

03.01-02/14/95-00231



DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1510 GILBERT ST
NORFOLK VA 23511-2699

TELEPHONE NO:
(804) 322-4776
IN REPLY REFER TO:
5090
1822:JFH:cag

U.S. Environmental Protection Agency
Attn: Mr. David Toth
Mail Code: 3HW61
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Re: Additional Fieldwork at Sites 2E, 15, and 24
at NAS Oceana

Dear Mr. Toth:

After our phone conversation on September 15, 1994, the second round of field activities for the above mentioned sites was initiated later in the month. After a presentation of the analytical results in December by our Contractor, CH2M Hill, the data was reviewed and the Navy determined that minor additional field activities were required to enhance characterization at these sites. The enclosure provides a summary of these proposed activities. Completion should fully characterize these sites and complete the currently ongoing RCRA Facility Investigation (RFI) in preparation for the Corrective Measures Study (CMS). The fieldwork is scheduled to start February 21, 1995. This fieldwork is an extension of the previous fieldwork as submitted in the approved RFI Phase II workplan.

Please call Mr. Jim Harris, RPM, NAS Oceana at (804) 322-4776 if you have questions or need additional information with regards to this submittal.

Sincerely,

J. F. HARRIS, P.E.
Remedial Project Manager
Installation Restoration Section
(North)
Environmental Programs Branch
Environmental Quality Division
By direction of the Commander

Enclosure

Copy to:
NAS Oceana (Mr. Will Bullard) (w/encl)

PROPOSED SUPPLEMENTAL FIELDWORK

Site 2E

Six groundwater geoprobes should be taken analyzed in the on-site laboratory for VOCs with 1 confirmatory sample sent to the lab for 8240 VOCs. Two shallow wells shall be installed and sampled for the 8240 VOCs, TPH, PAH, and total and dissolved lead, mercury and zinc. One deep well will be installed in a high contamination area. Six selected wells from the previous RFI (MW-7, 9-13) will be selected and sampled for 8240 VOCs, TPH and PAH. New wells will be surveyed and water levels taken.

Site 15

Five groundwater geoprobes will be taken south of well 15-MW-15 and 2 wells shall be installed. The samples will be sampled for BTEX and TPH.

Site 24

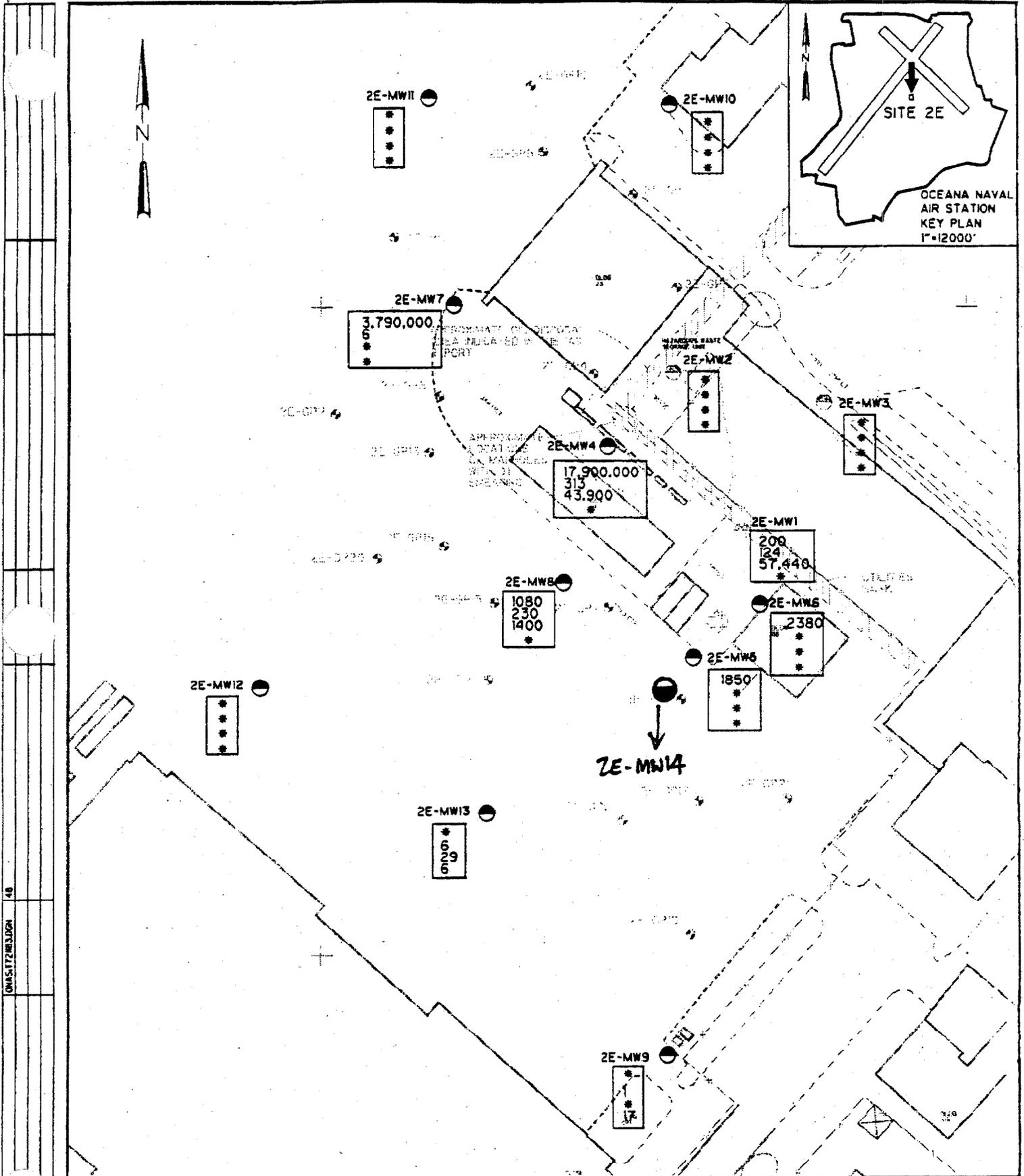
Seven groundwater geoprobe locations including three double depth samples for a total of 10 samples should be taken and analyzed in the on-site laboratory with one shallow and one deep sample shipped off site for 8240 VOCs. Four wells should be installed outside of the contamination and should be sampled for 8240 VOCs. One deep well should be installed in a highly contaminated area and sampled for 8240 VOCs. MW-2, 3, and 4 should be resampled for 8240 VOCs.

CMS - Pre-investigative fieldwork

Site 15 - Take 5 additional soil samples at site 15. These sites will be determined by the field engineer and will be approved by the RPM immediately upon designation. Analyze the 3 previously designated soil borings for NO₃, NH₄, PO₄ and TKN analysis.

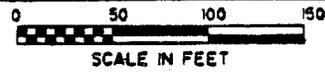
Conduct a soil gas survey to measure oxygen, carbon dioxide and organic vapor concentrations.

Finally, a laboratory treatability study designed to determine the potential to Biologically remediate petroleum hydrocarbon contaminated soil will be performed



LEGEND

- PHASE I SHALLOW MONITORING WELL
- PHASE II SHALLOW MONITORING WELL
- * NOT DETECTED ABOVE IDL



TPH
TOTAL BTEX
TOTAL DETECTED PAHs
CHLORINATED VOCs
CONCENTRATIONS IN PPB

Figure 2-2-6
ORGANIC COMPOUNDS
IN GROUNDWATER
AT SITE 2E DURING
PHASE I AND PHASE II
SAMPLING



2
 1
 2
 2
 1-63
 0NASJ0584.dgn
 0NASJ283.dgn
 0NASJ068.dgn
 0NASJ0581.dgn
 1-63

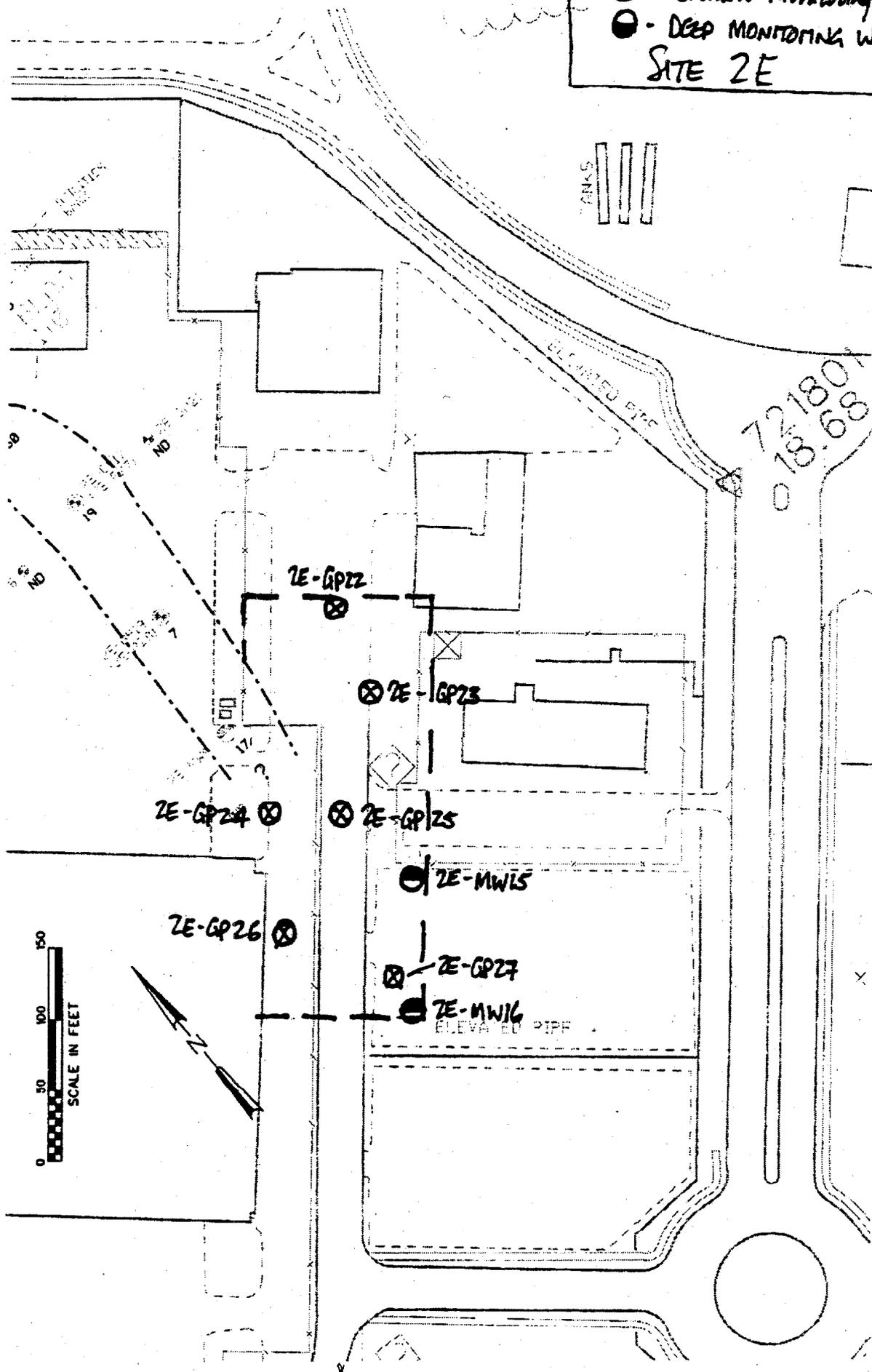
⊗ - GEOPROBE POINT

○ - Shallow Monitoring Well.

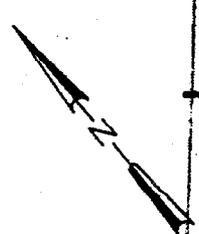
● - DEEP MONITORING WELL - SEE ATTACHED

SITE 2E

→ 6 in-situ samples + 1 vac. split
→ 2 MW's + 1 deep in a high con. air-area.



722180
018.688

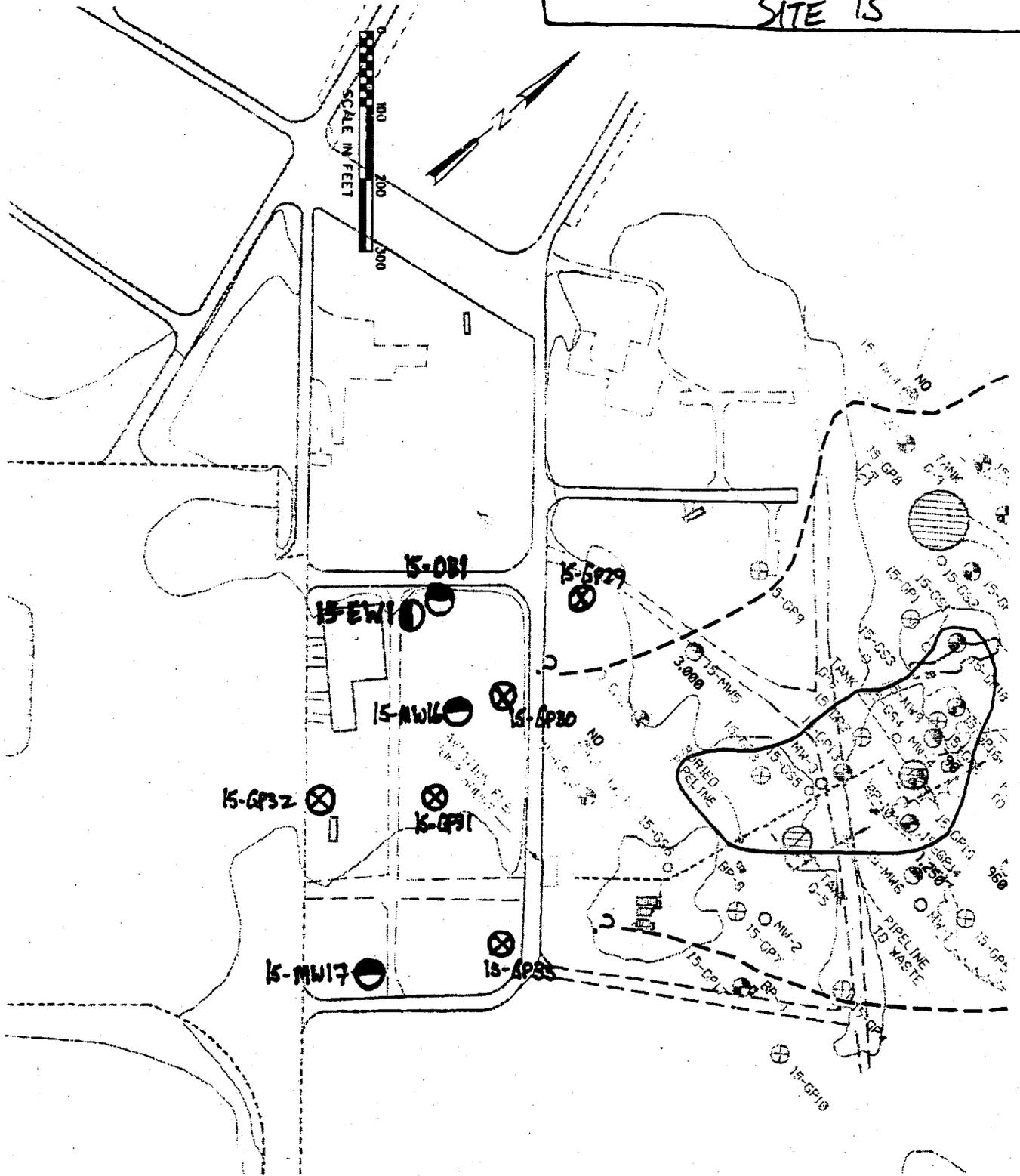


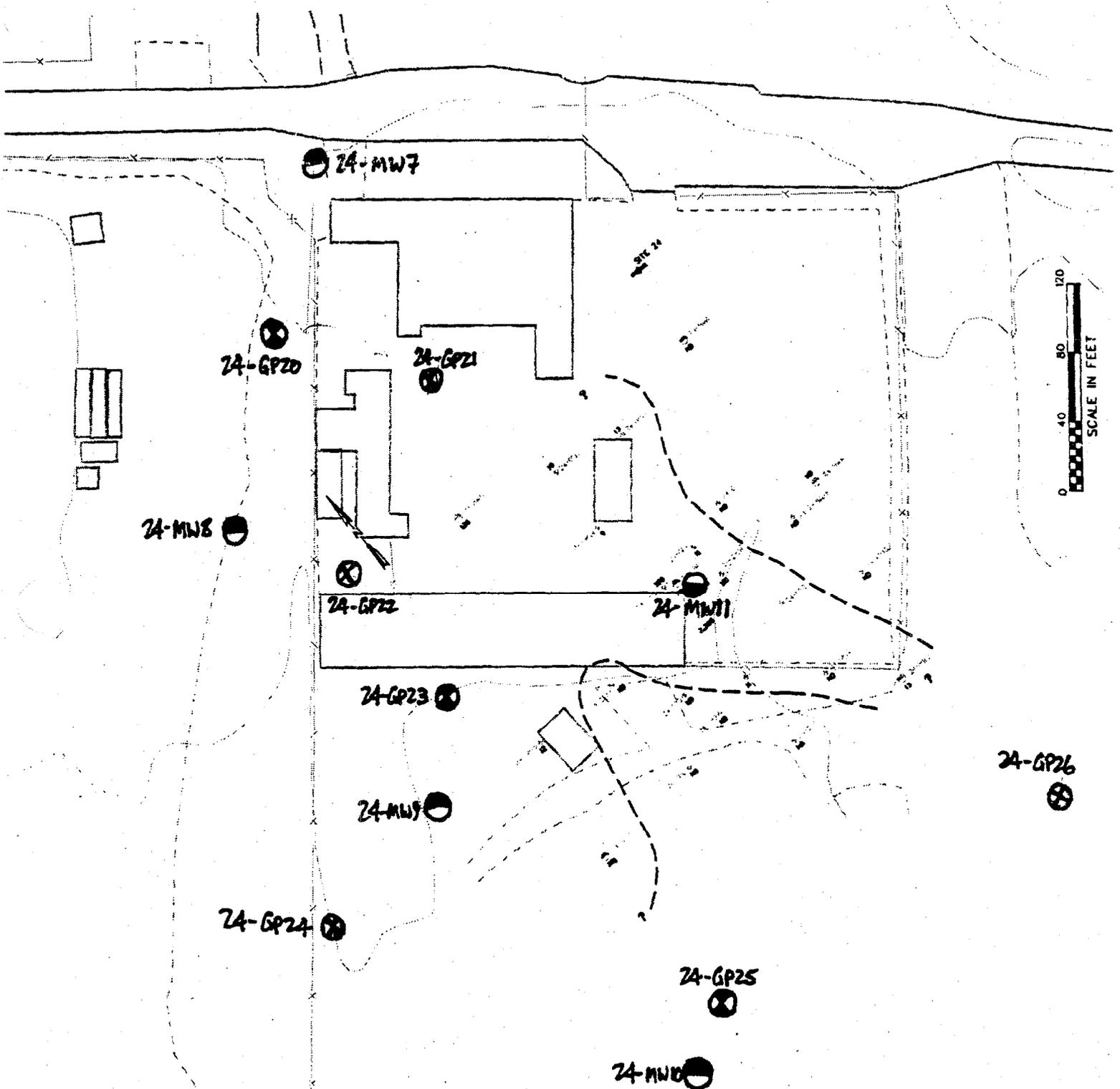
● 2 Shallow MW across

● 1 6" Pumping Well

● 1 2" Piezometer

SITE 15





SITE 24

- ⊗, ⊙ • 10 Geoprobe from 7 locations. $\left\{ \begin{array}{l} 2 \text{ SPLITS} \\ 1 \text{ SHALLOW } 8290 \\ 1 \text{ DEEP.} \end{array} \right.$
- ⊙ • 4 Shallow MWs outside contamination
- ⊙ • 1 DEEP MW IN HIGH CONTAMINATION AREA.