



# TRANSMITTAL SHEET

US Army Corps  
of Engineers  
Sacramento District

DATE: October 9, 1995

## DISTRIBUTION:

Department of Environmental Protection  
Alameda County  
1131 Harbor Bay Parkway, Rm. 250  
Alameda, CA 94502  
**Attn: Scott Seery**  
(510) 567-6700

Department of Toxic Substances Federal  
Facilities Unit  
10151 Croydon Way, Suite 3  
Sacramento, CA 95827-2106  
**Attn: Tracie Billington**  
(916) 255-3718

Regional Water Quality Control Board  
Central Valley Region  
3443 Routier Road  
Sacramento, CA 95827-3098  
**Attn: Ton Vorster**  
(916) 255-3046

U.S. Army Corps of Engineers  
Environmental Engineering (Ed Ketchum)  
SPK-ED-E Sacramento, CA 95814  
**Attn: Roger Henderson**

**PROJECT:** CON/HTW Removal  
**CONTRACT NO:** DACA 05-94-D-0012, D.O. 0005  
**INSTALLATION:** NIKE Battery 31, San Leandro, California

## THE ENCLOSED DOCUMENTS ARE BEING TRANSMITTED TO YOU FOR:

COORDINATION  INCORPORATION  REVIEW & COMMENTS  INFORMATION

**DOCUMENTS ENCLOSED:** 1. One copy of CKY, Inc. **Site Closure Report** for the NIKE Battery 31 CON/HTW site at San Leandro, CA.

**REMARKS:** Please review the enclosed Site Closure Report. We will look forward to hearing from you regarding formal closure of this site.

If you have any questions, please notify me at once.

**FROM:** Vicky Henderson for  
Brenda Pedersen  
Technical Manager

CESPK-ED-EB  
1325 J Street  
Sacramento, CA 95814-2922  
Tel: (916)557-6771 / 6628vh  
Fax: (916) 557-7865  
vh\nike31clos

# **SITE CLOSURE REPORT**

## **REMOVAL OF CONTAINERIZED HAZARDOUS AND /OR TOXIC WASTE AT NIKE BATTERY 31 SAN LEANDRO, CALIFORNIA**

**Contract No. DACA 05-94-D-0012  
Delivery Order No. 0005**

Submitted to:

**U. S. Army Corps of Engineers  
Valley Resident Office  
2021 Jefferson Boulevard  
West Sacramento, California 95691**

Prepared by:

**CKY, Inc. Environmental Services  
3480 Torrance Boulevard, Suite 100  
Torrance, California 90503**

**CKY Project No. 8808**

**September 22, 1995**

Reviewed by O'Heach 12/14/95



# CKY incorporated Environmental Services

September 22, 1995  
Project No. 8808

Mr. William R. Cameron  
U. S. Army Corps of Engineers  
Valley Resident Office  
2021 Jefferson Boulevard  
West Sacramento, California 95691

ENVIRONMENTAL  
PROTECTION  
95 OCT 12 PM 12:54

**Subject: Site Closure Report  
Removal of Containerized Hazardous and/or Toxic Waste at  
Nike Battery 31, San Leandro, California  
Contract No. DACA 05-94-D-0012, Delivery Order No. 0005**

Dear Mr. Cameron:

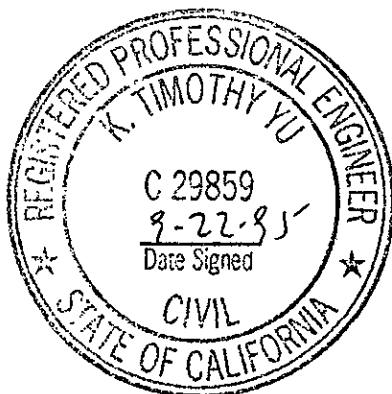
CKY, Inc. Environmental Services (CKY) is pleased to submit six copies of the subject site closure report and the field logbook for your review and approval.

The services under this Delivery Order included (1) removal and disposal of tank and piping, (2) sampling of potentially contaminated materials, (3) restoring of the disturbed area, and (4) preparation of a closure report. The work was performed in accordance with the terms and conditions specified in the Delivery Order.

It has been a pleasure to provide our consulting services to the Corps of Engineers. Please feel free to contact CKY if you should have any questions.

Very truly yours,

Timothy Yu, Ph.D., P.E.  
Project Director



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Torrance, California 90503**

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September 22, 1995

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This site closure report has been prepared to summarize the removal of containerized hazardous and/or toxic waste at the former Nike Battery 31 site in San Leandro, California.

## 1.1 PROJECT DESCRIPTION

The Nike Battery 31 site covered, under the scope of work, the Facilities Area and the Launcher Area. Figure 1 shows the site location, and Figures 2 and 3 present site plans of these two areas. The Launcher Area includes two missile vaults which are inactive. The East Bay Regional Parks District is using the Launcher Area as a maintenance facility and storage area. The East Bay Regional Parks Police Station is using the Facilities Area for administration offices.

The work performed under this Delivery Order included:

- Preparation of project work plans.
- At the Facilities Area:
  - Removal and disposal of the concrete masonry unit (CMU) block wall
  - Removal and disposal of the flue
  - Removal and disposal of one concrete aboveground storage tank (AST) saddle (no tank)
  - Excavation, removal, and disposal of contaminated soil under the AST saddle
  - Sampling and analysis of confirmatory soil samples from the excavation
- At the Launcher Area:
  - Removal and disposal of the concrete pump vault
  - Removal and disposal of one 6,000-gallon underground storage tank (UST) under the pump vault
  - Characterization, removal, and disposal of the tank contents
  - Removal and disposal of about 25 feet of underground piping
  - Sampling and analysis of confirmatory soil samples from the excavation
  - Cleaning hydraulic systems at the two missile vaults
  - Disposal of hydraulic fluid and rinsate
- Backfilling excavations with imported clean fill.
- Preparation of this site closure report.

## **1.2 REPORT ORGANIZATION**

As specified in the Delivery Order, this report contains the following:

- A narrative describing site condition, evidence of contaminated soil, sampling activities, removal and disposal of wastes, and materials and methods used to backfill excavations.
- Tables summarizing sampling information and analytical results.
- Figures showing sampling locations.
- Copies of laboratory reports (Appendix A).
- Waste manifests and disposal certificates (Appendix B).
- Permits (Appendix C).
- Progress photographs (Appendix D).

## 2.1 SUMMARY OF FIELD ACTIVITIES

- Mobilized and performed site reconnaissance (8/2/95).
- Exposed the UST and pumped its contents (8/2/95).
- Removed one 6,000-gallon UST and 25 feet of piping at the Launcher Area (8/3/95).
- Removed the UST saddle (8/7/95).
- Removed the AST saddle, the flue, and the CMU block wall at the Facilities Area (8/7/95).
- Excavated about 1.5 cubic yards of contaminated soil under the AST saddle (8/8/95).
- Collected soil samples from the excavations and stockpiles (8/8/95).
- Cleaned the missile vaults. Removed and disposed of the hydraulic fluid and rinsate (8/14/95 - 8/16/95).
- Loaded and hauled contaminated soil to Forward Landfill (8/21/95).
- Backfilled and compacted excavations. (8/21/95 - 8/22/95).
- Loaded and hauled pipes off site for scrap (8/23/95).

## 2.2 EXPOSING TANKS

CKY mobilized on August 2, 1995, and started surveying the site to locate the UST. Locations for the tank and piping were carefully evaluated to prevent damage to existing utilities during the excavation activities. Once identified, the tank location, dimension, and ancillary equipment were marked with a marking paint.

The UST and piping were exposed using a backhoe. The UST was almost full with water. Following the exposure, the liquid in the piping was drained into the tank. Then, the piping was flushed with water from a high pressure washer and the rinsate was drained into the tank. After the contents were pumped to an Erickson's vacuum truck, the tank was then flushed with water from a pressure-washer until the combustible vapor concentration was less than 10% of the lower explosion limit



(LEL). The tank contents containing rinsate were again pumped into the vacuum truck and transported to Gibson Environmental in Redwood City, California, for disposal/recycling.

### **2.3 REMOVAL OF TANKS AND PIPING**

The piping was disassembled and cut into pieces after flushing. The UST and most of the piping were removed on August 3, 1995 under the supervision of Mike DeKlotz, CKY Staff Scientist and Site Supervisor. About 8 feet of piping running next to shrubs were removed while backfilling to protect the shrubs from potential cave-in. Scott Seery of the Alameda County Health Agency (Alameda County) inspected removal activities and identified sample locations. See Section 2.5 (Sampling and Analysis) for sampling details. Soil samples were collected in accordance to the UST closure permit provisions imposed by the Alameda County (see Appendix C).

Upon removal of contents, the atmosphere inside the tank was monitored for combustible vapors using an explosimeter, which was calibrated against methane. *The appurtenances were removed from the tank and openings were capped, except those necessary to inert the tank.* The tank was inerted by using 250 pounds of dry ice to lower the oxygen level below five percent. The explosimeter probe was inserted into the tank without touching the surface of the walls to check the combustible vapor concentrations. The UST was removed after combustible vapor concentration was detected at 0% of LEL and oxygen level fell down to 1.6%.

Groundwater was not encountered at the UST excavation.

No obvious holes were found at the bottom of the UST removed. However, gray color stained soil, which had a distinctive petroleum hydrocarbon odor, was found at the walls and the bottom of the UST excavation.

The AST saddle, the flue, and the CMU block wall at the Facilities Area were removed on August 7, 1995. About one foot of contaminated soil under the AST saddle was excavated on August 8, 1995. Additional contaminated soil was not removed because the soil was highly compacted and there was little room to operate the backhoe.

### **2.4 CLEANING MISSILE VAULTS**

The two missile vaults contained several hydraulic systems that were used to lift missiles into position and open doors. It was necessary to remove the hydraulic fluid in the systems, particularly the piping, to eliminate the potential for this fluid to impact the soil and groundwater at these locations.

Hydraulic fluid was removed by dismantling the piping at joints and draining to the lowest point. Then, the piping was flushed with diluted Penetone™ solution from a pressure washer. Hydraulic fluid and rinsate were collected in drums. The drummed liquid was pumped into a vacuum truck and transported by Erickson to Enviropur West Corporation in Patterson, California, for disposal/recycling.

## **2.5 SAMPLING AND ANALYSIS**

Soil below the excavations were sampled on August 8, 1995. Sampling information is provided in Table 1; analytical results are summarized in Tables 2. Laboratory analytical reports are attached as Appendix A.

One soil sample was collected from the each wall and two soil samples were collected from the bottom of the UST excavation (see Figure 4). These samples were analyzed for total petroleum hydrocarbon (TPH) as diesel (Modified EPA Method 8015); and benzene, toluene, ethyl benzene, and total xylenes (EPA Method 8020).

Two soil samples were collected from the bottom of the AST saddle shallow excavation. These samples were analyzed for TPH as diesel; benzene, toluene, ethyl benzene, and total xylenes; and halogenated volatile organics (EPA Method 8010).

Soil sample locations were identified by Scott Seery of the Alameda County or approved by Brenda Pedersen of the U. S. Army Corps of Engineers (USACE). Samples were collected and shipped by Mike DeKlotz to CKY, Inc. Analytical Services (CKY Lab) in Torrance for analyses. Laboratory reports are included in Appendix A and the results are summarized in Table 2. Note that the majority of soil samples collected at the excavations contained elevated concentrations of TPH as diesel.

## **2.6 WASTE DISPOSAL**

The tanks and piping were hauled by Erickson to Erickson's facility in Richmond for scrap. Liquid waste consisting of UST contents and rinsate were hauled by Erickson to Gibson Environmental in Redwood City, California, for disposal/recycling. Hydraulic fluid and rinsate generated by cleaning the hydraulic vaults were hauled by Erickson to Enviropur West Corporation in Patterson, California, for disposal/recycling.

Approximately 52 cubic yards (3 truckloads) of excavated soil were hauled by Manley and Sons Trucking, Inc. to Forward Landfill (Class II) in Manteca, California, on August 21, 1995, for disposal. The landfill accepted the material upon review of the analytical results.

Waste manifests and certificates of disposal or acceptance by the treatment or disposal facilities are included in Appendix B.

## **2.7 SITE RESTORATION**

On August 17, 1995, David Woehl of the USACE authorized CKY to backfill the excavations after lining them with visqueen to segregate clean fill with contaminated soil that still remained in the excavations. The UST excavation at the Launcher Area was backfilled to nearly the top with clean sand from a local supplier and compacted. The remaining void, about 8 inches deep, was filled with Class II aggregate base material. The AST saddle overexcavation at the Facilities Area was backfilled with only Class II aggregate base material. Fill materials were placed in loose lifts in layers not exceeding 12-inch loose thickness for compaction. Each loose lift was compacted prior to the successive lift being placed. Backfill was compacted to at least 90 percent at  $\pm 2$  percent of optimum moisture content. Site restoration photographs are included in Appendix D.

**TABLE 1  
SAMPLING INFORMATION**

Sample ID	Date Sampled	Matrix	Sample Location
SL'-T1-EXC'N BOTTOM-W	8/8/95	Soil	Launcher area, UST excavation, bottom, west
SL'-T1-EXC'N BOTTOM-E1	8/8/95	Soil	Launcher area, UST excavation, bottom, east
SL'-T1-EXC'N BOTTOM-E2	8/8/95	Soil	QC sample <sup>(1)</sup> of SL'-T1-EXC'N BOTTOM-E1
SL'-T1-EXC'N-N-WALL	8/8/95	Soil	Launcher area, UST excavation, wall, north
SL'-T1-EXC'N-E-WALL	8/8/95	Soil	Launcher area, UST excavation, wall, east
SL'-T1-EXC'N-S-WALL	8/8/95	Soil	Launcher area, UST excavation, wall, south
SL'-T1-EXC'N-W-WALL	8/8/95	Soil	Launcher area, UST excavation, wall, west
PS-1'-N-END	8/8/95	Soil	Facilities area, bottom of excavation, north
PS-1'-S-END	8/8/95	Soil	Facilities area, bottom of excavation, south
SP2-EAST	8/8/95	Soil	Stockpile #2, center
SP1-NORTH	8/8/95	Soil	Stockpile #1, north portion
SP1-MIDDLE	8/8/95	Soil	Stockpile #1, middle portion
SP1-SOUTH1	8/8/95	Soil	Stockpile #1, south portion
SP1-SOUTH2	8/8/95	Soil	QC sample of SP1-SOUTH1

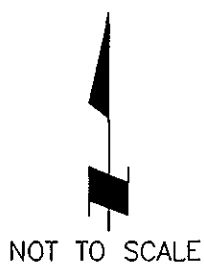
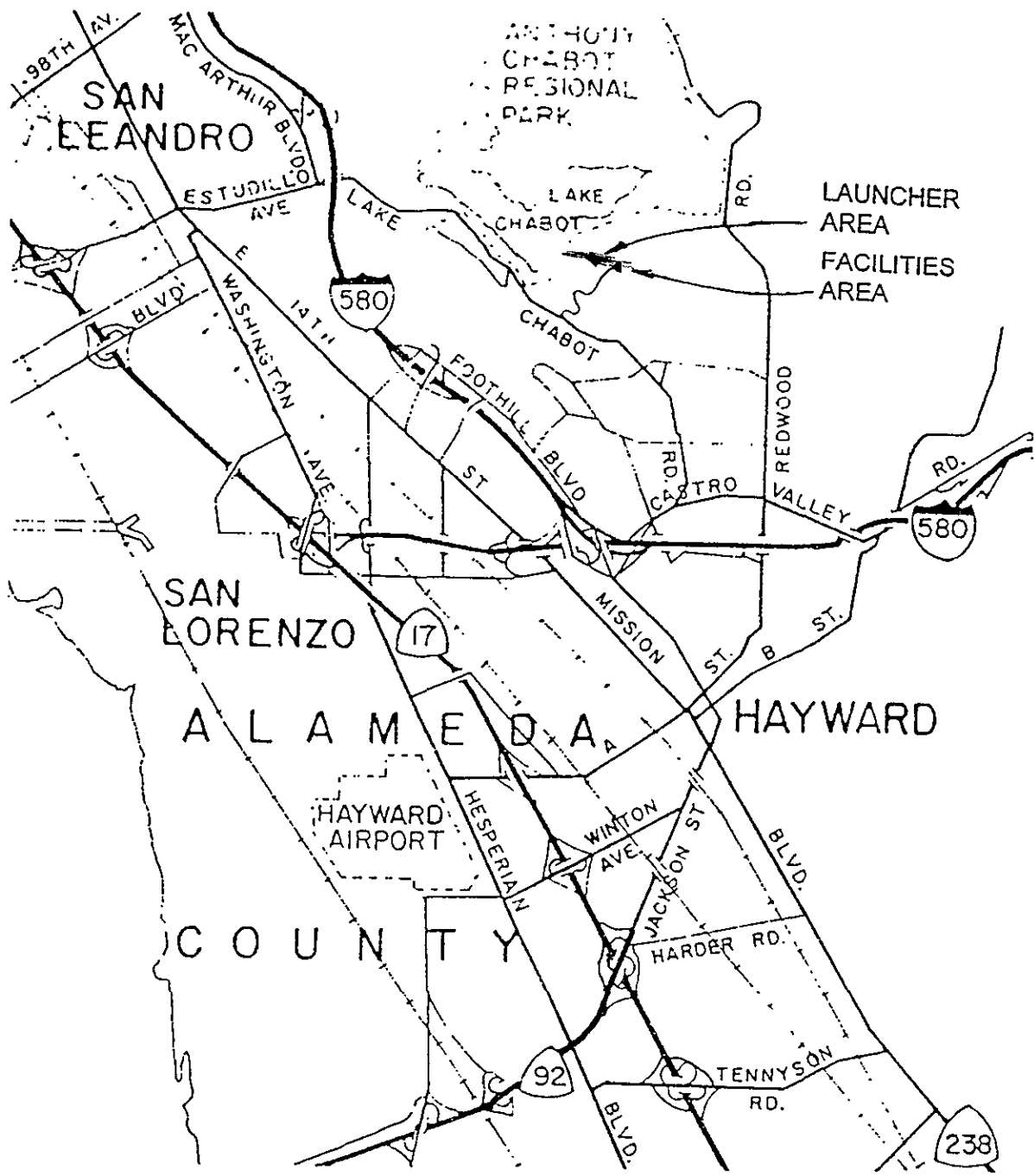
<sup>(1)</sup> Duplicate sample for quality control (QC), sent to the Contract Laboratory (CKY Lab).


**TABLE 2  
ANALYTICAL RESULTS FOR SOIL SAMPLES**

Sample ID	Date Sampled	TPH AS	HYDRO- CARBON RANGE	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	Halogenated Volatile Organics
		DIESEL		(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
		(mg/kg)		8020	8020	8020	8020	8010
SL'-T1-EXC'N BOTTOM-W	8/8/95	92	C <sub>10</sub> - C <sub>24</sub>	ND <sup>(1)</sup>	ND	ND	ND	_ <sup>(2)</sup>
SL'-T1-EXC'N BOTTOM-E1	8/8/95	6000	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SL'-T1-EXC'N BOTTOM-E2	8/8/95	5800	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SL'-T1-EXC'N-N-WALL	8/8/95	4400	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SL'-T1-EXC'N-E-WALL	8/8/95	5300	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SL'-T1-EXC'N-S-WALL	8/8/95	14000	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SL'-T1-EXC'N-W-WALL	8/8/95	3000	C <sub>10</sub> - C <sub>23</sub>	ND	ND	ND	ND	-
PS-1'-N-END	8/8/95	1500	C <sub>13</sub> - C <sub>24</sub>	ND	ND	ND	ND	ND
PS-1'-S-END	8/8/95	1900	C <sub>10</sub> - C <sub>24</sub>	ND	ND	7.9	52	ND
SP2-EAST	8/8/95	830	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SP1-NORTH	8/8/95	40	C <sub>15</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SP1-MIDDLE	8/8/95	400	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SP1-SOUTH1	8/8/95	2700	C <sub>9</sub> - C <sub>24</sub>	ND	ND	ND	ND	-
SP1-SOUTH2	8/8/95	79	C <sub>14</sub> - C <sub>24</sub>	ND	ND	ND	ND	-

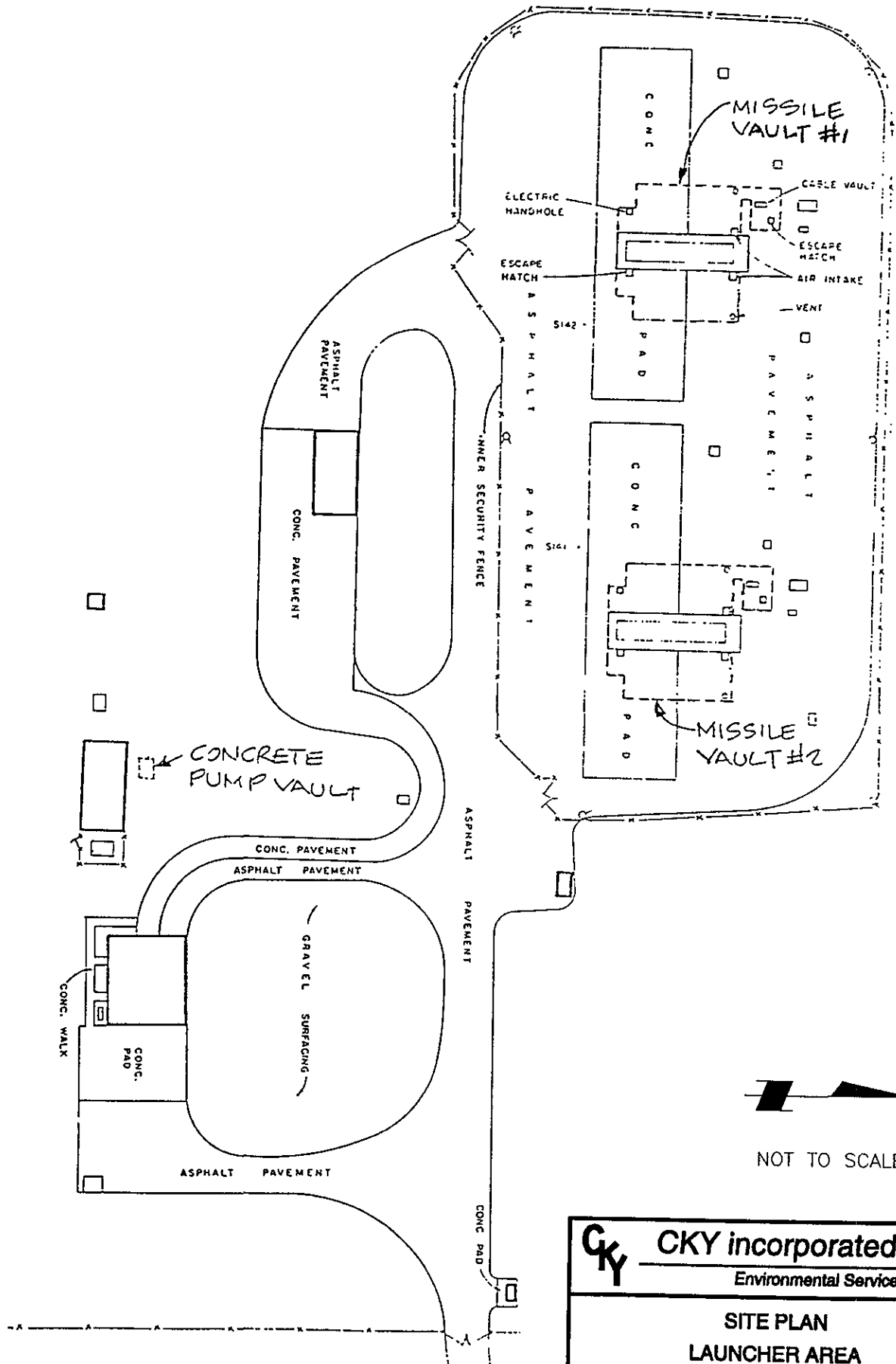
(1) ND = Not detected at or above the method detection limits. See Appendix A, Laboratory reports.

(2) - = Not analyzed.



	<b>CKY incorporated</b>	
	<i>Environmental Services</i>	
<b>SITE LOCATION MAP</b> <b>NIKE BATTERY 31</b> <b>SAN LEANDRO, CALIFORNIA</b>		
PROJECT NO.	8808	FIGURE 1

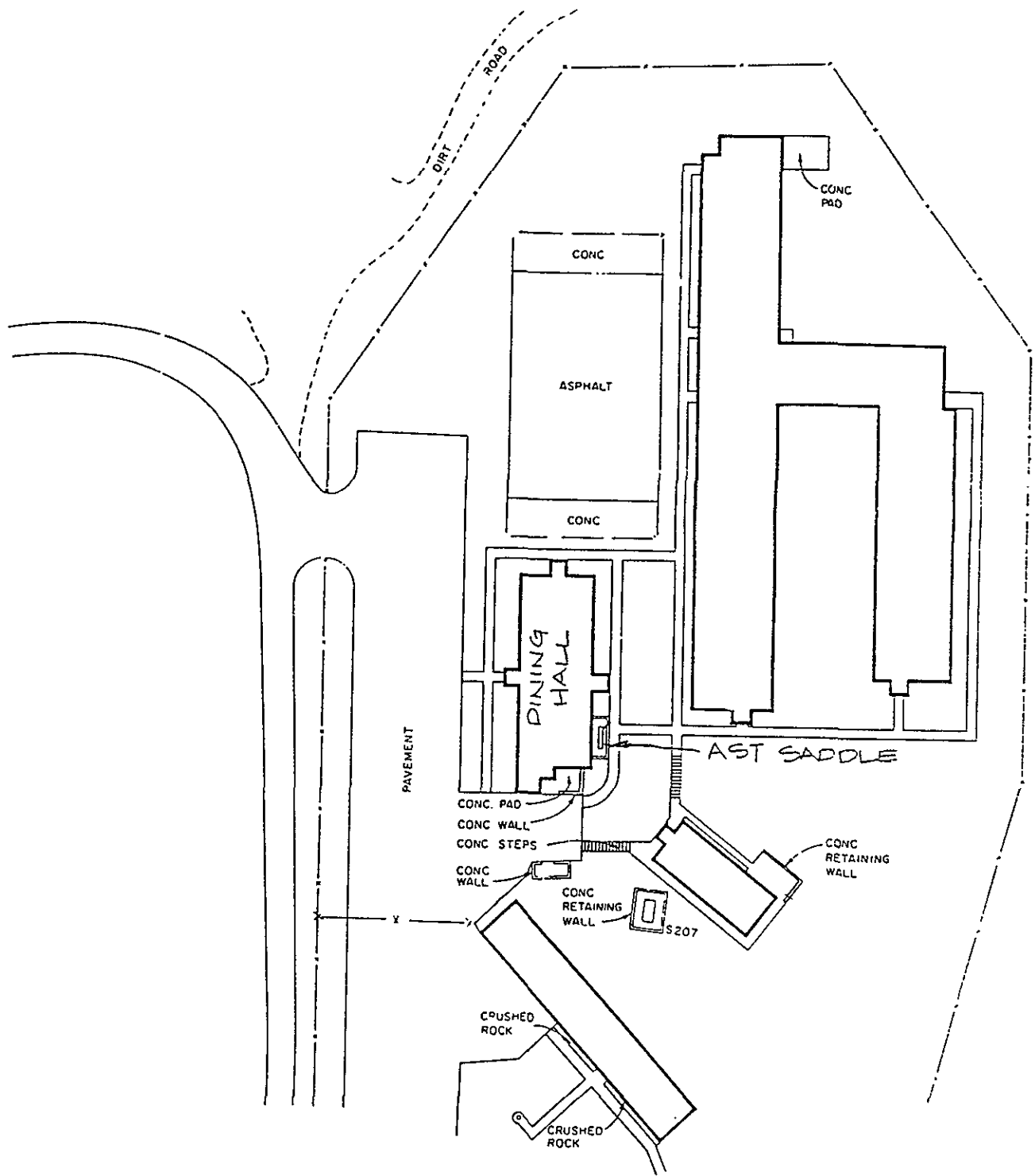
c:\p012\8808\1205-1.dwg




NOT TO SCALE

 <b>CKY incorporated</b> Environmental Services	
<b>SITE PLAN</b> <b>LAUNCHER AREA</b> <b>SAN LEANDRO, CALIFORNIA</b>	
PROJECT NO. 8808	FIGURE 2

6/10/03 10:00AM \1205-02.DWG

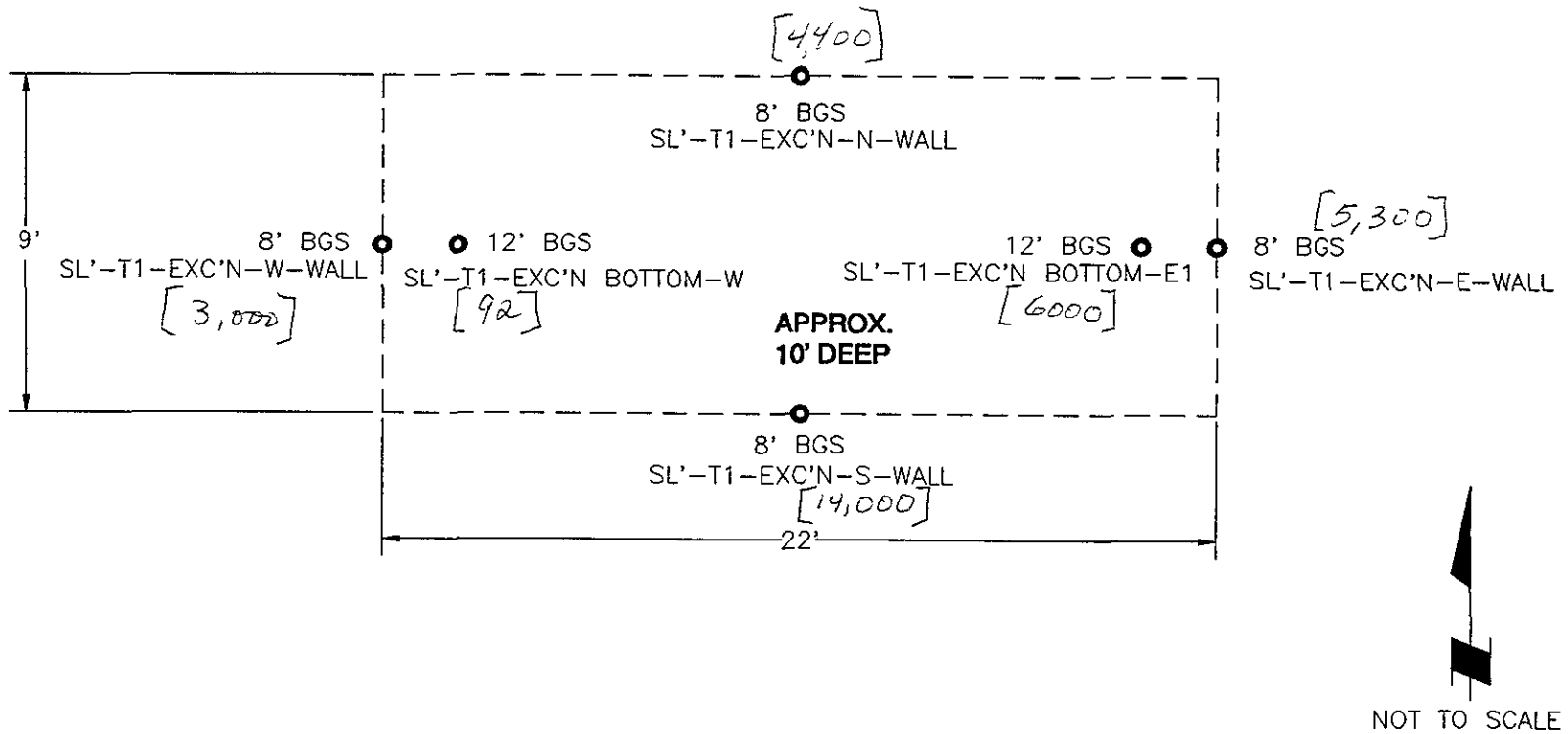


  
 NOT TO SCALE

	<b>CKY incorporated</b> Environmental Services	
	SITE PLAN FACILITIES AREA SAN LEANDRO, CALIFORNIA	
PROJECT NO. 8808	FIGURE 3	

c:\p012\8808\1205-13.dwg





[approx TPI d]

**LEGEND**

- SAMPLE LOCATION
- BGS BELOW GROUND SURFACE
- [ ] TANK EXCAVATION

**TRAILER  
BUILDING**

**CKY** CKY incorporated  
Environmental Services

**SAMPLE LOCATION MAP  
LAUNCHER AREA  
SAN LEANDRO, CALIFORNIA**

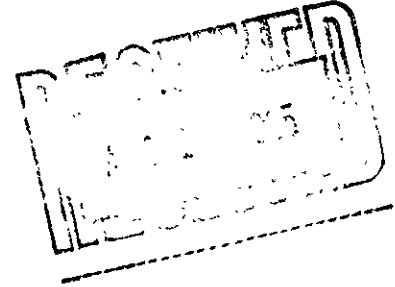
PROJECT NO. 8808 | FIGURE 4

**APPENDIX A  
LABORATORY REPORTS**



# CKY incorporated Analytical Laboratories

Date: 08-17-1995  
CKY Batch No.: 95H051



Attn. Dan Schottlander

CKY Environmental Services  
3480 Torrance Blvd., Suite 100  
Torrance, CA 90503

Subject: Laboratory Report  
Project: San Leandro #8808

-----  
Enclosed is the Laboratory report for samples received on 08/09/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

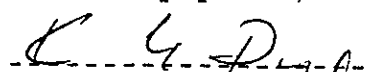
Sample ID	Control No.	Matrix	Analysis
SL' -T1-EXC'NBOTTOM-W	H051-01	Soil	EPA M8015 EPA 8020
SL' -T1-EXC'NBOTTOM-E1	H051-02	Soil	EPA M8015 EPA 8020
SL' -T1-EXC'NBOTTOM-E2	H051-03	Soil	EPA M8015 EPA 8020
SL' -T1-EXC' -N-WALL	H051-04	Soil	EPA M8015 EPA 8020
SL' -T1-EXC' -E-WALL	H051-05	Soil	EPA M8015 EPA 8020
SL' -T1-EXC' -S-WALL	H051-06	Soil	EPA M8015 EPA 8020
SL' -T1-EXC' -W-WALL	H051-07	Soil	EPA M8015 EPA 8020
PS-1' -N-END	H051-08	Soil	Hold
PS-1' -S-END	H051-09	Soil	Hold
SP2-EAST	H051-10	Soil	EPA M8015 EPA 8020
SP1-NORTH	H051-11	Soil	EPA M8015 EPA 8020
SP1-MIDDLE	H051-12	Soil	EPA M8015 EPA 8020

Sample ID	Control No.	Matrix	Analysis
SP1-SOUTH1	H051-13	Soil	EPA M8015 EPA 8020
SP1-SOUTH2	H051-14	Soil	EPA M8015 EPA 8020

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

  
 Kam Y. Pang, Ph.D.  
 Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD M8015  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
CLIENT:      CKY Environmental Services          DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808                 DATE RECEIVED:  08/09/95
ATCH NO.:    95H051                           DATE EXTRACTED: 08/10/95
MATRIX:      SOIL                             DATE ANALYZED:  08/16/95
=====
  
```

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	H-C RANGE	% RECOVERY		DL FACTOR	MOIST (%)	MDL (mg/kg)
				SURR1	SURR2			
SL'-T1-EXC'NBOTTOM-W	H051-01	92	C10-C24	83	82	1	16.2	2.39
SL'-T1-EXC'NBOTTOM-E1	H051-02	6000	C9-C24	126	124	10	17.3	24.2
SL'-T1-EXC'NBOTTOM-E2	H051-03	5800	C9-C24	113	119	10	16.7	24
SL'-T1-EXC'-N-WALL	H051-04	4400	C9-C24	DO	DO	50	11.8	113.5
SL'-T1-EXC'-E-WALL	H051-05	5300	C9-C24	DO	DO	50	13.9	116
SL'-T1-EXC'-S-WALL	H051-06	14000	C9-C24	DO	105	20	18.4	49
SL'-T1-EXC'-W-WALL	H051-07	3000	C10-C23	DO	DO	50	15.7	118.5
SP2-EAST	H051-10	830	C9-C24	92	82	10	16.0	23.8
SP1-NORTH	H051-11	40	C15-C24	83	100	2	7.7	4.34
SP1-MIDDLE	H051-12	400	C9-C24	104	101	5	8.3	10.9
SP1-SOUTH1	H051-13	2700	C9-C24	88	87	2	11.7	4.54
SP1-SOUTH2	H051-14	79	C14-C24	89	88	2	8.8	4.38
DBLK1S	DSH013SB	ND	NA	84	82	1	NA	2

QC LIMIT: 60-140 55-150

SURR1 : Bromobenzene  
 SURR2 : Hexacosane  
 MDL : Method Detection Limit

CKY QUALITY CONTROL DATA  
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: CKY Environmental Services  
 PROJECT: San Leandro #8808  
 METHOD: EPA M8015  
 MATRIX: SOIL  
 % DISTURE: 11.8

=====

BATCH NO.:	95H051	DATE RECEIVED:	08/09/95
SAMPLE ID:	SL'-T1-EXC'-N-WALL	DATE EXTRACTED:	08/10/95
CONTROL NO.:	H051-04	DATE ANALYZED:	08/16/95

ACCESSION: 95H051

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	MS % REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	MSD % REC	% RPD
DIESEL	4400	283	3600	NA+	283	3900	NA+	NA+

QC LIMIT: 60-140 60-140 40

NOTE: + The QC sample and MS/MSD were analyzed at DF=50 due to high diesel concentration in the sample. No spike recovery was achieved.

CKY QUALITY CONTROL DATA  
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: CKY Environmental Services  
PROJECT: San Leandro #8808  
METHOD: EPA M8015  
MATRIX: SOIL

=====

BATCH NO.:	95H051	DATE RECEIVED:	NA
SAMPLE ID:	LCS1S	DATE EXTRACTED:	08/10/95
CONTROL NO.:	DSH013SL	DATE ANALYZED:	08/16/95

ACCESSION: 95H051

PARAMETER	TRUE VALUE (mg/kg)	FOUND VALUE (mg/kg)	LCS RECOVERY ( % )
----- DIESEL	----- 250	----- 227	----- 91

QC LIMIT: 60-140

EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SL'-T1-EXC'NBOTTOM-W DATE ANALYZED: 08/15/95  
CONTROL NO.: H051-01 MATRIX: SOIL  
% MOISTURE: 16.2 DILUTION FACTOR: 50  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	298
Toluene	ND	298
Ethylbenzene	ND	298
Total Xylenes	ND	895
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	102	60-140

=====  
MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.



EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SL'-T1-EXC'NBOTTOM-E1 DATE ANALYZED: 08/15/95  
CONTROL NO.: H051-02 MATRIX: SOIL  
% MOISTURE: 17.3 DILUTION FACTOR: 50  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	302
Toluene	ND	302
Ethylbenzene	ND	302
Total Xylenes	ND	907

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	86	60-140

=====  
MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:   95H051                      DATE EXTRACTED: NA
SAMPLE ID:   SL'-T1-EXC'NBOTTOM-E2      DATE ANALYZED:  08/15/95
CONTROL NO.: H051-03                     MATRIX:         SOIL
% MOISTURE:  16.7                        DILUTION FACTOR: 50
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	300
Toluene	ND	300
Ethylbenzene	ND	300
Total Xylenes	ND	900

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	102	60-140

MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:  95H051                       DATE EXTRACTED: NA
SAMPLE ID:   SL'-T1-EXC' -N-WALL        DATE ANALYZED:  08/15/95
CONTROL NO.: H051-04                     MATRIX:         SOIL
% MOISTURE:  11.8                         DILUTION FACTOR: 50
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	283
Toluene	ND	283
Ethylbenzene	ND	283
Total Xylenes	ND	850

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	105	60-140

MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.

EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SL'-T1-EXC'-E-WALL DATE ANALYZED: 08/15/95  
CONTROL NO.: H051-05 MATRIX: SOIL  
% MOISTURE: 13.9 DILUTION FACTOR: 1  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.8
Toluene	ND	5.8
Ethylbenzene	ND	5.8
Total Xylenes	ND	17

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	92	60-140

=====  
MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:  95H051                       DATE EXTRACTED: NA
SAMPLE ID:   SL'-T1-EXC'-S-WALL          DATE ANALYZED:  08/15/95
CONTROL NO.: H051-06                     MATRIX:         SOIL
% MOISTURE:  18.4                         DILUTION FACTOR: 50
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	306
Toluene	ND	306
Ethylbenzene	ND	306
Total Xylenes	ND	919

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	66	60-140

MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED:  08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:   08/09/95
BATCH NO.:   95H051                     DATE EXTRACTED:  NA
SAMPLE ID:   SL'-T1-EXC' -W-WALL        DATE ANALYZED:   08/14/95
CONTROL NO.: H051-07                    MATRIX:          SOIL
% MOISTURE:  15.7                       DILUTION FACTOR: 1
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.9
Toluene	ND	5.9
Ethylbenzene	ND	5.9
Total Xylenes	ND	18

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	60-140

=====

MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SP2-EAST DATE ANALYZED: 08/15/95  
CONTROL NO.: H051-10 MATRIX: SOIL  
% MOISTURE: 16.0 DILUTION FACTOR: 50  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	298
Toluene	ND	298
Ethylbenzene	ND	298
Total Xylenes	ND	893

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	119	60-140

=====  
MDL: Method Detection Limit  
Dilution at 50 due to high matrix interference.

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:   95H051                     DATE EXTRACTED: NA
SAMPLE ID:   SP1-NORTH                   DATE ANALYZED:  08/14/95
CONTROL NO.: H051-11                     MATRIX:         SOIL
% MOISTURE:  7.7                         DILUTION FACTOR: 1
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.4
Toluene	ND	5.4
Ethylbenzene	ND	5.4
Total Xylenes	ND	16

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	67	60-140

=====  
MDL: Method Detection Limit



EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SP1-MIDDLE DATE ANALYZED: 08/14/95  
CONTROL NO.: H051-12 MATRIX: SOIL  
% MOISTURE: 8.3 DILUTION FACTOR: 1  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.5
Toluene	ND	5.5
Ethylbenzene	ND	5.5
Total Xylenes	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	100	60-140

=====  
MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:   95H051                     DATE EXTRACTED: NA
SAMPLE ID:   SP1-SOUTH1                 DATE ANALYZED:  08/14/95
CONTROL NO.: H051-13                    MATRIX:         SOIL
% MOISTURE:  11.7                       DILUTION FACTOR: 1
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.7
Toluene	ND	5.7
Ethylbenzene	ND	5.7
Total Xylenes	ND	17

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	83	60-140

MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: 08/08/95  
PROJECT: San Leandro #8808 DATE RECEIVED: 08/09/95  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: SP1-SOUTH2 DATE ANALYZED: 08/14/95  
CONTROL NO.: H051-14 MATRIX: SOIL  
% MOISTURE: 8.8 DILUTION FACTOR: 1  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.5
Toluene	ND	5.5
Ethylbenzene	ND	5.5
Total Xylenes	ND	16

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	60-140

=====  
MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

=====  
CLIENT: CKY Environmental Services DATE COLLECTED: NA  
PROJECT: San Leandro #8808 DATE RECEIVED: NA  
BATCH NO.: 95H051 DATE EXTRACTED: NA  
SAMPLE ID: MBLK1S DATE ANALYZED: 08/15/95  
CONTROL NO.: VAH1407SB MATRIX: SOIL  
% MOISTURE: NA DILUTION FACTOR: 1  
=====

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	60-140

=====  
MDL: Method Detection Limit







JOB # 8808 : PLEASE FAX TAN PHUNG A COPY OF THE "C-O-C"

954051

**CHAIN OF CUSTODY RECORD  
REQUEST FOR ANALYSIS**

CLIENT NAME: CKY Inc. Environmental Services  
ADDRESS: 3480 Torrance Blvd., #100  
Torrance, CA 90503

DATE: 8/8/95  
PAGE 1 OF 1



CKY Incorporated  
Analytical Laboratories  
630 Maple Ave.  
Torrance, Calif. 90503  
Tel: 310-618-8889  
Fax: 310-618-0818

PHONE NO. (310) 792-3728 FAX NO. (310) 792-3726  
PROJECT NAME: SAN LEAND RD - DPCA 05-94-D-0012 / DELIVERY ORDER 0005  
SEND REPORT TO: MICHAEL DEKLOTZ & DAN RICHMOND LANDER

I2

SAMPLER NAME/SIGNATURE				TURN AROUND TIME			ANALYSES REQUIRED														
<u>Michael Deklotz / Michael Deklotz</u>				3 TO 4 DAYS <input checked="" type="checkbox"/>			418.1	M8015 - DIESEL	8010/601	8020/602 - 6 TEX	8080/608	8240/624	8270/625	C&M Metals							
				NORMAL <input type="checkbox"/>											RUSH <input type="checkbox"/>						
SAMPLE NUMBER	SAMPLING DATE/TIME	Am	PRESERVATIVE	CONTAINER SIZE/TYPE	SAMPLE DESCRIPTION																
					WATER	SOIL	OTHER														
1	SL-T1-EXC'N BOTTOM-W	8/8/95	8:30	—	2" X 6" BRASS LINER	X			X	X											
2	SL-T1-EXC'N BOTTOM-E1		8:35	—		X			X	X											
3	SL-T1-EXC'N BOTTOM-E2		8:37	—		X			X	X											
4	SL-T1-EXC'N-N-WALL		8:45	—		X			X	X											
5	SL-T1-EXC'N-E-WALL		8:50	—		X			X	X											
6	SL-T1-EXC'N-S-WALL		8:55	—		X			X	X											
7	SL-T1-EXC'N-W-WALL		9:00	—		X			X	X											
8	PS-1'-N-END		10:30	—		X			X	X	X									HOLD	
9	PS-1'-S-END		10:35	—		X			X	X	X										HOLD
10	SP2-EAST		10:45	—		X			X	X											
11	SP1-NORTH		10:50	—		X			X	X											
12	SP1-MIDDLE		10:55	—		X			X	X											
13	SP1-SOUTH1		11:00	—		X			X	X											
14	SP1-SOUTH2		11:05	—		X			X	X											

COMMENTS: (+ temperature blank)

T = 2°C

Relinquished by: (Signature) <u>Michael Deklotz</u>	Date: <u>8/8/95</u>	Received by: (Signature) <u>MICHAEL DEKLOTZ</u>	Date: <u>8-9-95</u>	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: <u>CKY Inc. Env'l Servs.</u>	Time: <u>7pm</u>	Company: <u>CKY INC.</u>	Time: <u>0930</u>	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.





# CKY incorporated Analytical Laboratories

Date: 08-24-1995  
CKY Batch No.: 95H051A

Attn. Dan Schottlander

CKY Environmental Services  
3480 Torrance Blvd., Suite 100  
Torrance, CA 90503

Subject: Additional Laboratory Report  
Project: San Leandro #8808

-----  
Enclosed is the additional laboratory report for samples received on 08/09/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
PS-1'-N-END	H051-08	Soil	EPA M8015 EPA 8020 EPA 8010
PS-1'-S-END	H051-09	Soil	EPA M8015 EPA 8020 EPA 8010

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

*Kam Pang*  
-----  
Kam Y. Pang, Ph.D.  
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD M8015  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
CLIENT:      CKY Environmental Services          DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808                 DATE RECEIVED:  08/09/95
BATCH NO.:  95H051A                           DATE EXTRACTED: 08/21/95
MATRIX:     SOIL                               DATE ANALYZED:  08/23/95
=====
  
```

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	H-C RANGE	% RECOVERY		DL FACTOR	MDL (mg/kg)
				SURR1	SURR2		
PS-1'-N-END	H051-08	1500	C13-C24	DO	124	5	10
PS-1'-S-END	H051-09	1900	C10-C24	78	111	2	4
MBLK1S	DSH030SB	ND	N.A.	112	103	1	2

```

QC LIMIT:
SURR1    : Bromobenzene          60-140
SURR2    : Hexacosane           55-150
MDL      : Method Detection Limit
  
```

CKY QUALITY CONTROL DATA  
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: CKY Environmental Services  
 PROJECT: San Leandro #8808  
 METHOD: EPA M8015  
 MATRIX: SOIL  
 MOISTURE: 11.3

=====

BATCH NO.:	95H051A	DATE RECEIVED:	NA
SAMPLE ID:	MIR-13-S-272	DATE EXTRACTED:	08/21/95
CONTROL NO.:	H109-01	DATE ANALYZED:	08/23/95

ACCESSION: 95H051 95H105 95H109

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	MS % REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	MSD % REC	% RPD
DIESEL	140	282	420	99	282	400	93	6
QC LIMIT:				60-140			60-140	40

CKY QUALITY CONTROL DATA  
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: CKY Environmental Services  
PROJECT: San Leandro #8808  
METHOD: EPA M8015  
MATRIX: SOIL  
MOISTURE: NA

=====

BATCH NO.:	95H051A	DATE RECEIVED:	NA
SAMPLE ID:	LCS1S	DATE EXTRACTED:	08/21/95
CONTROL NO.:	DSH030SL	DATE ANALYZED:	08/23/95

ACCESSION: 95H051 95H105 95H109

PARAMETER	TRUE VALUE (mg/kg)	FOUND VALUE (mg/kg)	LCS RECOVERY (%)
----- DIESEL	----- 250	----- 229	----- 92
QC LIMIT:			60-140

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:   95H051A                     DATE EXTRACTED: NA
SAMPLE ID:   PS-1'-N-END                 DATE ANALYZED:  08/17/95
CONTROL NO.: H051-08                     MATRIX:         SOIL
% MOISTURE:  NA                           DILUTION FACTOR: 1
=====
```

PARAMETERS	results (ug/kg)	MDL (ug/kg)
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	60-140

MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808           DATE RECEIVED:  08/09/95
BATCH NO.:   95H051A                     DATE EXTRACTED: NA
SAMPLE ID:   PS-1'-S-END                 DATE ANALYZED:  08/17/95
CONTROL NO.: H051-09                     MATRIX:         SOIL
% MOISTURE:  NA                           DILUTION FACTOR: 1
=====
```

PARAMETERS	results (ug/kg)	MDL (ug/kg)
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	7.9	5.0
Total Xylenes	52	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	79	60-140

MDL: Method Detection Limit

EPA METHOD 8020  
BTEX

```
=====
CLIENT:      CKY Environmental Services   DATE COLLECTED:  NA
PROJECT:     San Leandro #8808           DATE RECEIVED:   NA
BATCH NO.:   95H051A                     DATE EXTRACTED:  NA
SAMPLE ID:   MBLK1S                       DATE ANALYZED:   08/16/95
CONTROL NO.: VAH1607B                     MATRIX:          SOIL
% MOISTURE:  NA                           DILUTION FACTOR: 1
=====
```

PARAMETERS	RESULTS (ug/kg)	MDL (ug/kg)
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	110	60-140

MDL: Method Detection Limit







EPA METHOD 8010  
 HALOGENATED VOLATILE ORGANICS

```

=====
CLIENT:      CKY Environmental Services      DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808              DATE RECEIVED:  08/09/95
BATCH NO.:  95H051A                        DATE EXTRACTED: NA
SAMPLE ID:   PS-1'-N-END                    DATE ANALYZED:  08/16/95
CONTROL NO.: H051-08                        MATRIX:         SOIL
% MOISTURE:  NA                              DILUTION FACTOR: 1
=====
  
```

PARAMETERS	results (ug/kg)	MDL (ug/kg)
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	25
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Dibromomethane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethyl vinylether	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Dibromochloromethane	ND	5.0
Ethylene Dibromide	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorotoluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Benzylchloride	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	82	60-140

MDL: Method Detection Limit  
 Analyzed by GC/MS

EPA METHOD 8010  
HALOGENATED VOLATILE ORGANICS

```

=====
CLIENT:      CKY Environmental Services      DATE COLLECTED: 08/08/95
PROJECT:     San Leandro #8808              DATE RECEIVED:  08/09/95
BATCH NO.:  95H051A                        DATE EXTRACTED: NA
SAMPLE ID:   PS-1'-S-END                    DATE ANALYZED:  08/16/95
CONTROL NO.: H051-09                        MATRIX:         SOIL
% MOISTURE:  NA                              DILUTION FACTOR: 1
=====
  
```

PARAMETERS	results (ug/kg)	MDL (ug/kg)
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	25
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Dibromomethane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethyl vinylether	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Dibromochloromethane	ND	5.0
Ethylene Dibromide	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorotoluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Benzylchloride	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	60-140

MDL: Method Detection Limit  
Analyzed by GC/MS

EPA METHOD 8010  
 HALOGENATED VOLATILE ORGANICS

```

=====
CLIENT:      CKY Environmental Services   DATE COLLECTED:  NA
PROJECT:     San Leandro #8808          DATE RECEIVED:   NA
BATCH NO.:   95H051A                   DATE EXTRACTED:  NA
SAMPLE ID:   MBLK1S                     DATE ANALYZED:   08/16/95
CONTROL NO.: VOH1803B                   MATRIX:          SOIL
% MOISTURE:  NA                          DILUTION FACTOR: 1
=====
  
```

PARAMETERS	results (ug/kg)	MDL (ug/kg)
Dichlorodifluoromethane	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	25
cis-1,2-Dichloroethene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Dibromomethane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethyl vinylether	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Dibromochloromethane	ND	5.0
Ethylene Dibromide	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
Chlorotoluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Benzylchloride	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	98	60-140

MDL: Method Detection Limit  
 Analyzed by GC/MS



CKY QUALITY CONTROL DATA  
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: CKY Environmental Services  
PROJECT: San Leandro #8808  
METHOD: EPA 8010  
MATRIX: SOIL

=====

BATCH NO.:	95H051A	DATE RECEIVED:	NA
SAMPLE ID:	LCS1S	DATE EXTRACTED:	NA
CONTROL NO.:	VOH1903L	DATE ANALYZED:	08/16/95

ACCESSION: 95H051 95H076

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY ( % )
-----	-----	-----	-----
Benzene	20.00	15.43	77
Toluene	20.00	16.21	81
1,1-DCE	20.00	17.01	85
TCE	20.00	15.70	79
Chlorobenzene	20.00	16.40	82

QC LIMIT:

1,1-DCE	59-172
Benzene	66-142
TCE	62-137
Toluene	59-139
Chlorobenzene	60-133

RELEASED!

ANALYSIS REQUEST FORM

CLIENT NAME: CKY-E

CKY CONTROL NO.: 954051

REQUESTED BY: M. Deklotz

DATE: 8-16-95

LOGGED BY: C. Chaver

CKY CONTROL NO.

CLIENT SAMPLE ID

COMMENTS

954051-8

954051-9

Diesel / 8010 / 8020

Diesel / 8010 / 8020

TAT - 4 days -

ln 8/16

du 8/16

**APPENDIX B**  
**WASTE MANIFESTS AND DISPOSAL CERTIFICATES**



**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. **CAC001011840** Manifest Document No. **9121204**

2. Page 1 of 1 Information in the checked areas is not required by Federal law.

3. Generator's Name and Mailing Address  
**ARMY CORP OF ENGINEERS  
P.O. Box 935  
WEST SACRAMENTO CA 95661**

**SITE ADDRESS:  
17930 LAKE CHABOT RD  
CASINO VALLEY CA 94546**

A. State Manifest Document Number: **95592204**

4. Generator's Phone (916) **686-6154**

6. US EPA ID Number  
**KAD1009466392**

B. State Generator's ID

5. Transporter 1 Company Name  
**ERICKSON INC**

8. US EPA ID Number

C. State Transporter's ID  
**616238**

7. Transporter 2 Company Name

10. US EPA ID Number

D. Transporter's Phone  
**510 235-1393**

E. State Transporter's ID

9. Designated Facility Name and Site Address  
**ERICKSON, Inc.  
255 Parr Blvd.  
Richmond, CA. 94801**

12. US EPA ID Number  
**CAD1009466392**

G. State Facility's ID  
**CAD1009466392**

H. Facility's Phone  
**(510) 235-1393**

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

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

15. Waste Number

"NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank."

0001 T,P

06000

P

State 12

EPA/Other

b.

State

EPA/Other

c.

State

EPA/Other

d.

State

EPA/Other

15. Special Handling Instructions and Additional Information  
Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name: **MARK HOLLICKS Phone 916-686-6154**  
**NIKE BATTERY #31, 17930 LAKE CHABOT RD,**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this manifest 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 use often.

Printed/Typed Name  
**Randy Rogers, for USACE**

Signature  
**Randy Rogers, for USACE**

Month Day Year  
**08 | 03 | 95**

17. Transporter 1 Acknowledgment of Receipt of Manifest  
Printed/Typed Name  
**PAUL JACOBO**

Signature  
**Paul Jacobo**

Month Day Year  
**08 | 03 | 95**

18. Transporter 2 Acknowledgment of Receipt of Manifest  
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 STU**

Signature  
**DAVID STU**

Month Day Year  
**08 | 03 | 95**

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802, WITHIN CALIFORNIA, CALL 1-800-852-7530

# CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 17503
CUSTOMER
REMEDIAL CONST
JOB NO.
966313

FOR: ERICKSON, INC. TANK NO. 16240

LOCATION: RICHMOND DATE: 95/08/07 TIME: 10:10

TEST METHOD VISUAL GASTECH/1314 SMPN LAST PRODUCT D

This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

TANK SIZE 6000 GALLON TANK CONDITION SAFE FOR FIRE

REMARKS: OXYGEN 20.9% LOWER EXPLOSIVE LIMIT LESS THAN 1%  
~~ERICKSON, INC. HEREBY CERTIFIES THAT THE ABOVE NUMBERED TANK HAS BEEN~~  
~~CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED HAZARDOUS~~  
~~WASTE FACILITY.~~  
~~ERICKSON, INC. HAS THE APPROPRIATE PERMITS FOR, AND HAS ACCEPTED THE TANK~~  
~~SHIPPED TO US FOR PROCESSING.~~

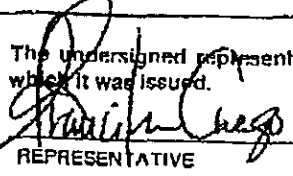
In the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

## STANDARD SAFETY DESIGNATION

**SAFE FOR MEN:** Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissible concentrations; and (c) In the judgment of the Inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Inspector's certificate.

**SAFE FOR FIRE:** Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the Inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the Inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

  
 REPRESENTATIVE

TITLE

  
 INSPECTOR

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. CAC001011842 Manifest Document No. 01517210 2. Page 1 of 1 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address  
 Army Corp. of Engineers  
 P.O. Box 935  
 West Sacramento, CA 95961  
 4. Generator's Phone (916) 686-6154

A. State Manifest Document Number  
95205720  
 B. State Generator's ID  
1111111111111111

5. Transporter 1 Company Name  
 Erickson, Inc.  
 6. US EPA ID Number  
CAD0009466392  
 7. Transporter 2 Company Name  
 8. US EPA ID Number

C. State Transporter's ID  
616586  
 D. Transporter's Phone  
510-235-1393  
 E. State Transporter's ID

9. Designated Facility Name and Site Address  
 Gibson Oil/Pilot Petroleum  
 475 Sea Port Blvd.  
 Redwood City, CA. 94063  
 10. US EPA ID Number  
CAD043260702

F. Transporter's Phone  
415-368-5511  
 G. State Facility's ID  
CAD043260702  
 H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)  
 a. RQ Hazardous Waste Liquids NOS (Benzene)  
 9 NA 3082, PG III D018 ERG #31

12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Waste Number
0101	TT	4950	G

b.  
 c.  
 d.

J. Additional Descriptions for Materials Listed Above  
 Hydrocarbon Mixture With Water (99% Water, 1% Hydrocarbons)

K. Handling Codes for Wastes Listed Above  
 a. 01  
 b.  
 c.  
 d.

15. Special Handling Instructions and Additional Information  
 Gibson Oil Waste Stream Profile # 17926 ERG 31 24 Hr.  
 Contact Mark Hallock 24 Hr. Phone# (916) 686-6154  
NIKE 17930 LAKE CHABOT RD CASTRO VALLEY. NIKE BATTERY 31

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: RANDY ROGERS FOR USACE Signature: Randy Rogers For USACE Month: 08 Day: 02 Year: 95

17. Transporter 1 Acknowledgement of Receipt of Materials  
 Printed/Typed Name: Robert Noie Signature: Robert Noie Month: 08 Day: 02 Year: 95

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: DONALD J. ALBEDO Signature: [Signature] Month: 08 Day: 04 Year: 95

DO NOT WRITE BELOW THIS LINE.

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

# Environmental

475 SEAPORT BOULEVARD  
 REDWOOD CITY, CA 94063  
 (415) 368-5511

ORIGIN: **ARMY CORPS. OF  
 ENGINEERS**

DESTINATION: GIBSON ENVIRONMENTAL  
 475 SEAPORT BOULEVARD  
 REDWOOD CITY, CA 94063

WEIGHT TAG NUMBER  
 DATE **8/4/95**  
 MANIFEST# **95205720**  
 INVOICE TO:

25330

CARRIER #	CARRIER	RELEASE#	COMMODITY	TDS	PH	GRAV.	PRICE:	NET GALLONS/BBLs
1024 3E43	ERICKSON	17926	WW	40	8.8	10	4950	117.86
ARRIVED TO UNLOAD 9:10 <sup>AM</sup> PM		START TO UNLOAD 9:55 <sup>AM</sup> PM		FINISH UNLOADING 10:10 <sup>AM</sup> PM			SOLIDS %	<1
LOADED FROM VT			UNLOADED TO 30719			WASHOUT GALLONS		
LOADER'S SIGNATURE <i>[Signature]</i>			DRIVER'S SIGNATURE <i>Steve Al...</i>			DEDUCT B S & W %	799	
REMARKS <del>XXXXXX</del> <del>XXXXXX</del> Flash point Deg F <u>7140</u> Hot Wire <u>NEG</u>						NET BARRELS		
							RECEIPT TICKET	
							<b>R</b> 6844	111264

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. **CAC00101184043913** Manifest Document No. **1 of 1**

2. Page 1  
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address  
**ARMY CORPS OF ENGINEERS**  
**P.O. BOX 935**  
**WEST SACRAMENTO, CA 95961**

A. State Manifest Document Number  
**9324391**

4. Generator's Phone (916) **686-6154**

5. Transporter 1 Company Name **ERICKSON, INC** 6. US EPA ID Number **CAD009466392**

C. State Transporter ID Number  
**616600**

7. Transporter 2 Company Name \_\_\_\_\_ 8. US EPA ID Number \_\_\_\_\_

E. State Transporter ID Number  
**(510) 235-1373**

9. Designated Facility Name and Site Address  
**Non-RCRA PRC PATTERSON INC**  
**1331 N. HWY 33**  
**PATERSON, CA 95365** 10. US EPA ID Number **CAD083166728**

G. State Facility ID Number  
 H. Facility Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Hazardous Waste Number
	No.	Type			
a. <b>NON RCRA HAZARDOUS WASTE LIQUID (OIL, WATER)</b>	<b>001</b>	<b>TT</b>	<b>00400</b>	<b>G</b>	<b>223</b>
b.					
c.					
d.					

I. State  
 EPA/City  
 State  
 EPA/City  
 State  
 EPA/City

**Hydrocarbon mixture (99% water)**  
**(20% Hydrocarbons)**

K. Handling Codes for Wastes Listed Above  
 a. \_\_\_\_\_ b. \_\_\_\_\_  
 c. \_\_\_\_\_ d. \_\_\_\_\_

15. Special Handling Instructions and Additional Information  
**11a) ERG 31**  
**24 HOUR PHONE: MARK HALLOCK, (916) 686-6154**  
**NIKE BATTERY 31-17930 LAKE CHARLOT ROAD, CASTRO VALLEY, CA.**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the 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 federal, state and international laws.

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 **Michael DeKlotz for U.S.A.C.E.** Signature **Michael DeKlotz for U.S.A.C.E.** Month **08** Day **16** Year **9**

17. Transporter 1 Acknowledgement of Receipt of Materials  
 Printed/Typed Name **Robert Nola** Signature **Robert Nola** Month **08** Day **16** Year **9**

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.

93243913  
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7350  
 GENERATOR  
 TRANSPORTER  
 FACILITY



# ENVIROPUR WEST CORPORATION

13331 NO. HIGHWAY #33  
PATTERSON, CA 95363  
(209) 892-6742 (800) 874 4444  
FAX# (209) 892 2248

PAGE NO	INVOICE NO	APPLY TO	INVOICE DATE	CUST. NO
1	A2261	A2261	08/17/95	REMC0
<b>INVOICE</b>				WORK ORDER NO. B.O.

209-537-8196 IRENE  
REMEDIAL CONSTRUCTORS INC  
5030 SHILOH ROAD  
MODESTO, CA 95358

US ARMY CORP OF ENGINEERS

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DATE SHIPPED	PURCHASE ORDER NO.	SHIP VIA	F.O.B.	TERMS			
08/16/95		Enviropur West		NET 30			
BUYER	DATE REQUESTED	LOCATION	SALESPERSON	TERRITORY			
	08/16/95	10000	JERRY SONDRÉE	ENVIRONMENTAL			
ITEM NO.	DESCRIPTION	QUANTITY ORDERED	QUANTITY BACK ORD.	QUANTITY SHIPPED	UNIT PRICE	EXTENSION	TAX
	NON RCRA HAZARDOUS WASTE LIQUID	540		540			
	LAB FEE	1		1			

RT#21104, #160127, MANIFEST#93243913

653-30-9505 = 135.00

657-30-9505 = 30.00

REMIT TO  
Enviropur West Corp c/o  
Oxford Capital Corp.  
P.O.Box 5921  
Dept. #1139  
Carol Stream, IL 60197-5921

PLEASE PAY FROM THIS INVOICE  
A service fee of 1 1/2 percent per month shall be charged on all past due accounts.  
In event this account becomes delinquent and it is necessary to institute legal proceedings, purchaser agrees to pay  
able attorney's fees and court costs.

SUBTOTAL

165.00

THANK YOU!

*DKL/208.23-95*

11/11  
A2261

PLEASE REMIT  
THIS AMOUNT

ORIGINAL



**JOB ACCEPTANCE NO.**

**CMM 4456**

**GENERATOR**  
U.S. ARMY CORP OF ENGINEERING  
**MAILING ADDRESS**  
9021 JEFFERSON BLVD  
CITY, STATE, ZIP  
WEST SACRAMENTO, CA 95691  
**PHONE**  
916-373-1617  
**CONTACT PERSON**  
ANDY ROGERS For USACE  
**SIGNATURE OF AUTHORIZED AGENT / TITLE** | **DATE**  
\*Andy Rogers For USACE | 8-21-95

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

**SPECIAL HANDLING PROCEDURES:**

**WASTE TYPE**

<input type="checkbox"/> TREATMENT SOIL	<input type="checkbox"/> SLUDGE
<input type="checkbox"/> DISPOSAL SOIL	<input type="checkbox"/> NON-FRIABLE ASBESTOS
<input type="checkbox"/> CONSTRUCTION SOIL	<input type="checkbox"/> WOOD
	<input type="checkbox"/> ASH
	<input type="checkbox"/> OTHER

**RECEIVING FACILITY**

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

**GENERATING FACILITY**  
NIKE BATTERY # 31  
LAKE CHABOT PARK  
SAN LEANDRO, CA

**NAME**  
WILSON & SONS TRUCKING, INC.  
**ADDRESS**  
390 RIDER CREEK ROAD  
CITY, STATE, ZIP  
SACRAMENTO, CA 95828  
**PHONE**  
(916) 281-2804  
**SIGNATURE OF AUTHORIZED AGENT OR DRIVER** | **DATE**  
\* [Signature] | 8-21-95

**NOTES:**  
3111636  
10K3215

**TRUCK NUMBER**  
M-25

<b>END DUMP</b> <input type="checkbox"/>	<b>BOTTOM DUMP</b> <input type="checkbox"/>	<b>TRANSFER</b> <input checked="" type="checkbox"/>
<b>ROLL-OFF(S)</b> <input type="checkbox"/>	<b>FLAT-BED</b> <input type="checkbox"/>	<b>VAN</b> <input type="checkbox"/>
		<b>DRUMS</b> <input type="checkbox"/>

**FORWARD INC. LANDFILL**

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

**REMARKS**

**FACILITY TICKET NUMBER**

**SIGNATURE OF AUTHORIZED AGENT** | **DATE**  
\* [Signature]

**CUBIC YARDS**  
13 YARDS

	DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)				
	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
<input type="checkbox"/> SOIL					
<input type="checkbox"/> SLUDGE					
<input type="checkbox"/> NON-FRIABLE ASBESTOS					
<input type="checkbox"/> WOOD					
<input type="checkbox"/> ASH					
<input type="checkbox"/> OTHER					



JOB ACCEPTANCE NO.

**CMM-4456**

TO BE COMPLETED BY THE GENERATOR

**GENERATOR**  
 U.S. ARMY CORP OF ENGINEERING  
**MAILING ADDRESS**  
 2021 JEFFERSON BLVD  
 CITY, STATE, ZIP  
 WEST SACRAMENTO, CA 95691  
**PHONE**  
 916-373-1617  
**CONTACT PERSON**  
 RANDY EGGLE'S  
**SIGNATURE OF AUTHORIZED AGENT / TITLE** **DATE**  
 \* *Randy Eggle's For USACE* 8-21-95

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

**SPECIAL HANDLING PROCEDURES:**

**WASTE TYPE**  
 TREATMENT SOIL  SLUDGE  
 DISPOSAL SOIL  NON-FRIABLE ASBESTOS  
 CONSTRUCTION SOIL  WOOD  
 ASH  
 OTHER

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

**GENERATING FACILITY**  
 NIKE BATTERY # 01  
 LAKE CHARLOTTE PARK  
 SAN LEANDRO, CA

**NAME**  
 HANLEY & SONS TRUCKING, INC.  
**ADDRESS**  
 2906 ELDER CREEK ROAD  
 CITY, STATE, ZIP  
 SACRAMENTO, CA 95820  
**PHONE**  
 916-331-3364  
**SIGNATURE OF AUTHORIZED AGENT OR DRIVER** **DATE**  
 \* *[Signature]* 8-21-95

**NOTES:**  
 3573654  
 10/21/95

**TRUCK NUMBER**  
 M-16

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

**FORWARD INC. LANDFILL**

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

**REMARKS**

**FACILITY TICKET NUMBER**

**SIGNATURE OF AUTHORIZED AGENT** **DATE**  
 \* *[Signature]*

**CUBIC YARDS**  
 18 YARDS

	DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)				
	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
<input type="checkbox"/> SOIL					
<input type="checkbox"/> SLUDGE					
<input type="checkbox"/> NON-FRIABLE ASBESTOS					
<input type="checkbox"/> WOOD					
<input type="checkbox"/> ASH					
<input type="checkbox"/> OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 P.M. THE DAY BEFORE DELIVERY TO THE LANDFILL. \* ALL UNSCHEDULED LOADS ARE SUBJECT TO REJECTION FOR A FURTHER SCHEDULING DATE. DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

MANIFEST # **52506**





**JOB ACCEPTANCE NO.**

**CMM-4456**

WASTE COMPLETED BY GENERATOR

**GENERATOR**  
 US ARMY CORP OF ENGINEERING  
**MAILING ADDRESS**  
 2021 JEFFERSON BLVD  
 CITY, STATE, ZIP  
 WEST SACRAMENTO, CA 95691  
**PHONE**  
 916-373-1617  
**CONTACT PERSON**  
 RANDY ROGERS  
**SIGNATURE OF AUTHORIZED AGENT / TITLE** | **DATE**  
 \* *Randy Rogers, For USACE* | 8-21-95

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

**SPECIAL HANDLING PROCEDURES:**

**WASTE TYPE**

<input type="checkbox"/> TREATMENT SOIL	<input type="checkbox"/> SLUDGE
<input type="checkbox"/> DISPOSAL SOIL	<input type="checkbox"/> NON-FRIABLE ASBESTOS
<input type="checkbox"/> CONSTRUCTION SOIL	<input type="checkbox"/> WOOD
	<input type="checkbox"/> ASH
	<input type="checkbox"/> OTHER

**RECEIVING FACILITY**

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

**GENERATING FACILITY**  
 NIKE BATTERY # 31  
 LAKE CHABOT PARK  
 SAN LEANDRO, CA

**NAME**  
 HANLEY & SONS TRUCKING, INC  
**ADDRESS**  
 3396 ELLER CREEK ROAD  
 CITY, STATE, ZIP  
 SACRAMENTO, CA 95825  
**PHONE**  
 (916) 381-6304  
**SIGNATURE OF AUTHORIZED AGENT OR DRIVER** | **DATE**  
 \* *[Signature]* | 8-21-95

**NOTES:**

**TRUCK NUMBER**  
 M 17

<b>END DUMP</b> <input type="checkbox"/>	<b>BOTTOM DUMP</b> <input type="checkbox"/>	<b>TRANSFER</b> <input checked="" type="checkbox"/>
<b>ROLL-OFF(S)</b> <input type="checkbox"/>	<b>FLAT-BED</b> <input type="checkbox"/>	<b>VAN</b> <input type="checkbox"/>
		<b>DRUMS</b> <input type="checkbox"/>

**FORWARD INC. LANDFILL**

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

**REMARKS**

**FACILITY TICKET NUMBER**

**SIGNATURE OF AUTHORIZED AGENT** | **DATE**  
 \* *[Signature]* |

**CUBIC YARDS**  
 18 YARDS

	<b>DISPOSAL METHOD: (TO BE COMPLETED BY FORWARD)</b>				
	DISPOSE	BIO	AERATE	STOCKPILE	OTHER
<input type="checkbox"/> SOIL					
<input type="checkbox"/> SLUDGE					
<input type="checkbox"/> NON-FRIABLE ASBESTOS					
<input type="checkbox"/> WOOD					
<input type="checkbox"/> ASH					
<input type="checkbox"/> OTHER					

SCHEDULING MUST BE MADE PRIOR TO 4:00 PM THE DAY BEFORE THE WASTE IS TO BE DELIVERED TO THE FACILITY. ANY UNSCHEDULED LOADS ARE SUBJECT TO REJECTION UPON ARRIVAL. SCHEDULING MUST BE MADE WITH THE DISPOSER THE DAY BEFORE. TO SCHEDULE CALL (209) 982-4298

**MANIFEST # 52507**

ORDER NO. 4456 TRUCK NO. M-25 BIN NO. \_\_\_\_\_

BILL TO: Remedial  
Tractor - 541436  
Tractor - 14k345 COMM-4456

SIZE YCS.	DESCRIPTION	\$ PER YD.	\$ AMOUNT	NOTES
	<input type="checkbox"/> REFUSE			G-Panel B  73800-6 31,200-7  net 42,600
	<input type="checkbox"/> TREATED WOOD			
	<input type="checkbox"/> SLUDGE			
	<input type="checkbox"/> ASH			
	<input type="checkbox"/> ASBESTOS			
	<input type="checkbox"/> NON-FRIABLE ASBESTOS			
	<input type="checkbox"/> I SOIL			
	<input type="checkbox"/> II SOIL			
	<input type="checkbox"/> AERATION SOIL			
	<input type="checkbox"/> A/B SOIL			
	<input type="checkbox"/> B/D SOIL			
	<input type="checkbox"/> CONSTRUCTION SOIL			
	<b>TOTAL</b>			

Signed: [Signature] IN 9:36 AM

STE MANIFEST  
 SPECIAL FACILITY  
 RESPIRATOR  HARD HAT   
 LANDFILL  
 AUSTIN ROAD  
 CALIFORNIA 95336  
 (209) 982-4298 PHONE  
 (209) 982-1009 FAX

100957  
 recycled paper

TOI  
 THIS PORTION  
 SHOULD BE COMPLETED

RECEIVING FACILITY  
 LAKE BATTERY # 31  
 LAKE CHARLOT PARK  
 SAN LEANDRO, CA  
 DATE: 6-2-95  
 SIGNATURE OF AUTHORIZED AGENT OR DRIVER: [Signature] DATE: 6-2-95

END DUMP  EGT DUMP  TRANSFER   
 SOIL OFFS  CEPTED  MAN  DMS   
501636 M-25  
14K345

**FORWARD INC. LANDFILL**  
 Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions, Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.  
 REMARKS:  
 FACILITY TICKET NUMBERS:  
 SIGNATURE OF AUTHORIZED AGENT OR DRIVER: [Signature] DATE: 6-2-95

DISPOSABLES: 18 YARDS

DISPOSAL METHOD TO BE COMPLETED BY FORWARD				
DISPOSER	EQ	APERTS	STOCK	OTHER
<input checked="" type="checkbox"/> SOIL				
<input checked="" type="checkbox"/> SLUDGE				
<input checked="" type="checkbox"/> NON-FRIABLE ASBESTOS				
<input checked="" type="checkbox"/> WOOD				
<input checked="" type="checkbox"/> ASH				
<input checked="" type="checkbox"/> OTHER				

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

MANIFEST # **52505**

CUSTOMER NO. 4456

TRUCK NO. M-16

BBN NO.

BILL TO:

*Remedial*  
Tractor - 3573654  
Trailer - 1UW5821 *CM4456*

SIZE YDS.	DESCRIPTION	\$ PER YD.	\$ AMOUNT	NOTES
	<input type="checkbox"/> REFUSE			G Panel B 40,060 - 6 30,985 + net 49,080
	<input type="checkbox"/> TREATED WOOD			
	<input type="checkbox"/> SLUDGE			
	<input type="checkbox"/> ASH			
	<input type="checkbox"/> ASBESTOS			
	<input type="checkbox"/> NON-FRIABLE ASBESTOS			
	<input type="checkbox"/> I SOIL			
	<input type="checkbox"/> II SOIL			
	<input type="checkbox"/> AERATION SOIL			
	<input type="checkbox"/> AB SOIL			
18	<input type="checkbox"/> BIO. SOIL			
	<input type="checkbox"/> DESTRUCTION SOIL			
	TOTAL			

Signed

*[Signature]*

IN 10:26 AM

LANDFILL  
AUSTIN ROAD  
FORNIA 95336  
298 PHONE

(209) 982-1009 FAX

GENERAL INQUIRY  
LAKES BATTERY  
LAKE CHABOT PARK  
SAN LEANDRO, CA

NAME  
ADDRESS  
CITY STATE ZIP  
PHONE

NOTES  
3573654  
1UW5821  
M-16

SIGNATURE OF AUTHORIZED AGENT OR DRIVER  
DATE

PROBLEMS  
SOIL  
SLUDGE  
NON-FRIABLE ASBESTOS  
WOOD  
ASH  
OTHER

**FORWARD INC. LANDFILL**

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

CUBIC YARDS  
18 YARDS

DISPOSABLE	DISPOSED	ASBATE	WOOD	OTHER
<input checked="" type="checkbox"/> SOIL				
<input checked="" type="checkbox"/> SLUDGE				
<input checked="" type="checkbox"/> NON-FRIABLE ASBESTOS				
<input checked="" type="checkbox"/> WOOD				
<input checked="" type="checkbox"/> ASH				
<input checked="" type="checkbox"/> OTHER				

REMARKS

AGENCY TICKET NUMBER

SIGNATURE OF AUTHORIZED AGENT  
DATE

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

MANIFEST # 52506

SALES COPY

100959 7-54  
recycled paper

CUSTOMER NO. 4456 TRUCK NO. M-17 BIN NO. \_\_\_\_\_

BILL TO: *Remedial*  
 Tractor - UP00062  
 Trailer ND9068 CMTR 4456

SIZE YDS.	DESCRIPTION	\$ PER YD.	\$ AMOUNT	NOTES
	<input type="checkbox"/> REFUSE			<i>G-Panel B</i>  <i>70,700 G</i> <i>29,800 T</i>  <i>Net 40,900</i>
	<input type="checkbox"/> TREATED WOOD			
	<input type="checkbox"/> SLUDGE			
	<input type="checkbox"/> ASH			
	<input type="checkbox"/> ASBESTOS			
	<input type="checkbox"/> NON-FRIABLE ASBESTOS			
	<input type="checkbox"/> I SOIL			
	<input type="checkbox"/> II SOIL			
	<input type="checkbox"/> AERATION SOIL			
	<input type="checkbox"/> A/B SOIL			
	<input type="checkbox"/> B/C SOIL			
	<input type="checkbox"/> CONSTRUCTION SOIL			
<i>16</i>				
	TOTAL			

Signed *John V...*

IN 10:56 AM PM

SPINAL FACILITY  
 RESPIRATOR  HARD HAT   
 LANDFILL  
 JUSTIN ROAD  
 ORNIA 95336

100960  
 recycled paper

GENERATING FACILITY  
 NIKE BATTERY # 31  
 LAKE CHABOT PARK  
 SAN LEANDRO, CA

(209) 982-4298 PHONE  
 (209) 982-1009 FAX

MANIFEST COMPLETER  
 NAME: WASTE RECOVERY TRUCKING, INC.  
 ADDRESS: 336 RIDEN GREEN ROAD  
SACRAMENTO, CA 95825  
 PHONE: 916-481-8864

NOTES: UP00062  
ND9068  
 TENDUMP  BOTTOM DUMP  TRAILERS   
 ROLL OFFS  FLUIDS  LIQUIDS  SOLIDS

SIGNATURE OF AUTHORIZED AGENT OR DRIVER: *[Signature]* DATE: 8-21-95

**FORWARD INC. LANDFILL**  
 Forward shall have no obligation to accept the waste if weather or other conditions impair the safe and effective disposal of the waste or if the waste impairs the safe and effective operation of the Landfill. Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason. If Forward's refusal to accept the waste is based on weather or other site conditions Forward shall notify the Disposer when site conditions are expected to change such that Forward will be able to accept the waste.  
 REMARKS:  
 FACILITY TICKET NUMBER:  
 SIGNATURE OF AUTHORIZED AGENT: *[Signature]* DATE: 8-21-95

SUBJECT YARDS: 18 YARDS

DISPOSAL METHOD TO BE COMPLETED BY FORWARD

	DISPOSE	SEPARATE	STORE	OTHER
<input type="checkbox"/> SOIL				
<input type="checkbox"/> SLUDGE				
<input type="checkbox"/> NON-FRIABLE ASBESTOS				
<input type="checkbox"/> WOOD				
<input type="checkbox"/> ASH				
<input type="checkbox"/> OTHER				

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

MANIFEST # **52507**

**APPENDIX C  
PERMITS**

ALAMEDA COUNTY HEALTH AGENCY  
CARE SERVICES

Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist



DIVISION OF ENVIRONMENTAL PROTECTION  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502  
(510) 567-6783 • Fax (510) 337-9335





6. Contractor REMEDIATION CONSTRUCTORS  
Address 8627 DIAMOND OAK WAY  
City EIK GROVE Phone (916) 686-6154  
License Type\* CLASS A + HAZ WASTE ID# 645468

\*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.

7. Consultant (if applicable) \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_ Phone \_\_\_\_\_

8. Main Contact Person for Investigation (if applicable)  
Name William Cameron Title Res. Engineer  
Company U.S. ARMY Corps of Engineers  
Phone (916) 373-1617

9. Number of underground tanks being closed with this plan ONE  
Length of piping being removed under this plan 25'

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

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 ERICKSON, INC EPA I.D. No. CAD009466392  
Hauler License No. 0019 License Exp. Date 5-31-96  
Address 255 PARK BLVD  
City Richmond State CA Zip 94801

b) Product/Residual Sludge/Rinsate Disposal Site  
Name Gibson Environmental EPA ID# CAD643260702  
Address 475 SEAPORT BLVD  
City Redwood City State CA Zip 94063



c) Tank and Piping Transporter

Name ERICKSON, INC EPA I.D. No. CA0009466392  
Hauler License No. 0019 License Exp. Date 5-31-96  
Address 255 PARR Blvd  
City RICHMOND state CA zip 94801

d) Tank and Piping Disposal Site

Name ERICKSON, INC EPA I.D. No. CA0009466392  
Address 255 PARR Blvd  
City RICHMOND State CA zip 94801

11. Sample Collector

Name \_\_\_\_\_  
Company CKY INC. ENVIRONMENTAL SERVICES  
Address 3480 TORRANCE Blvd Suite 100  
City TORRENCE State CA zip 90503 Phone 310-792-3738

12. Laboratory

Name CKY INC ENVIRONMENTAL SERVICES  
Address 3480 TORRANCE Blvd Suite 100  
City TORRENCE state CA zip 90503  
State Certification No. \_\_\_\_\_

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

If yes, describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

The TANK will be inerted by using at least 20 lbs of dry ice per 1,000 gallons of TANK volume

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

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

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

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
6,000 gallon	Diesel TANK FOR SUPPLYING FUEL FOR EMERGENCY GENERATOR LAST USED 1980	Soil  Soil	Pipeline - EVERY 20 FEET  TANK - 2 SAMPLES UNDER EACH END, 1 FROM EACH SIDE WALL - 2 FEET INTO NATIVE SOIL

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) 82 cubic YARDS	Sampling Plan Composite sample (4:1) for every 50 cubic yards of excavated soil for initial characterization or background aeration, only. On-site disposal/reuse requires one discrete sample per 20 yds <sup>3</sup>
--	---

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 Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.

16. Chemical methods and associated detection limits to be used for analyzing samples:  
 The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.  
 See attached Table 2.

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

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
Diesel	3550	TPH - Diesel MDA 8015/GC-FID	10 ppm
<del>Volatiles</del>		<del>8010</del>	
BTEX		8020	0.005 ppm

18. Submit Worker's Compensation Certificate copy

Name of Insurer State Fund

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

20. Enclose Deposit (See Instructions)

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

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

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

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

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

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

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

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

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

CONTRACTOR INFORMATION

Name of Business Remedial Constructors, Inc

Name of Individual Thomas J. Dougherty

Signature Thomas J. Dougherty Date 07/08/95

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business U.S. Army Corps of Engineers

Name of Individual Contract Number included with Plans

Signature \_\_\_\_\_ Date \_\_\_\_\_

**ALAMEDA COUNTY ENVIRONMENTAL PROTECTION DIVISION**

**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)

NIKE Battery 31 US Army Corps of Engineers  
Name of Site

Chabot Lake Rd  
Street Address

SAN LEANDRO, CA  
City, State & Zip Code

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

Remedial Constructors, Inc  
Name

8627 DIAMOND OAK WAY  
Street Address

EIK Grove, CA 95624  
City, State & Zip Code

Thomas J. Dougherty  
Signature of Payor

07/05/95  
Date

Thomas J. Dougherty  
Name of Payor  
(PLEASE PRINT CLEARLY)

Remedial Constructors, Inc  
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

## 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.

NOTE: These requirements are part of the Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19. PLOT PLAN

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

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

20. DEPOSIT

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

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

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

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





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
$\leq 10$ ppm (42%)	$\leq 10$ ppm (10%)
$\leq 5$ ppm (19%)	$\leq 5$ ppm (21%)
$\leq 1$ ppm (35%)	$\leq 1$ 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.

- 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.
- 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.

- REPORTING LIMITS FOR TPH are: gasoline standard  $\leq 20$  carbon atoms, diesel and jet fuel (kerosene) standard  $\leq 50$  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.

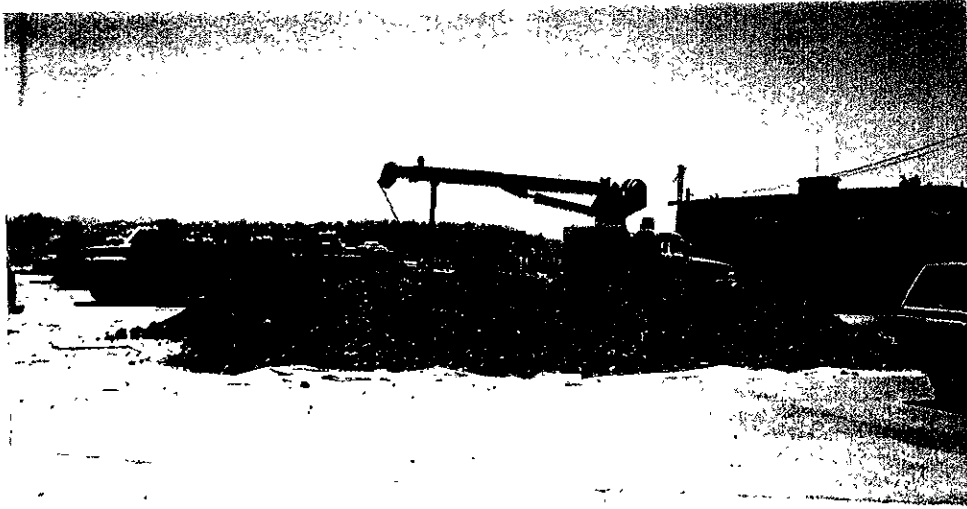
**APPENDIX D  
PROGRESS PHOTOGRAPHS**



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Launcher Area, Nike Battery 31, San Leandro  
Exposing 6,000-Gallon UST for Removal  
August 3, 1995, 11:40 AM, Looking West  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 1



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Launcher Area, Nike Battery 31, San Leandro  
Removing 6,000-Gallon UST  
August 3, 1995, 12:35 PM, Looking South  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 2



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Launcher Area, Nike Battery 31, San Leandro  
Stockpiled Soil  
August 8, 1995, 12:00 PM, Looking East  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 3



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Facilities Area, Nike Battery 31, San Leandro  
Overexcavation under AST Saddle  
August 8, 1995, 11:00 AM, Looking South  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 4



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Launcher Areas, Nike Battery 31, San Leandro  
Backfilling the UST Excavation Lined with Visqueen  
August 21, 1995, 12:20 PM, Looking West  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 5



DACA-05-94-D-0012, D.O. 0005, Project No. 8808  
Launcher Areas, Nike Battery 31, San Leandro  
Restoration of UST Excavation  
August 23, 1995, 8:00 AM, Looking West  
CKY, Inc. Environmental Services/Mike DeKlotz  
Photograph No. 6