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MEMORANDUM

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SUBJECT: Proposed Additional Sampling at SWMUs 5, 40, and 60; RCRA Facility Investigation; NAS Memphis, Millington, Tennessee; CTO-94

DATE: August 24, 1995

The following text and figures provide a brief description of the proposed additional sampling activities requested by the BRAC Cleanup Team (BCT) at NAS Memphis. Additional samples are proposed at SWMUs 5 (Aircraft Fire Fighting Training Facility), 40 (Salvage Yard No. 1), and 60 (Northside Landfill). All sampling activities will be conducted using the procedures outlined in Section 4 of the *Comprehensive RCRA Facility Investigation Work Plan* (E/A&H, October, 1994).

SWMU 5 (AIRCRAFT FIRE FIGHTING TRAINING FACILITY)

Surface Soil Sampling

JP-4 and JP-5 fuel have been burned during training activities at SWMU 5. It is also possible that waste oil was mixed with this fuel at times in the past. Because the burning of fuel and/or waste oil could potentially result in dioxin formation, surface soil samples will be collected for dioxin analysis (EPA Method 8280). Data from previous investigations indicate that petroleum contamination of soil is relatively greater in the area of the two former fire extinguisher training pits northeast of MAT 305 than in other areas of the site. Therefore, five biased surface (0-1') soil samples will be collected in the vicinity of the pits to increase the likelihood of detecting any

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dioxins that might be present. Figure 1 presents the site layout and the proposed additional sampling locations.

SWMU 40 (SALVAGE YARD NO. 1)

Surface Soil Samples

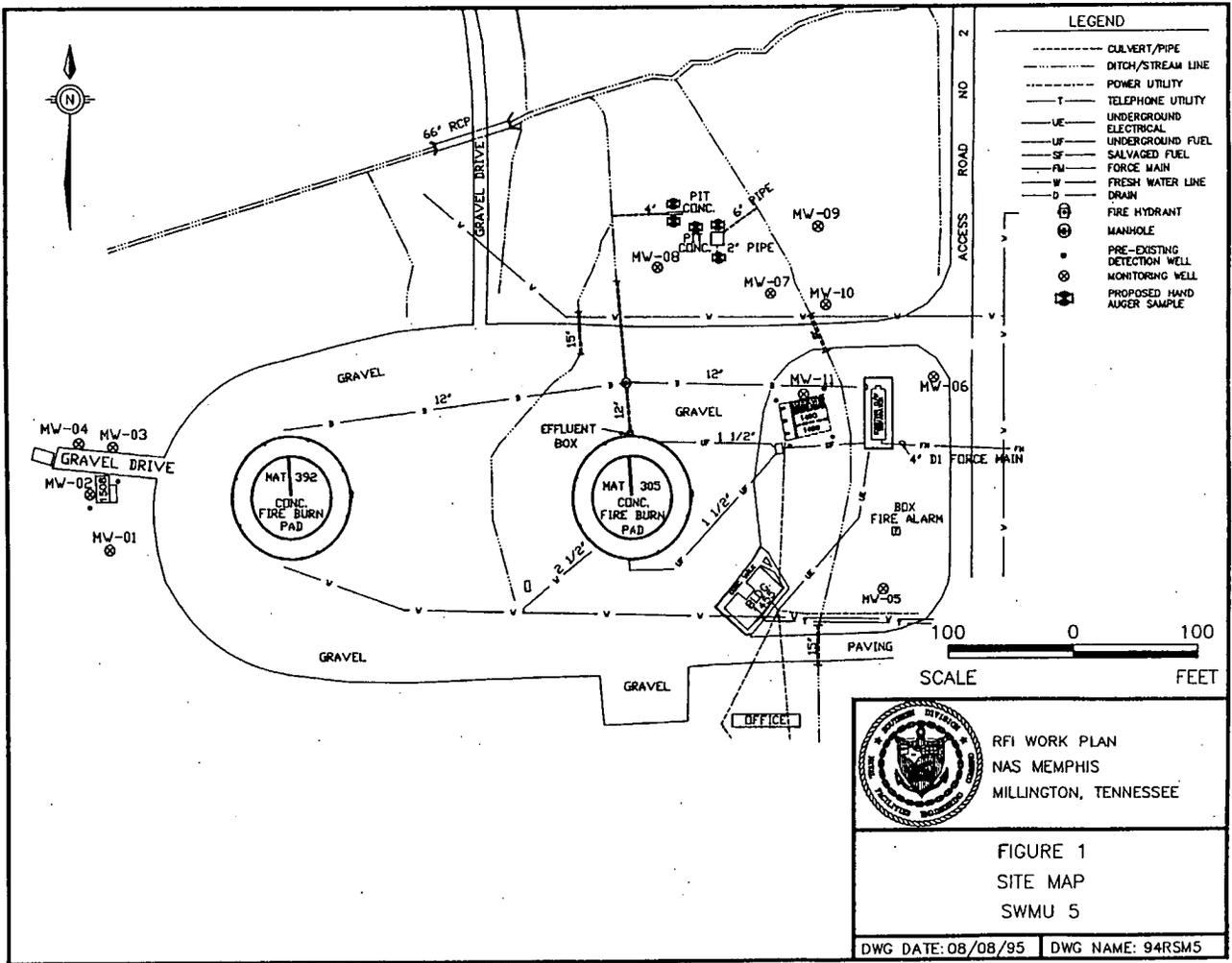
The results of the DPT screening investigation at SWMU 40 indicated that the source of contamination appears to be the USTs associated with the former service station. Therefore, the BCT decided that the site will be addressed under the UST program. The RCRA investigation will be closed out by collecting five surface (0-1') samples from SWMU 40, including one from the UST area (Figure 2). The five samples will be collected with hand augers, analyzed for SVOCs, metals, and pesticides/PCBs, and the results used for a Preliminary Risk Evaluation (PRE) and/or risk assessment preparation.

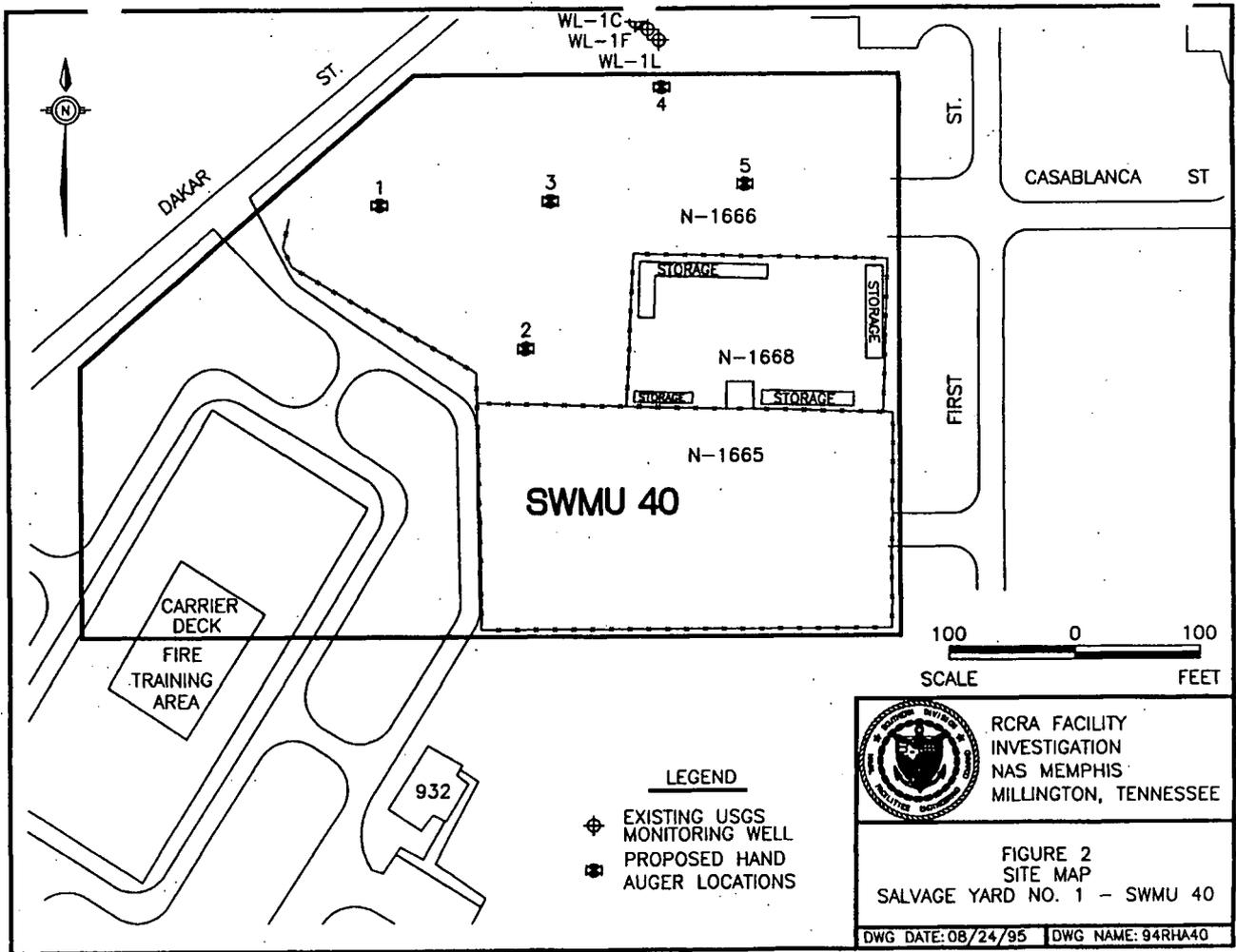
SWMU 60 (NORTHSIDE LANDFILL)

Additional Soil Borings

A Geoprobe survey will be conducted in the northwest corner of the site to determine the extent of shallow petroleum contamination detected during the RFI field investigation. When the extent of contamination has been determined, the petroleum-contaminated soil will be removed. A total of 16 soil borings will be advanced using a Geoprobe sampler, with samples collected at three intervals — 0 to 2-feet, 6 to 8-feet, and the two feet above the soil/water interface. Field personnel may deviate from this strategy if field conditions or data (i.e., visual observations) suggest that additional or different intervals may be successfully sampled or yield more useful information. Deviations from the proposed strategy will be documented in a field log book and in the addendum to the RFI Report.

Samples will be analyzed for DRO-TPH and GRO-TPH. The first 10 sample points are located around monitoring wells MW-01S and MW-01LF. Six additional contingent samples will be





DAKAR ST.

CASABLANCA ST.

ST.

FIRST

N-1666

N-1668

N-1665

SWMU 40

CARRIER DECK
FIRE TRAINING AREA

932

100 0 100
SCALE FEET

LEGEND

- ⊕ EXISTING USGS MONITORING WELL
- ⊞ PROPOSED HAND AUGER LOCATIONS



RCRA FACILITY INVESTIGATION
NAS MEMPHIS
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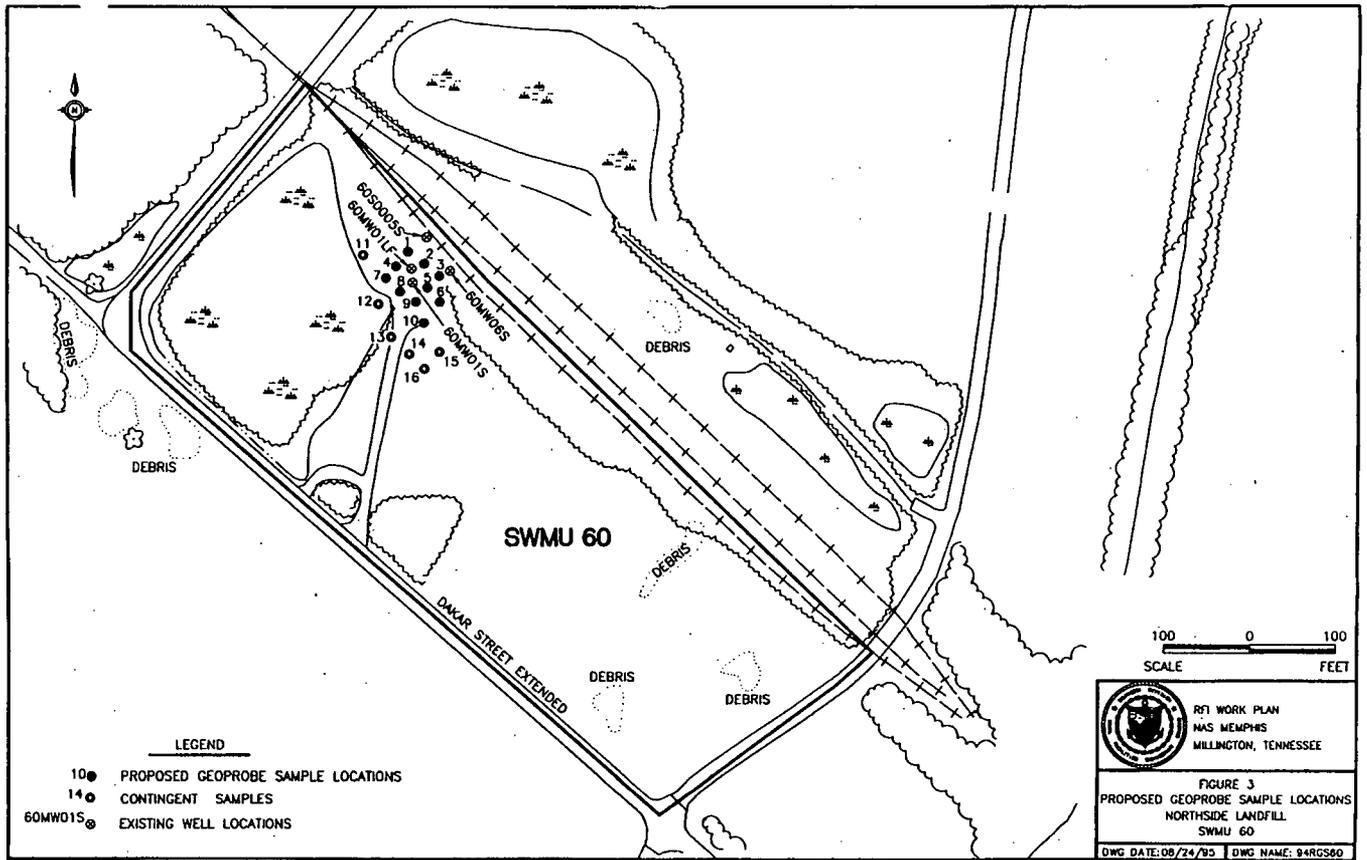
FIGURE 2
SITE MAP
SALVAGE YARD NO. 1 - SWMU 40

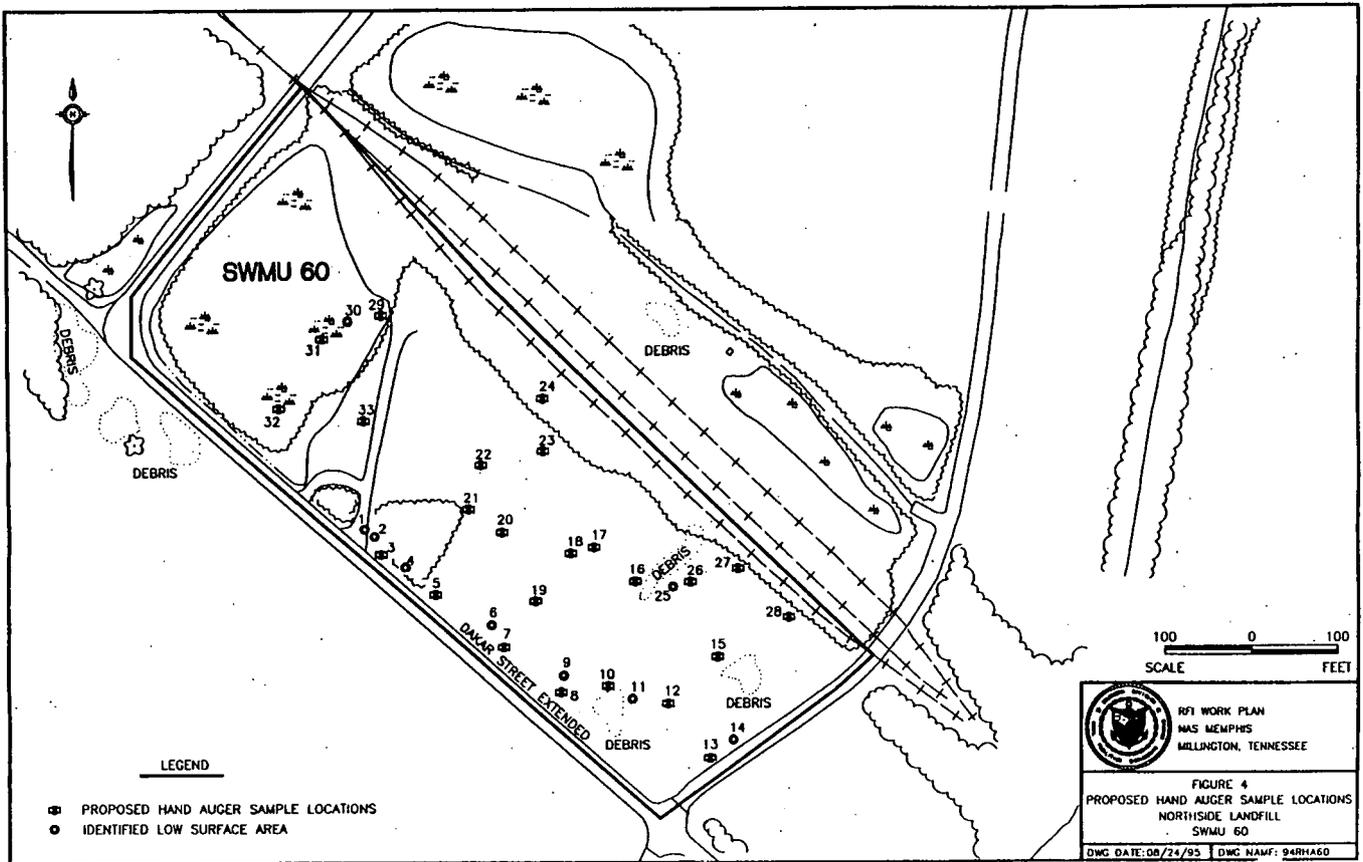
DWG DATE: 08/24/95 DWG NAME: 94RHA40

collected further downgradient and analyzed only if the first 10 samples fail to define the extent of contamination. Proposed sample locations are shown in Figure 3.

Surface Soil Samples

Because two of three surface soil samples collected in low areas during the RFI field investigation indicated petroleum contamination, additional surface samples will be collected across the entire landfill area. A total of 33 low areas have been identified across the site. Because of their close proximity to each other and existing sample data, only 24 of these low areas will be sampled (Figure 4). The samples will be collected from the 0 - 12-inch interval with a stainless steel hand auger and analyzed for GRO-TPH and DRO-TPH. Twenty-five percent of the samples will be analyzed for Full Scan Analysis, as outlined in Section 4.5 of the *Site Investigation Plan, SWMU 60 — Northside Landfill* (E/A&H, October 1994).





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