Decision Document

Solid Waste Management Units B25
Building 103-7 Inert Waste Impoundment
Hawthorne Army Depot
Hawthorne, Nevada

February 2000

Hawthorne Army
Depot

Decision Document SWMU B-25

February 2000

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ENVIRONMENTAL PROTECTION

The selected remedy is protective of human health and the environment. It has been shown that a complete pathway to human health and the environment does not exist, and there is no potential for an exposure pathway to be completed in the future.

U. S. Army

21 MAR 2000

James A. Piner
Lieutenant Colonel, U.S. Army

State of Nevada

29 March 2000

Paul Liebendorfer
Chief, Bureau of Federal Facilities

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Building 103-7 Inert Waste Impoundment
HAWTHORNE ARMY DEPOT
HAWTHORNE, NEVADA

1.0 Introduction:

This decision document describes the rationale for the proposed closure of SWMU B-25, the Trench Dusty Acres Area, at the Hawthorne Army Depot (HWAD), Hawthorne, Nevada. This document was prepared by the U.S. Army Corps of Engineers, Sacramento District, with the help of HWAD for the Nevada Department of Environmental Protection (NDEP).

Tetra Tech, Inc. (Tt), was tasked by the US Army Corps of Engineers, Sacramento District (USACE), to perform remedial investigations and ground water monitoring at the Hawthorne Army Depot (HWAD), Hawthorne, Nevada. These tasks were conducted from 1993 through 1997, primarily at solid waste management units (SWMUs) designated by the Army and the Nevada Division of Environmental Protection (NDEP). The NDEP is the lead regulatory agency for environmental issues at HWAD. The purpose of the sampling was to determine the extent and degree of environmental impacts, if any, associated with activities performed at each SWMU. The primary goal of the investigation was to assess the environmental impacts and to report the findings, present conclusions, and recommend any remediation, if necessary.

With guidance from the NDEP, basewide proposed closure goals (PCGs) for soil were established as acceptable levels so that SWMU closure could be recommended and to assist in directing the investigative efforts toward those SWMUs where the target analytes were of greatest concern (Appendix A). These PCGs were used as action levels throughout this investigation and are used for comparison with the detected analytes in this report.

2.0 Site History

SWMU B25 is in HWAD's north magazine area, within the 103 Group (Figure 1-1). SWMU B25 is on the north side of Building 103-7 and 150 feet to the east of Building 103-39 (Figure 1-2). The former impoundment was approximately 10 feet long, 20 feet wide, and a foot deep. A brass survey pin on the monument designates the monument as number HWAAP-29-1996 and the SWMU as number B25. Two corner pins were set and surveyed to define a SWMU boundary, with the monument at the northwest corner.The location of these corner markers and the SWMU boundary are shown on Figure 1-2. The survey data for SWMU B-25 is presented in Appendix B.

3.0 Site Conditions

Soils encountered during Tt's investigation of SWMU B25 included poorly graded sand and silt with some intermittent layers of gravel, sand, and silt to a depth of 30 feet bgs. According to the USAEHA (1988), the installation disposed of wastewater containing packing plaster, cement, and vermiculite from loading of inert bombs. The period of operation was from the 1960s to 1970s, and the impoundment is now inactive. The impoundment still contained residue of the above materials, based on the Resource Applications, Inc. (RAI 1992) inspection. However, sometime after the RAI inspection the impoundment was backfilled, and no evidence of an impoundment exists at the surface (Tt 1994). The ground water at SWMU B25 is estimated to be approximately 80 feet bgs.

4.0 INVESTIGATIONS

Sampling activities for the remedial investigation at SWMU B25 included collecting and analyzing subsurface soil samples. Figure 3-1 illustrates the sampling locations of the soil samples collected. Surface samples were not collected because the backfill material placed inside the former impoundment was presumed to be clean soil. One trench was excavated across SWMU B25 to identify and characterize the former waste impoundment beneath the clean backfill soil. The length of the trench was 34 feet from the northwest to the southeast of the presumed backfilled impoundment (Figure 3-1). The trench (TR01) was approximately three feet wide and five feet deep. Based on HWAD munition disposal practices typically associated with areas where wastewater from munition production and disposal activities was prevalent, the target analytes at SWMU B25 were explosives, metals, and semivolatile organic compounds (SVOCs).

5.0 Investigation Results

All four of the trench soil samples collected at SWMU B25 contained detectable concentrations of aluminum (2,890 mg/kg to 5,950 mg/kg), arsenic (2.3 mg/kg to6.9 mg/kg), barium (30.2 mg/kg to 127 mg/kg), chromium (1.7 mg/kg to 24.4 mg/kg), and lead (3.7 mg/kg to 11.1 mg/kg). Beryllium (0.02 mg/kg) and cadmium (0.25 mg/kg) were detected only in samples B25-TR01-2-S and B25-TR01-4-S, respectively. No other metals were detected in the subsurface trench samples collected at SWMU B25. Four out of seven trench and boring samples contained RDX at concentrations ranging from 0.09 mg/kg to 46.4 mg/kg, found during the explosives screening activity. The maximum concentration from this field screening analysis was detected in the soil boring sample collected from 14 feet bgs at location SB03. However, no explosives were detected in the samples that were analyzed by the contract laboratory. Therefore, the results indicate that the soils at SWMU B25 have not been impacted by explocive compounds.

Two SVOCs, di-n-butylphthalate and naphthalene, were detected only in trench sample B25-TR01-3-S at concentrations of 0.031 mg/kg and 0.022 mg/kg, respectively. No other SVOCs were detected in any of the other trench or soil boring samples. Analytical results for these samples are included in appendix C.

Based on the analytical results of the remedial investigation at SWMU B25, total chromium was the only metal detected at a concentration that slightly exceeded its PCG and expected maximum background level. Because the detected concentrations of total chromium are only slightly above the background level and appear only in one of the four samples, total chromium appears to be a naturally occurring anomaly and does not appear to be related to a release. It appears that no release of chemicals of concern have occurred at SWMU B25 and that the ground water is not impacted beneath SWMU B25.

6.0 Remediation

No remediation action was required for this site.

7.0 Remediation Results

Not applicable

8.0 Public Involvement:

It is the U.S. Department of Defense and Army policy to involve the local community throughout the investigation process at an installation. To initiate this involvement, HWAD has established and maintains a repository library at the local public library. This repository includes final copies of all past studies and other documents regarding environmental issues at HWAD. As future environmental documents are made available to HWAD the repository shall be updated.

HWAD has solicited community participation in establishment of a restoration and advisory board (RAB). To date there has been insufficient response and HWAD has not formed a RAB. HWAD has held open houses to inform the public of on going environmental issues. HWAD shall continue to solicit community involvement, and will establish a RAB should sufficient community interest be obtained.

9.0 Conclusions

There is no evidence of any release of the chemicals of concern above PCG's at SWMU B-25. SWMU B-25 should be closed without restrictions and returned to the base site master plan.

10.0 REFERENCES

EMSL. 1980. Aerial photographs of HWAAP, with overlays showing site locations identified by Art Gravenstein, NDEP.

NDEP. December 1998. Letter to HWAD. Draft Remedial Investigation reports, Solid Waste Management Units J02, J16, J25.

RAI. 1992. Site Screening Inspection (SSI) for the Hawthorne Army Ammunition Plant, Hawthorne, NV. Prepared for the U.S. Army Corps of Engineers Toxic and Hazardous Materials Agency by Resource Applications, Inc., Falls Church, Virginia. December 1992.

Tetra Tech, Inc. (Tt). 1993. Draft Technical Memorandum for Group B SWMUs, Hawthorne Army Ammunition Plant. November 22, 1993.

_____. 1994a. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Site Safety and Health Plan.

_____. 1994b. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Work Plan. Two volumes.

_____. 1994c. Hawthorne Army Ammunition Plant - Group B Remedial Investigation: Final Chemical Data Acquisition Plan.

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_____. 1997b. Quarterly Ground Water Monitoring Report, Second Quarter 1997, Hawthorne Army Depot, Hawthorne, Nevada. July 1997.

_____. 1997c. Final Site Health and Safety Plan, Hawthorne Army Depot, Hawthorne, Nevada. February 1997.

_____. 1997d. Final Data Package with recommendations for future action, Group B Solid Waste Management Units, Hawthorne Army Depot, Hawthorne, Nevada, Volumes 1, 2a, and 2b. January 1997.

_____. 1997e. Final Sampling and Analysis Plan, Remedial Investigations, Groups A and B Solid Waste Management Units, Hawthorne Army Depot, Hawthorne, Nevada. February 1997.

_____. 1997f. Final Technical Memorandum Background Sampling at the Hawthorne Army Depot, Hawthorne, Nevada. March 1997.

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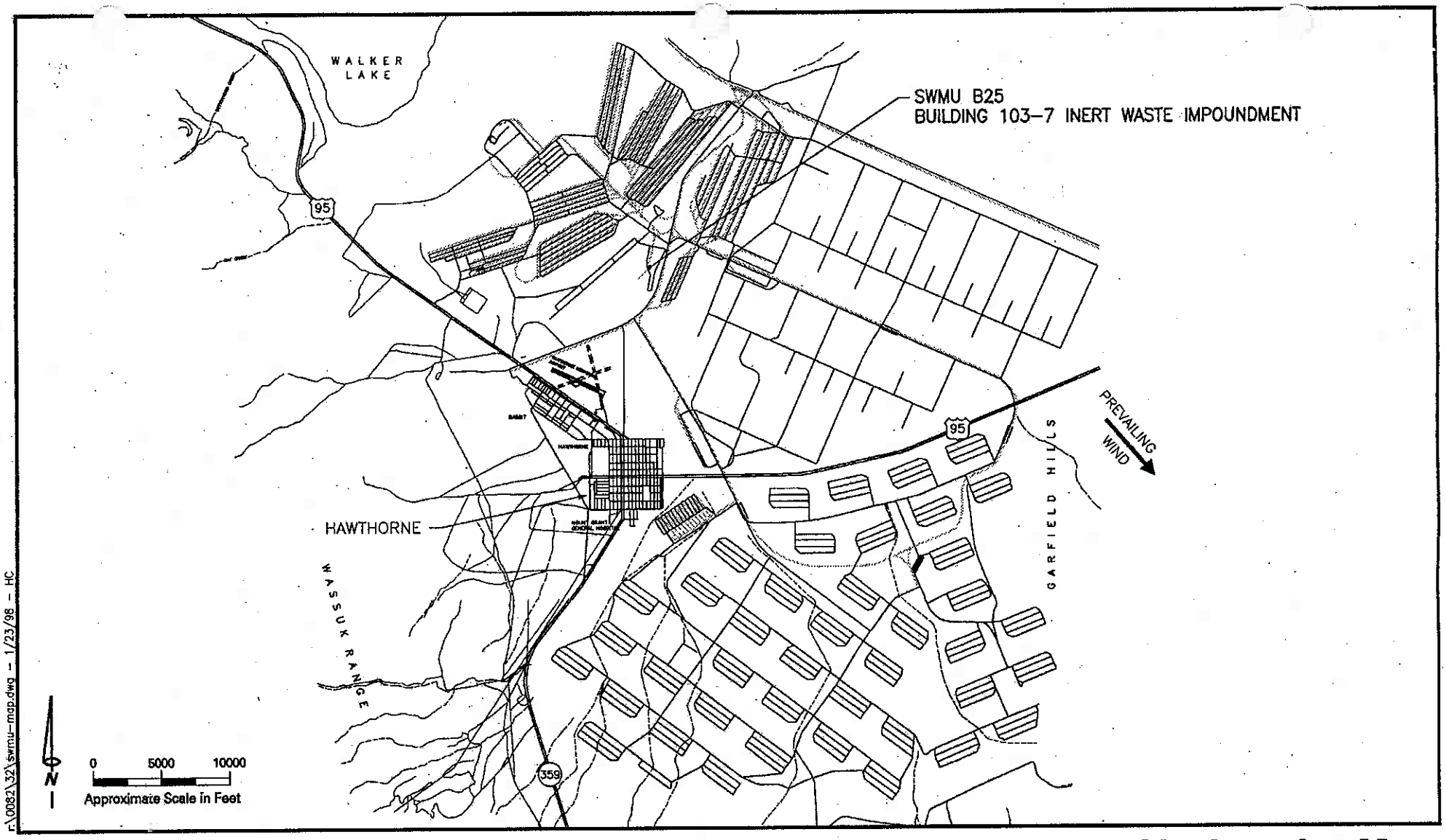
USEPA. 1989. Risk Assessment Guidance for Superfund. Volume I Human Health Evaluation Manual (Part A). USEPA. December 1989.

_____. 1996. Region IX Preliminary Remediation Goals. USEPA Region IX. August 1996.

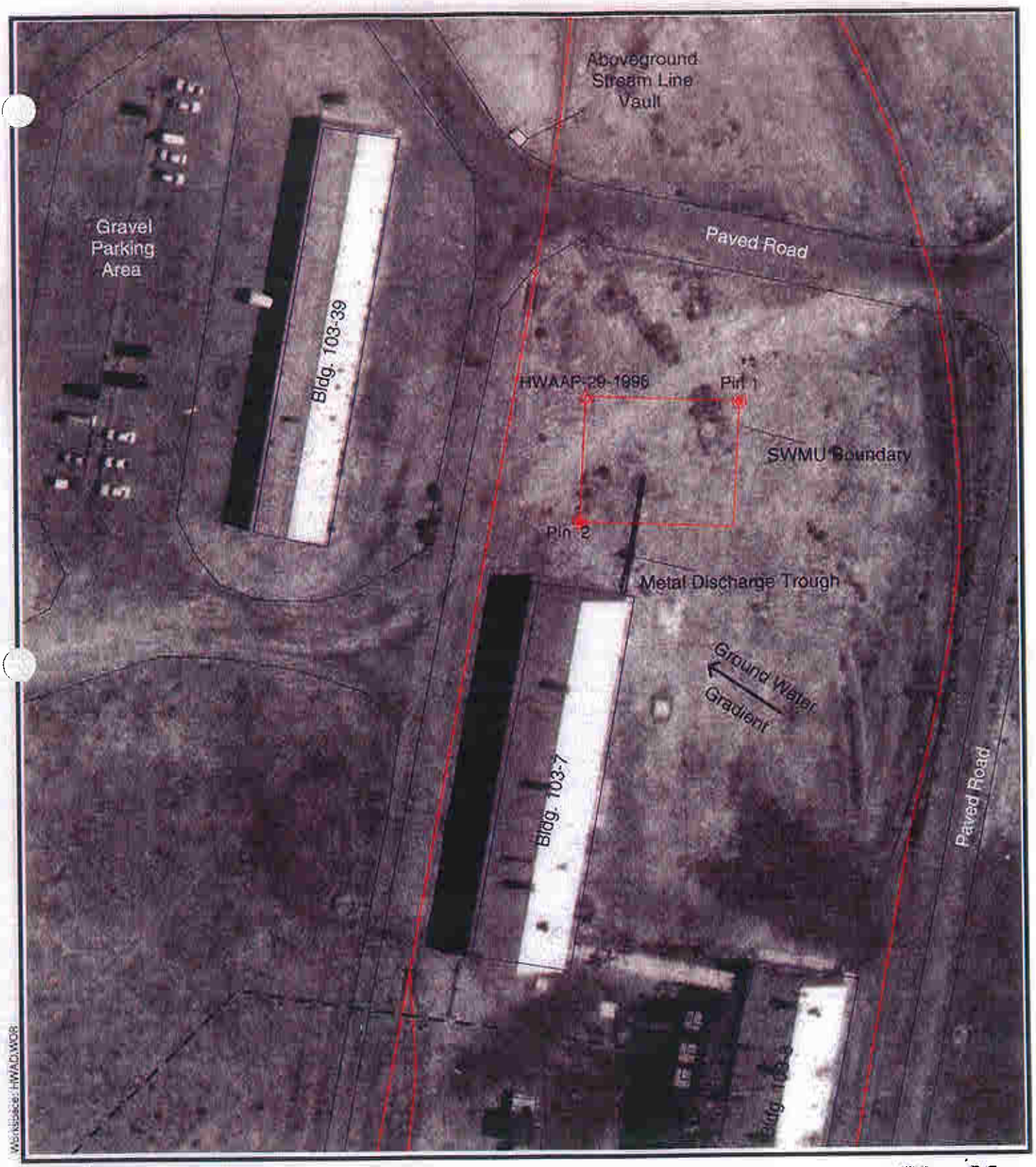


r:\0082\32\swmu-map.dwg - 1/23/98 - HC

SOURCE: TETRA TECH FINAL DATA PACKAGE, 1996 (REV. 1997)

Site Location Map
SWMU B25
Building 103-7 Inert Waste Impoundment
Hawthorne Army Depot
Hawthorne, Nevada
Figure 1-1

Tetra Tech, Inc.



Legend:

- Boundary Corner Pin
- Drain Line
- Railroad
- SWMU Monument

N

0 35 70

Approximate Scale in Feet

Tetra Tech, Inc.

Site Map

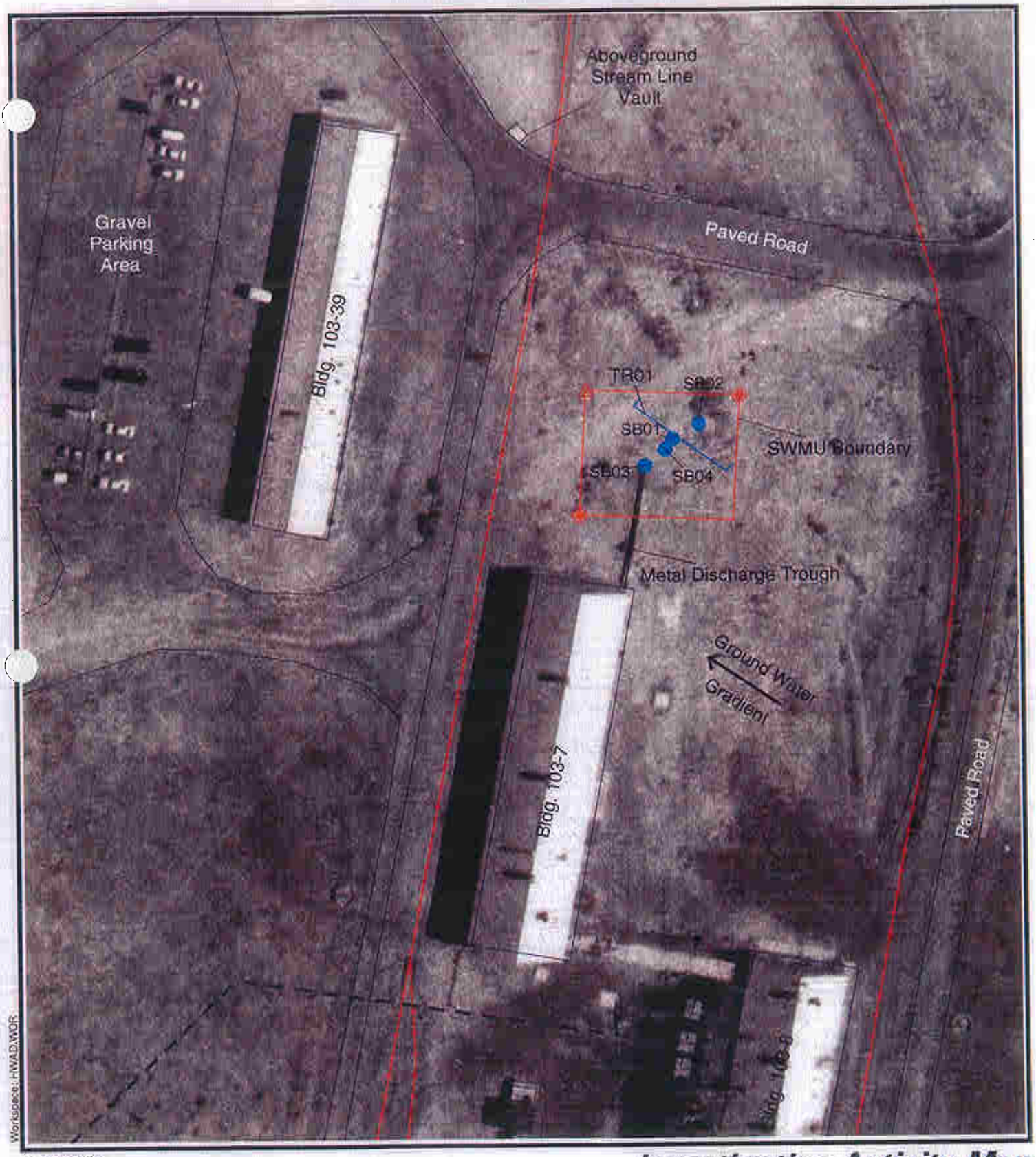
SWMU B25

Bldg. 103-7 Inert Waste Impoundment

Hawthorne Army Depot

Hawthorne, Nevada

Figure 1-2



Workspace:HWAD.WOR

Legend:

- Boundary Corner Pin
- Drain Line
- Soil Boring Location
- Railroad
- SWMU Monument
- Trench Location

N

0 35 70

Approximate Scale in Feet

Tetra Tech, Inc.

Investigation Activity Map

SWMU B25

Bldg. 103-7 Inert Waste Impoundment

Hawthorne Army Depot

Hawthorne, Nevada

Figure 3-1

Appendix A

Proposed Closure Goals
Hawthorne Army Depot
Hawthorne, Nevada

Constituent of Concern	Chemical Classification	Carcinogenic (C) or Non-carcinogenic (NC)	HWAD Proposed Closure Goals for Soil (mg/kg)	HWAD Proposed Closure Goal Source
Nitrate	Anion	NC	128,000	Calculated Subpart S[a]
2-Amino-dinitrotoluene	Explosive	NC	-	NA[b]
4-Amino-dinitrotoluene	Explosive	NC	-	NA
1,3-Dinitrobenzene	Explosive	NC	8	Calculated Subpart S
2,4-Dinitrotoluene	Explosive	NC	160	Calculated Subpart S
2,6-Dinitrotoluene	Explosive	NC	80	Calculated Subpart S
HMX	Explosive	NC	4,000	Calculated Subpart S
Nitrobenzene	Explosive	NC	40	Calculated Subpart S
Nitrotoluene (2-, 3-, 4-)	Explosive	NC	800	Calculated Subpart S
RDX	Explosive	NC	64	Calculated Subpart S
Tetryl	Explosive	NC	800	Calculated Subpart S
1,3,5-Trinitrobenzene	Explosive	NC	4	Calculated Subpart S
2,4,6-Trinitrotoluene	Explosive	C	233	Calculated Subpart S
Aluminum	Metal	NC	80,000	Calculated Subpart S
Arsenic (cancer endpoint)	Metal	C & NC	30	Background[c]
Barium and compounds	Metal	NC	5,600	Calculated Subpart S
Beryllium and compounds	Metal	C	1	Background
Cadmium and compounds	Metal	NC	40	Calculated Subpart S
Chromium III and compounds	Metal	NC	80,000	Calculated Subpart S
Lead	Metal	NC	1000	PRG[d]
Mercury and compounds (inorganic)	Metal	NC	24	Calculated Subpart S
Selenium	Metal	NC	400	Calculated Subpart S
Silver and compounds	Metal	NC	400	Calculated Subpart S
Acenaphthene	PAH	NC	4,800	Calculated Subpart S
Benzo[a]anthracene	PAH	C	0.96	Calculated Subpart S
Benzo[a]pyrene	PAH	C	0.10	Detection Limit[e]
Benzo[b]fluoranthene	PAH	C	0.96	Calculated Subpart S
Benzo[k]fluoranthene	PAH	C	10	Calculated Subpart S
Chrysene	PAH	C	96	Calculated Subpart S
Dibenz[ah]anthracene	PAH	C	0.96	Calculated Subpart S
Fluoranthene	PAH	NC	3,200	Calculated Subpart S
Fluorene	PAH	NC	3,200	Calculated Subpart S
Indeno[1,2,3-cd]pyrene	PAH	C	-	NA
Naphthalene	PAH	NC	3,200	Calculated Subpart S
Pyrene	PAH	NC	2,400	Calculated Subpart S
Total Petroleum Hydrocarbons as Diesel (TPH-d)	PAH	C	100	NDEP Level Clean-up[f]
Polychlorinated biphenyls (PCBs)	PCBs	C	25	TSCA[g]
Bis(2-ethylhexyl)phthalate (DEHP)	SVOC	C	1,600	Calculated Subpart S
Bromoform (tribromomethane)	SVOC	C	89	Calculated Subpart S

Proposed Closure Goals
Hawthorne Army Depot
Hawthorne, Nevada

Constituent of Concern	Chemical Classification	Carcinogenic (C) or Non-carcinogenic (NC)	HWAD Proposed Closure Goals for Soil (mg/kg)	HWAD Proposed Closure Goal Source
Butyl benzyl phthalate	SVOC	NC	16,000	Calculated Subpart S
Dibromochloromethane	SVOC	C	83	Calculated Subpart S
Dibutyl-phthalate	SVOC	NC	8,000	Calculated Subpart S
Diethyl phthalate	SVOC	NC	64,000	Calculated Subpart S
Phenanthrene	SVOC		-	NA
Phenol	SVOC	NC	48,000	Calculated Subpart S
Acetone	VOC	NC	800	Calculated Subpart S
Anthracene	VOC	NC	24,000	Calculated Subpart S
Benzene	VOC	C	24	Calculated Subpart S
Bis(2-chloraisopropyl)ether	VOC	C	3,200	Calculated Subpart S
Bromomethane	VOC	NC	112	Calculated Subpart S
Carbon tetrachloride	VOC	C	5	Calculated Subpart S
Chlorobenzene	VOC	NC	1,600	Calculated Subpart S
Chloroform	VOC	C	115	Calculated Subpart S
Chloromethane	VOC	C	538	Calculated Subpart S
Dibromomethane	VOC	C	0.008	Calculated Subpart S
1,2-Dichlorobenzene	VOC	NC	7,200	Calculated Subpart S
1,4-Dichlorobenzene	VOC	C	18,300	Calculated Subpart S
Dichlorodifluoromethane	VOC	C	16,000	Calculated Subpart S
Ethylbenzene	VOC	NC	8,000	Calculated Subpart S
Methylene bromide	VOC	NC	800	Calculated Subpart S
Methylene chloride	VOC	C	4,800	Calculated Subpart S
2-Methylnaphthalene	VOC		-	NA
1,1,2,2-Tetrachloroethane	VOC	C	35	Calculated Subpart S
Tetrachloroethylene (PCE)	VOC	C & NC	800	Calculated Subpart S
Toluene	VOC	NC	16,000	Calculated Subpart S
1,1,1-Trichloroethane	VOC	NC	7,200	Calculated Subpart S
Trichloroethylene (TCE)	VOC	C & NC	480	Calculated Subpart S
Trichlorofluoromethane	VOC	NC	24,000	Calculated Subpart S
1,2,3-Trichloropropane	VOC	C	480	Calculated Subpart S
Vinyl chloride	VOC	C	0.37	Calculated Subpart S
Xylene Total (m-, o-, p-)	VOC	NC	160,000	Calculated Subpart S
2,3,7,8-TCDD	Dioxin	C	0.000005	Calculated Subpart S

[a] RCRA 55 FR 30870

[b] Not available

[c] Highest background concentration detected in 50 background soil samples

[d] Smucker, Stanford J. USEPA Rgion IX, Preliminary Remedial Goals, Second Half, Sep. 1995

[e] Method detection limit for Volatile Organic Compounds by EPA Method 8260 or Semi-Volatile Organic Compounds analyzed by EPA Method 8270

[f] Nevada Division of Environmental Protection

[g] Cleanup level for PCB spills in accordance with Toxic Substance and Control Act Spill Policy Guidelines 40 CFR 761

Appendix B

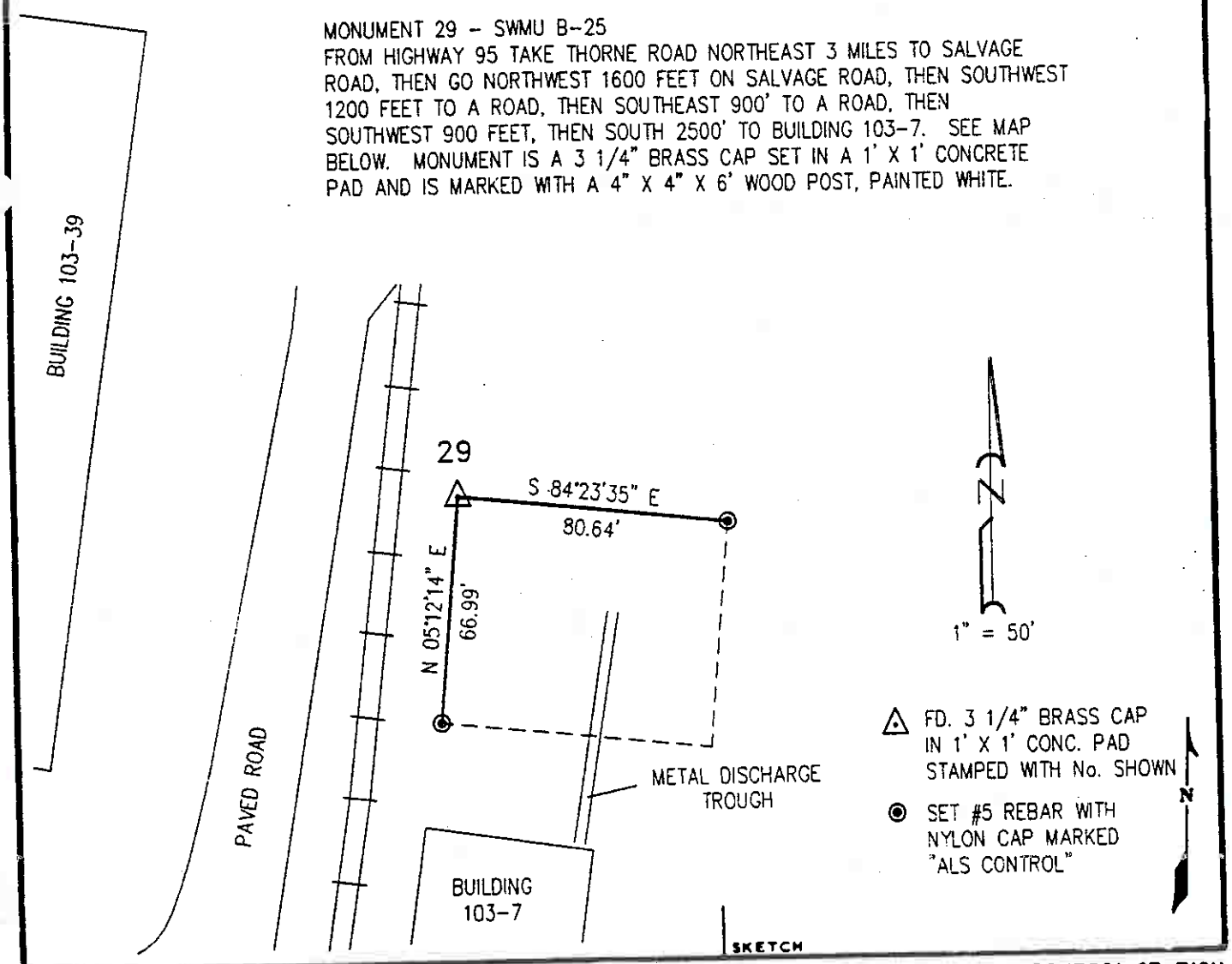
COUNTRY	TYPE OF MARK	STATION	
U.S.A.	BRASS CAP	29	
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
HAWTHORNE NEV.	29 B-25	COE HWAAP	4138.59
LATITUDE	LONGITUDE	DATUM	DATUM
38°33'56.88880" N	118°36'58.00511" W	NAD '27	NGVD '29
(NORTHING)(EASTING) (FT) (M)	(EASTING)(NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
1389081.12	490627.96	NEVADA SP WEST	A.L.S.
(NORTHING)(EASTING) (FT) (M)	(EASTING)(NORTHING) (FT) (M)	GRID AND ZONE	DATE / ORDER
			1997 / 2ND

TO OBTAIN GRID AZIMUTH, ADD ° ' " TO THE GEODETIC AZIMUTH

TO OBTAIN GRID AZ. (ADD)(SUB.) ° ' " TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC)(GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
	° ' "	° ' "		

MONUMENT 29 - SWMU B-25
FROM HIGHWAY 95 TAKE THORNE ROAD NORTHEAST 3 MILES TO SALVAGE ROAD, THEN GO NORTHWEST 1600 FEET ON SALVAGE ROAD, THEN SOUTHWEST 1200 FEET TO A ROAD, THEN SOUTHEAST 900' TO A ROAD, THEN SOUTHWEST 900 FEET, THEN SOUTH 2500' TO BUILDING 103-7. SEE MAP BELOW. MONUMENT IS A 3 1/4" BRASS CAP SET IN A 1' X 1' CONCRETE PAD AND IS MARKED WITH A 4" X 4" X 6' WOOD POST, PAINTED WHITE.



SKETCH

DA FORM 1 OCT 64 1959 REPLACES DA FORMS 1959 AND 1960, 1 FEB 57, WHICH ARE OBSOLETE.

DESCRIPTION OR RECOVERY OF HORIZONTAL CONTROL STATION
For use of this form, see TM 5-237; the proponent agency is TRADOC.

SWMU B25 Survey Data
Hawthorne Army Depot
Hawthorne, Nevada

SWMU	Point ID	Northing (feet)	Easting (feet)	Elevation
B25	SB01	1389052.18	490672.24	NE
B25	SB02	1389059.75	490686.31	NE
B25	SB03	1389038.74	490657.33	NE
B25	SB04	1389046.80	490668.26	NE
B25	TR01	1388961.07	488488.54	NE
B25	HWAAP-29-1996	1389081.10	490627.98	4138.59
B25	Pin 1	1389073.24	490708.22	NE
B25	Pin 2	1390555.28	490206.39	NE

Notes:

NE = Not established

Coordinate data based on electronic map file using the NAD 1927 datum.

Elevation data based on surveyors map using NGVD 1929 datum.

Appendix C

Metals
Method 6010A (APCL)

Sample ID	Location I	Sample Date	Depth	Aluminum, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Chromium, Total	Lead, Total	Selenium, Total	Silver, Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-TR01-1-S	TR01	2/28/97	5	2890	2.6	30.2	<0.017	<0.02	1.7	3.7	<0.18	<0.07
B25-TR01-2-S	TR01	2/28/97	5	3550	2.3	47.5	0.02	<0.02	2.3	3.7	<0.18	<0.071
B25-TR01-3-S	TR01	2/28/97	5	3460	2.4	39.9	<0.017	<0.02	2.2	4.3	<0.18	<0.071
B25-TR01-4-S	TR01	2/28/97	4	5950	6.9	127	<0.017	0.25	24.4	11.1	<0.18	<0.07
Analyses				4	4	4	4	4	4	4	4	4
Detections				4	4	4	1	1	4	4	0	0
Minimum Concentration				2890	2.3	30.2	0.02	0.25	1.7	3.7	0	0
Maximum Concentration				5950	6.9	127	0.02	0.25	24.4	11.1	0	0
HWAD - PCG				80000	100	2000	1	20	20	100	20	100
HWAD - PCG Hits				0	0	0	0	0	1	0	0	0

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Mercury
Method 7471A (APCL)

Sample ID	Location I	Sample Date	Depth	Mercury, Total
				mg/kg
B25-TR01-1-S	TR01	2/28/97	5	<0.069
B25-TR01-2-S	TR01	2/28/97	5	<0.07
B25-TR01-3-S	TR01	2/28/97	5	<0.07
B25-TR01-4-S	TR01	2/28/97	4	<0.069

Analyses	4
Detections	0
Minimum Concentration	0
Maximum Concentration	0
HWAD - PCG	24
HWAD - PCG Hits	0

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivol[illegible] Organics
Method 82[illegible]0B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,2-Diphenylhydrazine	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1-Chloronaphthalene	1-Naphthylamine	2,3,4,6-Tetrachlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.023	<0.026	<0.018	<0.027	<0.026	<0.051	<0.032	<0.017	<0.099	<0.017	<0.018	<0.037	<0.33	<0.022
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.022	<0.026	<0.018	<0.027	<0.026	<0.05	<0.031	<0.017	<0.097	<0.017	<0.018	<0.036	<0.32	<0.021
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.023	<0.026	<0.018	<0.027	<0.026	<0.051	<0.032	<0.017	<0.099	<0.017	<0.018	<0.036	<0.33	<0.022
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.033	<0.038	<0.026	<0.039	<0.038	<0.074	<0.046	<0.025	<0.14	<0.025	<0.026	<0.052	<0.47	<0.031
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.023	<0.026	<0.018	<0.027	<0.026	<0.051	<0.032	<0.017	<0.099	<0.017	<0.018	<0.036	<0.33	<0.022
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.023	<0.026	<0.018	<0.027	<0.026	<0.051	<0.032	<0.017	<0.098	<0.017	<0.018	<0.036	<0.33	<0.021
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.023	<0.027	<0.019	<0.028	<0.027	<0.052	<0.033	<0.017	<0.1	<0.017	<0.019	<0.037	<0.34	<0.022
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.023	<0.026	<0.018	<0.027	<0.026	<0.051	<0.032	<0.017	<0.098	<0.017	<0.018	<0.036	<0.33	<0.021
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.016	<0.018	<0.011	<0.045	<0.12	<0.053	<0.017	<0.02	<0.013	<0.027	<0.15	<0.012
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.016	<0.018	<0.011	<0.045	<0.12	<0.053	<0.017	<0.02	<0.013	<0.027	<0.15	<0.012
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.016	<0.018	<0.011	<0.045	<0.12	<0.053	<0.017	<0.02	<0.013	<0.027	<0.15	<0.012
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.013	<0.016	<0.016	<0.018	<0.011	<0.045	<0.12	<0.053	<0.017	<0.02	<0.013	<0.026	<0.15	<0.012
Analyses				12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	NE	7200	NE	NE	150	NE	NE	NE	NE	NE	NE	NE	NE	2.6
HWAD - PCG Hits				NE	NE	0	NE	NE	0	NE	NE	NE	NE	NE	NE	NE	NE	0

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivolatile Organics
Method 8270B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	2,6-Dichlorophenol	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	2-Naphthylamine	2-Nitroaniline	2-Nitrophenol	2-Picoline	3,3-Dichlorobenzidine	3-Methylcholanthrene	3-Nitroaniline	4,6-Dinitrophenol-o-cresol
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	NA	<0.019	<0.075	<0.022	<0.026	<0.027	<0.065	<0.022	<0.024	<0.026	<0.024	NA	<0.021	<0.043
B25-SB02-2-S	SB02	2/17/97	14	<0.11	NA	<0.019	<0.077	<0.021	<0.026	<0.027	<0.063	<0.021	<0.023	<0.026	<0.023	NA	<0.02	<0.042
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.018	<0.019	<0.075	<0.022	<0.026	<0.027	<0.065	<0.022	<0.024	<0.026	<0.024	<0.019	<0.02	<0.043
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.026	<0.028	<0.11	<0.031	<0.038	<0.039	<0.093	<0.031	<0.034	<0.038	<0.034	<0.028	<0.029	<0.062
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.018	<0.05	<0.075	<0.022	<0.026	<0.027	<0.065	<0.022	<0.024	<0.026	<0.024	NA	<0.02	<0.043
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.018	<0.05	<0.074	<0.021	<0.026	<0.027	<0.064	<0.021	<0.024	<0.026	<0.024	NA	<0.02	<0.043
B25-SB04-2-S	SB04	2/19/97	15	<0.12	NA	<0.02	<0.077	<0.022	<0.027	<0.028	<0.066	<0.022	<0.024	<0.027	<0.024	NA	<0.021	<0.044
B25-SB04-3-S	SB04	2/19/97	29	<0.12	NA	<0.019	<0.074	<0.021	<0.026	<0.027	<0.064	<0.021	<0.024	<0.026	<0.024	NA	<0.02	<0.043
B25-TR01-1-S	TR01	2/28/97	5	<0.035	NA	<0.018	<0.023	<0.014	<0.016	<0.017	<0.08	<0.013	<0.017	<0.017	<0.009	NA	<0.016	<0.068
B25-TR01-2-S	TR01	2/28/97	5	<0.035	NA	<0.018	<0.024	<0.014	<0.016	<0.017	<0.08	<0.013	<0.017	<0.017	<0.009	NA	<0.016	<0.069
B25-TR01-3-S	TR01	2/28/97	5	<0.035	NA	<0.018	<0.024	<0.014	<0.016	<0.017	<0.08	<0.013	<0.017	<0.017	<0.009	NA	<0.016	<0.069
B25-TR01-4-S	TR01	2/28/97	4	<0.035	NA	<0.018	<0.023	<0.014	<0.016	<0.017	<0.079	<0.013	<0.017	<0.017	<0.009	NA	<0.016	<0.068
Analyses				12	4	12	12	12	12	12	12	12	12	12	12	2	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	NE	80	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HWAD - PCG Hits				NE	NE	0	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivola Organics
Method 82 B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	4-Aminobiphenyl	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	7,12-Dimethylbenz(a)anthracene	a,a-Dimethylphenethylamine	Acenaphthene	Acenaphthylene	Acetophenone	Aniline
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.022	<0.023	<0.023	<0.025	<0.026	<0.043	<0.023	<0.11	<0.015	<0.067	<0.024	<0.023	<0.024	<0.047
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.021	<0.022	<0.022	<0.024	<0.026	<0.042	<0.022	<0.11	<0.014	<0.066	<0.023	<0.022	<0.023	<0.046
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.022	<0.023	<0.023	<0.025	<0.026	<0.043	<0.023	<0.11	<0.015	<0.067	<0.024	<0.023	<0.024	<0.046
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.031	<0.033	<0.033	<0.036	<0.038	<0.062	<0.033	<0.16	<0.021	<0.096	<0.034	<0.033	<0.034	<0.067
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.022	<0.023	<0.023	<0.025	<0.026	<0.043	<0.023	<0.11	<0.015	<0.067	<0.024	<0.023	<0.024	<0.047
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.021	<0.023	<0.023	<0.025	<0.026	<0.043	<0.023	<0.11	<0.015	<0.067	<0.024	<0.023	<0.024	<0.046
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.022	<0.023	<0.023	<0.026	<0.027	<0.044	<0.023	<0.12	<0.015	<0.069	<0.024	<0.023	<0.024	<0.048
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.021	<0.023	<0.023	<0.025	<0.026	<0.043	<0.023	<0.11	<0.015	<0.067	<0.024	<0.023	<0.024	<0.046
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.05	<0.011	<0.016	<0.011	<0.012	<0.019	<0.059	<0.068	<0.099	<0.046	<0.015	<0.016	<0.014	<0.049
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.05	<0.011	<0.016	<0.011	<0.012	<0.019	<0.059	<0.069	<0.099	<0.046	<0.015	<0.016	<0.014	<0.049
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.05	<0.011	<0.016	<0.011	<0.012	<0.019	<0.059	<0.069	<0.099	<0.046	<0.015	<0.016	<0.014	<0.049
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.05	<0.011	<0.016	<0.011	<0.012	<0.019	<0.059	<0.068	<0.099	<0.046	<0.015	<0.016	<0.014	<0.049
Analyses				12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	4800	NE	NE	NE
HWAD - PCG Hits				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0	NE	NE	NE

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivolatile Organics
Method 8270B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	Anthracene	Benzidine	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether	bis(2-Chloroisopropyl)-ether	bis(2-Ethylhexyl)-phthalate	Butyl benzyl phthalate
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.026	<0.063	<0.083	<0.024	<0.088	<0.083	<0.091	<0.055	<0.018	<0.018	<0.032	<0.034	<0.081	<0.023
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.026	<0.061	<0.081	<0.023	<0.086	<0.081	<0.089	<0.053	<0.018	<0.018	<0.031	<0.033	<0.079	<0.022
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.026	<0.062	<0.083	<0.024	<0.087	<0.083	<0.091	<0.054	<0.018	<0.018	<0.032	<0.034	<0.08	<0.023
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.038	<0.09	<0.12	<0.034	<0.13	<0.12	<0.13	<0.078	<0.026	<0.026	<0.046	<0.049	<0.12	<0.033
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.026	<0.062	<0.083	<0.024	<0.087	<0.083	<0.091	<0.054	<0.018	<0.018	<0.032	<0.034	<0.081	<0.023
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.026	<0.062	<0.082	<0.024	<0.087	<0.082	<0.09	<0.054	<0.018	<0.018	<0.032	<0.034	<0.08	<0.023
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.027	<0.064	<0.085	<0.024	<0.09	<0.085	<0.093	<0.056	<0.019	<0.019	<0.033	<0.035	<0.083	<0.023
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.026	<0.062	<0.082	<0.024	<0.087	<0.082	<0.09	<0.054	<0.018	<0.018	<0.032	<0.034	<0.08	<0.023
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.013	<0.008	<0.009	<0.008	<0.012	<0.1	<0.036	<0.021	<0.043	<0.062	<0.053	<0.018
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.013	<0.008	<0.009	<0.008	<0.012	<0.1	<0.036	<0.021	<0.043	<0.062	<0.053	<0.018
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.013	<0.016	<0.013	<0.008	<0.009	<0.008	<0.012	<0.1	<0.036	<0.021	<0.043	<0.062	<0.053	<0.018
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.013	<0.016	<0.013	<0.008	<0.009	<0.008	<0.012	<0.1	<0.036	<0.021	<0.043	<0.062	<0.053	<0.018
Analyses				12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	24000	NE	0.96	0.1	0.96	NE	10	NE	NE	NE	NE	3200	1600	16000
HWAD - PCG Hits				NE	0	NE	0	0	0	NE	0	NE	NE	NE	NE	0	0	0

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivol[illegible] Organics
Method 82[illegible]0B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	Chrysene	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibenz(a,h)anthracene	Dibenz(a,j)acridine	Dibenz(aj)acridine	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Diphenylamine	Ethyl methanesulfonate	Fluoranthene	Fluorene	Hexachlorobenzene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.018	<0.046	<0.026	<0.023	<0.022	<0.022	<0.022	<0.024	<0.017	<0.022	<0.23	<0.027	<0.029	<0.03
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.018	<0.044	<0.026	<0.022	<0.021	<0.021	<0.021	<0.023	<0.017	<0.021	<0.22	<0.027	<0.028	<0.029
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.018	<0.045	<0.026	<0.023	<0.022	<0.022	<0.022	<0.024	<0.017	<0.022	<0.22	<0.027	<0.028	<0.029
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.026	<0.065	<0.038	<0.033	<0.031	<0.031	<0.031	<0.034	<0.025	<0.031	<0.32	<0.039	<0.041	<0.042
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.018	<0.045	<0.026	<0.023	<0.022	<0.022	<0.022	<0.024	<0.017	<0.022	<0.22	<0.027	<0.028	<0.03
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.018	<0.045	<0.026	<0.023	<0.021	<0.021	<0.021	<0.024	<0.017	<0.021	<0.22	<0.027	<0.028	<0.029
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.019	<0.047	<0.027	<0.023	<0.022	<0.022	<0.022	<0.024	<0.017	<0.022	<0.23	<0.028	<0.029	<0.03
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.018	<0.045	<0.026	<0.023	<0.021	<0.021	<0.021	<0.024	<0.017	<0.021	<0.22	<0.027	<0.028	<0.029
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.011	<0.02	<0.013	<0.054	<0.057	<0.057	<0.016	<0.015	<0.011	<0.015	<0.05	<0.008	<0.014	<0.01
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.011	<0.02	<0.013	<0.054	<0.057	<0.057	<0.016	<0.015	<0.011	<0.015	<0.05	<0.008	<0.014	<0.01
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.011	0.031	<0.013	<0.054	<0.057	<0.057	<0.016	<0.015	<0.011	<0.015	<0.05	<0.008	<0.014	<0.01
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.011	<0.02	<0.013	<0.054	<0.057	<0.057	<0.016	<0.015	<0.011	<0.015	<0.05	<0.008	<0.014	<0.01
Analyses				12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0.031	0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0.031	0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	96	8000	NE	0.96	NE	NE	NE	64000	NE	NE	NE	3200	3200	NE
HWAD - PCG Hits				NE	0	0	NE	0	NE	NE	NE	0	NE	NE	NE	0	0	NE

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Semivolatile Organics
Method 8270B (APCL)

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-c,d)pyrene	Isophorone	Methyl methanesulfonate	N-Nitroso-di-n-butylamine	N-Nitroso-di-n-propylamine	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	N-Nitrosopiperidine	Naphthalene	Nitrobenzene	p-Dimethylaminoazobenzene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.03	<0.11	<0.027	<0.023	<0.019	<0.024	<0.018	<0.022	<0.018	<0.026	<0.25	<0.026	<0.025	<0.087
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.029	<0.1	<0.027	<0.022	<0.019	<0.023	<0.018	<0.021	<0.018	<0.026	<0.24	<0.026	<0.024	<0.084
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.029	<0.11	<0.027	<0.023	<0.019	<0.024	<0.018	<0.022	<0.018	<0.026	<0.24	<0.026	<0.025	<0.086
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.042	<0.15	<0.039	<0.033	<0.028	<0.034	<0.026	<0.031	<0.026	<0.038	<0.35	<0.038	<0.036	<0.12
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.03	<0.11	<0.027	<0.023	<0.019	<0.024	<0.018	<0.022	<0.018	<0.026	<0.25	<0.026	<0.025	<0.086
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.029	<0.11	<0.027	<0.023	<0.019	<0.024	<0.018	<0.021	<0.018	<0.026	<0.24	<0.026	<0.025	<0.086
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.03	<0.11	<0.028	<0.023	<0.02	<0.024	<0.019	<0.022	<0.019	<0.027	<0.25	<0.027	<0.026	<0.089
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.029	<0.11	<0.027	<0.023	<0.019	<0.024	<0.018	<0.021	<0.018	<0.026	<0.24	<0.026	<0.025	<0.086
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.086	<0.14	<0.02	<0.007	<0.015	<0.016	<0.014	<0.046	<0.018	<0.013	<0.019	<0.016	<0.014	<0.045
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.086	<0.14	<0.02	<0.007	<0.015	<0.016	<0.014	<0.046	<0.018	<0.013	<0.019	<0.016	<0.014	<0.045
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.086	<0.14	<0.02	<0.007	<0.015	<0.016	<0.014	<0.046	<0.018	<0.013	<0.019	0.022	<0.014	<0.045
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.085	<0.14	<0.02	<0.007	<0.015	<0.016	<0.014	<0.046	<0.018	<0.013	<0.019	<0.016	<0.014	<0.045
Analyses				12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0.022	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0	0.022	0	0
HWAD - PCG				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	3200	40	NE
HWAD - PCG Hits				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0	0	NE

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Sample ID	Location I	Sample Date	Depth	1,2,4,5-Tetrachlorobenzene	Pentachlorobenzene	Pentachloronitrobenzene	Pentachlorophenol	Phenacetin	Phenanthrene	Phenol	Pronamide	Pyrene
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.12	<0.025	<0.024	<0.15	<0.027	<0.022	<0.067	<0.062	<0.023
B25-SB02-2-S	SB02	2/17/97	14	<0.11	<0.024	<0.023	<0.14	<0.027	<0.021	<0.066	<0.06	<0.022
B25-SB02-3-S	SB02	2/17/97	19	<0.12	<0.025	<0.024	<0.15	<0.027	<0.022	<0.067	<0.061	<0.023
B25-SB03-1-S	SB03	2/17/97	6	<0.17	<0.036	<0.034	<0.21	<0.039	<0.031	<0.096	<0.088	<0.033
B25-SB03-2-S	SB03	2/17/97	14	<0.12	<0.025	<0.024	<0.15	<0.027	<0.022	<0.067	<0.061	<0.023
B25-SB04-1-S	SB04	2/17/97	9	<0.11	<0.025	<0.024	<0.15	<0.027	<0.021	<0.067	<0.061	<0.023
B25-SB04-2-S	SB04	2/19/97	15	<0.12	<0.026	<0.024	<0.15	<0.028	<0.022	<0.069	<0.063	<0.023
B25-SB04-3-S	SB04	2/19/97	29	<0.12	<0.025	<0.024	<0.15	<0.027	<0.021	<0.067	<0.061	<0.023
B25-TR01-1-S	TR01	2/28/97	5	<0.035	<0.015	<0.01	<0.19	<0.013	<0.014	<0.012	<0.044	<0.013
B25-TR01-2-S	TR01	2/28/97	5	<0.035	<0.015	<0.01	<0.19	<0.013	<0.014	<0.012	<0.044	<0.013
B25-TR01-3-S	TR01	2/28/97	5	<0.035	<0.015	<0.01	<0.19	<0.013	<0.014	<0.012	<0.044	<0.013
B25-TR01-4-S	TR01	2/28/97	4	<0.035	<0.015	<0.01	<0.19	<0.013	<0.014	<0.012	<0.044	<0.013
Analyses				12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0
HWAD - PCG				NE	NE	NE	NE	NE	NE	48000	NE	2400
HWAD - PCG Hits				NE	NE	NE	NE	NE	NE	0	NE	0

Notes:
NE = Not established.
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Explosives
Method 8330 (APCL)

Sample ID	Location I	Sample Date	Depth	1,3,5-Trinitrobenzene	1,3-Dinitrobenzene	2,4,6-Trinitrotoluene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	HMX	Nitrobenzene	RDX	Tetryl
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.07	<0.038	<0.063	<0.047	<0.05	<0.097	<0.07	<0.082	<0.065	<0.072	<0.049	<0.064
B25-SB02-2-S	SB02	2/17/97	14	<0.068	<0.037	<0.061	<0.021	<0.019	<0.094	<0.068	<0.08	<0.063	<0.024	<0.048	<0.062
B25-SB02-3-S	SB02	2/17/97	19	<0.069	<0.037	<0.062	<0.022	<0.019	<0.096	<0.069	<0.082	<0.065	<0.025	<0.049	<0.063
B25-SB03-1-S	SB03	2/17/97	6	<0.1	<0.054	<0.09	<0.031	<0.028	<0.14	<0.1	<0.12	<0.093	<0.036	<0.07	<0.092
B25-SB03-2-S	SB03	2/17/97	14	<0.069	<0.037	<0.062	<0.022	<0.05	<0.096	<0.069	<0.082	<0.065	<0.025	<0.049	<0.064
B25-SB04-1-S	SB04	2/17/97	9	<0.069	<0.037	<0.062	<0.021	<0.05	<0.096	<0.069	<0.081	<0.064	<0.025	<0.048	<0.063
B25-SB04-2-S	SB04	2/19/97	15	<0.071	<0.038	<0.064	<0.022	<0.02	<0.099	<0.071	<0.084	<0.066	<0.026	<0.05	<0.065
B25-SB04-3-S	SB04	2/19/97	29	<0.069	<0.037	<0.062	<0.021	<0.019	<0.096	<0.069	<0.081	<0.064	<0.025	<0.049	<0.063
B25-TR01-1-S	TR01	2/28/97	5	<0.013	<0.026	<0.041	<0.012	<0.018	<0.074	<0.063	<0.074	<0.047	<0.014	<0.051	<0.046
B25-TR01-2-S	TR01	2/28/97	5	<0.013	<0.026	<0.041	<0.012	<0.018	<0.074	<0.063	<0.074	<0.047	<0.014	<0.051	<0.046
B25-TR01-3-S	TR01	2/28/97	5	<0.013	<0.026	<0.041	<0.012	<0.018	<0.074	<0.063	<0.074	<0.047	<0.014	<0.051	<0.046
B25-TR01-4-S	TR01	2/28/97	4	<0.013	<0.025	<0.041	<0.012	<0.018	<0.073	<0.063	<0.073	<0.047	<0.014	<0.051	<0.046
Analyses				12	12	12	12	12	12	12	12	12	12	12	12
Detections				0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				0	0	0	0	0	0	0	0	0	0	0	0
Maximum Concentration				0	0	0	0	0	0	0	0	0	0	0	0
HWAD - PCG				4	8	233	2.6	80	800	800	800	4000	40	64	800
HWAD - PCG Hits				0	0	0	0	0	0	0	0	0	0	0	0

Notes:

Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

RDX Test Kit
Method 8510 (Tt Field)

Sample ID	Location I	Sample Date	Depth	RDX	RDX-Dup
				mg/kg	mg/kg
B25-SB03-2-S	SB03	2/17/97	14	46.4	46.4
B25-SB04-1-S	SB04	2/17/97	9	1.96	1.96
B25-TR01-1-S	TR01	2/28/97	5	<0	<0
B25-TR01-2-S	TR01	2/28/97	5	<0	<0
B25-TR01-3-S	TR01	2/28/97	5	<0	<0
B25-TR01-4-S	TR01	2/28/97	4	1.11	1.11

Analyses	6	6
Detections	3	3
Minimum Concentration	1.11	1.11
Maximum Concentration	46.4	46.4
HWAD - PCG	64	64
HWAD - PCG Hits	0	0

TNT Test Kit
Method 8515 (Tt Field)

Sample ID	Location I	Sample Date	Depth	2,4,6-TNT	2,4,6-TNT-Dup
				mg/kg	mg/kg
B25-SB03-2-S	SB03	2/17/97	14	<0	<0
B25-SB04-1-S	SB04	2/17/97	9	<0	<0
B25-TR01-1-S	TR01	2/28/97	5	<0	<0
B25-TR01-2-S	TR01	2/28/97	5	<0	<0
B25-TR01-3-S	TR01	2/28/97	5	<0	<0
B25-TR01-4-S	TR01	2/28/97	4	<0	<0

Analyses	6	6
Detections	0	0
Minimum Concentration	0	0
Maximum Concentration	0	0
HWAD - PCG	233	233
HWAD - PCG Hits	0	0

Notes:
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.

Picric Acid
Method M8330 (APCL)

Sample ID	Location I	Sample Date	Depth	Picric Acid
				mg/kg
B25-SB02-1-S	SB02	2/17/97	9.5	<0.78
B25-SB02-2-S	SB02	2/17/97	14	<0.76
B25-SB02-3-S	SB02	2/17/97	19	<0.77
B25-SB03-1-S	SB03	2/17/97	6	<1.1
B25-SB03-2-S	SB03	2/17/97	14	<0.77
B25-SB04-1-S	SB04	2/17/97	9	<0.77
B25-SB04-2-S	SB04	2/19/97	15	<0.79
B25-SB04-3-S	SB04	2/19/97	29	<0.77
B25-TR01-1-S	TR01	2/28/97	5	<0.69
B25-TR01-2-S	TR01	2/28/97	5	<0.7
B25-TR01-3-S	TR01	2/28/97	5	<0.7
B25-TR01-4-S	TR01	2/28/97	4	<0.69

Analyses	12
Detections	0
Minimum Concentration	0
Maximum Concentration	0
HWAD - PCG	7
HWAD - PCG Hits	0

Notes:
Zero values listed for maximum and minimum concentrations indicate a nondetect value for that analyte.
HWAD Action Level based on guidance from ASTDR and NDEP approval.

Appendix D

B-25, View to east of discharge trough, Bldg 103-7 to right. #R1-P2/3, 9/1/93

September 1993

February 2000