME M.A. MORTENSON CO. <input type="checkbox"/> UNKNOWN		CONTACT PERSON Jim CALL		PHONE (510) 625 0201	
	ADDRESS 720 SECOND ST. OAKLAND CA 94607					
SITE LOCATION	FACILITY NAME (IF APPLICABLE)		OPERATOR M.A. MORTENSON CO.		PHONE (510) 625 0201	
	ADDRESS 720 SECOND STREET OAKLAND ALAMEDA 94607					
	CROSS STREET BRUSH STREET					
IMPLEMENTING AGENCIES	LOCAL AGENCY ALAMEDA COUNTY HEALTH CARE		AGENCY NAME HEALTH CARE		CONTACT PERSON SUSAN HUBB	
	REGIONAL BOARD PHONE ()					
SUBSTANCES INVOLVED	(1) NAME GASOLINE				QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN	
	(2) <input type="checkbox"/> UNKNOWN					
DISCOVERY/ABATEMENT	DATE DISCOVERED 0 9 M 2 6 D 0 Y 0		HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER			
	DATE DISCHARGE BEGAN M M D D Y Y <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER			
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 9 M 2 6 D 0 Y 0					
SOURCE/CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input checked="" type="checkbox"/> CORROSION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER			
	CHECK ONE ONLY <input type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)					
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input type="checkbox"/> LEAK BEING CONFIRMED <input checked="" type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY					
	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> OTHER (OT)					
COMMENTS	SOIL TPHg = 2300 ppm ; BENZENE = 12 ppm					

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

September 27, 2000

Alex Gallego
Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112

Order: 22433

Date Collected: 9/26/00

Project Name:

Date Received: 9/26/00

Project Number:

P.O. Number:

Project Notes:

On September 26, 2000, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Solid	Gas/BTEX	EPA 8015 MOD. (Purgeable)
		EPA 8020
	Organic lead subcontract out to American Envirome	Title 22
	Oxygenates by EPA 8260B	EPA 8260B

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,



Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112
Attn: Alex Gallego

Date: 9/27/00
Date Received: 9/26/00
Project Name:
Project Number:
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22433

Lab Sample ID: 22433-001

Client Sample ID: S-N

Sample Time: 2:15 PM

Sample Date: 9/26/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	8.3		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Toluene	66		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Ethyl Benzene	27		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Xylenes, Total	130		1000	0.001	1	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
			Surrogate		Surrogate Recovery		Control Limits (%)			
			aaa-Trifluorotoluene		94		65 - 135			
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	1800		1000	0.050	50	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8015 MOD. (Purgeable)
			Surrogate		Surrogate Recovery		Control Limits (%)			
			aaa-Trifluorotoluene		95		65 - 135			

Comment: Sample required methanol extraction due to high concentrations of target hydrocarbons

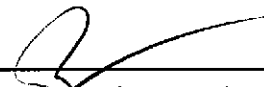
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director*Environmental Analysis Since 1983*

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112
Attn: Alex Gallego

Date: 9/27/00
Date Received: 9/26/00
Project Name:
Project Number:
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22433

Lab Sample ID: 22433-002

Client Sample ID: S-S

Sample Time: 2:10 PM

Sample Date: 9/26/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	12		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Toluene	91		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Ethyl Benzene	42		1000	0.0005	0.5	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020
Xylenes, Total	210		1000	0.001	1	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	88	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	2300		1000	0.050	50	mg/Kg	N/A	9/27/00	SGC2000923	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	81	65 - 135

Comment: Sample required methanol extraction due to high concentrations of target hydrocarbons


DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112
Attn: Alex Gallego

Date: 9/27/00
Date Received: 9/26/00
Project Name:
Project Number:
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22433

Lab Sample ID: 22433-001

Client Sample ID: S-N

Sample Time: 2:15 PM

Sample Date: 9/26/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Diisopropyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
Ethyl-t-butyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
Methyl-t-butyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
tert-Amyl Methyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
tert-Butanol	ND		200	20	4000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
	Surrogate				Surrogate Recovery			Control Limits (%)	
	4-Bromofluorobenzene				105			65 - 135	
	Dibromofluoromethane				102			65 - 135	
	Toluene-d8				90			65 - 135	

Comment: Sample diluted due to high concentrations of non-target hydrocarbons


DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Page 1 of 2

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
550 Parrott Street, Suite One
San Jose, CA 95112
Attn: Alex Gallego

Date: 9/27/00
Date Received: 9/26/00
Project Name:
Project Number:
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22433

Lab Sample ID: 22433-002

Client Sample ID: S-S

Sample Time: 2:10 PM

Sample Date: 9/26/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Diisopropyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
Ethyl-t-butyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
Methyl-t-butyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
tert-Amyl Methyl Ether	ND		200	5	1000	µg/Kg	9/27/00	WMS1000926	EPA 8260B
tert-Butanol	ND		200	20	4000	µg/Kg	9/27/00	WMS1000926	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	90	65 - 135
Dibromofluoromethane	91	65 - 135
Toluene-d8	94	65 - 135

Comment: Sample diluted due to high concentrations of non-target hydrocarbons

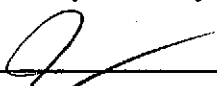
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Page 2 of 2



American Environmental Testing Laboratory Inc.

2834 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 AETLAB@AOL.COM

Ordered By

Entech Analytical Labs, Inc.
525 Del Rey Avenue Suite E
Sunnyvale, CA 94086-

Telephone: (408) 735-1550
Attention: Michele Anderson

Number of Pages 2
Date Received 09/27/2000
Date Reported 09/27/2000

Job Number	Order Date	Client
16556	09/27/2000	ENTECH

Enclosed please find results of analyses of 2 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ *A* _____

Approved By: _____ *C. Razmara* _____

Cyrus Razmara, Ph.D.
Laboratory Director



American Environmental Testing Laboratory Inc.

2834 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
 Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 AETLAB@AOL.COM

ANALYTICAL RESULTS

Ordered By

Entech Analytical Labs, Inc.
 525 Del Rey Avenue
 Suite B
 Sunnyvale, CA 94086

Telephone: (408)735-1550
 Attn: Michele Anderson

Page: 2

AETL Job Number	Submitted	Client
16556	09/27/2000	ENTECH

Method: (HMU-900), Organic Lead

QC Batch Number: 09272000 / 09272000

Our Lab I.D.			AE78313	AE78314		
Client Sample I.D.		Method Blank	22433-001	22433-002		
Date Sampled		09/26/2000	09/26/2000	09/26/2000		
Date Prepared		09/27/2000	09/27/2000	09/27/2000		
Preparation Method		HMU-900	HMU-900	HMU-900		
Date Analyzed		09/27/2000	09/27/2000	09/27/2000		
Matrix		Soil	Soil	Soil		
Units		mg/Kg	mg/Kg	mg/Kg		
Dilution Factor		1	1	1		
Analytes	MDL	PQL	Results	Results	Results	
Lead, Organic	0.5	1.0	ND	ND	ND	

QUALITY CONTROL REPORT

QC Batch Number: 09272000 / 09272000

Analytes	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Lead, Organic	1.00	0.99	99	1.00	1.01	101	2.0	80-120	<15

QC Batch Number: 09272000 / 09272000

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS/LCSD % Limit
Lead, Organic	1.00	0.96	96	80-120



American Environmental Testing Laboratory Inc.

2834 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 AETLAB@AOL.COM

Data Qualifiers and Descriptors

Data Qualifier:

- B: Analyte was present in the Method Blank.
- D: Result is from a diluted analysis.
- E: Result is beyond calibration limits and is estimated.
- J: Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

Definition:

- %Limi: Percent acceptable limits.
- %REC: Percent recovery.
- Con.L: Acceptable Control Limits
- Conce: Added concentration to the sample.
- LCS: Laboratory Control Sample
- MDL: Method Detection Limit
- MS: Matrix Spike
- MS DU: Matrix Spike Duplicate
- ND: Analyte was not detected in the sample at or above MDL.
- PQL: Practical Quantitation Limit
- Recov: Recovered concentration in the sample.
- RPD: Relative Percent Difference
-

Entech Analytical Labs, Inc.

CA ELAP # I-2346

525 Del Rey Avenue, Suite E, Sunnyvale, CA 94086 (408) 735-1550 FAX (408) 735-1554

Subcontract Chain of Custody

Subcontract Lab: AmericanEnvironmental test Project Name: 22433 Date Sent: 9/26/00 Due Date: 9/27/00 PO Number: 22433

Sample Number:	Customer Sample Number:	Matrix:	Test:	Method:	Collect Date:	Collect Time:	Bottle Type:	Preservative:
22433-001	S-N	Solid	Organic Lead-American Enviromental Testing	Title 22	9/26/00	2:15 PM	Brass	
22433-002	S-S	Solid	Organic Lead-American Enviromental Testing	Title 22	9/26/00	2:10 PM	Brass	

Relinquished By: <i>Craig Dumbauld</i>	Received By: <i>Golden State</i>	Date: <i>9/26/00</i>	Time: <i>1800</i>
Relinquished By:	Received By:	Date:	Time:
Relinquished By:	Received By:	Date:	Time:

Notes: Same Day Rush!!

16556

Entech Analytical Labs, Inc.

CA ELAP # I-2346

525 Del Rey Avenue, Suite E, Sunnyvale, CA 94086 (408) 735-1550 FAX (408) 735-1554

Subcontract Chain of Custody

Subcontract Lab:	Project Name:	Date Sent:	Due Date:	PO Number:
American Environmental test	22433	9/26/00	9/27/00	22433

Sample Number:	Customer Sample Number:	Matrix:	Test:	Method:	Collect Date:	Collect Time:	Bottle Type:	Preservative:
22433-001	S-N AE78313	Solid	Organic Lead-American Environmental Testing	Title 22	9/26/00	2:15 PM	Brass	
22433-002	S-S AE78314	Solid	Organic Lead-American Environmental Testing	Title 22	9/26/00	2:10 PM	Brass	

Relinquished By: <i>Craig Dumbauld</i>	Received By: <i>Golden State</i>	Date: <i>9/26/00</i>	Time: <i>1800</i>
Relinquished By: <i>GOLDEN STATE O/N</i>	Received By: <i>Craig A</i>	Date: <i>9/27/00</i>	Time: <i>08:45</i>
Relinquished By:	Received By:	Date:	Time:

Notes: Same Day Rush!!

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography
Laboratory Control SampleQC Batch #: SGC2000923
Matrix: Soil
Units: µg/kgDate Analyzed: 09/23/00
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB µg/kg	SA µg/kg	SR µg/kg	SP	SP % R	SPD µg/kg	SPD %R	RPD	QC LIMITS	
										RPD	%R
Benzene	8020	<5.0	4.0	ND	4.0	100	4.0	100	0.0	25	75-125
Toluene	8020	<5.0	28.2	ND	31	110	31	110	0.0	25	75-125
Ethyl Benzene	8020	<5.0	4.8	ND	6.0	125	6.0	125	0.0	25	75-125
Xylenes	8020	<5.0	32.1	ND	30	93	30	93	0.0	25	75-125
Gasoline	8015	<1000	468	ND	551	118	540	115	2.0	25	75-125
aaa-TFT(S.S.)-PID	8020			117%	114%		113%				65-135
aaa-TFT(S.S.)-FID	8015			102%	104%		102%				65-135

Definition of Terms:

- na: Not Analyzed in QC batch
- MB: Method Blank
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike % Recovery
- NC: Not Calculated

QUALITY CONTROL RESULTS SUMMARY

Volatile Organic Compounds
Laboratory Control Sample

QC Batch #: WMS1000926

Matrix: Liquid

Units: µg/L

Date analyzed: 09/26/00

Spiked Sample: Blank Spike

PARAMETER	Method #	SA µg/L	SR µg/L	SP µg/L	SP %R	SPD µg/L	SPD %R	RPD	QC LIMITS	
									RPD	%R
1,1- Dichloroethene	8240/8260	40	ND	44.3	111	39.3	98	12.0	25	50-150
Benzene	8240/8260	40	ND	42.6	106	39.6	99	7.2	25	50-150
Trichloroethene	8240/8260	40	ND	42.9	107	44.0	110	2.5	25	50-150
Toluene	8240/8260	40	ND	42.7	107	38.2	96	11.0	25	50-150
Chlorobenzene	8240/8260	40	ND	43.4	108	39.9	100	8.4	25	50-150
<i>Surrogates</i>										
Toluene -d8	8240/8260		101%	98%		92%				65-135
Dibromofluoromethane	8240/8260		119%	110%		114%				65-135
4-Bromofluorobenzene	8240/8260		101%	120%		128%				65-135
MTBE-d3	8240/8260		99%	92%		91%				65-135

Definition of Terms:

na: Not Analyzed in QC batch

SA: Spike Added

SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike Duplicate % Recovery

Entech Analytical Labs, Inc.

525 Del Rey, Suite E (408) 735-1550
 Sunnyvale, CA 94085 (408) 735-1554 - Fax

Chain of Custody / Analysis Request

Send Report to: <i>Alex Gallego</i>	Phone No.:	Purchase Order No.:	Send Invoice to (if Different):	Phone:	
Client: <i>Krazer & Assoc.</i>	Fax No.:	Project Number:	Company:		
Mailing Address:		Project Name:	Billing Address (if Different):		
City:	State:	Zip:	Project Location:	City:	State: Zip:

Sampler: <i>Ian Beatty</i>	Turn Around Time Same Day <input type="checkbox"/> 24 Hour <input checked="" type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> Standard <input type="checkbox"/>	Volatiles (Price by GC/MS): From 113 624 <input type="checkbox"/> 8240 <input type="checkbox"/> Fuel Organics by GC/MS: From 113 MTBE by 8240 <input type="checkbox"/> 8240B <input type="checkbox"/> Pesticides-8081 <input type="checkbox"/> Halogenated or Aromatic Volatiles: 801/8010 <input type="checkbox"/> PCBs - 8082 <input type="checkbox"/> TPH as GC/MS <input type="checkbox"/> 802/8020 <input type="checkbox"/> TPH as GC/MS <input type="checkbox"/> 802/8020 <input type="checkbox"/> Base/Neutral/Acid Organics 8270 <input type="checkbox"/> 8270-SIMS <input type="checkbox"/> Fuel Scan <input type="checkbox"/> Diesel <input type="checkbox"/> w/ Special Standard Cleanup <input type="checkbox"/> w/ Special Column Cleanup <input type="checkbox"/> <i>Organic Ph</i>		TRPH <input type="checkbox"/> Oil & Grease <input type="checkbox"/> pH, EC, SO4 <input type="checkbox"/> Alk, NO3, F, TDS, TSS, Cyanide NH3-N, COD, TKN, Total P, TOC THM (302-2) <input type="checkbox"/> Metals - Cycle Below <input type="checkbox"/> Total <input type="checkbox"/> Dissolved <input type="checkbox"/>	
Date: <i>9-26-00</i>					

Order ID:		Sampling		Matrix	Composite	Grab	Containers	Preservative	Volatiles (Price by GC/MS): From 113 624 <input type="checkbox"/> 8240 <input type="checkbox"/>	Fuel Organics by GC/MS: From 113 MTBE by 8240 <input type="checkbox"/> 8240B <input type="checkbox"/>	Pesticides-8081 <input type="checkbox"/>	Halogenated or Aromatic Volatiles: 801/8010 <input type="checkbox"/> PCBs - 8082 <input type="checkbox"/>	TPH as GC/MS <input type="checkbox"/> 802/8020 <input type="checkbox"/>	TPH as GC/MS <input type="checkbox"/> 802/8020 <input type="checkbox"/>	Base/Neutral/Acid Organics 8270 <input type="checkbox"/> 8270-SIMS <input type="checkbox"/>	Fuel Scan <input type="checkbox"/>	Diesel <input type="checkbox"/>	w/ Special Standard Cleanup <input type="checkbox"/>	w/ Special Column Cleanup <input type="checkbox"/>	<i>Organic Ph</i>	TRPH <input type="checkbox"/>	Oil & Grease <input type="checkbox"/>	pH, EC, SO4 <input type="checkbox"/>	Alk, NO3, F, TDS, TSS, Cyanide NH3-N, COD, TKN, Total P, TOC	THM (302-2) <input type="checkbox"/>	Metals - Cycle Below <input type="checkbox"/>	Total <input type="checkbox"/> Dissolved <input type="checkbox"/>	Remarks	
Client ID	Laboratory No.	Date	Time																										
S-N	22433-001								x																				
S-S	L 062								x																				

24 HR RUSH

Relinquished by: <i>Ian Beatty</i>	Received by: <i>[Signature]</i>	Date: <i>9/26/00</i>	Time: <i>1600</i>
Relinquished by:	Received by:	Date:	Time:
Relinquished by:	Received by:	Date:	Time:
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments NPDES Detection Limits

Metals: Al, As, Sb, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Si, Ag, Na, Se, Sr, Tl, Sn, Ti, V, Zn, W : CAM-17 Plating PPM-13 LUFT-5

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

October 12, 2000

Alex Gallego
Krazan & Associates, Inc.
545 Parrott Street
San Jose, CA 95112

Order: 22607

Date Collected: 10/3/00

Project Name:

Date Received: 10/5/00

Project Number: 04400006

P.O. Number:

Project Notes:


On October 05, 2000, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Solid	Gas/BTEX	EPA 8015 MOD. (Purgeable)
		EPA 8020
	Oxygenates by EPA 8260B	EPA 8260B

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,


Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
545 Parrott Street
San Jose, CA 95112
Attn: Alex Gallego

Date: 10/12/00
Date Received: 10/5/00
Project Name:
Project Number: 04400006
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22607

Lab Sample ID: 22607-001

Client Sample ID: S-S2E

Sample Time: 8:20 AM

Sample Date: 10/3/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	0.089		50	0.0005	0.025	mg/Kg	N/A	10/10/00	SGC4001009A	EPA 8020
Toluene	0.35		50	0.0005	0.025	mg/Kg	N/A	10/10/00	SGC4001009A	EPA 8020
Ethyl Benzene	0.36		50	0.0005	0.025	mg/Kg	N/A	10/10/00	SGC4001009A	EPA 8020
Xylenes, Total	0.11		50	0.001	0.05	mg/Kg	N/A	10/10/00	SGC4001009A	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	79	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	77		50	0.050	2.5	mg/Kg	N/A	10/10/00	SGC4001009A	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	71	65 - 135

Comment: Sample required methanol extraction due to high concentrations of target hydrocarbons

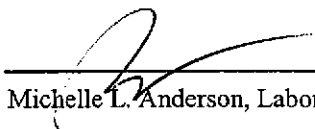
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director*Environmental Analysis Since 1983*

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
545 Parrott Street
San Jose, CA 95112
Attn: Alex Gallego

Date: 10/12/00
Date Received: 10/5/00
Project Name:
Project Number: 04400006
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22607

Lab Sample ID: 22607-002

Client Sample ID: S-N2W

Sample Time: 8:23 AM

Sample Date: 10/3/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.005	0.005	mg/Kg	N/A	10/9/00	SGC4001009B	EPA 8020
Toluene	ND		1	0.005	0.005	mg/Kg	N/A	10/9/00	SGC4001009B	EPA 8020
Ethyl Benzene	ND		1	0.005	0.005	mg/Kg	N/A	10/9/00	SGC4001009B	EPA 8020
Xylenes, Total	ND		1	0.005	0.005	mg/Kg	N/A	10/9/00	SGC4001009B	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	96	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	1	1	mg/Kg	N/A	10/9/00	SGC4001009B	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	109	65 - 135

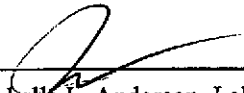
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director*Environmental Analysis Since 1983*

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
545 Parrott Street
San Jose, CA 95112
Attn: Alex Gallego

Date: 10/12/00
Date Received: 10/5/00
Project Name:
Project Number: 04400006
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22607

Lab Sample ID: 22607-001

Client Sample ID: S-S2E

Sample Time: 8:20 AM

Sample Date: 10/3/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Diisopropyl Ether	ND		200	5	1000	µg/Kg	10/10/00	SMS1001009	EPA 8260B
Ethyl-t-butyl Ether	ND		200	5	1000	µg/Kg	10/10/00	SMS1001009	EPA 8260B
Methyl-t-butyl Ether	ND		200	5	1000	µg/Kg	10/10/00	SMS1001009	EPA 8260B
tert-Amyl Methyl Ether	ND		200	5	1000	µg/Kg	10/10/00	SMS1001009	EPA 8260B
tert-Butanol	ND		200	20	4000	µg/Kg	10/10/00	SMS1001009	EPA 8260B
	Surrogate			Surrogate Recovery			Control Limits (%)		
	4-Bromofluorobenzene			83			65 - 135		
	Dibromofluoromethane			87			65 - 135		
	Toluene-d8			87			65 - 135		

Comment: Sample diluted due to high concentrations of non-target hydrocarbons

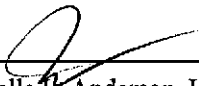
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Page 1 of 2

Entech Analytical Labs, Inc.

CA ELAP# 2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94085 • (408) 735-1550 • Fax (408) 735-1554

Krazan & Associates, Inc.
545 Parrott Street
San Jose, CA 95112
Attn: Alex Gallego

Date: 10/12/00
Date Received: 10/5/00
Project Name:
Project Number: 04400006
P.O. Number:
Sampled By: Client

Certified Analytical Report

Order ID: 22607

Lab Sample ID: 22607-002

Client Sample ID: S-N2W

Sample Time: 8:23 AM

Sample Date: 10/3/00

Matrix: Solid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Diisopropyl Ether	ND		1	5	5	µg/Kg	10/10/00	SMS1001009	EPA 8260B
Ethyl-t-butyl Ether	ND		1	5	5	µg/Kg	10/10/00	SMS1001009	EPA 8260B
Methyl-t-butyl Ether	ND		1	5	5	µg/Kg	10/10/00	SMS1001009	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/Kg	10/10/00	SMS1001009	EPA 8260B
tert-Butanol	ND		1	20	20	µg/Kg	10/10/00	SMS1001009	EPA 8260B
	Surrogate				Surrogate Recovery			Control Limits (%)	
	4-Bromofluorobenzene				117			65 - 135	
	Dibromofluoromethane				110			65 - 135	
	Toluene-d8				59			65 - 135	

Comment: Surrogate recovery out of control limits due to matrix interference

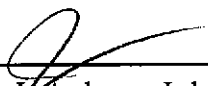
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)


Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Page 2 of 2

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography
Laboratory Control SampleQC Batch #: SGC4001009A
Matrix: Solid
Units: µg/kgDate Analyzed: 10/09/00
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB µg/kg	SA µg/kg	SR µg/kg	SP µg/kg	SP % R	SPD µg/kg	SPD %R	% RPD	QC LIMITS	
										RPD	%R
Benzene	8020	<5.0	5.2	ND	5.6	107	4.7	90	17.3	25	80-120
Toluene	8020	<5.0	29	ND	28	97	26	89	7.8	25	80-120
Ethyl Benzene	8020	<5.0	5.6	ND	6.3	113	5.3	95	16.5	25	80-120
Xylenes	8020	<5.0	32	ND	31	96	28	87	10.3	25	80-120
Gasoline	8015	<1000	469	ND	479	102	450	96	6.2	25	75-115
aaa-TFT(S.S.)-FID	8015			110%	110%				98%		65-135
aaa-TFT(S.S.)-PID	8020			95%	104%				89%		65-135

Definition of Terms:

- na: Not Analyzed in QC batch
- MB: Method Blank
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike % Recovery
- NC: Not Calculated

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography
Laboratory Control Sample

QC Batch #: SGC4001009B
Matrix: Solid
Units: µg/kg

Date Analyzed: 10/09/00
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB µg/kg	SA µg/kg	SR µg/kg	SP µg/kg	SP % R	SPD µg/kg	SPD %R	% RPD	QC LIMITS	
										RPD	%R
Benzene	8020	<5.0	5.2	ND	5.1	98	5.4	104	5.9	25	80-120
Toluene	8020	<5.0	29	ND	27	91	28	95	3.9	25	80-120
Ethyl Benzene	8020	<5.0	5.6	ND	6.0	106	5.8	103	3.1	25	80-120
Xylenes	8020	<5.0	32	ND	30	93	30	92	1.3	25	80-120
Gasoline	8015	<1000	469	ND	426	91	443	94	3.9	25	75-115
aaa-TFT(S.S.)-FID	8015			117%	104%		110%				65-135
aaa-TFT(S.S.)-PID	8020			102%	95%		100%				65-135

Definition of Terms:

- na: Not Analyzed in QC batch
- MB: Method Blank
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike % Recovery
- NC: Not Calculated

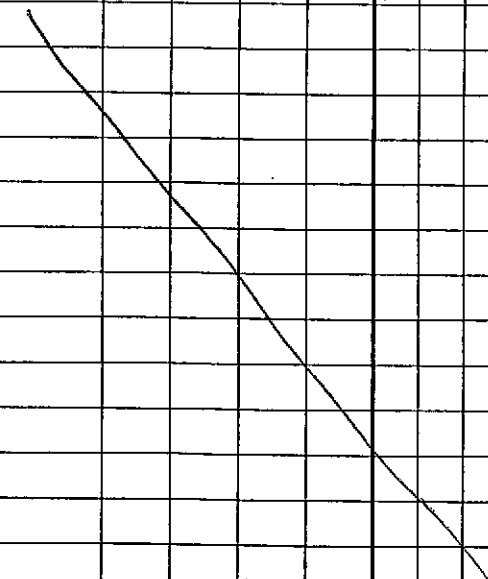
QUALITY CONTROL RESULTS SUMMARY

Volatile Organic Compounds
Laboratory Control SampleQC Batch #: SMS1001009
Matrix: Solid
Units: $\mu\text{g}/\text{kg}$ Date analyzed: 10/10/00
Spiked Sample: Blank Spike

PARAMETER	Method #	SA	SR	SP	SP	SPD	SPD	RPD	RPD	QC LIMITS
		$\mu\text{g}/\text{kg}$	$\mu\text{g}/\text{kg}$	$\mu\text{g}/\text{kg}$	%R	$\mu\text{g}/\text{kg}$	%R			
1,1-Dichloroethene	8240/8260	25	ND	23.1	92	21.9	88	5.3	25	65-135
Benzene	8240/8260	25	ND	24.4	98	23.9	96	2.1	25	65-135
Trichloroethene	8240/8260	25	ND	25.6	102	25.1	100	2.0	25	65-135
Toluene	8240/8260	25	ND	24.6	98	24.7	99	0.4	25	65-135
Chlorobenzene	8240/8260	25	ND	25.3	101	24.3	97	4.0	25	65-135
<i>Surrogates</i>										
Toluene -d8	8240/8260		87%	90%		92%				65-135
Dibromofluoromethane	8240/8260		85%	92%		95%				65-135
4-Bromofluorobenzene	8240/8260		82%	102%		86%				65-135
MTBE-d3	8240/8260		76%	86%		91%				65-135

Definition of Terms:

na: Not Analyzed in QC batch
 SA: Spike Added
 SR: Sample Result
 RPD(%): Duplicate Analysis - Relative Percent Difference
 SP: Spike Result
 SP (%R): Spike % Recovery
 SPD: Spike Duplicate Result
 SPD (%R): Spike Duplicate % Recovery
 NC: Not Calculated

KRAZAN & ASSOCIATES, INC. 550 PARROTT ST., STE. ONE SAN JOSE, CA 95112 (408) 271-2200 VOICE (408) 271-2201 FAX				Comments:				REQUESTED ANALYSES						P.O. Number:			
								Project No.: 04400006		Project Name (optional):		Sample Matrix W=Water S=Soil A=Air O=Other	Sample Type G=Grab C=Composite D=Discrete	Sample Preserved? (Yes/No)	Number of Containers	BTEX/TPH-Gasoline	TPH-Diesel
Sampler Name (Printed): ALEX GALLEBO				Report Attention: ALEX GALLEBO										Laboratory: ENTTECH			
														Lab Quote No.:			
														Method of Shipment/Delivery: PICK-UP			
														Remarks			
Lab Sample ID #	Krazan Sample No.	Date Sampled	Time Sampled	Sample Description		Sample Matrix	Sample Type	Sample Preserved?	Number of Containers	BTEX/TPH-Gasoline	TPH-Diesel	TRPH by EPA 418.1					
	S-SZ E	10/3/00	8:20	EXCAVATION BOTTOM		S	S	N	1	X			X	22607-001			
	S-NZ W	10/3/00	8:23	"		S	S	N	1	X			X	002			
																	
Signature				Printed Name				Date		Time		Company Name				Total Number of Containers Submitted to Laboratory	
Relinquished by: <i>Alex Gallo</i>				ALEX GALLEBO				10/5/00		am pm		KRAZAN + ASS				Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted	
Received by: <i>[Signature]</i>				D. LIM				10/5/00		9:15 am pm							
Relinquished by: <i>[Signature]</i>				D. LIM				10/5/00		9:42 am pm							
Received by: <i>[Signature]</i>				Lance Galvin				10/5/00		9:51 am pm		Entech					
Relinquished by:										am pm							
Received for Laboratory by:										am pm							



Date: 10/13/00

Krazan & Associates, Inc.
550 Parrott St., Suite One
San Jose, CA 95112

Attention: Mr. Alex Gallego

Client Project Number: 04400006
Date Sampled: 10/11/00
Date Samples Received: 10/12/00
Sierra Project No.: 0010-319

Attached are the results of the chemo-physical analysis of the sample(s) from the project identified above.


The samples were received by Sierra Laboratories, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analysis were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report. If you require additional retaining time, please advise us.



Richard K. Forsyth
Laboratory Director



Reviewed

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

Krazan & Associates, Inc.		Date Sampled:	10/11/00
215 West Dakota Avenue		Date Received:	10/12/00
Clovis, CA 93612		Date Prepared:	10/13/00
Sierra Project No.:	0010-319	Date Analyzed:	10/13/00
Client Project ID:	04400006	Analyst:	MW
Sample Matrix:	Water	Report Date:	10/13/00

**EPA METHOD 8020-BTEX/
EPA METHOD 8015 MODIFIED-GASOLINE RANGE HYDROCARBONS (C4-C12)
(PURGE AND TRAP)**

Client Sample No.:	Concentration, ug/L			Practical Quantitation Limit, ug/L
	G-1	G-2		
Sierra Sample No.:	29914	29915		
COMPOUNDS:				
Benzene	ND	ND		0.5
Toluene	ND	ND		0.5
Ethylbenzene	ND	ND		0.5
Total Xylenes	ND	ND		0.5
MTBE	ND	ND		5.0
Gasoline	ND	ND		50
Dilution Factor	1	1		QC Limits
% Surrogate Recovery:	93	93		70-125

Quality Assurance/Quality Control Data							
QC Sample ID:	001012-Blank						
Compounds	LCS % Rec.	QC Limits	Spike % Rec.	Spike Dup % Rec.	QC Limits	RPD	QC Limits
Benzene	92	80-120	91	102	39-150	11	0-30
Toluene	100	80-120	90	100	46-148	11	0-30
Ethylbenzene	89	80-120	89	99	32-160	11	0-30
Gasoline	99	80-120	102	96	50-150	6.5	0-30

ND means Not Detected

Reporting Limit (RL) = Practical Quantitation Limit (PQL) x Dilution Factor

0010-319

KRAZAN & ASSOCIATES, INC.
 550 PARROTT ST., STE. ONE
 SAN JOSE, CA 95112
 (408) 271-2200 VOICE
 (408) 271-2201 FAX

Comments:
RUSH

REQUESTED ANALYSES

P.O. Number:
 Ice Chest No.:
 Laboratory:
 SIERRA
 Lab Quote No.:
 Method of Shipment/Delivery:
 CAL. OVERNIGHT
 Remarks

Project No.: 04400006

Project Name: (optional)
 Report Attention: ALEX GALLEGOS

Sampler Name (Printed): IAN BEATTY

Lab Sample ID#	Krazan Sample No.	Date Sampled	Time Sampled	Sample Description	Sample Matrix W=Water S=Soil A=Air O=Other	Sample Type G=Grab C=Composite D=Discrete	Sample Preserved? (Yes/No)	Number of Containers	BTEX/TPH-Gasoline +MTBE	TPH-Diesel	TRPH by EPA 418.1								
	G-1	10/11/00		BROWN WATER	W	G	Y	Y	X										
	G-2	10/11/00		"	W	G	Y	Y	X										
/																			

Signature	Printed Name	Date	Time	Company Name
Relinquished by: <i>Jan Beatty</i>	Jan Beatty	10-11-00	5 am	KRAZAN
Received by: <i>Tom Schuch</i>	Tom Schuch	10-12-00	10:30 am	Sierra
Relinquished by:			am pm	
Received by:			am pm	
Relinquished by:			am pm	
Received for Laboratory by:			am pm	

Total Number of Containers Submitted to Laboratory: 6

Turn Around Time (Circle Choice)

24 Hrs. 48 Hrs.
 5 Days 10 Days

As Contracted