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FINAL

Close-Out Report

Solid Waste Management Unit (SWMU) Sites
SWMU 09-LP-200Area
SWMU 10- MAC Terminal Area

Naval Station Norfolk
Norfolk, Virginia

Prepared for

Department of the Navy
Atlantic Division
Naval Facilities Engineering Command

Under the
LANTDIV CLEAN II Program
Contract N62470-95-D-6007
Contract Task Order 0131
October 2000

Prepared by

CH2MHILL

Virginia Beach, Virginia

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Close-Out Report
Solid Waste Management Unit (SWMU)
SWMU 09 – LP-200 Area and
SWMU 10 – MAC Terminal Area

Naval Station Norfolk

Norfolk, Virginia

In accordance with the Federal Facilities Agreement for the Naval Station Norfolk, signed February 1999, a Closeout Report was completed for SWMU 09 – LP-200 Area and SWMU 10 – MAC Terminal Area. The site Project Managers and members of the Naval Station Norfolk Tier I Partnership determined that no further action is required and the land use will be unrestricted at the site. This evaluation was based on consideration of field sampling data for soil and groundwater, risk screening, and professional judgement. In the event contamination posing an unacceptable risk to human health or the environment is discovered after execution of this site closeout report, the Partnership agrees to remediate the contamination if deemed necessary.

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Figures

Section 1

Introduction

This SWMU Close-Out Report presents the results of the environmental sampling and analysis performed at SWMU 09 – LP-200 Area and SWMU 10 – MAC Terminal Area at the Naval Station, Norfolk (NSN), Norfolk, Virginia.

This report is organized into four sections. Section 1 describes the SWMUs, describes past land use and future land use possibilities for the SWMUs, and provides information regarding environmental investigations conducted at the SWMUs. Details on the number of samples collected, collection techniques, sampling locations and dates, and sample analysis are provided in Section 2. Section 3 presents a qualitative human health and ecological risk characterization. Conclusions and recommendations are presented in Section 4.

An overall screening process outlined in the Federal Facilities Agreement (February 1999) was applied to all of the sites in the Naval Station Norfolk. Through that screening process, sites were categorized as follows:

- Installation Restoration (IR) sites. These sites will follow the full CERCLA process and will require cleanup or the implementation of institutional controls (ICs) to protect human health.
- Site Screening Areas (SSAs). These sites will go through a site screening process that will either lead to an RI/FS or a decision document.
- Areas of Concern (AOCs). These areas go through a more streamlined process to determine if they should be classified as SSAs, if the area should closed out with no further action (NFA), or if additional evaluation is required to determine if the area should be classified as an SSA or be closed out.

SWMU 09 and SWMU 10 were categorized as AOCs. The streamlined process to further evaluate the sites occurred as follows:

Concentrations of detected chemicals were compared to the following risk screening and regulatory criteria for each sample matrix: USEPA Region III risk-based concentrations (RBCs) for residential and industrial soil, USEPA Region III tap water RBCs, and USEPA national drinking water Maximum Contaminant Levels (MCLs) for groundwater. The USEPA Region III Biological Technical Assistance Group (BTAG) screening values for surface water and sediment were used for comparison only and not as FFA site classification or decision-making criteria. The SWMUs were initially categorized based on the comparison to screening and regulatory criteria (comparison criteria). The concentrations of chemicals exceeding these criteria were then compared to the upgradient concentrations (for groundwater), background concentrations (for soil) or offsite

concentrations (for surface water and sediment) to determine if the detected concentrations exceeded the upgradient, background, or offsite concentrations.

The groundwater samples were collected using direct-push technology and groundwater monitoring wells. The samples were used to make an initial evaluation of groundwater quality relative to the comparison criteria, and to see if any contaminants found at elevated concentrations in soils were also elevated in groundwater.

Concern over potential groundwater impacts of these sites is further mitigated because the City of Norfolk supplies all potable water to the City and to Naval Station, Norfolk, and there are no potable water supply wells at NSN.

Site Description

The 200 MAC Terminal (SWMU 9) area is located east of Building LP-167 and south of the taxiway for Runway 28. The area immediately east of Building LP-167 has a concrete surface and is used as a run-up area for jet engine aircraft. Access to this area is restricted to personnel performing aircraft maintenance activities.

The LP-200 MAC Terminal East (SWMU 10) extends from the MAC Terminal parking area, northward to just south of the Runway 28 taxiway. The site includes a portion of the Weapons Station near Building NM-25. A drainage ditch intercepts the southern portion of the site and then parallels the western boundary.

According to the Naval Base Norfolk 2010 Land Use Plan, anticipated future land use of this site is for industrial and logistics facilities. The locations of SWMUs 9 and 10 are shown on Figure 1-1.

Previous Investigations

Aerial photographs of the SWMU 9 and 10 areas from 1949 through 1968 were reviewed to identify potential WDAs in the vicinity of these SWMUs. In the report entitled EPA Aerial Photographic Site Analysis, Norfolk Naval Base, Norfolk, Virginia (September 1994), several potential WDAs are identified including WDA-28, WDA-29, WDA-31, and WDA-35. The 1994 document also describes a solid waste and fill disposal area consisting of coarse-textured materials with possible discarded objects (SWMU 9) and small disturbed and graded areas with possible disposal activities observed at various locations (SWMU 10).

Baker Environmental, Inc. completed two Relative Risk Ranking (RRR) studies to evaluate the presence of contamination and potential exposure pathways associated with the SWMUs at NSN. The results of the first study are documented in the *Final Relative Risk Ranking System Data Collection Sampling and Analysis Report, Naval Base, Norfolk, Virginia,* dated January 9, 1996. During the Phase I RRR study, samples were collected at SWMUs 9 and 10.

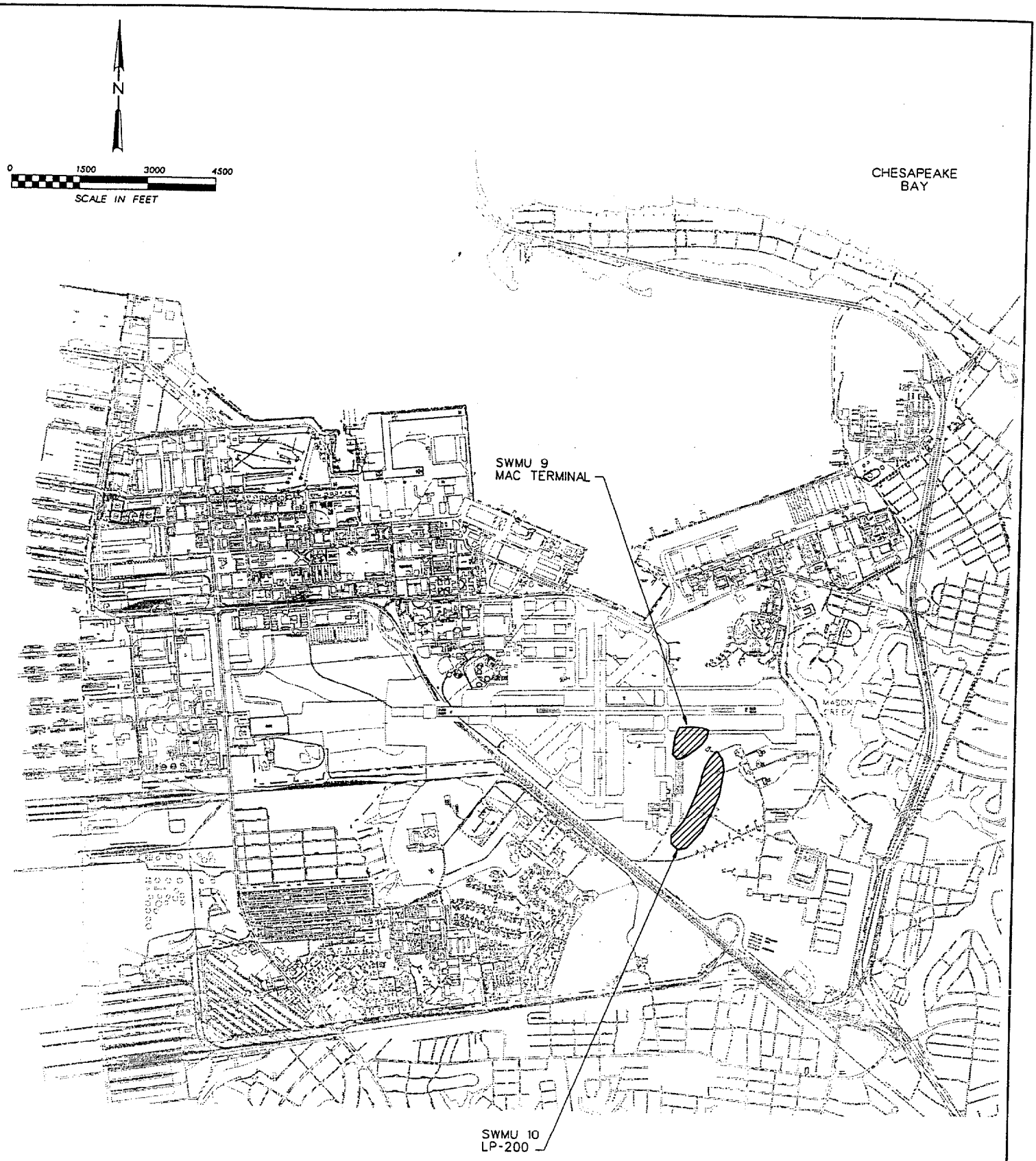


Figure 1-1
SITE LOCATIONS
SWMU 9 AND 10
Naval Station Norfolk

CH2MHILL

The results of the second study are documented in the *Draft Phase II Relative Risk Ranking System Data Collection Sampling and Analysis Report, Naval Base, Norfolk, Virginia* dated December 9, 1996. During the *Phase II* study, additional sampling was conducted at SWMU 10. In addition, CH2M HILL performed a supplemental investigation which was completed 1998. The results are presented in the document entitled *SWMU Supplemental Investigation Report, Naval Base Norfolk, Virginia,* dated October 1998. Sampling and analysis of the groundwater, surface soil, and subsurface soil were performed during this investigation. The sampling locations and a description of the sampling activities associated with these investigations are presented in Section 2.

An additional Supplemental Investigation was completed at SWMUs 09 and 10 by CH2MHILL in 2000. Sampling and analysis of the groundwater and subsurface soil were performed during the investigation. The sampling locations and a description of the SWMU 2000 SI sampling activities are presented in Section 2. A thorough discussion of the investigation and results is presented in the document entitled, *Site Investigation Report, Solid Waste Management Units 09 and 10, SWMU Supplemental Investigation Report, Naval Station Norfolk, Virginia,* dated September, 2000.

Section 2

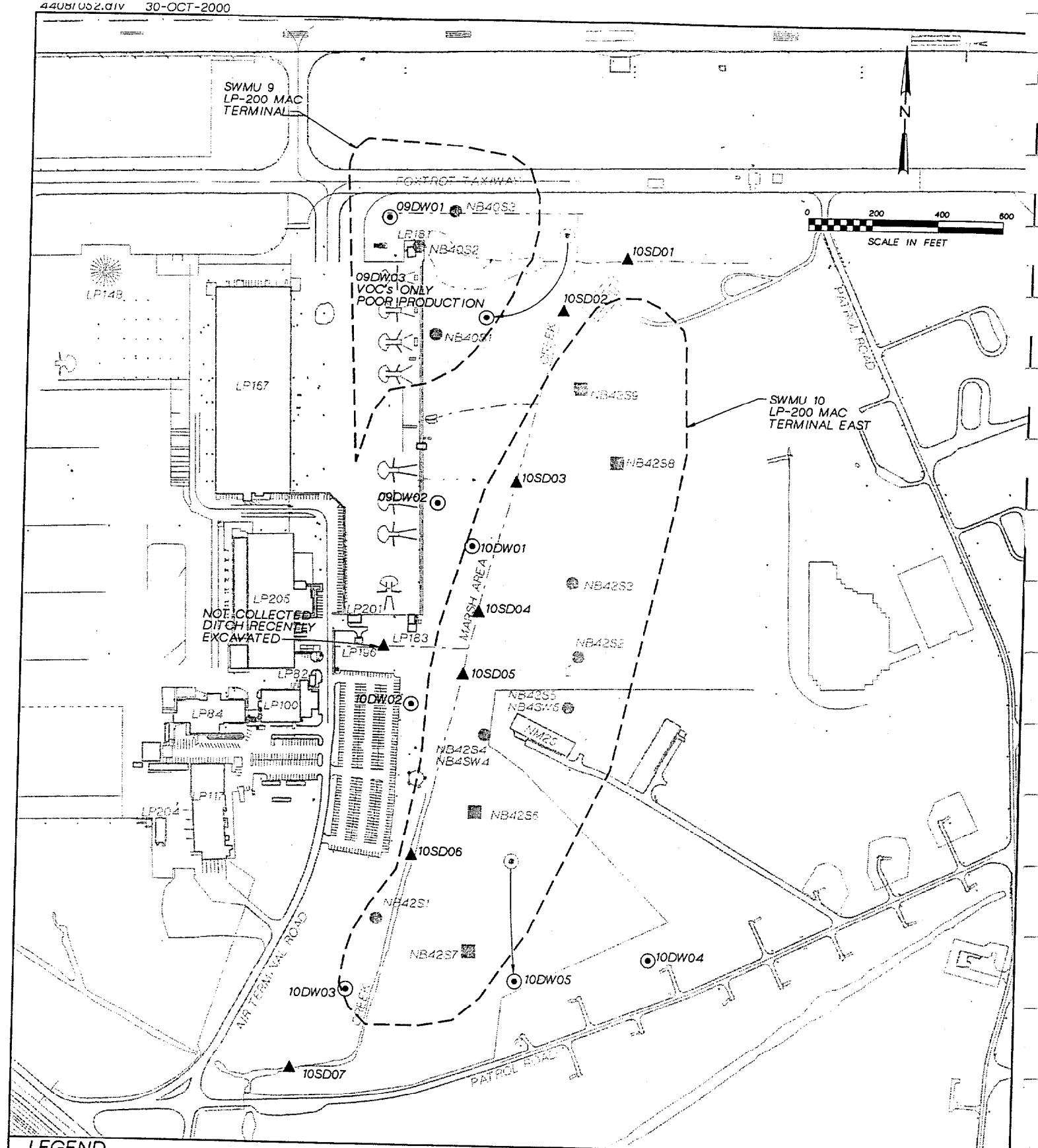
Field Activities

This section presents information related to the field activities associated with the sampling performed at SWMUs 9 and 10. Details on the number of samples collected, collection techniques, sampling locations, and sample analysis are provided.

Twelve surface soil and two groundwater samples were collected at SWMUs 9 and 10 during the Phase I and II RRR sampling. Phase I surface soil and groundwater samples were analyzed for VOCs, SVOCs, metals, and cyanide. Surface soil samples collected during the Phase II RRR were analyzed for VOCs, SVOCs, and metals. Seven Sediment samples were collected from the creek that traverses the western edge of the SWMU 10 boundary during the 1998 Supplemental Investigation. All sediments were analyzed for TCL VOCs, SVOCs, Pesticides, PCBs, and TAL metals. A total of nine groundwater samples (two from the RRR Study and seven from the 1998 Supplemental Investigation) were collected and analyzed for TCL VOCs, SVOCs, Pesticides, PCBs, and TAL metals. Figure 2-1 presents sampling locations for these studies.

Ten surface soil samples and eight subsurface soil locations were collected during the 1999 Supplemental Investigation in an effort to characterize the extent of contaminants previously detected in the soils. Stainless steel trowels and hand augers were employed during soil sampling efforts. Surface soil samples were collected from 0 to 6 inches bgs. and subsurface soil samples were collected from a depth of 3-4 feet bgs. the soil samples were analyzed for Target Analyte List (TAL) metals, TCL volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides, and polychlorinated biphenyls (PCBs).

Three monitoring wells were installed during the 2000 Supplemental Investigation. The wells were subsequently sampled and analyzed for TAL metals (total and dissolved), VOCS, SVOCs, pesticides, and PCBs. Figure 2-2 presents the sampling locations for the 2000 Supplemental Investigation.



LEGEND

- NB40S1 — PHASE I RRR SURFACE SOIL SAMPLE LOCATION
- NB42S5 NB42W5 — PHASE I RRR SURFACE SOIL AND GROUNDWATER SAMPLING LOCATION
- NB42S6 — PHASE II RRR SURFACE SOIL SAMPLING LOCATION
- 1998 SI GEOPROBE GROUNDWATER SAMPLING LOCATION
- 1998 SI SEDIMENT SAMPLING LOCATION
- ESTIMATED EXTENT OF WASTE DISPOSAL AREA

Figure 2-1
SWMU 9 AND 10 - LP-200
MAC TERMINAL
SAMPLING LOCATIONS
Naval Base, Norfolk

CH2MHILL

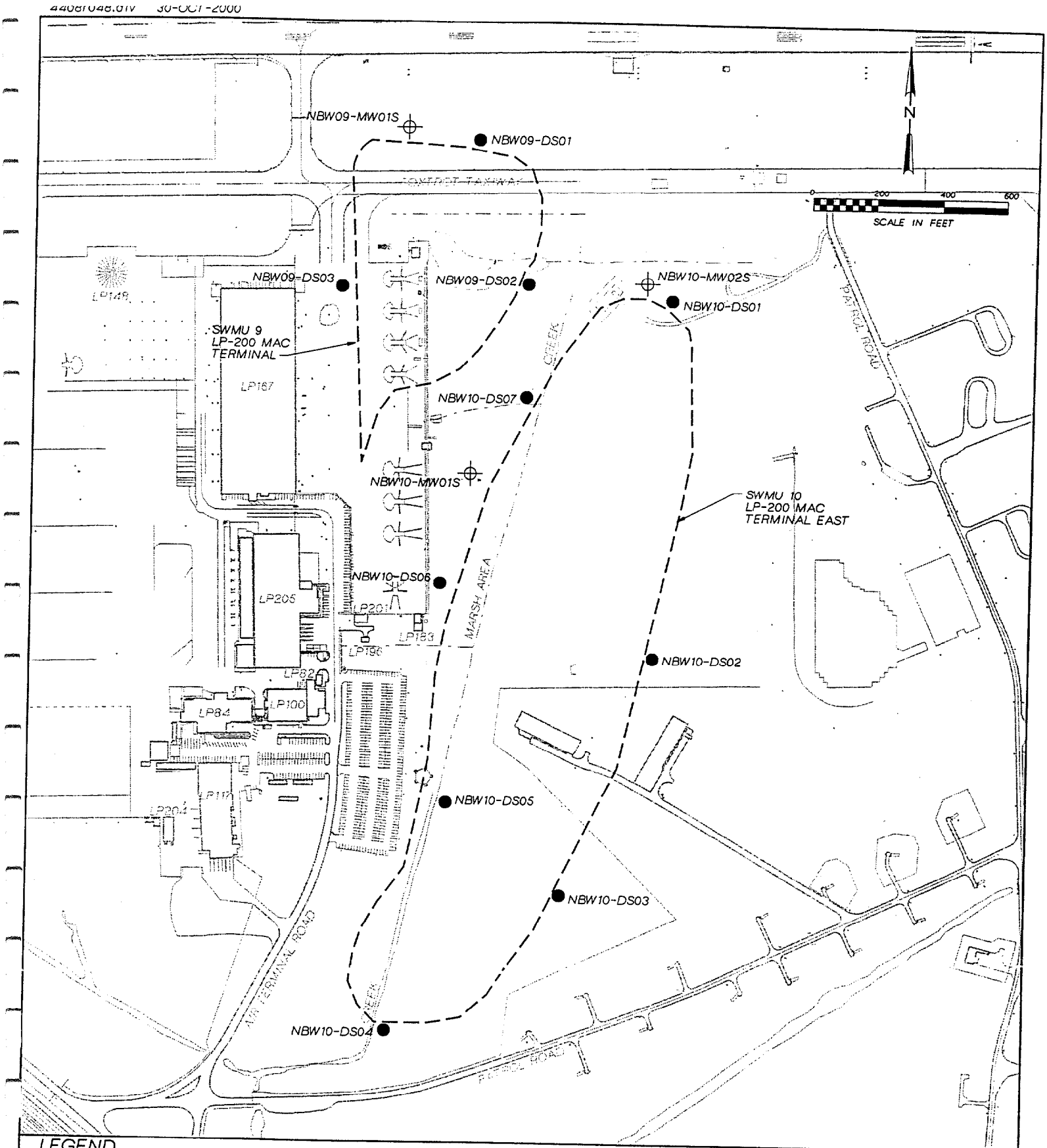


Figure 2-2
SWMU 9 AND 10 - LP-200
MAC TERMINAL
1999 SI SAMPLING LOCATIONS
Naval Station Norfolk

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Section 3

Risk Characterization

The following sections present the interpretation of the analytical data from the RRR Phase I and II Studies, the 1998 Supplemental Investigation, and the 2000 Supplemental Investigation. The discussion includes the identification of screening/regulatory criteria exceedances, as well as exceedances of upgradient, background and offsite concentrations.

Analytical Results

The analytical results from the RRR Phase I and II Studies, 1998 Supplemental Investigation, and 2000 Supplemental Investigation are discussed in the following sections. Concentrations of detected chemicals were compared to the following current USEPA screening and regulatory screening criteria for each sample matrix: risk-based concentrations (RBCs) for residential and industrial soil, USEPA Region III tap water RBCs, and USEPA drinking water Maximum Contaminant Levels (MCLs) for groundwater.

Soil

Twelve surface soil samples were collected (three at SWMU 09 and nine at SWMU 10) during the RRR Studies. The analytical results of the compounds detected at concentrations that exceeded the residential and/or industrial RBCs are illustrated on Figure 3-1. Ten additional surface soil samples were collected (three at SWMU 9 and seven at SWMU 10) during the 1999 Supplemental Investigation. Additionally, eight subsurface soil samples were collected during the 1999 Supplemental Investigation. The analytical results of the compounds detected at concentrations that exceeded the residential and/or industrial RBCs are illustrated on Figure 3-2. The analytical results are summarized below.

- One polynuclear aromatic hydrocarbon (PAH), benzo(a)pyrene, exceeded background and the residential RCB at locations NB40S2 and NB42S2 (see Figure 3-1).
- The surface soil sample at location NBW09-DS02 contained five exceedances of RBCs for the following polynuclear aromatic hydrocarbons (PAHs): benzo(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene, dibenzo(a,h)pyrene, indeno(1,2,3-cd)pyrene.(see Figure 3-2).
- Several detections of arsenic also exceeded the residential soil RBCs at almost all locations. The Soil Background Investigation of Naval Station Norfolk (CH2M HILL, September 2000) indicates that the background arsenic concentrations within the soils range from 12.7 mg/kg across the entire base to 28.6 mg/kg at the golf course. The highest arsenic concentration detected in the soils at SWMUs 9 and 10 was 7.8 mg/kg Based on this information it is evident that the arsenic concentrations detected at SWMUs 9 and 10 are attributed to background conditions and are not site-related.

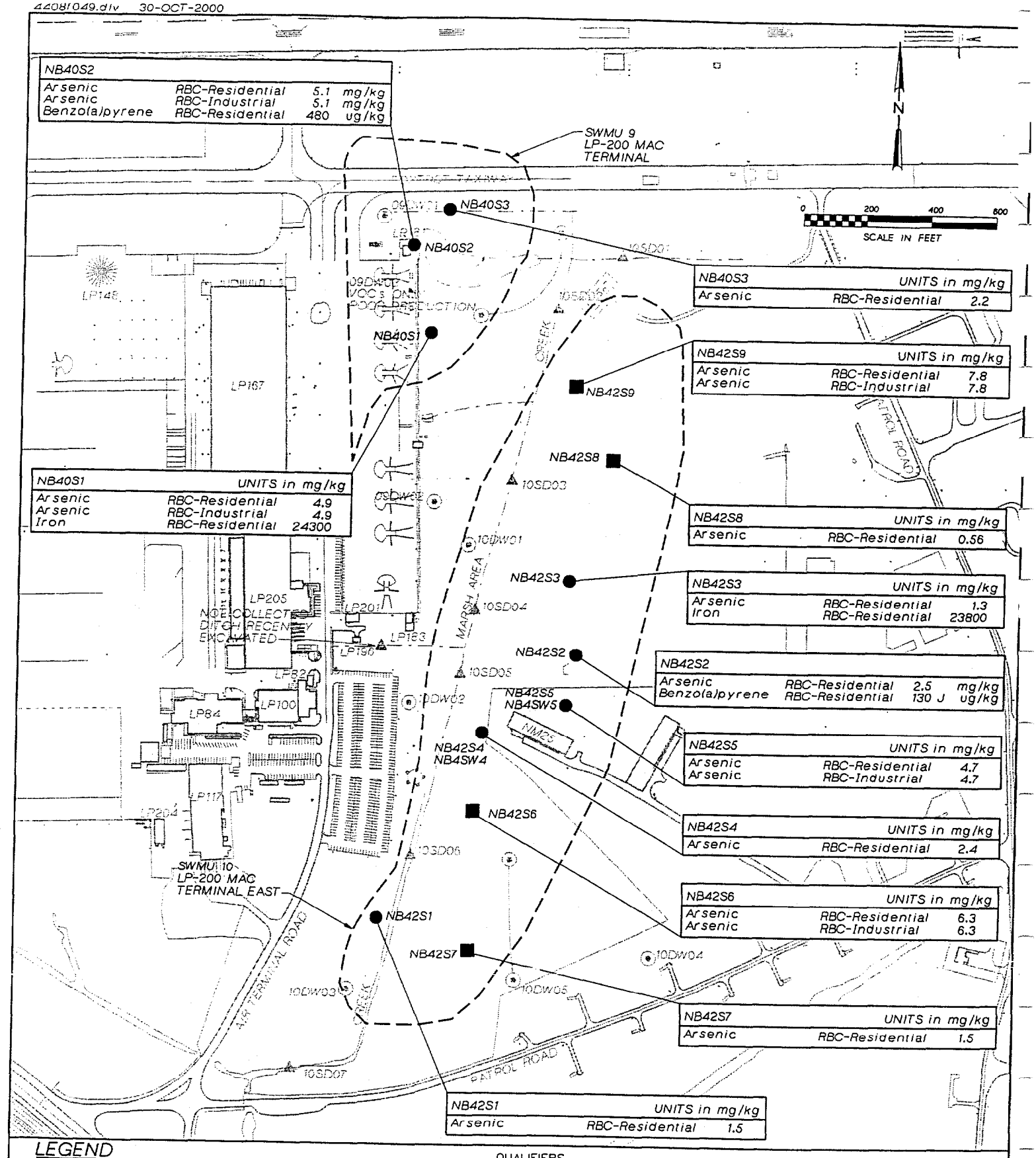


Figure 3-1
SWMU 9 AND 10 - LP-200 MAC TERMINAL
SOIL EXCEEDANCES
Naval Station Norfolk

CH2MHILL

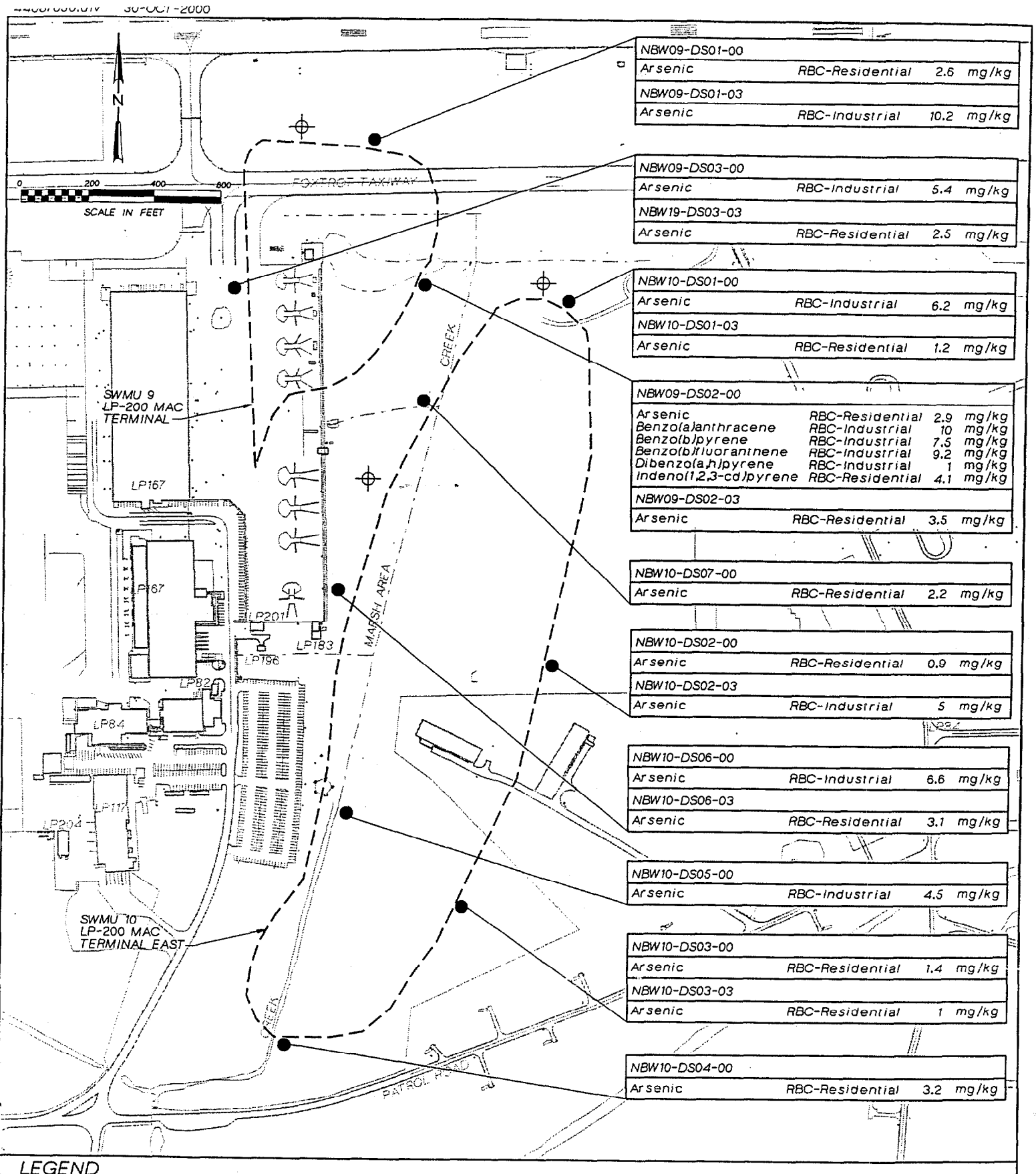


Figure 3-2
SWMU 9 AND 10 - LP-200 MAC TERMINAL
SOIL EXCEEDANCES
1999 SUPPLEMENTAL INVESTIGATION
Naval Station Norfolk

CH2MHILL

- All sampling locations and historical screening criteria exceedances are shown on Figures 3-1 and 3-2.

Sediment

Seven Sediment samples were collected from the creek that traverses the western edge of the SWMU 10 boundary during the 1998 Supplemental Investigation. The analytical results of the compounds detected at concentrations that exceeded the residential and/or industrial RBCs are illustrated on Figure 3-3. The analytical results are summarized below.

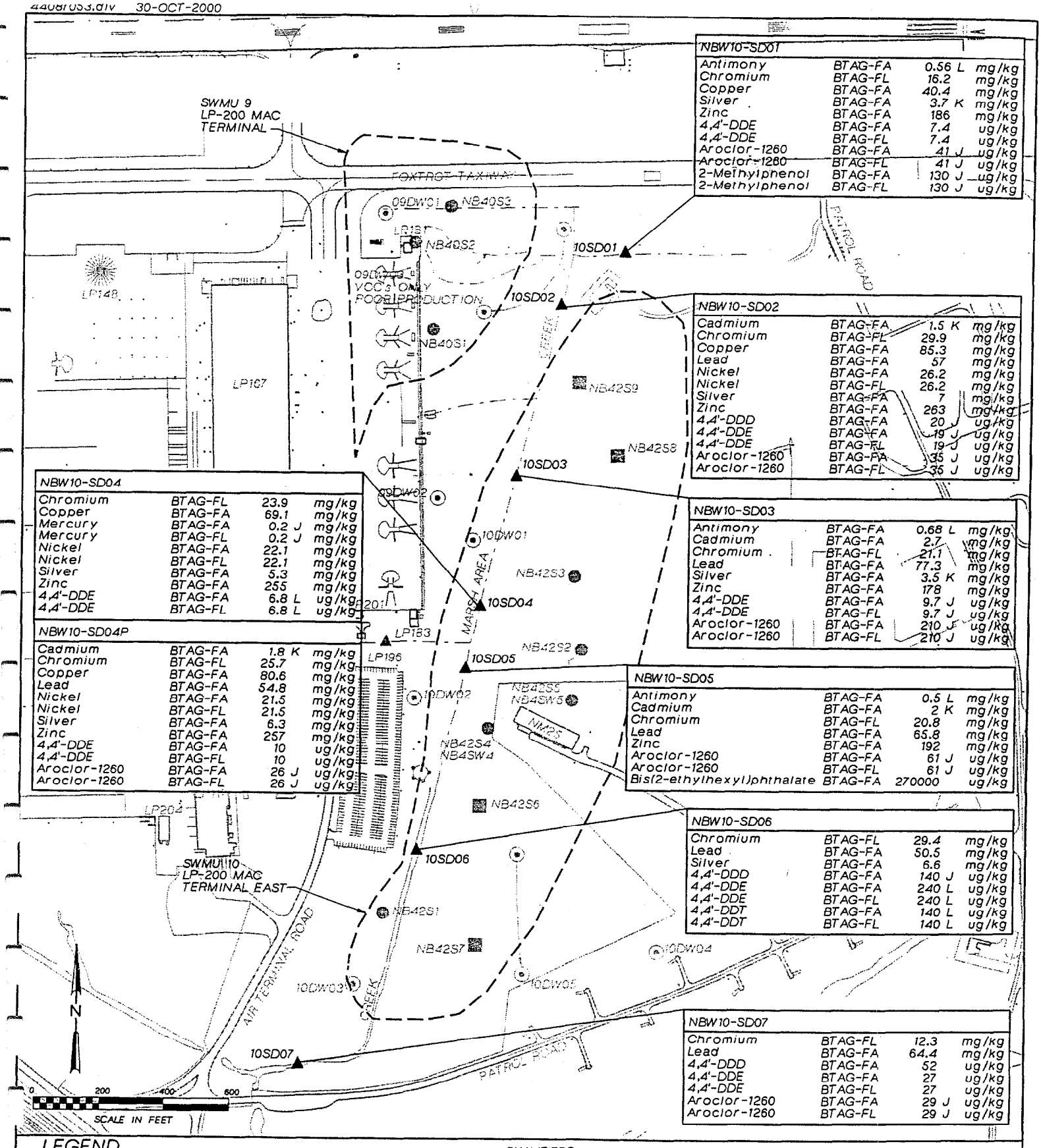
- In all, fifteen contaminants were detected at concentrations exceeding the BTAG-Sediment values. Bis(2-ethylhexyl)phthalate, 2-methylphenol, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Aroclor-1260, antimony, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc exceeded the BTAG sediment screening values in at least one sediment sample. In general, bis(2-ethylhexyl)phthalate, 2-methylphenol, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Aroclor-1260, antimony, chromium, and silver were detected at concentrations significantly higher than the BTAG values. Cadmium, copper, lead, mercury, nickel, and zinc concentrations were slightly higher than the BTAG values. 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT concentrations were notably higher in the sample collected at NBW10-SD06, while Aroclor-1260 was detected at a higher concentration at NBW10-SD03.

- Most of the compounds were detected at concentrations considerably higher than the offsite concentration in at least one sample suggesting that they may be site related, but several inorganic compounds were detected at concentrations that were only slightly higher than the offsite concentrations. It should also be noted that Aroclor-1260 offsite concentrations were only exceeded at one sampling location.

Groundwater

During the 1998 Supplemental Investigation, nine filtered groundwater samples were taken using direct push technology. Figure 3-4 presents groundwater locations and exceedances for the RRR and 1998 SI investigations. Thallium was below MCLs in 6 of the samples. Of the three samples that had thallium above MCLs, two were taken within the site and had thallium concentrations of 2.7 and 3.2 and both had a K qualifier indicating the result is "Biased high, actual concentration may be lower than the reported concentration". The third sample that exceeded thallium RBCs was taken from an apparently upgradient sampling location and had a thallium concentration of 3.2 ug/l with a J qualifier indicating an "estimated value". Thallium has been found at similar concentrations in other groundwater samples at the base. Results from a previous study involving numerous SWMUs throughout the base found thallium with an average concentration of 2.9 ug/l in 14 of 55 filtered groundwater samples taken with direct push technology.

During the 1999 Supplemental Investigation, three monitoring wells were installed and sampled for VOCs, SVOCs, Pesticides, PCBs, and TAL metals (total and dissolved) analyses. Figure 3-5 presents groundwater locations and exceedances for the 1999 Supplemental Investigation. The only parameter in the groundwater that exceeded MCLs



NBW10-SD01

Antimony	BTAG-FA	0.56 L	mg/kg
Chromium	BTAG-FL	16.2	mg/kg
Copper	BTAG-FA	40.4	mg/kg
Silver	BTAG-FA	3.7 K	mg/kg
Zinc	BTAG-FA	186	mg/kg
4,4'-DDE	BTAG-FA	7.4	ug/kg
4,4'-DDE	BTAG-FL	7.4	ug/kg
Aroclor-1260	BTAG-FA	41 J	ug/kg
Aroclor-1260	BTAG-FL	41 J	ug/kg
2-Methylphenol	BTAG-FA	130 J	ug/kg
2-Methylphenol	BTAG-FL	130 J	ug/kg

NBW10-SD02

Cadmium	BTAG-FA	1.5 K	mg/kg
Chromium	BTAG-FL	29.9	mg/kg
Copper	BTAG-FA	85.3	mg/kg
Lead	BTAG-FA	57	mg/kg
Nickel	BTAG-FA	26.2	mg/kg
Nickel	BTAG-FL	26.2	mg/kg
Silver	BTAG-FA	7	mg/kg
Zinc	BTAG-FA	263	mg/kg
4,4'-DDD	BTAG-FA	20 J	ug/kg
4,4'-DDE	BTAG-FA	19 J	ug/kg
4,4'-DDE	BTAG-FL	19 J	ug/kg
Aroclor-1260	BTAG-FA	35 J	ug/kg
Aroclor-1260	BTAG-FL	35 J	ug/kg

NBW10-SD04

Chromium	BTAG-FL	23.9	mg/kg
Copper	BTAG-FA	69.1	mg/kg
Mercury	BTAG-FA	0.2 J	mg/kg
Mercury	BTAG-FL	0.2 J	mg/kg
Nickel	BTAG-FA	22.1	mg/kg
Nickel	BTAG-FL	22.1	mg/kg
Silver	BTAG-FA	5.3	mg/kg
Zinc	BTAG-FA	255	mg/kg
4,4'-DDE	BTAG-FA	6.8 L	ug/kg
4,4'-DDE	BTAG-FL	6.8 L	ug/kg

NBW10-SD04P

Cadmium	BTAG-FA	1.8 K	mg/kg
Chromium	BTAG-FL	25.7	mg/kg
Copper	BTAG-FA	80.6	mg/kg
Lead	BTAG-FA	54.8	mg/kg
Nickel	BTAG-FA	21.5	mg/kg
Nickel	BTAG-FL	21.5	mg/kg
Silver	BTAG-FA	6.3	mg/kg
Zinc	BTAG-FA	257	mg/kg
4,4'-DDE	BTAG-FA	10	ug/kg
4,4'-DDE	BTAG-FL	10	ug/kg
Aroclor-1260	BTAG-FA	26 J	ug/kg
Aroclor-1260	BTAG-FL	26 J	ug/kg

NBW10-SD03

Antimony	BTAG-FA	0.68 L	mg/kg
Cadmium	BTAG-FA	2.7	mg/kg
Chromium	BTAG-FL	21.1	mg/kg
Lead	BTAG-FA	77.3	mg/kg
Silver	BTAG-FA	3.5 K	mg/kg
Zinc	BTAG-FA	178	mg/kg
4,4'-DDE	BTAG-FA	9.7 J	ug/kg
4,4'-DDE	BTAG-FL	9.7 J	ug/kg
Aroclor-1260	BTAG-FA	210 J	ug/kg
Aroclor-1260	BTAG-FL	210 J	ug/kg

NBW10-SD05

Antimony	BTAG-FA	0.5 L	mg/kg
Cadmium	BTAG-FA	2 K	mg/kg
Chromium	BTAG-FL	20.8	mg/kg
Lead	BTAG-FA	65.8	mg/kg
Zinc	BTAG-FA	192	mg/kg
Aroclor-1260	BTAG-FA	61 J	ug/kg
Aroclor-1260	BTAG-FL	61 J	ug/kg
Bis(2-ethylhexyl)phthalate	BTAG-FA	270000	ug/kg

NBW10-SD06

Chromium	BTAG-FL	29.4	mg/kg
Lead	BTAG-FA	50.5	mg/kg
Silver	BTAG-FA	6.6	mg/kg
4,4'-DDD	BTAG-FA	140 J	ug/kg
4,4'-DDE	BTAG-FA	240 L	ug/kg
4,4'-DDE	BTAG-FL	240 L	ug/kg
4,4'-DDT	BTAG-FA	140 L	ug/kg
4,4'-DDT	BTAG-FL	140 L	ug/kg

NBW10-SD07

Chromium	BTAG-FL	12.3	mg/kg
Lead	BTAG-FA	64.4	mg/kg
4,4'-DDD	BTAG-FA	52	ug/kg
4,4'-DDE	BTAG-FA	27	ug/kg
4,4'-DDE	BTAG-FL	27	ug/kg
Aroclor-1260	BTAG-FA	29 J	ug/kg
Aroclor-1260	BTAG-FL	29 J	ug/kg

LEGEND

- NB40S1 — PHASE I RRR SURFACE SOIL SAMPLE LOCATION
- NB42S5 / NB42W5 — PHASE I RRR SURFACE SOIL AND GROUNDWATER SAMPLING LOCATION
- NB42S6 — PHASE II RRR SURFACE SOIL SAMPLING LOCATION
- SI GEOPROBE GROUNDWATER SAMPLING LOCATION
- SI SEDIMENT SAMPLING LOCATION
- ESTIMATED EXTENT OF WASTE DISPOSAL AREA

QUALIFIERS

- J- Estimated value
- K- Biased high, actual concentrations may be lower
- L- Biased low, actual concentrations may be higher

Figure 3-3
SWMU 9 AND 10 - LP-200 MAC TERMINAL
SEDIMENT EXCEEDANCES
Naval Base, Norfolk

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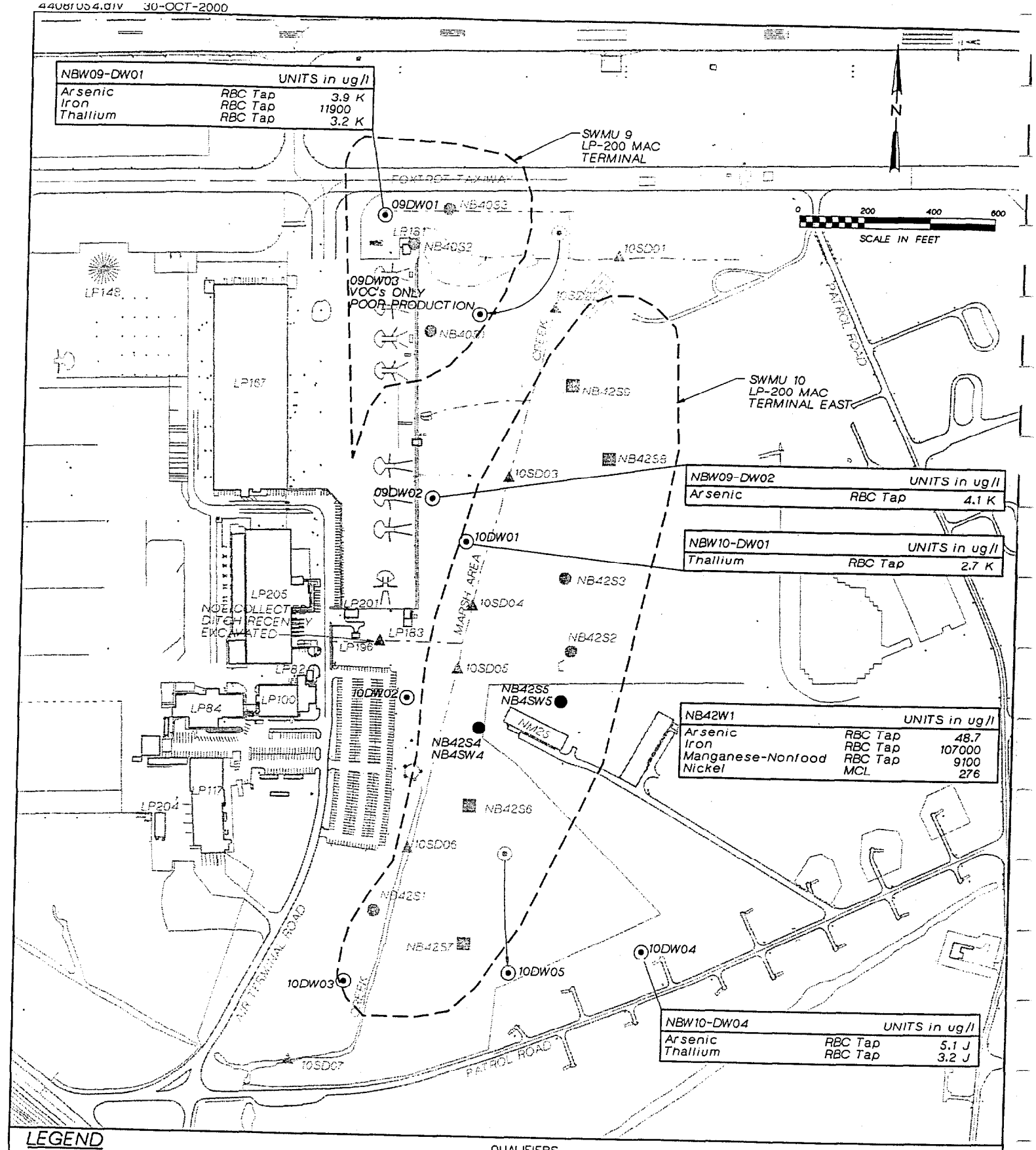
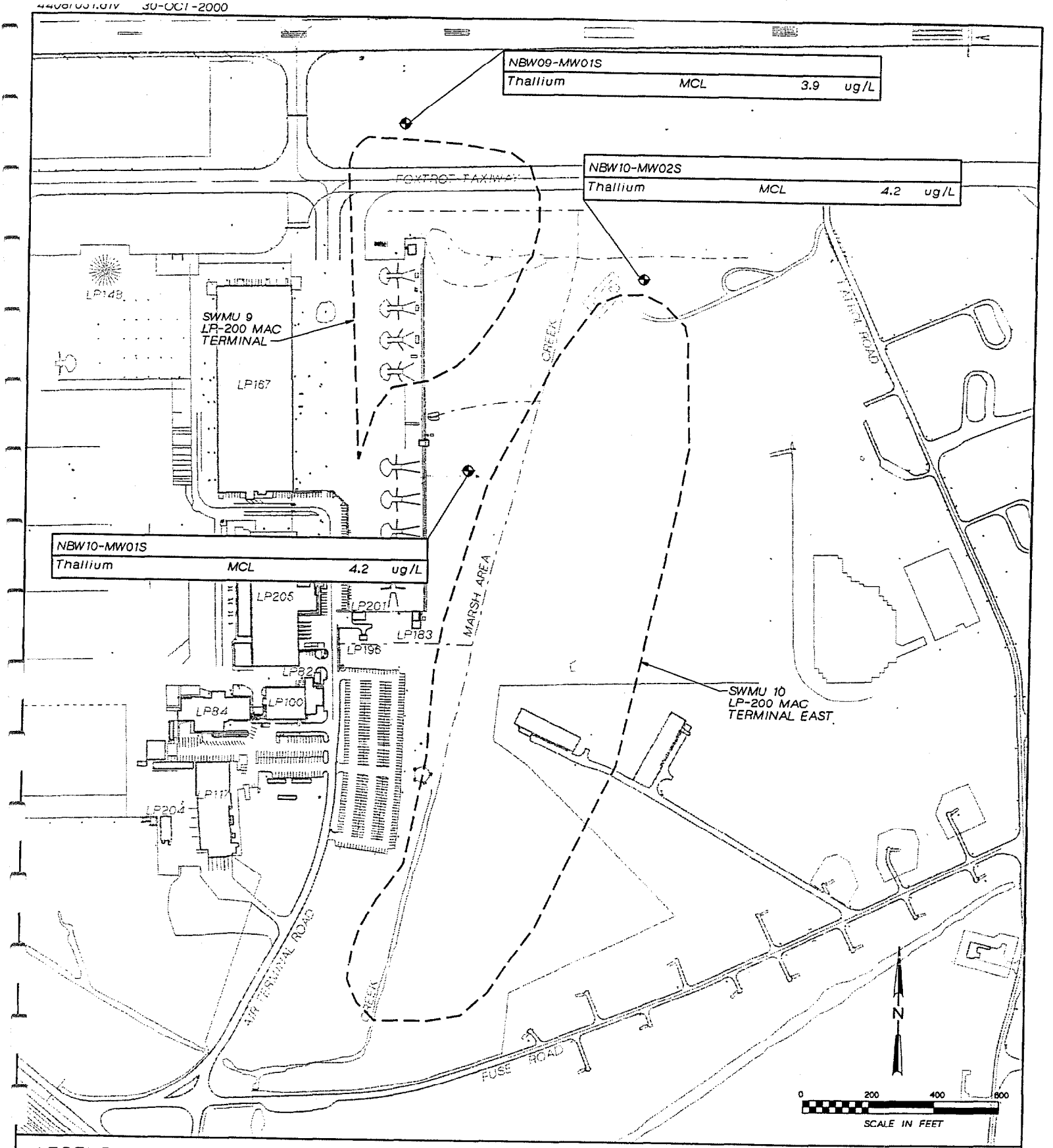


Figure 3-4
SWMU 9 AND 10 - LP-200 MAC TERMINAL GROUNDWATER EXCEEDANCES RRR AND 1998 SUPPLEMENTAL INVESTIGATION
Naval Base, Norfolk

CH2MHILL



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- MONITORING WELL LOCATION
- ESTIMATED EXTENT OF WASTE DISPOSAL AREA

Figure 3-5
SWMU 9 AND 10 - LP-200 MAC TERMINAL
MONITORING WELL LOCATIONS
GROUNDWATER MCL EXCEEDENCES
1999 SUPPLEMENTAL INVESTIGATION
Naval Station Norfolk

CH2MHILL

was thallium, which has an MCL of 2 ug/l and a tap water RBC of 2.6 ug/l. Thallium was found at all three monitoring wells, with dissolved (filtered) concentrations of 3.9, 4.2, and 4.2 ug/l. Each of these results was flagged with a "J" qualifier indicating an estimated value, and the reported detection limit was 3.8 ug/l.

Concentrations of thallium found in the surface soil ranged from 0.80to 3.8mg/kg and were all below the EPA Region III residential RBC value of 5.5 mg/kg for thallium.

Therefore, since thallium level was only slightly above the MCL and at a level commonly found in the area, and none of the soil samples had thallium above RBCs, there is no indication that the presence of thallium in the groundwater is site related. Since thallium was the only parameter exceeding MCLs and does not appear to be site related, there is no indication that the site is impacting groundwater.

Section 4

Conclusions and Recommendations

The goal of the supplemental field investigation was to supplement data collected during previous investigations at Naval Station Norfolk and to make a recommendation for additional action or no further action for both SWMU 09 and SWMU 10 based on the data interpretation.

The following conclusions are based upon a complete review of all available analytical data collected during previous investigations (summarized in Section 1) and during the 1999 supplemental field investigation (summarized in Section 3). The soil analytical data was compared to background data and the current USEPA risk-based residential and industrial concentrations (RBCs) for soil. The groundwater analytical data was compared to background data for the base and drinking water Maximum Contaminant Levels (MCLs) for groundwater.

- The soil analytical results show that arsenic concentrations at the site range from 1.0 to 10.2 mg/kg. At all the soil sampling locations the arsenic concentrations exceeded the residential RBC concentration of 0.43 mg/kg. The Soil Background Investigation of Naval Station Norfolk (CH2M HILL, September 2000) indicates that the background arsenic concentrations within the soils range from 12.7 mg/kg across the entire base to 28.6 mg/kg at the golf course. Based on this information it is evident that the arsenic concentrations detected at SWMUs 09 and 10 are attributed to background conditions and are not site-related.

- The soil analytical results show that at only one of the ten soil sampling locations (NBW09-DS02-00) did the SVOC concentrations exceed the RBC for residential soil at SWMU 09. These SVOCs include: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz (a,h) anthracene, and indeno (1,2,3-cd) pyrene (4,100 ug/kg). There were no exceedances at SWMU 10. These concentrations also exceeded the soil background concentrations detected at the base. However, no SVOCs were detected in the groundwater. As a result, the elevated SVOC concentrations are not likely impacting the groundwater quality at the site.

- The only parameter in the groundwater that exceeded MCLs was thallium, which has an MCL of 2 ug/L and a tap water RBC of 2.6 ug/L. Thallium was found at all three monitoring wells, with dissolved (filtered) concentrations of 3.9, 4.2, and 4.2 ug/L. Each of these results was flagged with "J" qualifier indicating an estimated value, and the reported detection limit was 3.8 ug/L.

- There is no indication that the presence of thallium in the groundwater is site-related due to the following: 1) thallium level was only slightly above the MCL and at a level commonly found in the area, 2) thallium was also found at similar levels in an apparent upgradient location, and 3) none of the soil samples detected thallium above background levels.

Since thallium was the only parameter detected in groundwater at levels exceeding MCLs and does not appear to be site-related, there is no indication that the site is impacting groundwater. Therefore, based on the analytical and regulatory screening results from all investigations performed to date, a recommendation of no further action is proposed.

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