

5.14 SWMU 23: DEMILITARIZATION HOLDING AREA (NORTH OF SWMU 1)

5.14.1 Site Description and Waste Generation

SWMU 23 is located in the southeast portion of TEAD-S, north of SWMU 1 (Figure 5.0-1). This SWMU was used from the 1940s through the 1970s for temporary holding of munitions to be demilitarized (USAEHA 1986; NUS 1987). The types of munitions held at SWMU 23 were not documented, but may have been conventional or chemical based on the demilitarization activities that occurred at SWMUs 1 and 25 during this same period (NUS 1987). Ertec (1982) noted that mustard (H and HD) may have been spilled at this location, although the source of Ertec's information is unknown.

SWMU 23 was a fenced area, approximately 130 ft long by 50 ft wide (Figure 5.14-1), but the fence was removed between EBASCO's initial site visit in 1989 and the 1990 field program. The location of SWMU 23 can still be identified by unimproved roads remaining in the area or with the coordinates of a surveyed monument that was placed at the northwest corner of the area. Munitions debris, including unexploded ordnance from nearby demilitarization activities, was visible on the ground during the RFI-Phase I field investigation, and a substance that appeared to be weathered raw explosive from past operations was found near the ditch during the interim sampling program.

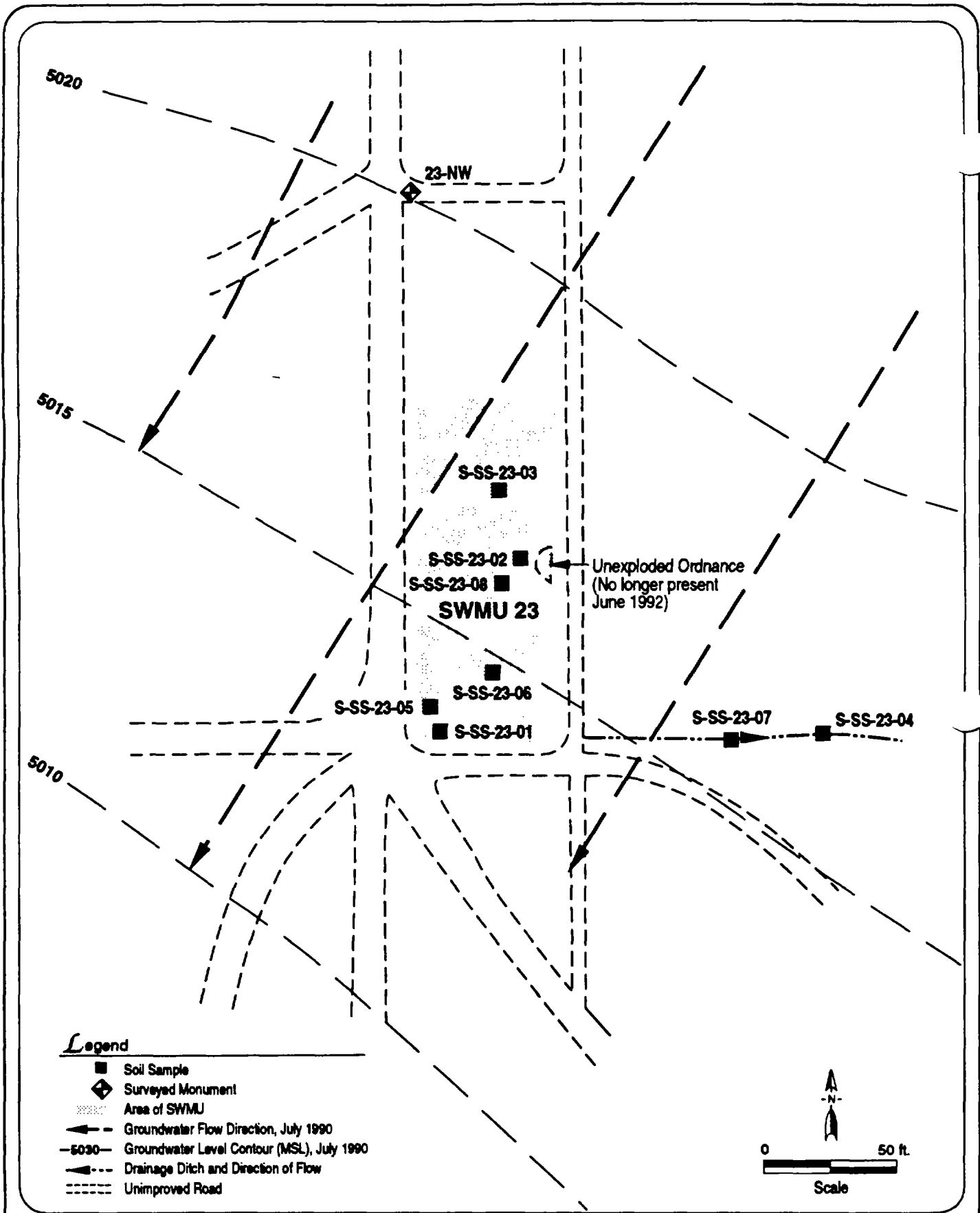
5.14.2 Site Hydrogeology

SWMU 23 is located on a very gentle southeast-sloping topographic surface at an elevation of 5,105 ft above msl. Surface water may drain from the site to a ditch that extends from the southeast corner (Figure 5.14-1). The site is underlain by a Quaternary pediment capped by alluvium. The subsurface lithology at this site is estimated using information from the two closest monitoring wells (S-10, S-69-90), from a dry well nearby (S-9), and from soil samples S-SS-23-01, S-SS-23-02, S-SS-23-03, and S-SS-23-04.

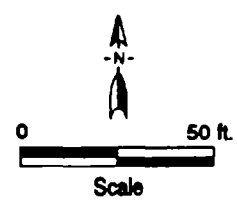
The near-surface soil is grayish-brown to light olive brown, gravelly sand and silty clay (SP, CL). The unsaturated zone may be approximately 80 ft thick and composed of stiff, light gray to light olive-gray, silty clay (CL). The saturated zone from approximately 85 to 124 ft in nearby wells is olive gray to gray, silty clay and clayey silt (CL, ML). Groundwater is estimated to occur at a depth of 85 ft and an elevation of 5,020 ft msl. Groundwater is expected to flow south-southwest at this SWMU (Plate 3).

5.14.3 Previous Sampling and RFI-Phase I Sampling Results

SWMU 23 was not investigated before the RFI-Phase I. Four soil samples were collected during the RFI-Phase I and analyzed for agent breakdown products and explosives. Three soil samples were collected within the SWMU boundaries where unexploded ordnance and other munitions debris could be sufficiently cleared. One soil sample was collected from a drainage ditch that leads east from the southeast corner of the site. The RFI-Phase I sampling locations are illustrated in Figure 5.14-1. The four soil samples collected at SWMU 23 during Phase I were replaced during the Phase I interim sampling program, since the MS/MSD results indicated



- Legend**
- Soil Sample
 - ◆ Surveyed Monument
 - ▨ Area of SWMU
 - Groundwater Flow Direction, July 1990
 - 5030- Groundwater Level Contour (MSL), July 1990
 - Drainage Ditch and Direction of Flow
 - ⋯ Unimproved Road



Source:
 EBASCO Field Measurement
 EPIC 1986

Figure 5.14-1
Site Map
SWMU 23 - Demilitarization Holding Area
(North of SWMU 1)
 Tooele Army Depot - South Area
 Prepared by: Ebasco Services Incorporated

inaccuracy in the explosives analysis. The replacement samples **were analyzed** for explosives only.

5.14.4 Contamination Assessment

No agent breakdown products or explosives were detected in **SWMU 23** soil samples, indicating no remnant of potential releases from leaking munitions. **However, unexploded ordnance** or explosives may pose a hazard at the site.

5.14.5 Recommendations

The Phase I and interim sampling programs indicated no **contaminant release** at SWMU 23. However, the presence of **UXO** and raw explosives that have **now been cleared** from the SWMU shows a need for a Phase II explosive risk determination in **this area**. As SWMU 23 is not expected to be the source of the explosives, the **explosive risk determination** in this vicinity should be conducted as part of the Phase II investigation of **neighboring SWMU 8**, where open detonation has been conducted.