



MONTGOMERY WATSON

N00296.002212  
MOFFETT FIELD  
SSIC NO. 5090.3

September 28, 1993

Ms. Elizabeth Adams  
Regional Water Quality Control Board  
2101 Webster Street, Suite 500  
Oakland, CA 94612

Contract No.: N62474-88-D-5086

File: CTO 235/3.1.7

Subject: Sampling Results for NEX Soils at NAS Moffett Field

Dear Ms. Adams:

Please refer to our letter of September 14, 1993, about sampling requirements for NEX gas station soils staged on the treatment pad at Naval Air Station (NAS) Moffett Field. Soil sampling was conducted as described in the aforementioned letter at locations shown in Figure 1 enclosed with this letter. Samples were collected for total petroleum hydrocarbons (TPH)-extractable and TPH-purgeable analyses by EPA Method 8015 (modified).

Four samples were collected from different locations in each soil pile and composited into a single sample for TPH-extractable analysis. Samples were collected from locations 3- to 4-feet-deep inside the soil piles. A small backhoe was used to expose the soil approximately 3 feet inside the soil pile and stainless steel spoons were used to collect the soil samples. Figure 2 presents photographs of a portion of the treatment pad and soil piles and shows a typical excavation made in a soil pile for sample collection. A total of 13 composited soil samples corresponding to the 13 soil piles identified in Figure 1 were collected. One discreet soil sample was collected from each soil pile for TPH-purgeable analysis (sampling locations selected by aid of organic vapor meter). These samples were collected in stainless steel sleeves to minimize loss of volatile organic compounds (VOCs) during sample collection. Appropriate decontamination procedures were followed during collection of all soil samples. Analytical results are summarized in Table 1 enclosed with this letter. Copies of laboratory data sheets are enclosed as Attachment A.

TPH and VOC concentrations in samples from 12 soil piles were determined to be below the 100 milligrams per kilogram (mg/kg) and 1 mg/kg action levels identified for TPH and VOCs in soils, respectively. One soil pile (NEX-NB) contained TPH and VOC concentrations greater than the action levels. Figure 1 shows analytical results and proposed action for each soil pile. Soil piles with TPH and VOC levels below the action levels will be transported to a location within NAS Moffett Field. The three soil piles with non-detect TPH and VOC concentrations, and treated soil from soil pile NEX-NB will be stockpiled for future use as backfill material, at a location yet to be determined by the Navy. Nine soil piles determined to contain TPH and VOC levels below the action levels will be spread for aeration, at a location yet to be determined by the Navy.

Ms. Adams  
Page 2

September 28, 1993

Please call me or Joe LeClaire at (510) 975-3400, if you have questions or comments regarding this matter.

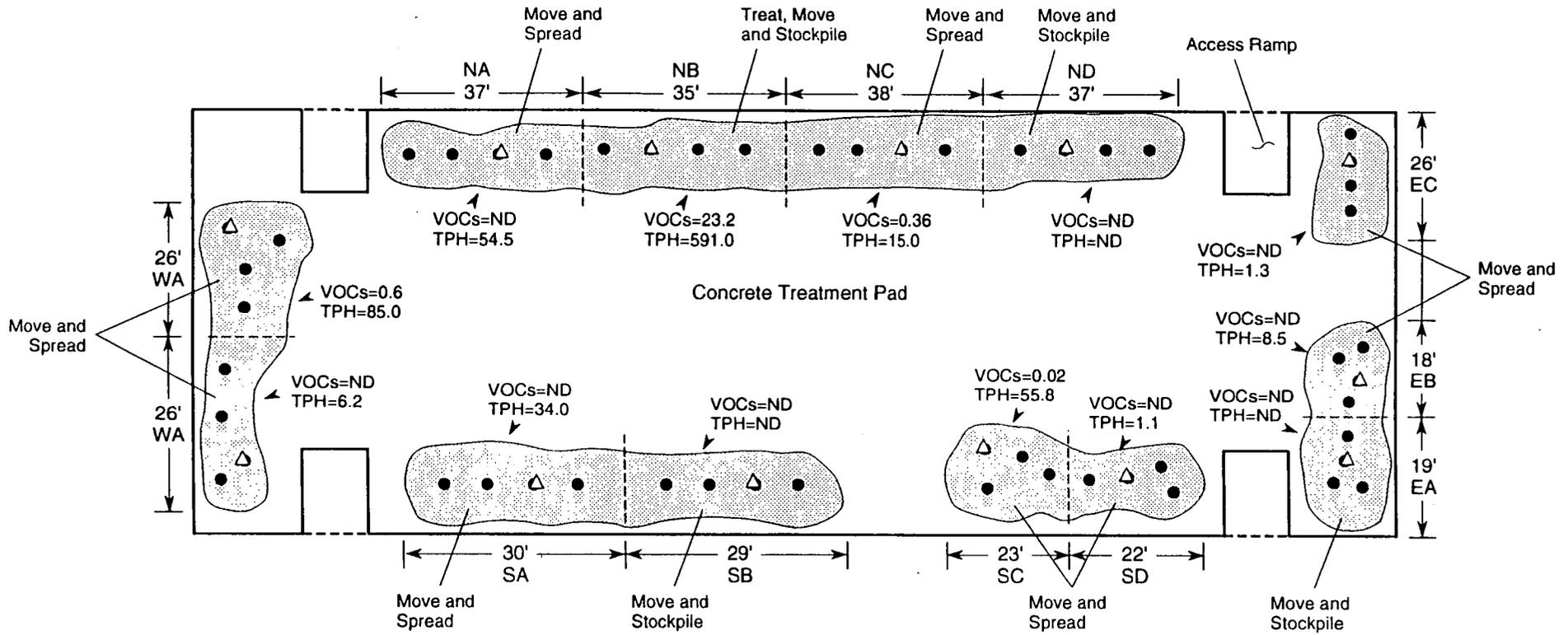
Sincerely,

*Joseph P. LeClaire for*

Mukul Sharma  
Project Engineer

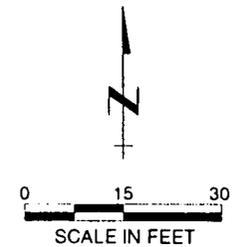
cc: Stephen G. Chao, WESTDIV  
Camille Garibaldi, WESTDIV  
Joseph P. LeClaire, Montgomery Watson  
Joshua D. Marvil, PRC  
Lt. Susanne Openshaw, NAS Moffett Field  
Jeff Reichmuth, PRC  
Jerry Taleghani, ROICC

Enclosures



**LEGEND**

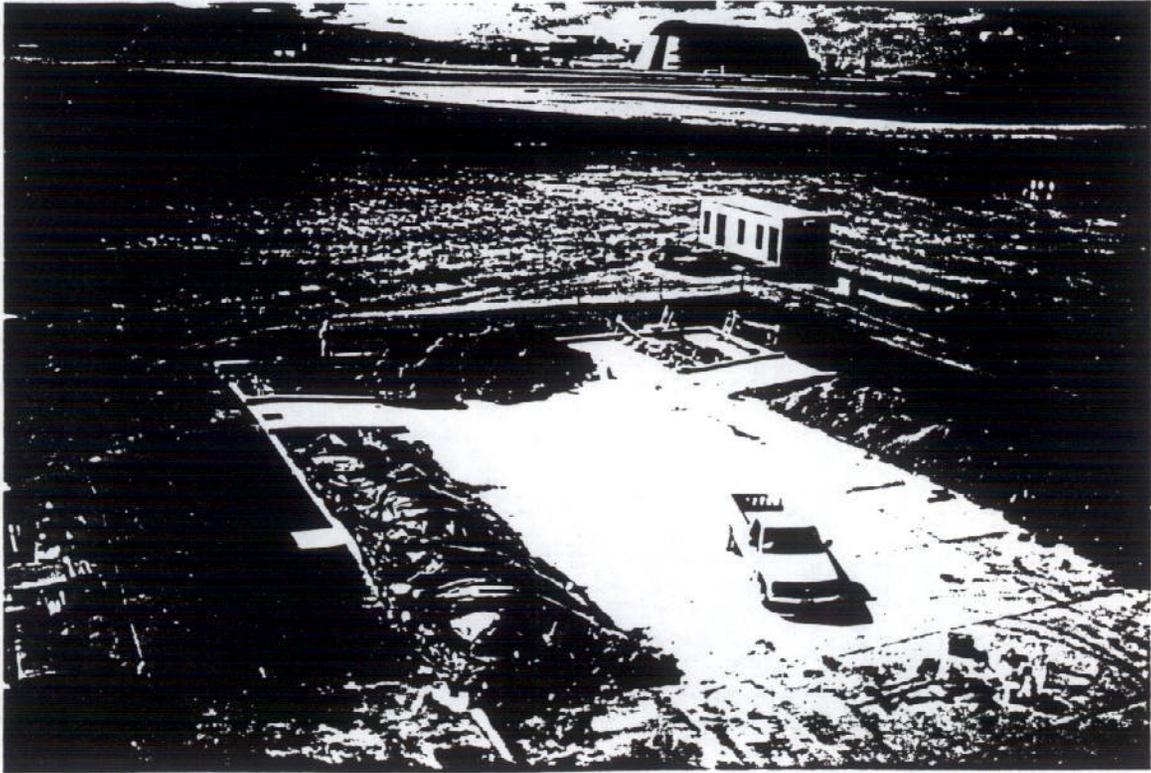
- Approximate Location for TPH-Extractable Soil Sample
  - △ Approximate Location for TPH-Purgeable Soil Sample (Collected September 22, 1993)
- |    |   |     |   |
|----|---|-----|---|
| SA | South Pile, Area A, Approximately 4' High | NB  | North Pile, Area B, Approximately 5' High |
| SB | South Pile, Area B, Approximately 4' High | NC  | North Pile, Area C, Approximately 5' High |
| SC | South Pile, Area C, Approximately 7' High | ND  | North Pile, Area D, Approximately 5' High |
| SD | South Pile, Area D, Approximately 4' High | WA  | West Pile, Area A, Approximately 4' High  |
| EA | East Pile, Area A, Approximately 4' High  | WB  | West Pile, Area B, Approximately 7' High  |
| EB | East Pile, Area B, Approximately 4' High  | VOC | Volatile Organic Compounds, mg/kg         |
| EC | East Pile, Area C, Approximately 4' High  | TPH | Total Petroleum Compounds, mg/kg          |
| NA | North Pile, Area A, Approximately 5' High |     |   |



NAVAL AIR STATION  
MOFFETT FIELD

**NEX SOIL PILES/SAMPLING  
LOCATIONS  
SEPTEMBER 16, 1993**

FIGURE 1



→ NORTH



FIGURE 2

**TABLE 1**  
**ANALYTICAL RESULTS FOR NEX SOILS**  
**NAS MOFFETT FIELD**

| Sample ID | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethylbenzene<br>(mg/kg) | Xylenes<br>(mg/kg) | Total VOCs<br>(mg/kg) | Total Petroleum Hydrocarbons (mg/kg) |          |           |          |                     | TPH<br>(mg/kg) |                      |
|-----------|--------------------|--------------------|-------------------------|--------------------|-----------------------|--------------------------------------|----------|-----------|----------|---------------------|----------------|----------------------|
|           |                    |                    |                         |                    |                       | Diesel                               | Kerosene | Motor Oil | Gasoline | Unknown<br>Extract. |                | Unknown<br>Purgeable |
| NEX-EA    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | -              | ND                   |
| NEX-EB    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | 8.5            | 8.5                  |
| NEX-EC    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | 1.3            | 1.3                  |
| NEX-NA    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | 53.0                | 1.5            | 54.5                 |
| NEX-NB    | 1.1                | 2.7                | 3.4                     | 16.0               | 23.2                  | ND                                   | ND       | 71.0      | 520.0    | -                   | -              | 591.0                |
| NEX-NC    | ND                 | 0.1                | 0.1                     | 0.2                | 0.4                   | ND                                   | ND       | ND        | ND       | -                   | 15.0           | 15.0                 |
| NEX-ND    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | -              | ND                   |
| NEX-SA    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | 34.0      | ND       | -                   | -              | 34.0                 |
| NEX-SB    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | -              | ND                   |
| NEX-SC    | ND                 | ND                 | 0.0                     | 0.0                | 0.0                   | ND                                   | ND       | 52.0      | ND       | -                   | 3.8            | 55.8                 |
| NEX-SD    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | -                   | 1.1            | 1.1                  |
| NEX-WA    | ND                 | ND                 | ND                      | ND                 | ND                    | ND                                   | ND       | ND        | ND       | 3.3                 | 2.9            | 6.2                  |
| NEX-WB    | ND                 | 0.1                | 0.2                     | 0.3                | 0.6                   | ND                                   | ND       | ND        | ND       | -                   | 85.0           | 85.0                 |

ND: Not Detected

Detection Limits:

Diesel = 1 mg/kg  
Kerosene = 1 mg/kg  
Motor Oil = 10 mg/kg  
Gasoline = 1 mg/kg

Benzene = 0.0053 mg/kg  
Toluene = 0.0053 mg/kg  
Ethylbenzene = 0.0053 mg/kg  
Xylenes = 0.0053 mg/kg