KAISER ENGINEERS

KAISER ENGINEERS (CALIFORNIA) CORPORATION
1800 HARRISON STREET
POST OFFICE BOX 23210
OAKLAND, CALIFORNIA 94623
(415) 268-6000

March 16, 1987

Mr. Rafat A. Shahid, Chief
Hazardous Material Program
Alameda County Health Care Services
470 27th Street, Third Floor
Oakland, CA 94612

Subject: A.C. Transit Emeryville Facility Monitoring Well Sampling Report

Dear Mr. Sahid:

Transmitted herewith is the monitoring well installation and sampling report, as prepared by Baseline Consultants, for the removed tank farm at the A.C. Transit, Emeryville facility.

If you have any questions or concerns, please contact me at (415) 632-0574 or Mr. Hal Nahler at (415) 891-4888.

Sincerely,

Steve Whitehead
Construction Manager

SW:cm

Enclosure

cc: Dwight Hoenig, DOHS
Pete Johnson, RWQB
Hal Nahler

~~GSZ~~ ~~PWS~~

III
New
DB

KAISER ENGINEERS

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1800 HARRISON STREET
POST OFFICE BOX 23210
OAKLAND, CALIFORNIA 94623
(415) 268-6000

March 16, 1987

Mr. Rafat A. Shahid, Chief
Hazardous Material Program
Alameda County Health Care Services
470 27th Street, Third Floor
Oakland, CA 94612

Subject: A.C. Transit Emeryville Facility Monitoring Well Sampling Report
SAN PABLO and 47TH EMERYVILLE /ALAMEDA

Dear Mr. Sahid:

Transmitted herewith is the monitoring well installation and sampling report, as prepared by Baseline Consultants, for the removed tank farm at the A.C. Transit, Emeryville facility.

If you have any questions or concerns, please contact me at (415) 632-0574 or Mr. Hal Nahler at (415) 891-4888.

Sincerely,

Steve Whitehead
Construction Manager

SW:cm

Enclosure

cc: Dwight Hoenig, DOHS
Pete Johnson, RWQB
Hal Nahler

III
3/16/87
GSZ

SYNOPSIS
WATER TABLE AT 7 FEET
1 WELL SOIL SAMPLES 360 PPM THC - 6 FEET
240 PPM " - 11.5 FEET
WATER SAMPLE IN WELL < 1 PPM

THEY RECOMMEND - SAMPLE AGAIN IN MAY, THEN, EVERY 6 MONTHS

PREVIOUS
SOIL SAMPLES - 4 FROM WALLS OF EXCAVATED PIT
1 FROM BENEATH ONE OF THE TANKS
(NO REPORTED TANK INSPECTION DURING REMOVAL)
NO SITE HYDRAULIC GRADIENT DETERMINATION

BASELINE

ENVIRONMENTAL CONSULTING

3 March 1987
S-593B

KAISER ENGINEERS, Inc.
AC Transit Project Office
508 16th Street
Oakland, CA 94621

Attn: Mr. Steve Whitehead

Subject: Reporting on Monitoring Well Installation and Sampling Activities at AC Transit, Emeryville Facility.

Dear Steve:

At your request, BASELINE ENVIRONMENTAL CONSULTING, installed one groundwater monitoring well at the AC Transit, Emeryville Facility (see Figure 1 for regional site location) in January 1987. The well was installed to ascertain if groundwaters of the state could have been affected by confirmed releases of fuel hydrocarbons from underground fuel storage tanks, previously located on the site.

The tanks previously located on the site were removed in November 1986. The excavation and soil sampling activities that occurred at that time have previously been discussed in a letter to you from BASELINE, dated 11 December 1986; for your information, this letter has been included as Attachment A to this letter.

The methods and procedures used in monitoring well installation and sampling are described below:

> Fieldwork. One monitoring well was installed at the location shown in Figure 2. The well was installed in accordance with the requirements contained in the Guidelines For Addressing Fuel Leaks, September 1985, by the Regional Water Quality Control Board, San Francisco Bay Region. Attachment B to this letter contains well completion details, a well log of the well, and a copy of the well log submitted to the California Department of Water Resources.

During monitoring well installation, groundwater was encountered at a depth of 13 feet below ground surface, and after well development, the static water level was measured at a depth of 6.9 feet below ground surface.

During well installation, two soil samples were collected from the unsaturated zone at depths of 6 and 11.5 feet. These samples were analyzed for total fuel hydrocarbons. The sample collection methodology is described in Attachment C.

Following well installation, a water sample was collected from the well (sampling methodology is described in Attachment C). The sample was analyzed for total hydrocarbons and BTX. Prior to groundwater sampling, the well was checked for floating product; no floating product was discovered.

Analytical Results. The laboratory reports for the soil samples and chain-of-custody forms are included in Attachment D. The sample collected at a depth of 6 feet contained 300 mg/kg of total fuel hydrocarbons, and the sample collected at a depth 11.5 feet contained 240 mg/kg of total fuel hydrocarbons.

The water sample collected from the well did not contain total fuel hydrocarbons above the detection limit of 1 mg/L. Benzene was detected at a concentration of 0.06 mg/L; no toluene or total xylene isomers were identified above detection limits of 0.05 mg/L.

Conclusions and Recommendations. The shallow groundwater underlying the site may have been affected by releases from the underground fuel storage tanks formerly located near the monitoring well, as evidenced by the presence of benzene in the groundwater sample. It is therefore recommended that the monitoring well be monitored in the future. The following sampling frequency is recommended: The well should be sampled in May 1987

and following that sampling event, the well should be sampled every six months, in accordance with the Regional Water Quality Control Board Guidelines. The water samples should be analyzed for total fuel hydrocarbons and BTX. The analytical results should be submitted to the Regional Water Quality Control Board, San Francisco Bay Region and Alameda County within six weeks of sample collection. Sampling should continue until total fuel hydrocarbons and BTX are not detected for two consecutive sampling events.

Should you have any questions regarding this letter, please do not hesitate to contact us.

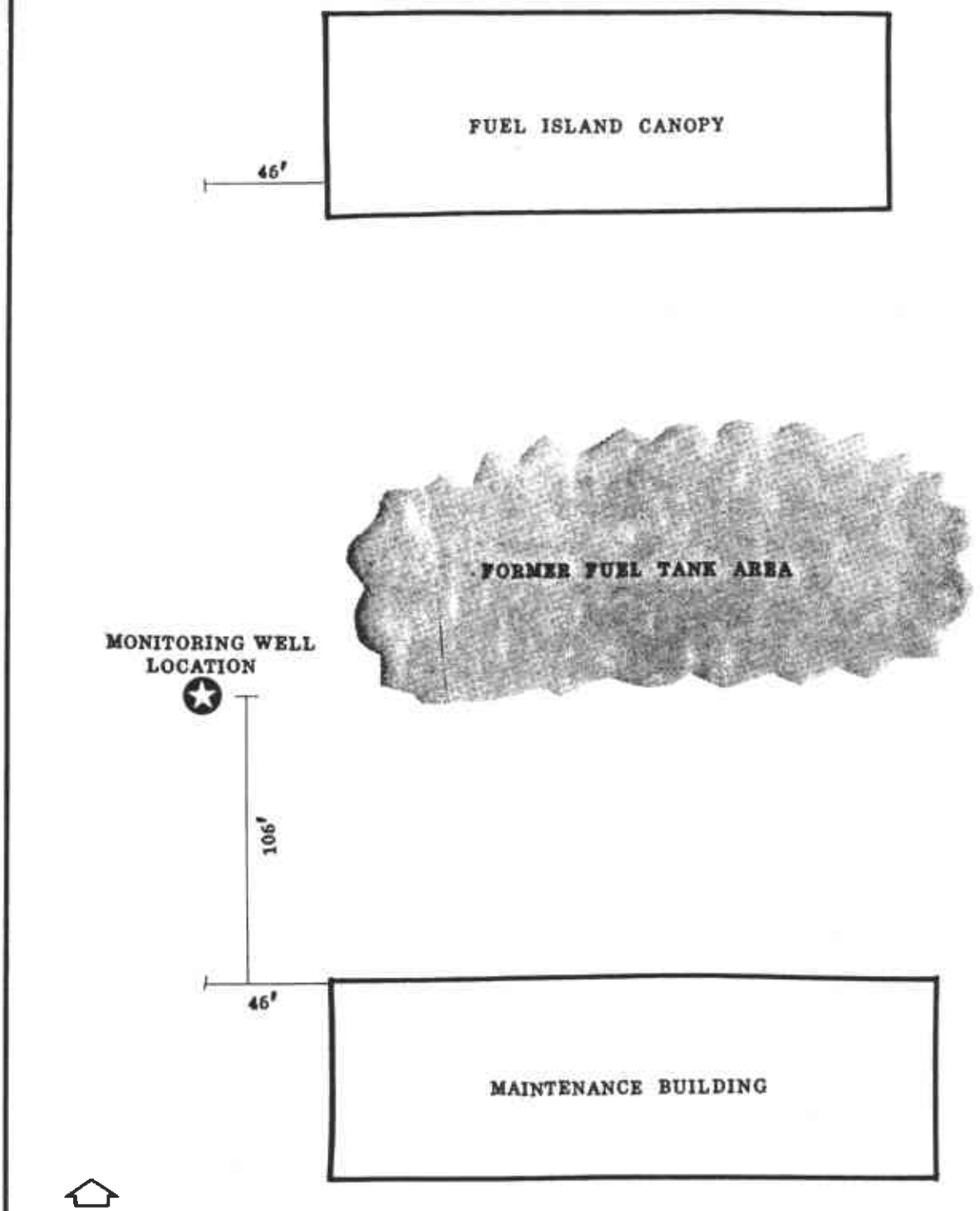
Sincerely,

Yane Nordhav
Principal
Reg. Geologist No. 4009

YN/ae
Attachments

REGIONAL LOCATION

1177 47th STREET
EMERYVILLE, CALIFORNIA



AC TRANSIT FACILITY
EMERYVILLE, CA

BASELINE

BASELINE

ATTACHMENT A

BASELINE Letter, dated 11 December 1986
Remedial Measures at AC Transit, Emeryville Facility

BASELINE

ENVIRONMENTAL CONSULTING

11 December 1986
S-593B

KAISER ENGINEERS, INC.
AC Transit Project Office
508 16th Street
Oakland, CA 94621

Attn: Mr. Steve Whitehead

Subject: Excavation and Remedial Measures at AC Transit Facility, Emeryville

Dear Steve:

A corrective Action Plan for the AC Transit Facility in Emeryville was submitted by BASELINE to Kaiser Engineers on 11 November 1986. In accordance with the Corrective Action Plan, concerning removal of five underground tanks, BASELINE collected a total of eleven soil samples during excavation to determine the concentrations of total hydrocarbons in both the removed soils and the soils remaining after excavation had ceased. This letter serves as documentation of corrective actions performed on the site.

Prior to corrective actions being performed on the site, two soil samples were collected at depths of 3 and 3-1/2 feet, immediately north and south of the tank locations. The purpose of collecting these samples was to ascertain if either lead or organic lead were present in concentrations that could affect workers involved in site excavation. In addition, the samples were analyzed for gasoline and diesel. The analytical report from Thermal Analytical Inc. is attached to this report. No lead or organic lead were identified above detection limits of 50 mg/kg and 2 mg/kg, respectively. Gasoline and diesel were found in the samples with combined concentrations in excess of 1,000 mg/kg.

Site safety on the site during corrective actions was the responsibility of the general contractor.

Five underground tanks, consisting of three 12,000-gallon diesel, one 12,000-gallon motor oil, and one 2,000-gallon gasoline tank, were removed from the site by Erickson, a registered hazardous waste hauler. The tanks were cleaned off-site, cut into smaller parts, and disposed of as non-hazardous materials.

Soils were excavated around the tanks and excavated material was transported by Erickson to a Class I disposal facility (Kettleman Hills). A total of 812 cubic yards were disposed of at a Class I facility. During soil removal, groundwater collected in the open excavation; this water was pumped out, a total of 7,425 gallons, and disposed of by H & H Ship Service.

Soil removal from the excavation was continued until soil sampling indicated that the concentration of total hydrocarbons in the soils were below 1,000 mg/kg. A total of five samples were collected from the excavation; one sample each was collected from the four walls of the excavation (sample identifications E-1 through E-4 in the attached laboratory report from Anatec laboratories), and one sample was collected from the middle, at a point underneath the former location of a 12,000-gallon diesel tank (sample identification E-5).

In addition, four random samples were collected from the pile of excavated material stockpiled for removal (sample identifications Ep-1 through Ep-4).

All soil samples were collected with a stainless steel soil corer, fitted with 6-inch brass liners. The samples from the excavation were collected from a back-hoe bucket. Sample material was excavated from the wall of the excavation at the groundwater/soil interface. Immediately after the bucket was filled, it was raised to ground surface, six inches of the surface soils removed, and a sample collected with the stainless steel corer. The soil samples from the stockpile were collected by driving the stainless steel corer directly into the pile. After sample collection, the brass liner was sealed with aluminum foil, a plastic cap, taped, placed in a zip-lock bag, iced, and brought to the on-site laboratory for analysis. All sampling equipment was decontaminated with TSP and deionized water between each sample collection.

The soil samples were analyzed on-site by a mobile laboratory from Anatec Laboratories. Analytical procedures are described in the attached laboratory report. The analytical

results from the excavation showed concentrations of total hydrocarbons ranging from 100 to 870 mg/kg. No further excavation of soils were therefore required, according to prior verbal communications with T.M. Gerow, Public Health Engineer of Alameda County Health Department.

The analytical results of the samples collected from the temporary stockpile showed concentrations of total hydrocarbons ranging from 1,030 to 7,200 mg/kg. The entire stockpile was therefore removed and disposed of as hazardous materials at a Class I disposal site.

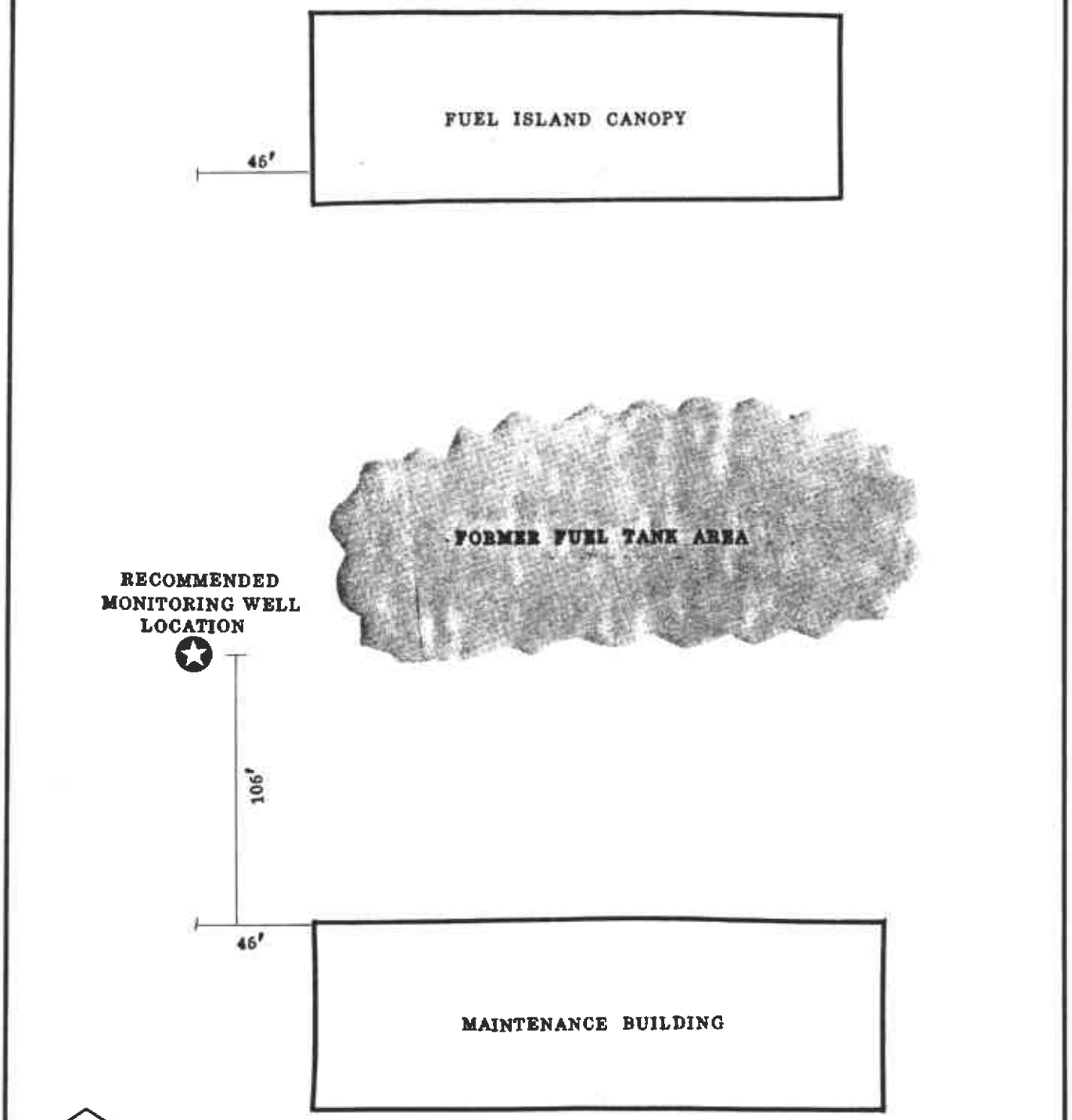
It is unknown whether the groundwater has been affected by the hydrocarbons in the unsaturated zone. However, since concentrations of hydrocarbons in the soil exceeded 100 mg/kg, it is required that at least one monitoring well be installed and sampled, according to the Guidelines for Addressing Fuel Leaks by the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) (September, 1985). The well should be installed in a downgradient direction from the former tank locations in accordance with the specifications of the RWQCB. The well should be checked for floating product after installation, and a groundwater sample should be collected. Following receipt of sample analyses, further actions may be required if the sample analysis should show that the groundwater has been affected by leakage from the underground tanks.

If you should have any questions regarding this letter, please do not hesitate to contact us.

Sincerely,

Yane Nordhav
Principal
Reg. Geologist No. 4009

YN/ae
Attachments



AC TRANSIT FACILITY
EMERYVILLE, CA

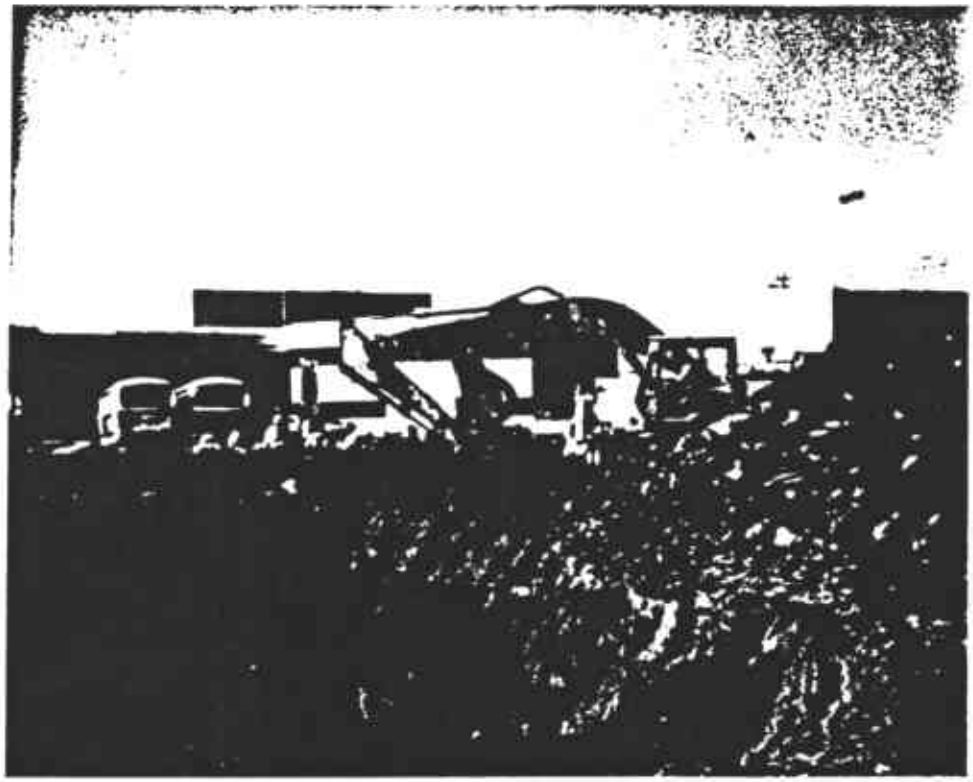
BASELINE

BASELINE

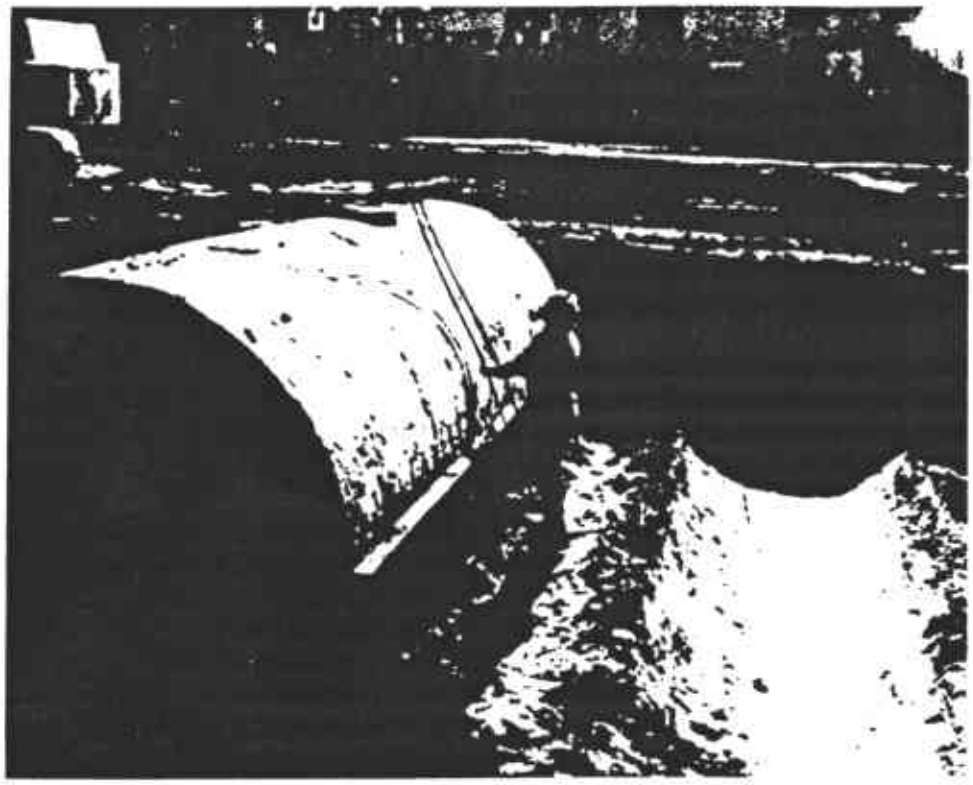
ATTACHMENTS

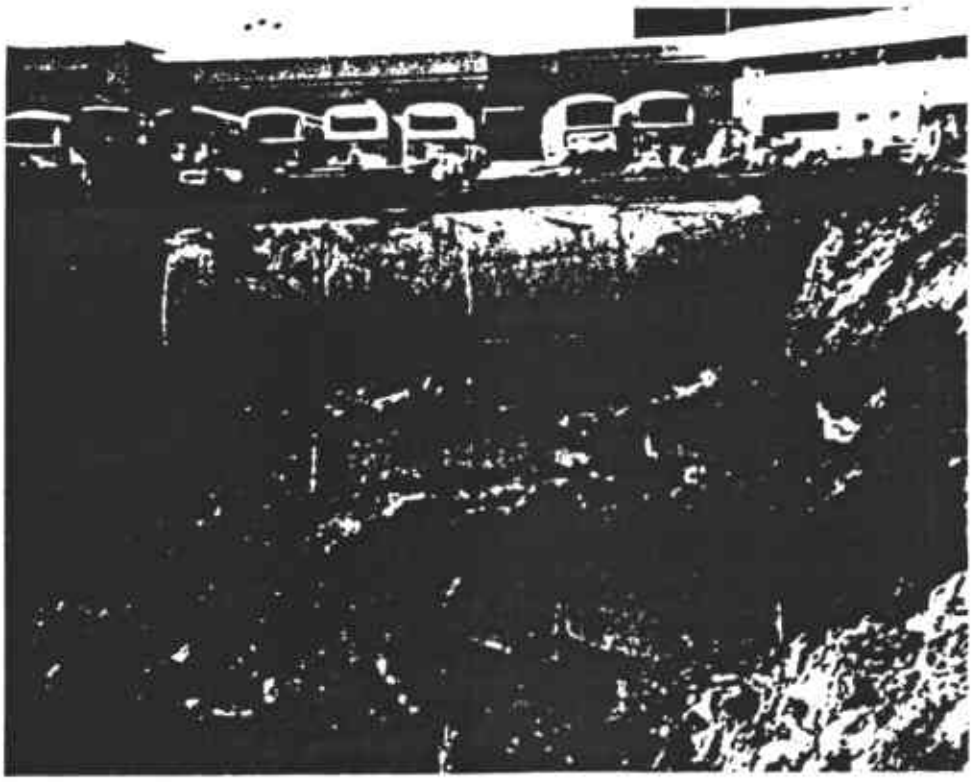
SITE PHOTOGRAPHS AND LABORATORY REPORTS

TANK REMOVAL ACTIVITIES



TANK REMOVAL ACTIVITIES





Thermo Analytical Inc.

TMA/ERG
1400 West 53rd Street
Suite 450
Emeryville, CA 94608-2945
(415) 652-2300

Baseline
315 Washington Ave.
Oakland, CA 94607

November 11, 1986
Report #9638
P.O. #Sample Chain-of-custody

Attention: Irene

RE: Two (2) samples submitted on November 10, 1986 for rush gasoline, diesel fuel, lead, tetraethyl lead analyses.

Lead levels are determined by following a modification of the method described in Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985, using Inductively Coupled Plasma Spectroscopy (ICAP).

Procedure: The samples are analyzed for gasoline or diesel fuel by following the method described in Attachment 2, Analytical Procedures for Fuel Leak Investigations. The samples are concentrated on a Tekmar LSC-2 automatic sample concentrator prior to injection into a gas chromatograph fitted with a flame ionization detector. Quantitation is performed, as total hydrocarbon response, against known concentrations of gasoline and diesel fuel. The limit of detection for this method of analysis is one part per million (mg/kg).

The samples are analyzed for organic lead by following a DuPont Petroleum method M-111074 (adopted by the DOHS), using a methylisobutylketone extraction and atomic absorption spectroscopy.

The results are displayed in the table below:

		Concentration (mg/kg)			
TMA/ERG #	CLIENT ID	GASOLINE	DIESEL FUEL	LEAD	ORGANIC LEAD
9638-1	K-10	330	930	< 50	< 2
9638-2	K-11	380	2900	< 50	< 2

Submitted by:

Robert B. Flay
Manager, Organics Department

RBF:sml

ANATEC LABORATORIES INC.

435 Tesconi Circle • Santa Rosa, California 95401 • 707-526-7200

Yane Nordhav
Baseline Environmental Consulting
315 Washington St.
Oakland, CA 94607

November 21, 1986
ANATEC Log No: 8538 (1-9)
Series No: 310/007
Client Ref: (V) Y. Nordhav

Subject: Results of On-Site Analysis for Petroleum Hydrocarbons as Obtained at the AC Transit Facility, Emeryville, California on November 13, 1986.

Dear Ms. Nordhav:

The analyses referenced above have been completed. This report is written to confirm results transmitted verbally on November 13, 1986. Soil samples were obtained by personnel of Baseline in brass core containers from the fuel tank excavation sites and were submitted to ANATEC personnel for on-site analysis. Upon receipt, samples were maintained in storage at 4°C and thus maintained until analysis commenced.

Determination of petroleum hydrocarbon content of the soil samples was performed in a mobile laboratory equipped with a Hewlett-Packard gas chromatograph, Mettler analytical balance, and other supportive equipment. Samples were prepared for analysis by thorough mixing and subsequent extraction with methylene chloride. Extraction was performed three successive times, and each time extraction was aided by sonication. The extracts were dried over sodium sulfate, combined and concentrated at 60°C to a final volume of 2 to 4 milliliters.

The extract was then analyzed by gas chromatography with flame ionization detection. Preparation and analysis of the sample batch was accompanied by similar preparation of a method blank and a sample fortified with a petroleum hydrocarbon standard. Response of the chromatographic system to gasoline, diesel, and motor oil standards was measured. Response of the chromatographic system to calibration standards was compared with system response to sample extracts for purposes of contaminant identification and quantification.

Preparative and analytical methods employed are in accord with requirements presented in "Guidelines for Addressing Fuel Leaks," Water Quality Control Board, San Francisco Bay Region, revised 1985; chromatographic conditions are described in this

publication. The preparation of samples as described above is presented in detail as "Sonication Extraction," Method 3550, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA, SW-846, revised 1985.

Results of analyses are summarized below in Table 1. Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

William G. Rotz, Manager
Field Chemistry

Approved by:

Greg Anderson, Director
Analytical Laboratories

/hs

TABLE 1. SUMMARIZED RESULTS FOR ANALYTICAL WORK AT THE AC TRANSIT FACILITY, EMERYVILLE, CALIFORNIA, NOVEMBER 13, 1986.

Descriptor	Lab No.	Total Petroleum Hydrocarbons as Diesel Fuel (mg/Kg)[1]
Ep-1	8538-1	7,200
Ep-2	8538-2	3,100
Ep-3	8538-3	3,050
Ep-4	8538-4	1,030
E-1	8538-5	230
E-2	8538-6	870
E-3	8538-7	650
E-4	8538-8	200
E-5	8538-9	100

[1]Units are milligrams total petroleum hydrocarbons as diesel fuel per kilogram sample, as received basis.

BASELINE

ATTACHMENT B

Well Log
Well Construction Detail
DWR Submittal

BASELINE ENVIRONMENTAL CONSULTING
315 Washington Street
Oakland, CA 94607
(415) 763-7037

Boring No. MW-1E
Date 1/28/87
Datum

DRILLING LOG

Location A/C Transit, Emeryville
Driller Exceltec
Method Hollow-stem, cont. flight

Bore Size 8-inch
Casing Size 2-inch
Logger WKS

DEPTH	GRAPHIC	LITHOLOGY	NOTES
0		Concrete slab.	
1	GW	Gray, sandy GRAVEL, wet, angular clasts.	
3	SP	Black, SAND, moist-wet, fine grained.	Slight petroleum odor.
	SP	Black, CLAY, moist-wet.	
5		Black, SAND, moist-wet.	3-6-9
		Blue gray, silty, CLAY, moist.	Slight petroleum odor.
7	CL		
9		Blue gray, mottled, silty, CLAY, moist.	5-11-15 Slight petroleum odor.
11		Light olive brown, SAND, wet, fine grained, some local blue gray clay areas, sand bed coarsens to depth, a few gravel lense 2-inches thick at 15.5 and 16 ft.	4-5-8 Petroleum odor
13	SP		
15		Light olive brown, SAND, fine-med. sand; lenses of angular gravel of 2" diameter.	5-9-10
	GW		
17		Light olive brown, silty CLAY, wet, some black organic, sand <4%	4-6-8
	CL		
19			

BASELINE ENVIRONMENTAL CONSULTING
315 Washington Street
Oakland, CA 94607
(415) 763-7037

Boring No. MW-1E(cont)
Date 1/28/87
Datum

DRILLING LOG

Location A/C Transit, Emeryville
Driller Exceltec
Method Hollow-stem, cont. flight

Bore Size 8-inch
Casing Size 2-inch
Logger WKS

DEPTH	GRAPHIC	LITHOLOGY	NOTES
21 ft-	0%	Light olive brown, silty, CLAY, wet, some black organic pieces.	3-6-7 4-7
		T.D. 20.5 feet Standard pin 20.5 ft.-22 ft.	

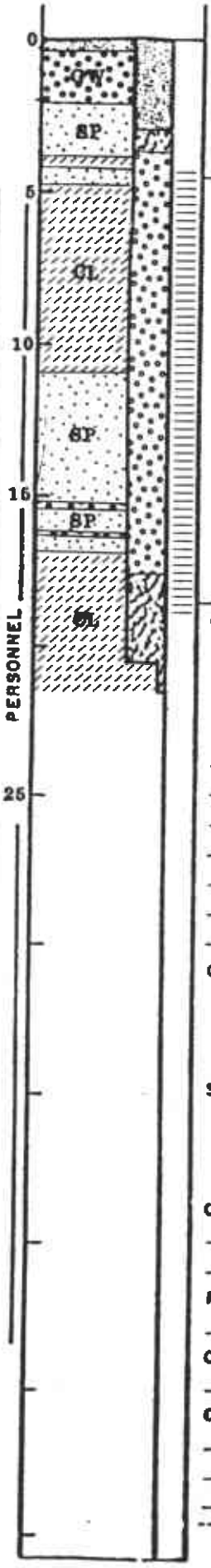
WELL _____

WELL CONSTRUCTION SUMMARY

LOCATION or COORDS: AC Transit, Emeryville

ELEVATION: GROUND LEVEL _____

TOP OF CASING _____



PROJECT Kaiser Engineers

PERSONNEL _____

LOCATION AC Transit, Emeryville

DRILLING SUMMARY:

TOTAL DEPTH 20.5'

BOREHOLE DIAMETER 8"

DRILLER Exceltec

RIG Mobile B-53

BIT(S) Hollow-stem, cont. flight

DRILLING FLUID None

SURFACE CASING Christy box

WELL DESIGN:

BASIS: GEOLOGIC LOG X GEOPHYSICAL LOG ___

CASING STRING(S): C=CASING S=SCREEN

4'	17.5'	S			
0'	4'	C			

CASING: C1 2", sch 40 PVC

C2 _____

C3 _____

C4 _____

SCREEN: S1 2", sch 40 PVC 20 slots

S2 _____

S3 _____

S4 _____

CENTRALIZERS None

FILTER MATERIAL Monterey Sand 2-12
17.5'-3.5'

CEMENT Neat cement 0-3'

OTHER Bentonite 22'-17.5' &
3.5'-3'

CONSTRUCTION TIME LOG:

TASK	START DATE	START TIME	FINISH DATE	FINISH TIME
DRILLING:				
0-20.5'	1/28	9:46	1/28	11:0
GEOPHYS LOGGING:				
CASING.				
0-17.5'	1/28	11:05	1/28	11:08
FILTER PLACEMENT:	1/28	11:08	1/28	13:50
CEMENTING:	1/28	14:00	1/28	14:10
DEVELOPMENT:	2/2	15:50	2/2	16:30
OTHER.				

WELL DEVELOPMENT

Well Wizard

COMMENTS:

Water levels
During drilling 13'
1/28 11:05 6.9'
2/2 15:50 4.4'
2/3 13:40 5'

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

BASELINE

ATTACHMENT C

Soil and Groundwater Sampling Procedures

SAMPLING PROCEDURES

SOILS, TOTAL HYDROCARBONS

Two soil sampling procedures are used for collection of soil samples during underground tank investigations. One method is used without the use of a drill rig (Method 1, below) and the second method is used when a drill rig is on site for either soil sample collection and/or monitoring well installation (Method 2, below).

(1) In-place soil samples are collected with a stainless steel corer, fitted with a 6-inch brass liner. The corer is driven into the ground by a slide hammer. The brass liner is removed from the steel corer, capped with aluminum foil and a plastic cap, taped, placed in a zip-lock bag, and iced prior to being brought to the laboratory for analysis.

All sampling equipment is decontaminated with trisodium-phosphate (TSP) and deionized water between each sample collection.

(2) Soil samples are collected with a California Modified Sampler from a hollow-stem auger rig. The Sampler is fitted with brass tubes. The sampler is pounded into the ground by a weight falling onto the sampler. When the sampler is retrieved, the sample is contained within the brass tube closest to the shoe of the Sampler. The brass tube is sealed with aluminum foil, a plastic cap, and tape. The sample is then placed in a zip-lock bag, iced, and brought to the laboratory for analysis.

All sampling equipment is decontaminated with TSP and deionized water between each sample collection.

GROUNDWATER, TOTAL HYDROCARBONS

The well is checked for floating product with a bottom-valve, teflon bailer. A water level measurement is then made with an electrical probe, calibrated to the nearest 1/100th of a foot.

The well is then evacuated of five well volumes of water prior to sampling. The evacuation and the sampling is accomplished by bottom-valve, teflon bailer. The sample is transferred directly into glass vials, iced, and brought to the laboratory.

All sampling equipment is decontaminated with TSP and deionized water prior to each sampling event. All samples are collected using proper chain-of-custody procedures.

BASELINE

ATTACHMENT D

Soil Sampling 28 January 1987: Analytical Results
Chain-of-Custody Forms

BROWN AND CALDWELL LABORATORIES
1255 POWELL STREET EMERYVILLE, CA 94608 • (415) 428-2300

ANALYTICAL REPORT

LOG NO: E87-01-517

Received: 28 JAN 87
Reported: 11 FEB 87

Yane Nordhav
Baseline
315 Washington St.
Oakland, CA 94607

Project: S-593 B

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
01-517-1	MW-1E 6.0-6.5'	28 JAN 87
01-517-2	MW-1E 11.5-12.0'	28 JAN 87

PARAMETER	01-517-1	01-517-2
Total Fuel Hydrocarbons, mg/kg	300	240

D. A. McLean, Laboratory Director

BASELINE

CHAIN OF CUSTODY RECORD

NO. | PROJECT NAME: S-593B - Emeryville A/C Transit

ENS: (Signature): William K Scott

NO.	DATE	TIME	BOMB	GRAB	STATION LOCATION	NO. OF CONTAINERS	gas	diesel					REMARKS
	1/26/87	10:05		X	MW-1E / 6'-6.5'	1	X	X					
	1/26/87	10:26		X	MW-1E / 11.5-12'	1	X	X					

Relinquished by: (Signature)	Date / Time: 1/26/87 12:55	Received by: (Signature): William K Scott	Relinquished by: (Signature)	Date / Time	Received by: (Signature)	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)	
Relinquished by: (Signature)	Date / Time	Received for Laboratory by:	Date / Time / Remarks			

BASELINE

ATTACHMENT E

Groundwater Sampling 4 February 1987: Analytical Results
Chain-of-Custody

BROWN AND CALDWELL LABORATORIES

1255 POWELL STREET EMERYVILLE, CA 94608 • (415) 428-2300

ANALYTICAL REPORT

LOG NO: E87-02-475

Received: 23 FEB 87
Reported: 24 FEB 87

Yane Nordhav
Baseline
315 Washington St.
Oakland, CA 94607

Purchase Order: AC Transit

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
0 -475-1	MLVIE	04 FEB 87

PARAMETER	02-475-1
Benzene,Toluene,Xylene Isomers	
Benzene, mg/L	0.06
oluene, mg/L	~~<0.05~~
otal Xylene Isomers, mg/L	<0.05

Linda Brack for
D. A. McLean, Laboratory Director

BROWN AND CALDWELL LABORATORIES

1255 POWELL STREET EMERYVILLE, CA 94608 • (415) 428-2300

ANALYTICAL REPORT

LOG NO: E87-02-066

Received: 04 FEB 87
Reported: 20 FEB 87

Yane Nordhav
Baseline
315 Washington St.
Oakland, CA 94607

Project: A/C Transit

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
02-066-1	MW 1 E	04 FEB 87

PARAMETER	02-066-1
Total Fuel Hydrocarbons, mg/L	<1

Linda Brack Fox

D. A. McLean, Laboratory Director

Project: A/C TRANSIT
Project No: S-593B

GROUNDWATER SAMPLING

WELL No: MW-1E

DATE: 2/3/87

TIME: 13:34

RECORDED BY: WKS

WEATHER:
Wind: None

Precip. in last 5 days:
0.75 inches

ELEVATION OF WELL: Unknown
DEPTH OF WELL: 17.5 ft
WATER LEVEL: 5 ft
SCREENED: 4-17.5 ft
WELL DIAMETER: 2-inch

VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING:

(17.5 ft - 5 ft) x (0.083 ft)^2 x 3.14 x 7.48 =

(Depth of well - Water level) x (Well radius)^2

2.2 Gallons in one well volume.

APPEARANCE OF SAMPLE: Cloudy.

SAMPLING EQUIPMENT:
Bailer: x Type: Teflon
Submersible: Type: GPM:
Dedicated: Type: GPM:

DECONTAMINATION METHOD: Lab-prepared bottles.

SAMPLE ANALYSES: Total fuel hydrocarbons, BTX.

LABORATORY: Brown and Caldwell.

CHAIN OF CUSTODY RECORD

2 66-1

BASELINE

NO. 5-595-B

PROJECT NAME: A/C Plant

SAMPLERS: (Signature)

DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	gas	diesel	fuel oil				REMARKS
2/4/87	1300		X	MW1E	1	X						
2/4/87	1300		X	MW1E	1		X					

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	2/4/87 13:44				
		Received by: (Signature) C. Johnson 2/4/87	Relinquished by: (Signature)	Date / Time	Received by: (Signature)