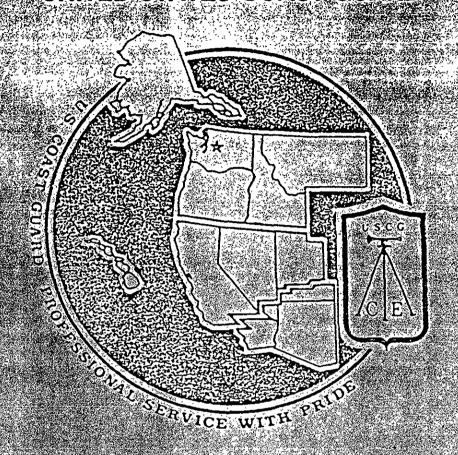
DEPARTMENT OF TRANSPORTATION UNITED STATES COAST GUARD



USCG DISTRICT ELEVEN UNDERGROUND STORAGE TANK CLOSURE

PHASE 1 AT U.S. COAST GUARD SUPPORT CENTER ALAMEDA ALAMEDA, CALIFORNIA

Prepared By

HUNTER/GREGG, INC. Martinez, California

December 1988

SEMO

JAMES C. BATEMAN PETROLEUM SERVICES, INC.
431 W. Hatch Road, Modesto, CA 95351
1806 Leslie Street, San Mateo, CA 94402
General & Engineering Contractors, Lic. No. 449864 A, B, & C-61
Modesto Office (209) 524-9653 FAX (209) 524-0503
San Mateo Office (415) 572-8033 FAX (415) 572-9734
TOLL FREE 1-800-533-9293

PROF	DSAL	NO. 288
PROPOSAL SUBMITTED TO:	DESCRIPTION C	OF JOB:
U.S. COAST GUARD	SOIL REMEDIA	ATION
915 SECOND AVE. ROOM 2664	JOB LOCATION:	: ALAMEDA SUPPORT CTI
SEATTLE, WASHINGTON 98174-1011	ALAMEDA, CALI	IFORNIA
ATTENTION: MARGARET J. JONES	PHONE:	DATE:5/18/89

SEMCO will subcontract the services of Certified Environmental Consultants, Inc. to accomplish the bioremediation of approximately 30 cubic yards of contaminated soil at this location, including:

- Obtain agreement from regulatory agency on the treatment levels required at the site for on-site reuse of the soil.
- Obtain approval from Base Commander to utilized the necessary land area and water for the project.
- Obtain a permit from the Air Quality Control Board for the treatment of the soil.
- Set up treatment system.
- Collect required soil samples and turn the soil as needed.
- Obtain final approval from regulatory agency for reuse of soil on site.
- Prepare final report on project.
- ** This proposal is based on a Time & Materials basis, and will be billed according to the attached fee schedule.

We hereby propose to subcontract labor and materials complete in accordance with the above specifications, for the sum not to exceed \$9,179.30 (Nine Thousand One Hundred Seventy Nine Dollars and Thirty Conts) without prior approval. This is based on the fees submitted by Certified Environmental Consultants, Inc., with fifteen percent added as our standard markup for subcontractor services.

Authorized Signature Jerry	24l
Terry Ham	llton, Fresident

Acceptance of Proposal -- The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made percentract No. DTCG-88-C-65036.

Authorized	Signature/Date	
	-	



Northern California Office Gregg & Associates, Inc. 597 Center Avenue, Suite 350 Martinez, California 94553 415-372-3637 • 800-321-3637

January 24, 1989

Project No. 02-258-002

Commander John Sprouse U.S. Coast Guard Facilities Design and Construction Center 915 Second Avenue, Room 2664 Seattle, WA 98174-1011

SUBJECT: Underground Fuel Storage Tank Removal and Closure Documentation for

U.S. Coast Guard Island Support Center in Alameda, California

Dear Commander Sprouse:

On December 29 and 30, 1988, three underground fuel storage tanks were closed at the U.S. Coast Guard Alameda Island Support Center. There were two 2,000 gallon steel gasoline tanks and one 2,000 gallon fiberglass diesel tank. During removal, the 2,000 gallon fiberglass diesel tank was found to be a Corning "bubble" tank. The tank was in pea-gravel backfill and surrounded by bay mud, and appeared to be in good condition. There was no apparent diesel oil in the soils sampled or observed surrounding the 2,000 gallon glass diesel tank. To confirm this a soil sample was collected under each end of the tank.

On December 30, 1988, the two 2,000 gallon steel gasoline tanks were removed. The tanks appeared to be old and showed some corrosion, but no holes were detected. The tanks were surrounded with sand and native material of bay mud. There was a petroleum hydrocarbon odor detected in soils surrounding the fuel tanks and therefore, approximately 30 yards of soils were removed from the tank excavation, placed on plastic, and covered. Soil samples were collected from each end of each tank and surrounding side walls to define vertical and lateral extent of hydrocarbons. Two separate stock piles were made, one large pile being below tank grade (Sample 4), and the other small pile above grade (Sample 5). Both soil stock piles emitted hydrocarbon odors and composite soil samples were collected from each soil stock pile as indicated in the previous sentence.

Commander John Sprouse Page 2 January 24, 1989

Soil samples were analyzed by Superior Analytical Laboratories, a state certified testing laboratory. All soil samples collected were analyzed for Total Petroleum Hydrocarbons (TPH) and Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) using Environmental Protection Agency Methods 8015 and 8020, respectively.

Semco used pea-gravel to backfill and compact the excavations to grade. A concrete and asphalt finish was applied to the surface of the 2,000 gallon fiberglass tank excavation. The surface of the (two) 2,000 gallon steel tanks was not returned to final contour, awaiting results of laboratory analysis. For safety purposes the excavation was barricaded with a chain link fence.

A composite rinsate water sample was collected from all three tanks final cleaning and will be analyzed for TPH.

All hazardous waste manifests, chain-of-custody and sample location maps are included in this report to show and verify sample locations. A short summary explaining the analytical findings is attached following the summary tab. If there are any questions regarding this report, please call Norm Nelson at (415) 372-3637.

Sincerely,

Norm N. Nelson

Project Manager

Down Ded

Dale E. Egner, RG 3457

General Manager

NNN:gm

cc: Terry Hamilton, Semco

Thomas F. Peacock, Alameda County

GREGG

GREGG & ASSOCIATES, INC.

A Hunter Company

CHAIN OF CUSTODY RECORD

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GREGG & ASSOCIATES, INC.

A Hunter Company

597 Center Avenue, Suite 350, Martinez, CA 94553 / (415) 372-3637

CHAIN OF CUSTODY RECORD

DATE 1/4/89 PAGE OF 1

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1385 FAIRFAX St., Ste D • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 50531 CLIENT: Hunter/Gregg

CLIENT ID: USCG-Alameda

DATE RECEIVED: 12/30/88 DATE REPORTED: 1/6/89

JOB NO.: N/A

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

Sample Identification	Concentration (Gasoline Range	(mg/kg) Diesel Range
1A 12/29 4:30	ND < 10	ND < 10
1B 12/29 4:35	ND < 10	ND < 10
2A 12/29 4:40	ND < 10	ND < 10
2B 12/29 4:49	ND < 10	ND < 10
3A 12/29 5:00	ND < 10	ND < 10
3B 12/29 5:15	ND < 10	ND < 10
#4	320.	260.

mg/kg = part per million (ppm) Minimum Detection Limit for Gasoline and Diesel, 10 mg/kg. QA/QC Summary:

Daily standards run at 200 mg/L; RPD Gasoline=10, Diesel=1.5 MS/MSD: Average Diesel Recovery =93%: Duplicate RPD =7.

Laboratory Manager

1385 FAIRFAX St., Ste D • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 50531 CLIENT: Hunter/Gregg

JOB NO.: N/A

DATE SAMPLED: 12/29/88 DATE ANALYZED: 1/4/89 DATE REPORTED: 1/6/89

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

Concentration (ug/kg)

Sample Ide	ntification	Benzene	Toluene	Ethyl Benzene	Xylenes
1A 12/29	4:30	ND< 3	ND< 3	ND< 3	ND< 3
18 12/29	4:35	ND< 3	ND< 3	ND< 3	ND< 3
2A 12/29	4:40	ND< 3	ND< 3	14.	57.
28 12/29	4:49	ND< 3	ND< 3	4.5	ND< 3
3A 12/29	5:00	ND< 3	5.1	25.	10.
3B 12/29	5:15	ND< 3	ND< 3	6.4	8.
#4		ND< 60	2700.	5000.	24000.

ug/kg = part per billion (ppb)

QA/QC Summary: Matrix Spike, Matrix Spike Duplicate:
Average Recovery:102% . RPD: 3

Les Partridge, Ph.D.

Laboratory Manager

1385 FAIRFAX St., Ste D • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 50534 CLIENT: Hunter/Gregg

CLIENT ID: USCG-Alameda

DATE RECEIVED: 1/4/89
DATE REPORTED: 1/11/89

JOB NO.: N/A

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

Sample	Identification	Concentration (Gasoline Range	mg/kg, mg/L) Diesel Range
N-Sidewall	12/30/88 12:00	ND < 10	ND < 10
S-Sidewall	12/30/88 12:00	ND < 10	ND < 10
E-Sidewall	12/30/88 12:00	ND < 10	ND < 10
W-Sidewall	12/30/88 12:00	ND < 10	ND < 10
Large Pile	12/30/88 12:00	710.	340.
Small Pile	12/30/88 12:00	22.	77.
#7		13. mg/L	52.mg/L

mg/kg = part per million (ppm) mg/L = part per million (ppm) Minimum Detection Limit for Gasoline and Diesel, 10 mg/kg, 1 mg/L QA/QC Summary:

Daily standards run at 200 mg/L; RPD Gasoline=14, Diesel=5 MS/MSD: Average Diesel Recovery =93%; Duplicate RPD =7.

Les Partridge, Pn.D.

Laboratory Mahager

1385 FAIRFAX ST., STE D • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 50534 CLIENT: Hunter/Gregg JOB NO.: USCG-Alameda DATE SAMPLED: 12/30/88
DATE ANALYZED: 1/9/89
DATE REPORTED: 1/11/89

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

Concentration (ug/kg)

		_	Ethy1		
Sample Identification	Benzene	Toluene	Benzene	Xylenes	
N-Sidewall	ND< 3	15.	ND< 3	ND< 3	
S-Sidewall	ND< 3	10.	ND< 3	ND< 3	
T Cidovoll	ND< 3	29.	ND< 3	10.	
E-Sidewall	ND(3	23.	115.		
W-Sidewall	ND< 3	37.	4.8	31.	
Large Pile	370.	7200.	11000.	62000.	
Ç				0.4	
Small Pile	ND< 3	37.	ND< 3	34.	

ug/kg = part per billion (ppb)

QA/QC Summary: Matrix Spike, Matrix Spike Duplicate: Average Recovery: 102% , RPD: 3

Les Partridge, Ph.D.

Laboratory Manager

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

Signature

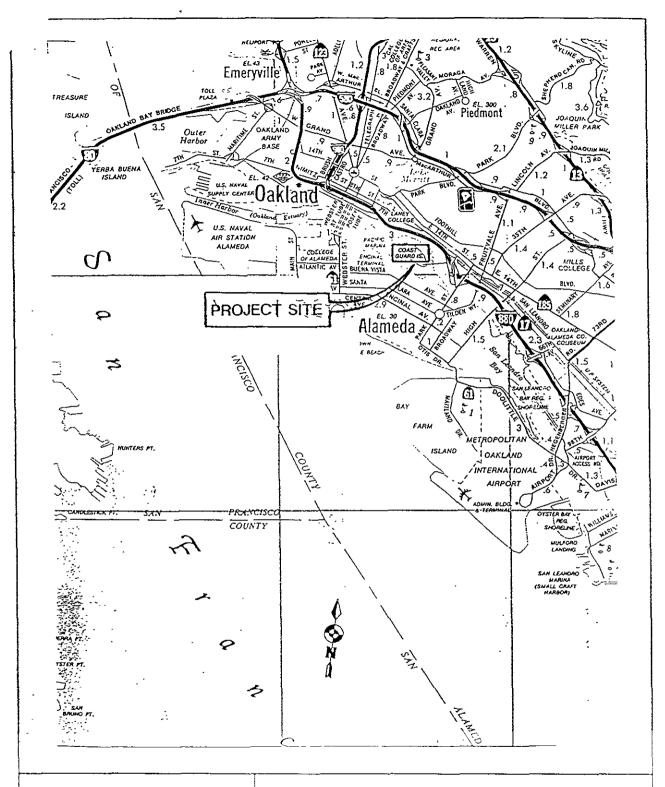
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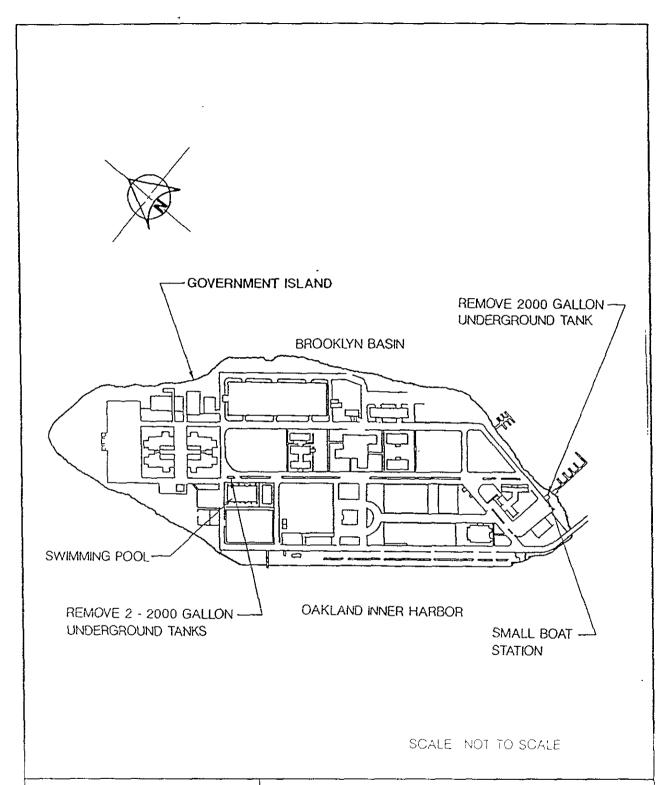
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19. Discrepancy Indication Space



A HUNTER ENVIRONMENTAL SERVICES, INC. COMPANY

GREGG & ASSOCIATES, INC. 597 Center Avenue, Suite 350 Martinez, California 94553 (415) 372-3637 FIGURE 1
SITE LOCATION MAP
UNITED STATES COAST GUARD
SUPPORT CENTER - ALAMEDA
ALAMEDA, CALIFORNIA

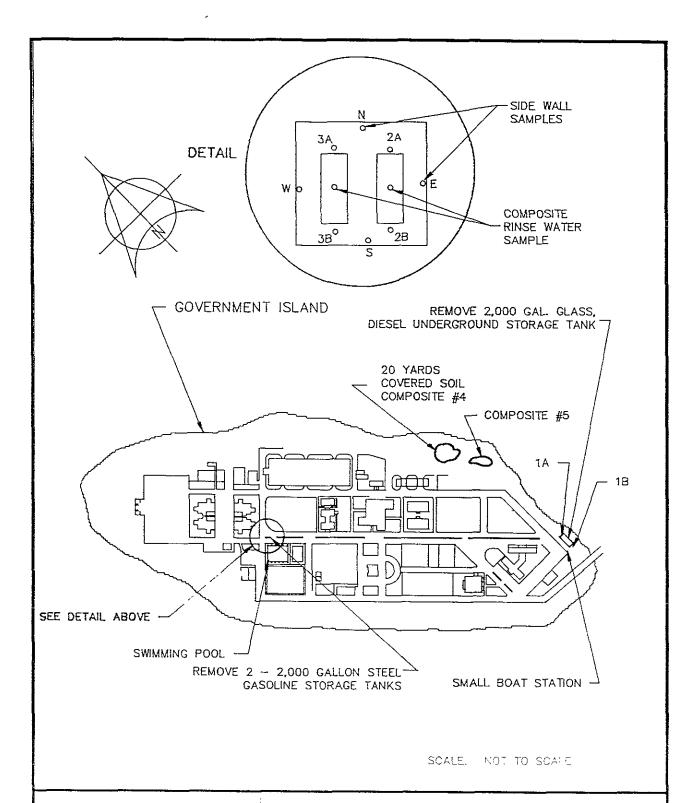


A HUNTER ENVIRONMENTAL

GREGG & ASSOCIATES, INC. 597 Center Avenue, Suite 350 Martinez, California 94553 (415) 372-3637

SERVICES, INC. COMPANY

FIGURE 2
UNDERGROUND TANK LOCATION MAP
UNITED STATES COAST GUARD
SUPPORT CENTER - ALAMEDA
ALAMEDA, CALIFORNIA



A HUNTER ENVIRONMENTAL SERVICES, INC. COMPANY

GREGG & ASSOCIATES, INC. 597 Center Avenue, Suite 350 Martinez, California 94553 (415) 372-3637 FIGURE 3
SOIL SAMPLE LOCATION MAP
UNITED STATES COAST GUARD
SUPPORT CENTER - ALAMEDA
ALAMEDA, CALIFORNIA

SUMMARY

A total of three underground fuel storage tanks were closed at the Alameda Support Center U.S. Coast Guard Facility on December 30, 1988. All soil samples were collected as required by Alameda County regulator, Tom Peacock.

Soil sampling was performed by Hunter Environmental Services, Inc., environmental consultants subcontracted by SEMCO. Samples were collected in 6 inch brass sleeves from the soil in the backhoe bucket. Samples were immediately covered with aluminum foil and plastic caps, labeled, and placed on ice. The samples were transported to a DOHS certified analytical laboratory at the end of each day under proper chain-of-custody.

Soil samples were analyzed by Superior Analytical Laboratories, Inc. of San Francisco (DOHS Certification No. 220). Samples were analyzed for Total Petroleum Hydrocarbon (TPH) using modified Environmental Protection Agency (EPA) SW-846 Method 8015 and Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) using EPA SW-846 Methods 8020 and 5030. The signed certificates of analyses and chain-of-custody records are enclosed.

Hydrocarbon odors were detected in soils during the excavation of the two 2,000 gallon gasoline tanks. Approximately 30 yards of soils containing hydrocarbon concentrations were removed from around and below the tanks. Excavated soils were placed on plastic and composite soil samples from each pile were collected. Soil samples were collected underneath the fuel tanks at a vertical depth of 8 feet. Side wall soil samples were collected in native material, of bay mud, from the walls of the excavation. The bay muds were saturated with water, but no ground water was present in the tank excavation.

Soil samples collected under the fuel tanks showed non-detectable levels or insignificant traces of TPH and BTEX. Soil samples collected from the excavations walls and analyzed for TPH and BTEX also showed non-detectable levels. Thus, the vertical and lateral extent of hydrocarbons in soil has been defined in the excavation and those soils have been removed for treatment or disposal.

Soils removed from the excavation were analyzed as composite sample No. 4 (small pile) and No. 5 (large pile). The composite soil samples contained low levels of hydrocarbon concentrations, however, they are above the California State Action Levels. These soils need to be remediated on site or hauled to a hazardous waste disposal site by a state certified licensed hazardous materials hauler. If soils are remediated on site, soil aeration permits and County authorization are required before work begins. An unauthorized leak report may need to be filed upon the county's request.