



DEPARTMENT OF THE NAVY  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
1220 PACIFIC HIGHWAY  
SAN DIEGO, CA 92132-5190

5090.4  
Ser 56LB.DR/0122  
April 1, 1998

Mr. Hugh Marley  
California Regional Water Quality Control Board  
Los Angeles Region  
101 Centre Plaza Drive  
Monterey Park, CA 91754-2156

Dear Mr. Marley:

Request your review and concurrence of the Navy's responses to your letter of March 24, 1998 regarding the Stockpile Characterization for Site 4, Naval Station Long Beach. Our responses are as follows:

- The locations of the soil samples that exceed the screening criteria for this site are shown on the enclosed site maps to allow identification of hot spots or concentrations of the contaminated soil.
- The soil exceeding the existing screening criteria will be segregated from the stockpiles. The segregation will include removing the soil with elevated TPH-Diesel concentrations from within the surrounding area of the sample point to the floor of the stockpiled area. In addition, any visibly impacted soil will also be segregated from the stockpiles. The segregated impacted soils will be treated and used as backfill in the excavation or transported off-site for treatment and/or disposal. The remaining soil at the site that has lower THP-Diesel concentrations that the screening criteria will be used as backfill in the excavation.
- All oversize material and debris that have been rejected by the previous thermal desorber at the site (currently stored in Stockpile 4) and also show oily stains will be transported off-site for disposal at a regulatory approved landfill.

Please send your concurrence for these responses and approval to proceed with treatment and/or disposal of contaminated soil and backfilling of excavation with remaining soil stockpiles to:

Commander  
Attn: Duane Rollefson (Code 56LB.DR)  
Southwest Division, Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132-5190

5090.4  
Ser 56LB.DR/0122  
April 1, 1998

If you have any questions regarding this matter, please contact Mr. Duane Rollefson at (619) 532-4712.

Sincerely,



FAIQ ALJABI  
Environmental Engineer  
By direction of the Commander

Encl: (1) Figures 1 through 15, STOCKPILE LOCATION/SAMPLING LOCATION  
MAPS for Site 4, Naval Station Long Beach, dated 3/98

5090.4  
Ser 56LB.DR/0122  
April 1, 1998

Blind copy:  
572.CP (Admin Record Coordinator)  
56LB.FA  
56LB.AL  
Chron File

Writer: D. Rollefson, Code 56LB.DR, 2-4712  
Typist: B. Foster. Code 564.BF, J:\560\560s\56LB.DR, SITE4.DOC 1 APR 98

*FA*  
*56LB.1*

*DR*  
*56LB.1*

*CF*  
*56LB.1*

Drawn By: BDB  
Date: 3/98

Checked By:  
Rev. Date: 3/98

Approved By:  
Project No.:

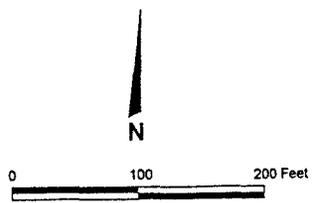
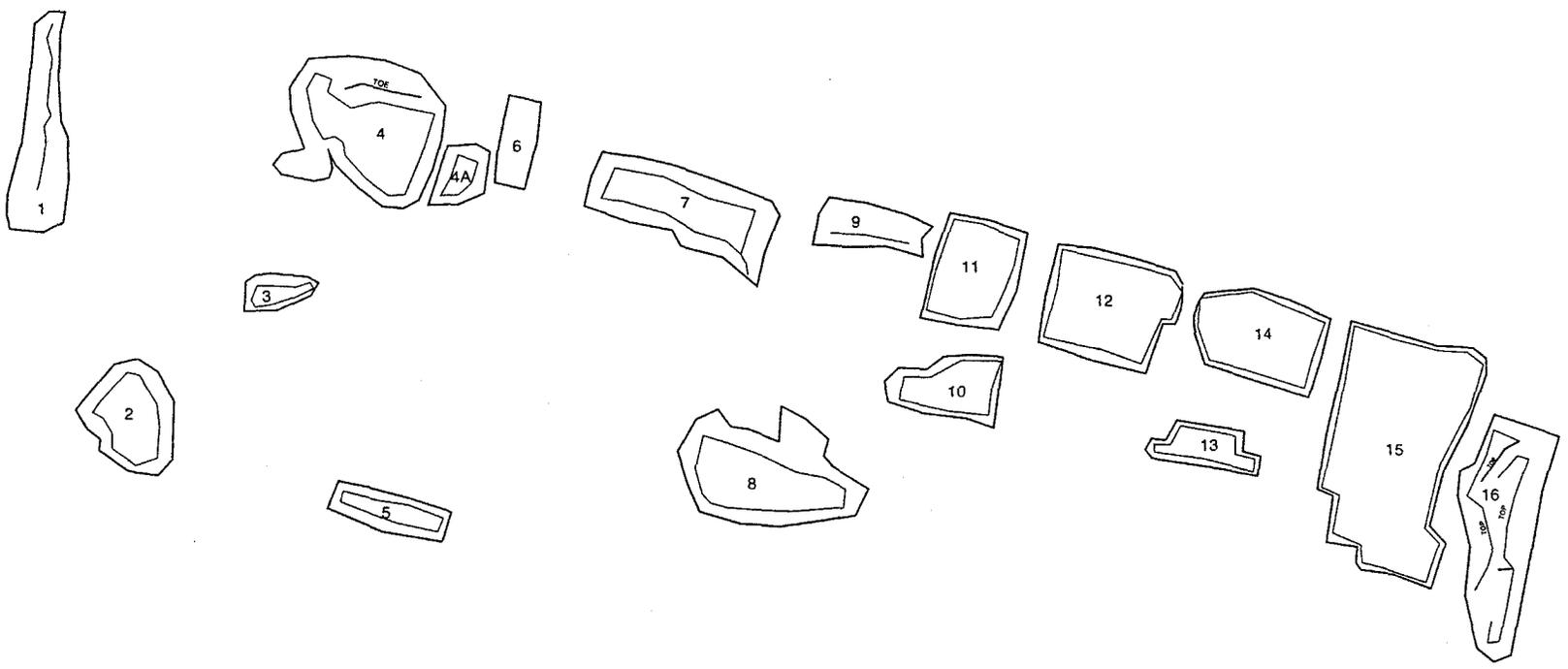
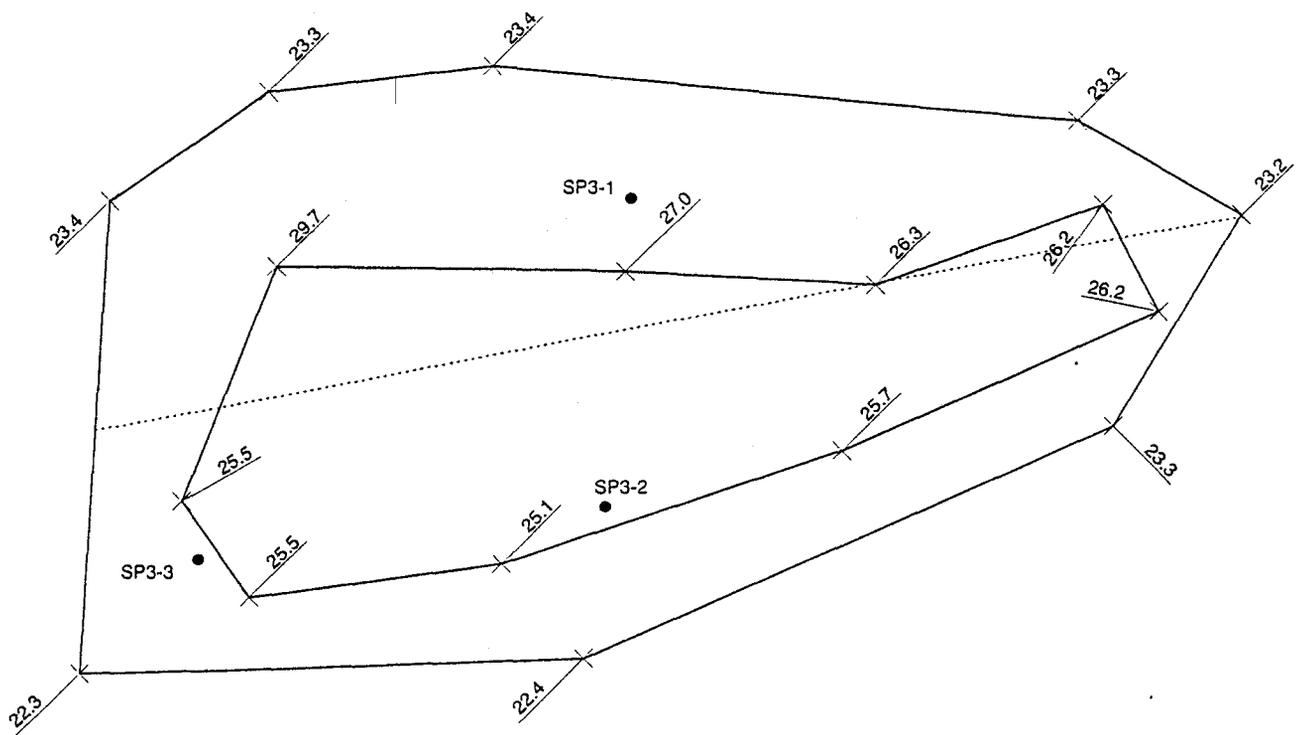


Figure 1  
**Stockpile Location Map**  
Site 4, Naval Station Long Beach  
Long Beach, California

 FOSTER WHEELER  
ENVIRONMENTAL CORPORATION

Drawn By: BDB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

**STOCKPILE 3**



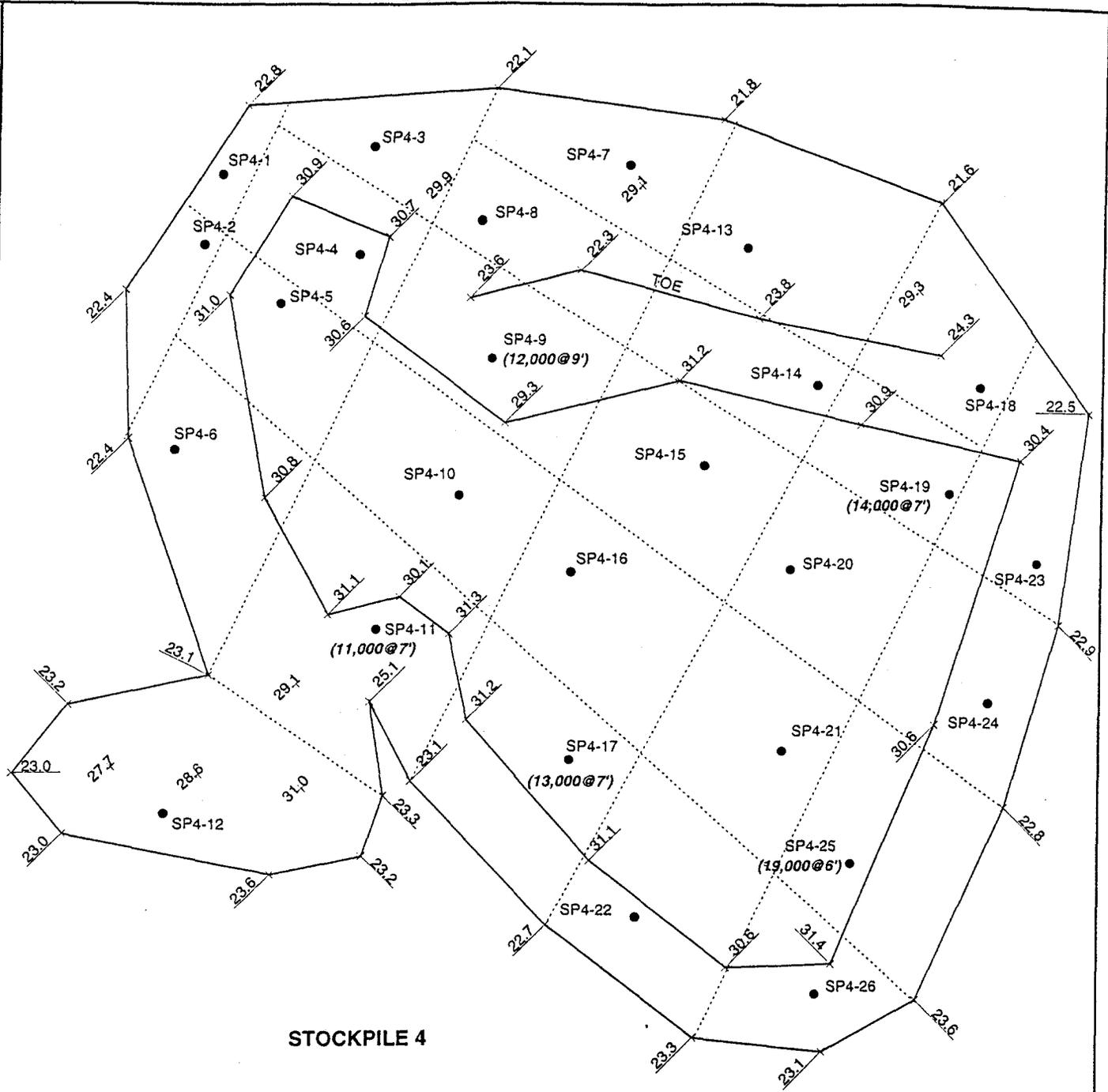
**Explanation**

- Sample Location
- ..... Section Consisting of Approximately 100 Cubic Yards of Soil



**Figure 2**  
**Stockpile 3 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California

Drawing No.:	Checked By:
Project No.:	Approved By:
Drawn By: BOB	Rev. Date: 3/98
Date: 3/98	



**Explanation**

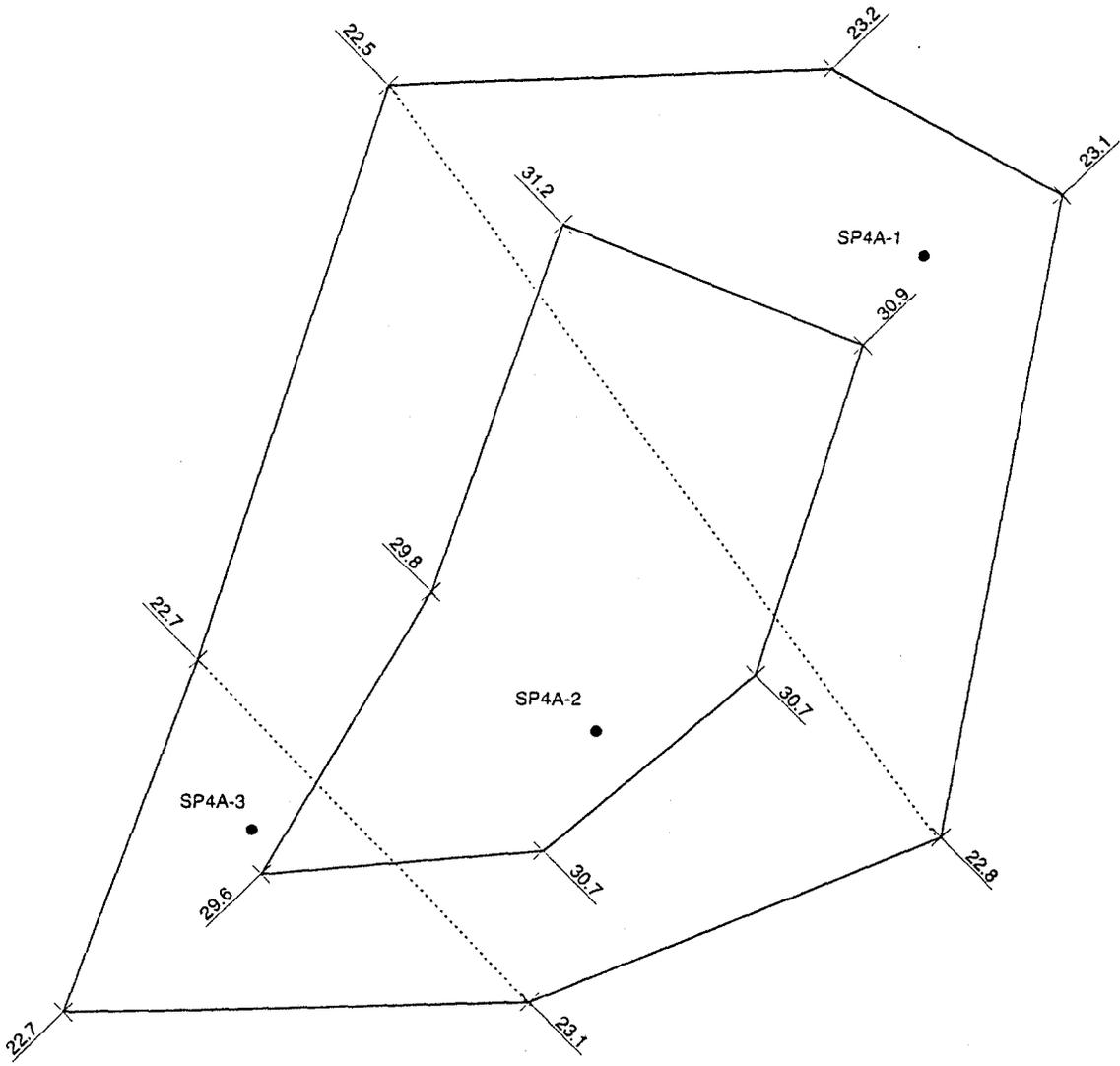
- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil
- (11,000@7') Concentration of TPH (C<sub>13</sub>-C<sub>22</sub>) ≥ 10,000 mg/kg shown with sample depth



**Figure 3**  
**Stockpile 4 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California

**FW** FOSTER WHEELER ENVIRONMENTAL CORPORATION

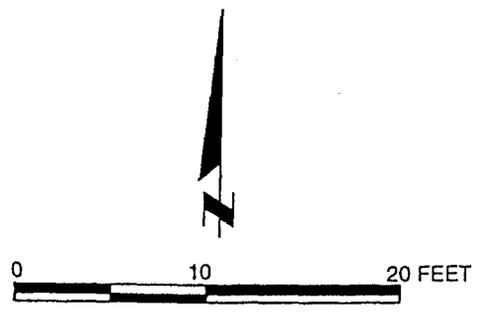
Drawn By: BDB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------



**STOCKPILE 4A**

**Explanation**

- Sample Location
- ..... Section Consisting of Approximately 100 Cubic Yards of Soil

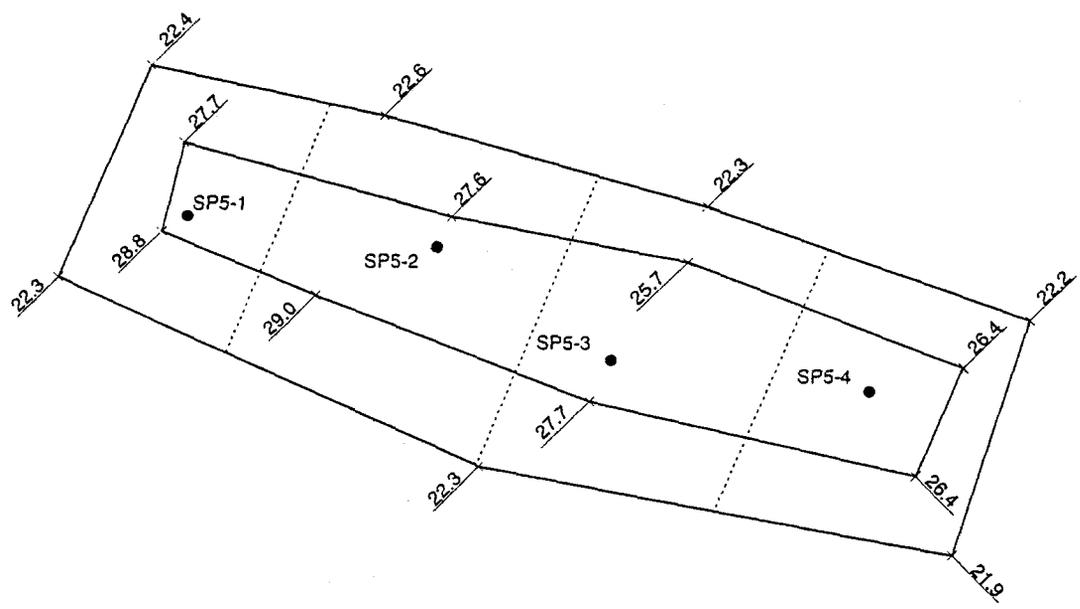


**Figure 4**  
**Stockpile 4A Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California

**FW** FOSTER WHEELER  
 ENVIRONMENTAL CORPORATION

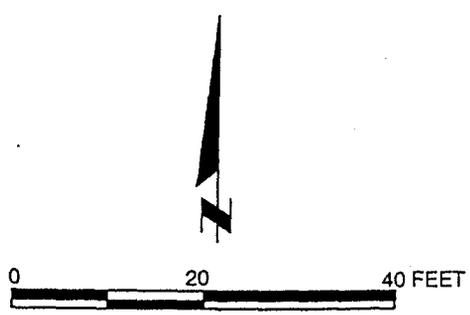
Drawn By: BOB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

**STOCKPILE 5**



**Explanation**

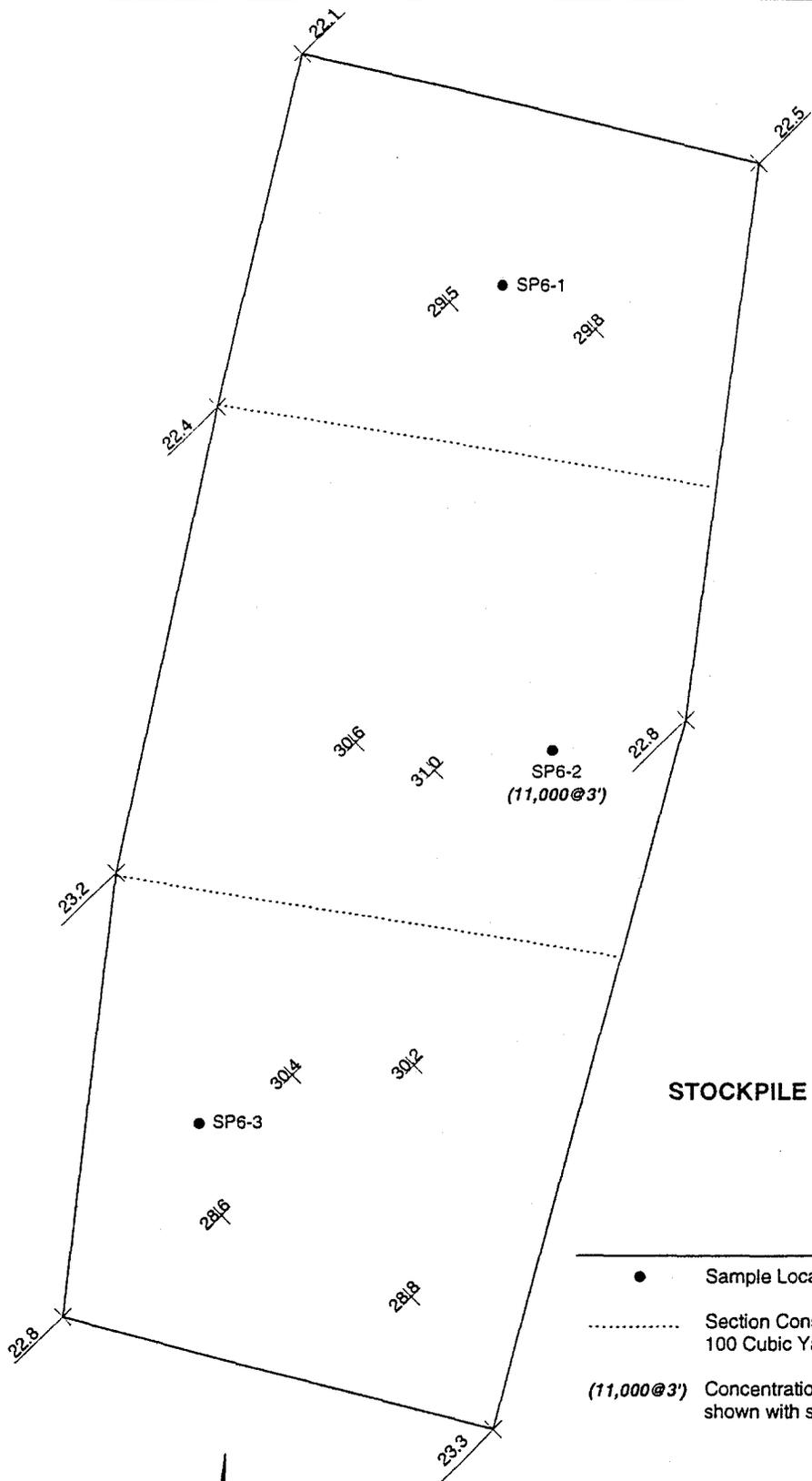
- Sample Location
- ..... Section Consisting of Approximately 100 Cubic Yards of Soil



**Figure 5**  
**Stockpile 5 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California

**FW** FOSTER WHEELER  
 ENVIRONMENTAL CORPORATION

Drawn By: BDB Date: 3/99	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

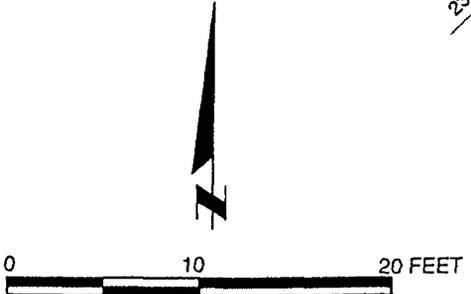


**STOCKPILE 6**

Explanation

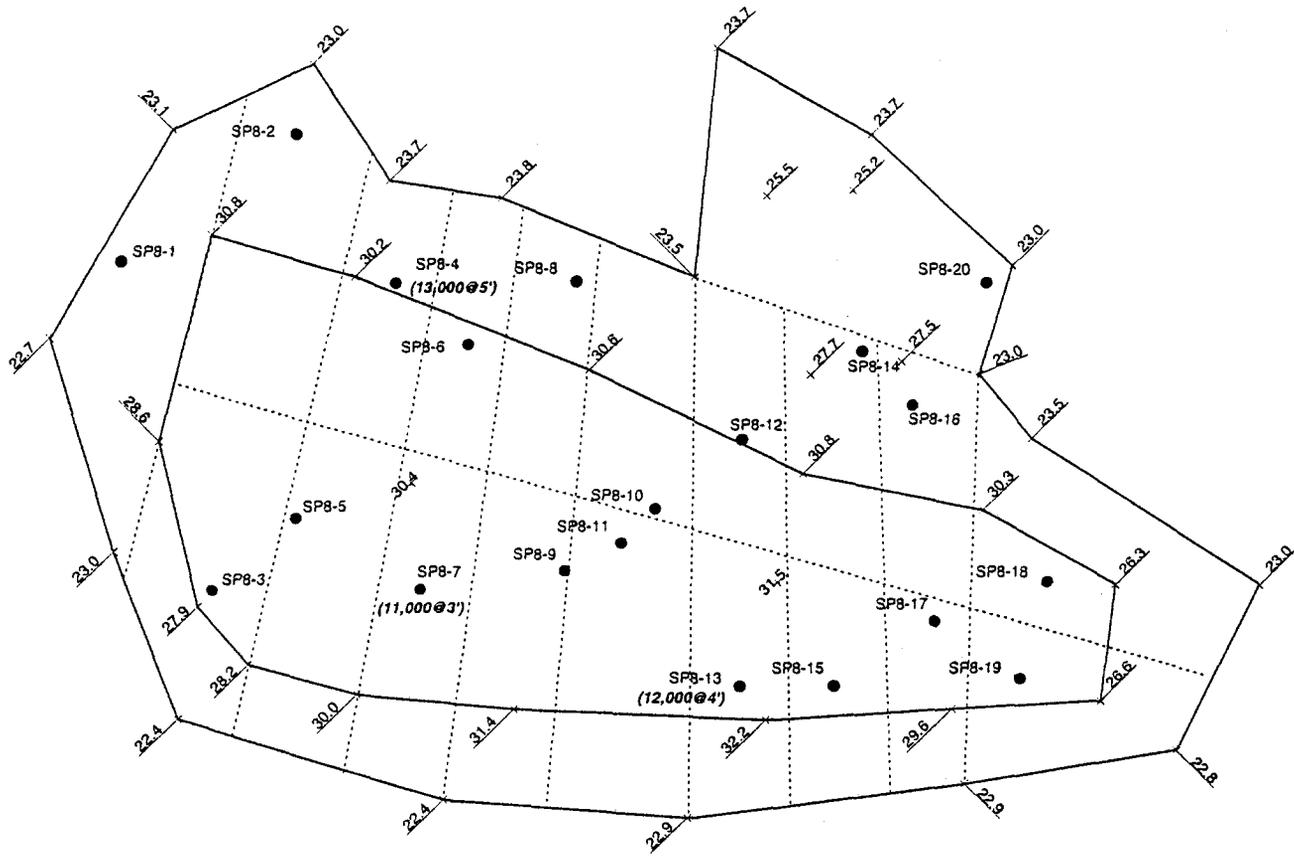
- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil
- (11,000@3') Concentration of TPH (C<sub>13</sub>-C<sub>22</sub>) ≥ 10,000 mg/kg shown with sample depth

**Figure 6**  
**Stockpile 6 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California



Drawn By: BDB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

### STOCKPILE 8



#### Explanation

- Sample Location
- ..... Section Consisting of Approximately 100 Cubic Yards of Soil
- (11,000@3') Concentration of TPH (C<sub>13</sub>-C<sub>22</sub>) ≥ 10,000 mg/kg shown with sample depth

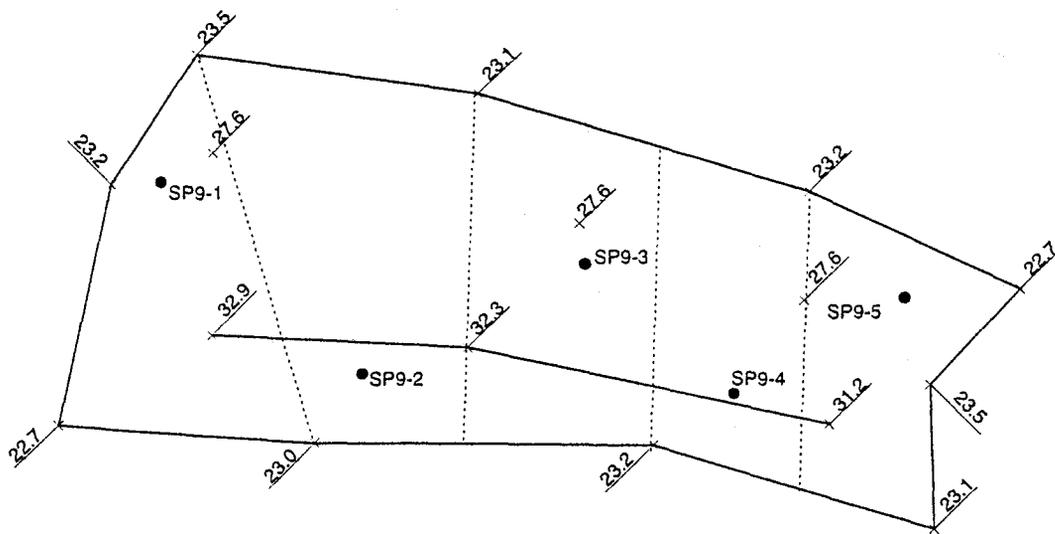


Figure 7  
**Stockpile 8 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California

**FW** FOSTER WHEELER  
 ENVIRONMENTAL CORPORATION

Drawn By: BDB Date: 3/88	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

STOCKPILE 9



Explanation

- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil

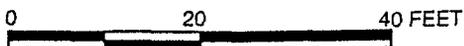


Figure 8

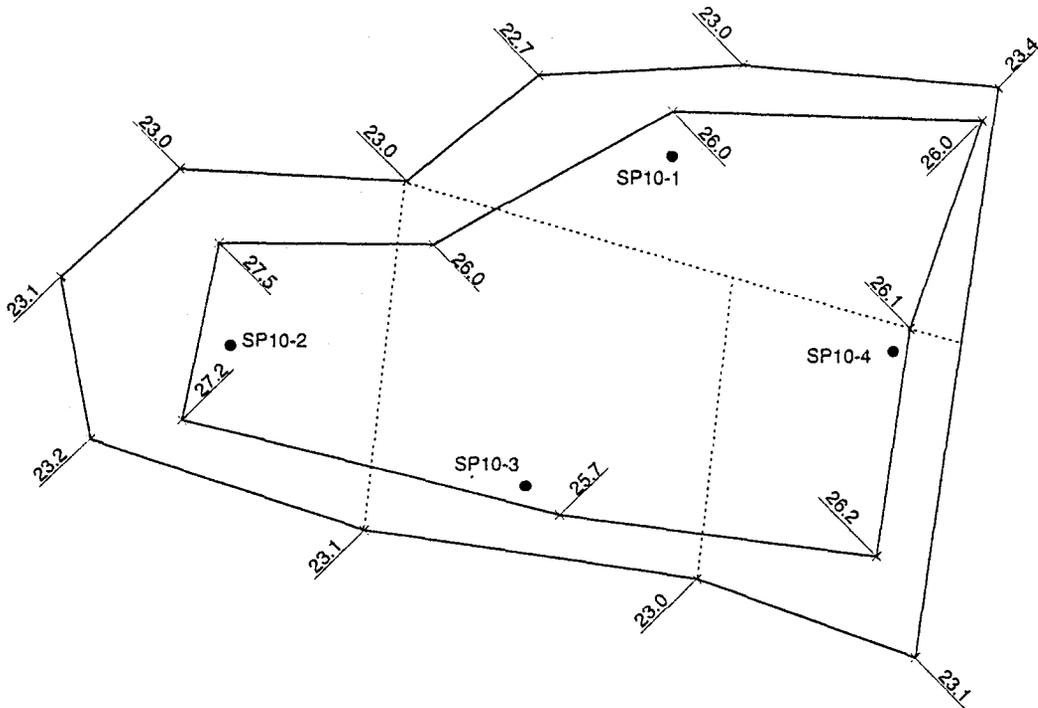
**Stockpile 9 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California



FOSTER WHEELER  
 ENVIRONMENTAL CORPORATION

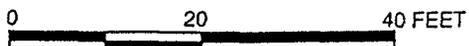
Drawn By: BDB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

**STOCKPILE 10**



**Explanation**

- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil



**Figure 9**

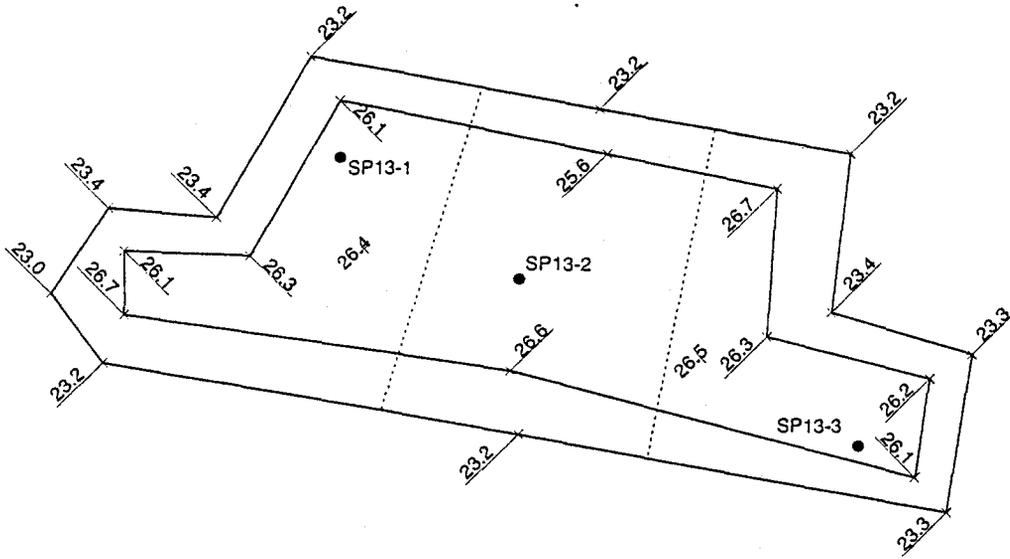
**Stockpile 10 Sampling Locations**  
Site 4, Naval Station Long Beach  
Long Beach, California





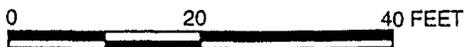
Drawn By: BDB Date: 3/98	Checked By: Approved By:	Drawing No.: Project No.:
-----------------------------	-----------------------------	------------------------------

**STOCKPILE 13**



**Explanation**

- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil

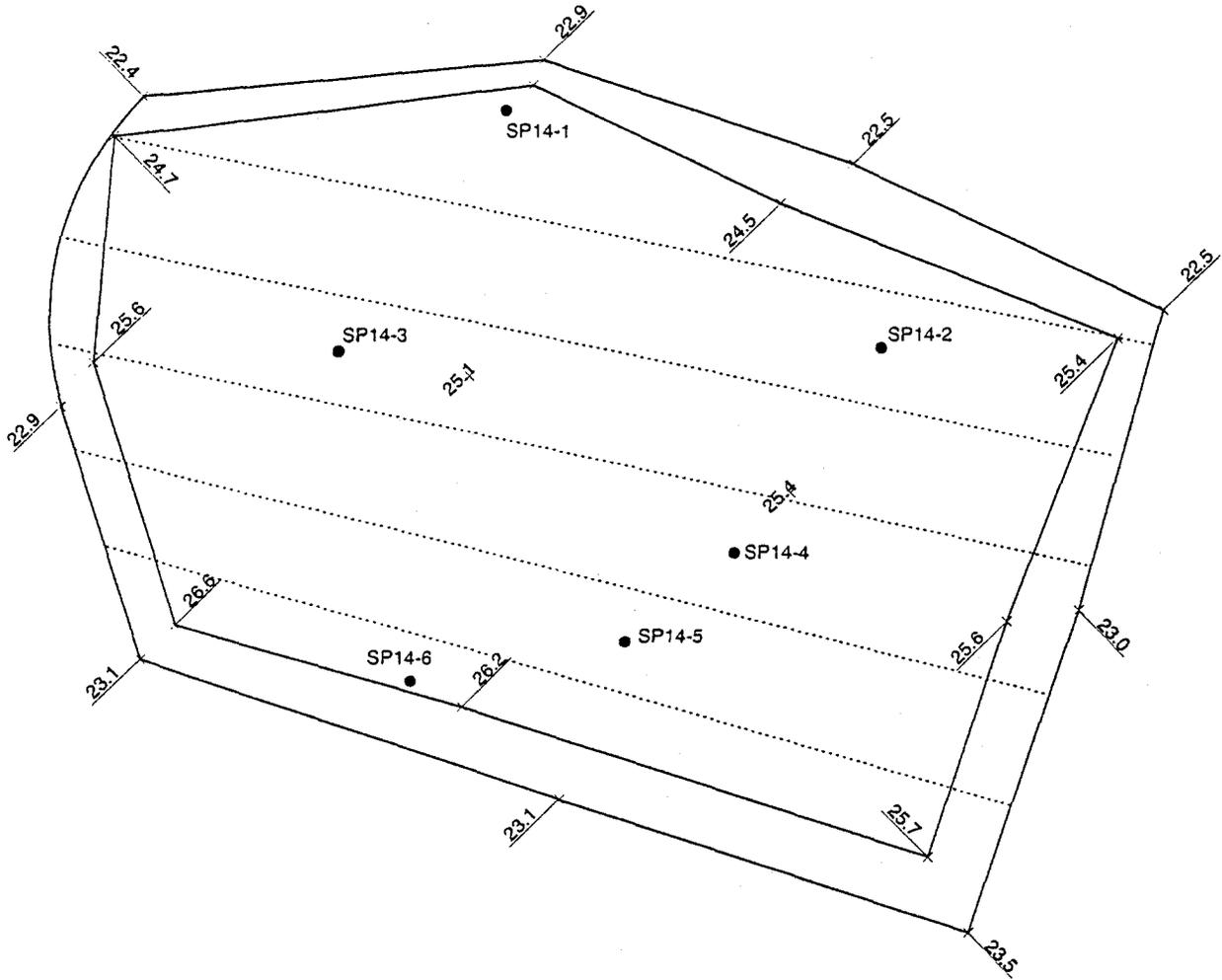


**Figure 12**

**Stockpile 13 Sampling Locations**  
Site 4, Naval Station Long Beach  
Long Beach, California

Drawn By: BDB	Checked By:	Drawing No.:
Date: 3/98	Rev. Date: 3/98	Project No.:

### STOCKPILE 14



**Explanation**

- Sample Location
- Section Consisting of Approximately 100 Cubic Yards of Soil

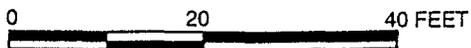


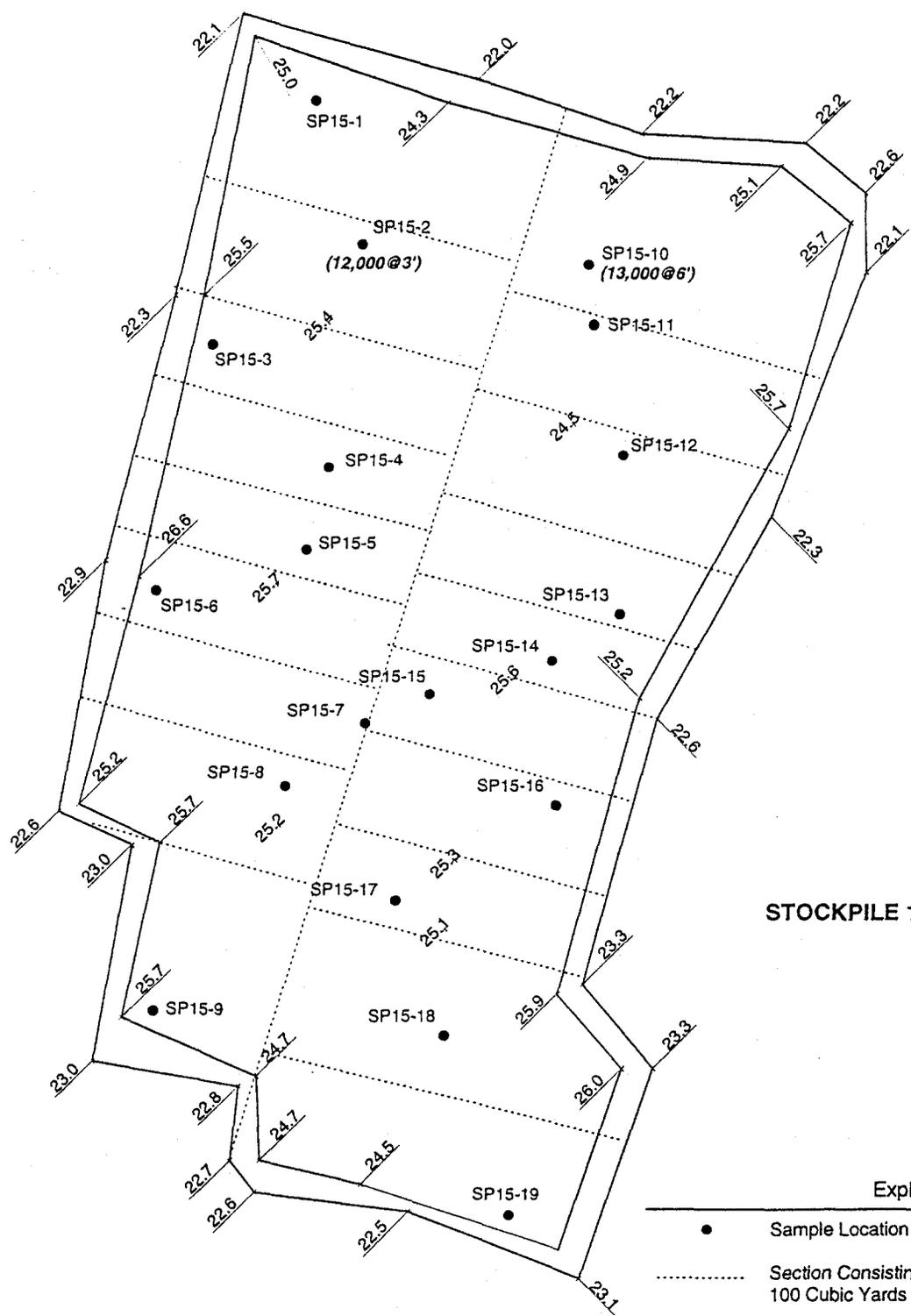
Figure 13

**Stockpile 14 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California



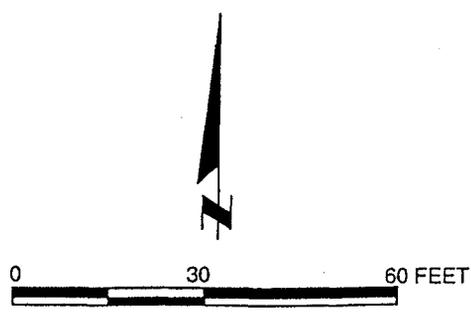
**FOSTER WHEELER**  
**ENVIRONMENTAL CORPORATION**

Drawn By: BOB Date: 3/98	Checked By: BOB Rev. Date: 3/98	Project No.:
-----------------------------	------------------------------------	--------------



**STOCKPILE 15**

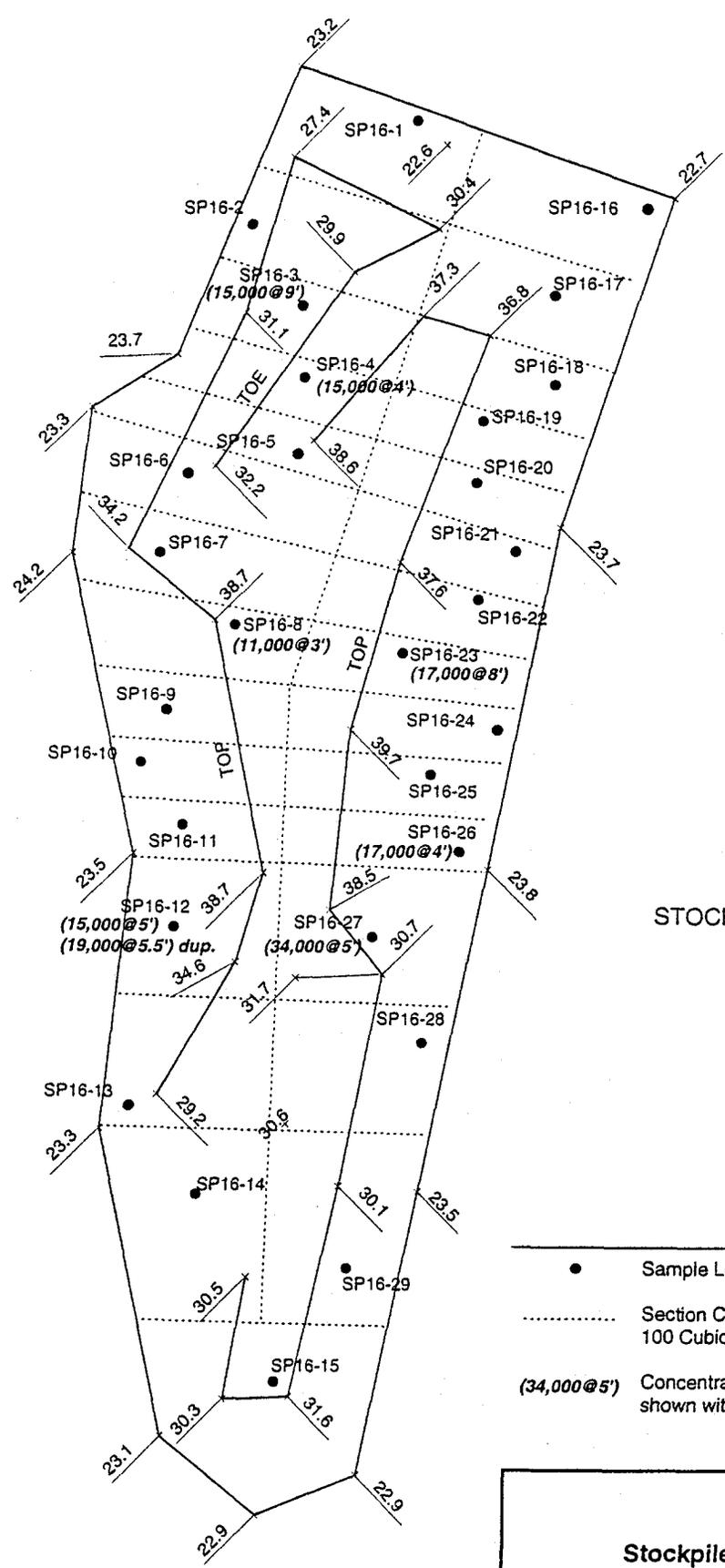
Explanation	
●	Sample Location
-----	Section Consisting of Approximately 100 Cubic Yards of Soil
(13,000@6')	Concentration of TPH (C <sub>13</sub> -C <sub>22</sub> ) ≥ 10,000 mg/kg shown with sample depth



**Figure 14**  
**Stockpile 15 Sampling Locations**  
 Site 4, Naval Station Long Beach  
 Long Beach, California


**FOSTER WHEELER ENVIRONMENTAL CORPORATION**

Drawn By: BDB	Drawn By: BDB	Checked By:	Drawing No.:
Date: 3/98	Rev. Date: 3/98	Approved By:	Project No.:



STOCKPILE 16

Explanation

- Sample Location
- ..... Section Consisting of Approximately 100 Cubic Yards of Soil
- (34,000@5') Concentration of TPH (C<sub>13</sub>-C<sub>22</sub>) ≥ 10,000 mg/kg shown with sample depth

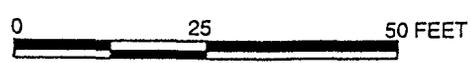


Figure 15

**Stockpile 16 Sampling Locations**  
Site 4, Naval Station Long Beach  
Long Beach, California

**FOSTER WHEELER**  
ENVIRONMENTAL CORPORATION