

PREPARED FOR: Larry Button

PREPARED BY: CH2M HILL

DATE: December 13, 1990

SUBJECT: McClellan Task 5015--Soil Waste Streams Record Review

PROJECT: SAC28722.15.01

INTRODUCTION

McClellan Air Force Base (McAFB), located in Sacramento County, California, provides logistical support and maintenance of aircraft and ground support systems through the Sacramento Air Logistics Center (ALC) (Figure 1).

The +50-year-old ALC is a key part of the Air Force Logistics Command lifeline of the aerospace team. The command is headquartered at Wright-Patterson AFB, Ohio, and the Sacramento center is one of five such facilities located at strategic points around the country. Each of these centers supports the Air Force's other major commands in key areas of management, procurement, supply distribution and transportation, and maintenance and repair. Each also supports certain aircraft, weapon systems, and various items and commodities.

At Sacramento ALC, aircraft such as the F/EF/FB-111, A-10, F-4, and C-12A/D are kept combat-ready. Surveillance and warning systems, radar sites, space systems such as the Space Shuttle, missile tracking stations, and airborne and ground power generators are also maintained and repaired (Ref. 1).

Environmental efforts at McAFB during the previous decade have identified numerous known or suspected hazardous waste disposal sites. These sites are located in Operable Units A, B, C, D, and other areas (Figure 2). Most of the sites have had some previous soil sampling and data analysis. The results of site-specific environmental efforts to date at McClellan reside in the Administrative Record (AR) at the Base library.

In addition to the soil contamination at the Operable Units, an ongoing Soil Program provides shallow soil sampling throughout the facility. The areas that have been sampled are designated by location or proximity to a building, but are not designated sites.

The purpose of the current effort was to conduct a record search to evaluate and quantify soil waste streams. The objective of this Technical Memorandum is to provide

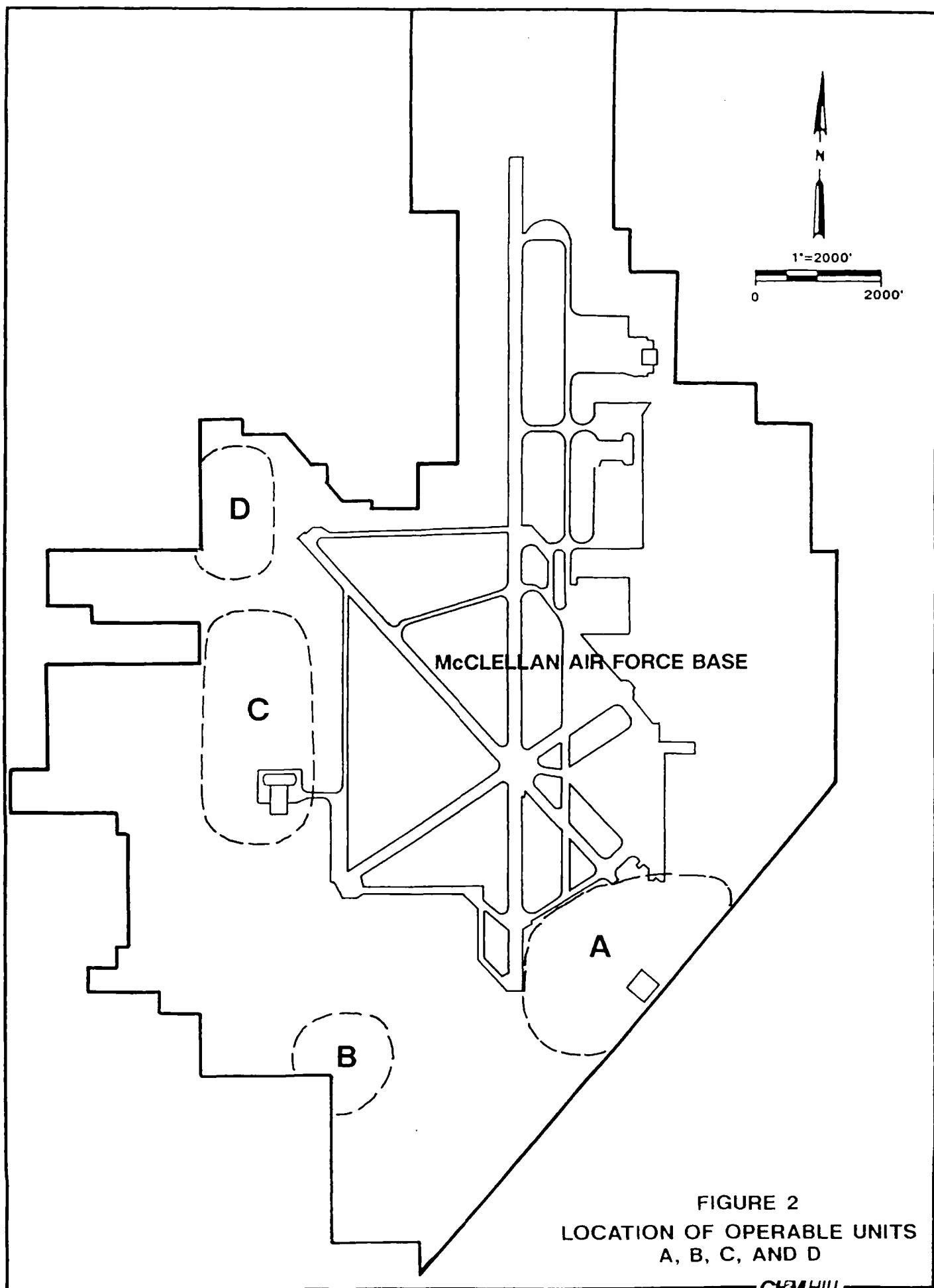


FIGURE 2
LOCATION OF OPERABLE UNITS
A, B, C, AND D

CHM HILL

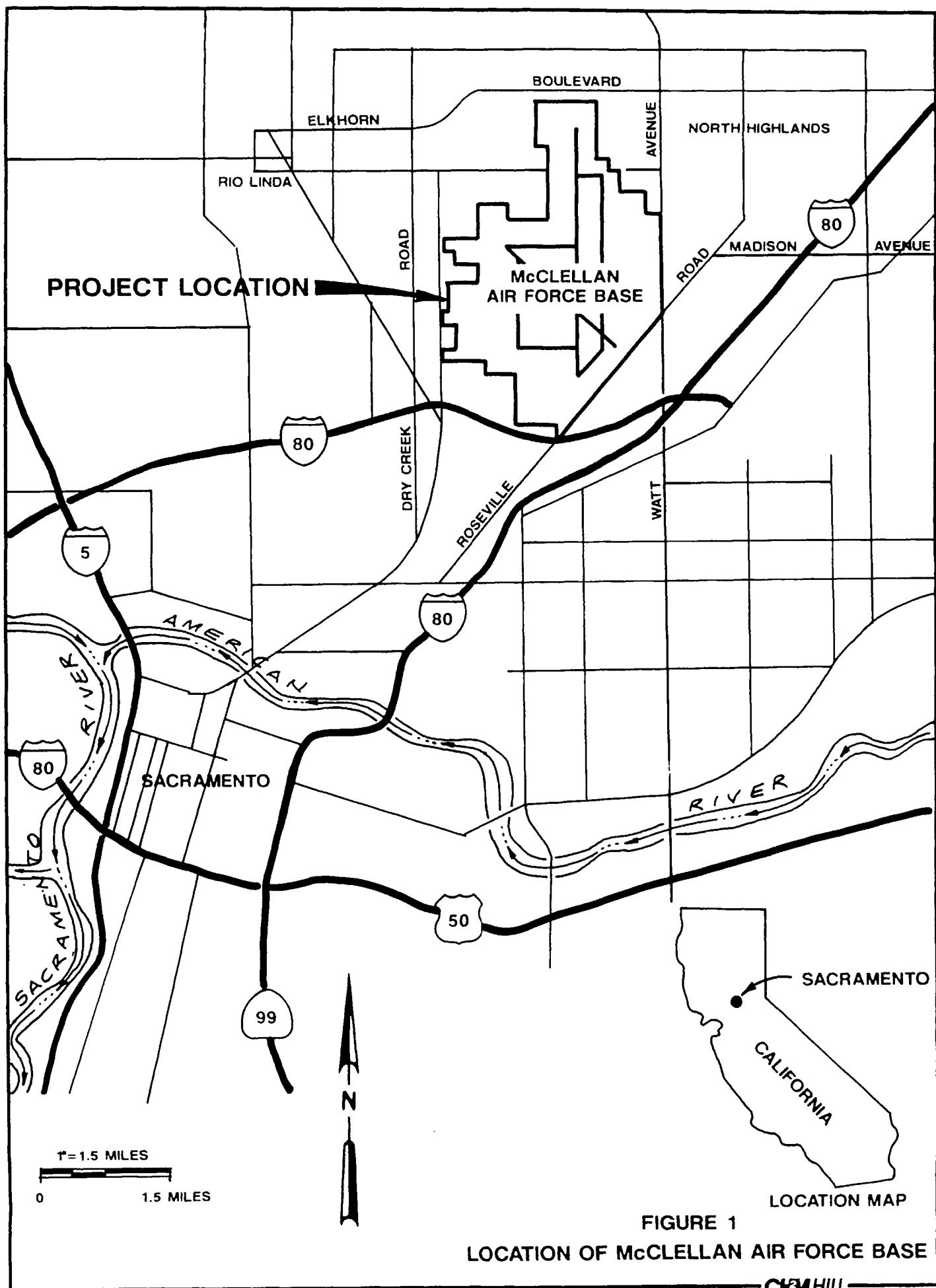


FIGURE 1
LOCATION OF McCLELLAN AIR FORCE BASE

CHM HILL

McAFB with a summary of the record review efforts. This memorandum will provide the necessary input into the regulatory requirements evaluation, the bioremediation treatability study work plan, and the soil treatment technologies feasibility study.

RECORD REVIEW

DOCUMENT REVIEW AND FILE SEARCH

The McAFB library houses a collection of 211 documents, largely prepared by contractors, containing information on environmental conditions at the Base. This collection, called the Administrative Record (AR), was assessed to identify those documents pertinent to the task of locating a suitable site for the steam injection pilot facility. A data review of those found to be relevant is provided in Appendix A.

Documents addressing Operable Units A, B, C, and D, and Other Areas were reviewed. Other areas are currently designated Operable Units E through H. Of particular importance were documents containing specific information on soil analyses.

In addition to the information in the AR, the record review consisted of a file search in Building 250 HH. The files contained soil sampling and analytical information from the Soil Program involving shallow soil sampling. This program began in 1987 and continues today.

To ensure that the information in the AR documents was reliable and accurate, a document Quality Assurance/Quality Control evaluation was compiled.

QA/QC OF DOCUMENTS

The Index to Data References, prepared for McAFB by Radian Corporation, lists and provides a preliminary assessment of that data (Ref 2). It was the sole source of information in the QA/QC search of relevant documents in the AR. The index categorizes the data inventory items: chemical/physical measurements, geology, maps, and specific site features. In addition, it allows retrieval of documents by site and by inventory items.

The index uses a coding scale to establish the quality of reviewed data. The preliminary quality ratings of A, B, C are defined as follows:

- A Data that are considered complete, representative, and verifiable. These data can be used for decisionmaking with a high confidence level.
- B Data considered partially lacking in completeness and/or representativeness, and/or not completely verifiable. These data should be used with

caution in decisionmaking and only with the support of other data of Code A quality.

- C Data of poor quality or data with indeterminate or undocumented quality control. These data should be used for decisionmaking only when strongly supported by data of Code A quality.

The majority of the documents received either an A or B rating. The limitation of the index is that it provides only a preliminary evaluation of documents (Ref. 3). Due to this limitation, additional criteria used in determining the quality of data were the completeness of information and the existence of supporting documents. Using the index, CH2M HILL determined that existing data were of sufficient quality for the site selection process. However, the data should not be assumed to be completely accurate. Additional samples should be collected before any feasibility study begins.

The site selection process involved using information from existing documents to target areas with high and appropriate contamination.

RESULTS

Several tables have been constructed to summarize the data obtained from the Record Review. Tables 5, 6, 7, 8, and 9 are summaries of the data in Operable Units A, B, C, D, and other areas, respectively. The data in these tables are divided into several information categories. These categories are:

- Site numerical designation and description
- Contaminants
- Concentration range (in mg/kg)
- Number of samples taken at a particular site
- Approximate depth of samples (in feet)
- Approximate area of site (in square feet)
- Miscellaneous comments

Table 10 contains the information from the Soil Program. The information in Table 10 is categorized in a manner similar to the above table with the exception that site number is designated as building or location number.

The most important portions of Tables 5 through 10 are the list of site- or building/location-specific contaminants and their concentrations. Contaminants were classified into four categories: volatile organics, semivolatile organics, oil and grease, and/or total petroleum hydrocarbons, and heavy metals. Within each category, the individual contaminants were listed alphabetically (by first letter only). The concentration of a particular contaminant at a specific site is presented as a range with only the high and low values listed. If the data review showed that only one concentration value of a

contaminant existed at a site, this single value was also listed. In summary, every contaminant at every known and sampled site and building or location is presented in Tables 5 through 10. These tables provide a quick and ready reference of contamination at a specific site or location.

The voluminous tables (5 through 10) reflect the enormous amount of environmental information in the AR and Soil Program files. To condense these data even further, Tables 1 through 4 were created to summarize the information in Tables 5 through 10. These summary tables contain only the concentration range for each specific contaminant. Again, the contaminants are classified into four categories: Table 1 contains volatile organics; Table 2 contains semivolatile organics; Table 3 contains heavy metals; and Table 4 contains miscellaneous compounds. All contaminants discovered through chemical analysis are listed. The corresponding concentration range for a particular contamination is the value of lowest and highest concentration (in mg/kg) found in the record review. Therefore, Tables 1 through 4 contain the lowest and highest concentration throughout the base for each contaminant to date.

REFERENCES

1. The Golden State Salutes McClellan Air Force Base. Marcoa Publishing, Inc., San Diego, California. 1987.
2. Index to Data References, Installation Restoration Program, Stage 3, McClellan Air Force Base. Radian Corporation. December 1988.
3. Personal Conversation with Joy Rogalla, Quality Assurance Officer. Radian Corporation, Sacramento, California. November 8, 1990.

Table 1
The Range of Volatile Organic Compounds in Soil at McClellan AFB

Sheet 1 of 2

Volatile Organic Compounds	Concentration Range (mg/kg)			Site or Location With Highest Concentration
	Low	High	76	
Acetone	0.11			13
Benzene	0.01	50		4
2-Butanone	0.04	43		13
Bromodichloromethane	0.02	--		--
Chloroform	0.01	0.89		10
Chlorobenzene	0.01	17		5
Carbon disulfide	0.02	0.16		5
2-Chlorethylvinylether	0.02	0.23		38
Chlorofluoromethane	0.02	0.12		Conforming Storage Facility
Carbon tetrachloride	--	0.26		B/257
Dichloromethane	0.02	110		2
1,1-Dichloroethane	0.02	26		5
1,2-Dichloroethane	0.03	--		--
1,1-Dichloroethylene	0.01	45		T
1,2-Dichloroethylene	2.8	10		4
1,2-Dichloropropane	0.02	--		--
Ethylbenzene	0.01	72		38
2-Hexanone	0.03	190		38
4-Methyl-2-pentanone	0.16	43		38

Table 1
The Range of Volatile Organic Compounds in Soil at McClellan AFB

Sheet 2 of 2

Volatile Organic Compounds	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Methylene chloride	1.9	27.2	4
Styrene	0.02	5.9	38
Toluene	0.01	335	4
Trichloroethylene	0.01	350	4
Tetrachlorethylene	0.01	36	4;T
1,1,1-Trichloroethane	0.01	300	2
1,1,2-Trichloroethane	0.01	--	--
1,1,2,2-Tetrachloroethane	0.03	4.7	38
1,1,1,2-Tetrachloroethane	0.01	--	--
Trans-1,2-dichloroethylene	0.01	75	4,T
Total xylenes	0.01	430	38
Vinyl chloride	0.02	52	2

Table 2
The Range of Semi-volatile Organic Compounds in Soil at McClellan AFB

Sheet 1 of 3

Semi-volatile Organic Compounds	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Anthracene	0.14	5.9	12
Acenaphthene	0.03	100	13
Arochlor 1254	1.2	2	7
Arochlor 1260	1.0	150	10
Butyl benzyl phthalate	0.23	17	4
Bis(2-ethylhexyl)phthalate	0.14	250	4
3,4-Benzofluoranthene	0.6	14	52
Benzo[a]anthracene	0.1	18	DET 42
Benzo[a]fluoranthene	--	112	DET 42
Benzo[b]fluoranthene	0.01	55	DET 42
Benzo[k]fluoranthene	14	117	DET 42
Benzo[g,h,i]perylene	4.1	42	DET 42
Benzo[a]pyrene	0.22	13	52
Benzyl alcohol	--	0.18	11
Benzoic acid	45	69	13
Chlordane	--	0.72	13
4-Chloroaniline	--	7.2	42
Chrysene	0.4	80	DET 42
Di-n-butyl phthalate	0.1	19	2

Table 2
The Range of Semi-volatile Organic Compounds in Soil at McClellan AFB

Sheet 2 of 3

Semi-volatile Organic Compounds	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Di-n-octyl phthalate	--	0.16	13
Dibenzof[a,h]anthracene	1.2	3.5	52
3,3-Dichlorobenzidine	--	0.19	43
2,4-Dimethylphenol	1.4	11	43
1,4-Dichlorobenzene	0.4	520	4
1,3-Dichlorobenzene	0.1	290	4
1,2-Dichlorobenzene	0.3	280	2
Diethyl phthalate	0.11	4.6	43
Dimethyl phthalate	0.18	1.12	13
2,6-Dinitrotoluene	0.19	1.7	13
Dibenzo[furan]	0.3	3.5	12
4,4-DDD	--	0.41	52
4,4-DDE	--	0.15	52
Endosulfan 1	0.02	0.04	12
Endosulfan sulfate	--	0.67	12
Fluoranthene	0.38	88	DET 42
Fluorene	0.25	5.4	12
Hexachlorobutadiene	--	0.2	38
Hexachloroethane	--	0.15	12

Table 2
The Range of Semi-volatile Organic Compounds in Soil at McClellan AFB

Sheet 3 of 3

Semi-volatile Organic Compounds	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Indeno[1,2,3-c,d]pyrene	1.2	49	DET 42
Isophorone	--	0.38	B/720
2-Methyl napthalene	0.10	13	43
4-Methylphenol	0.26	76	2
Naphthalene	0.10	64	2
N-Nitrosodiphenylamine	0.15	1.6	22
4-NitrophenoI	--	3.3	12
2-Nitroaniline	--	0.18	38
Nitrobenzene	--	0.62	22
Pentachlorophenol	--	1.6	10
Phenol	0.02	13	2
Phenanthrene	0.12	54	DET 42
Pyrene	0.24	106	DET 42
1,2,4-Trichlorobenzene	0.6	4.9	4
2,4,5-Trichlorophenol	--	0.12	38

Table 3
The Range of Metals in Soil at McClellan AFB

Sheet 1 of 2

Metal	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Antimony	0.2	330	10
Arsenic	0.4	520	40
Barium	9.0	28399	B/692
Beryllium	0.18	0.28	New IWTP Site
Cadmium	0.1	2100	5
Chromium	1.8	33000	5
Cobalt	1.7	48	B/243
Copper	4.6	5900	10
Lead	2.2	4400	11
Mercury	0.1	29	14
Molybdenum	0.6	3.1	B/1412 W
Nickel	1.5	280	10
Selenium	0.1	17	B/241 W
Silver	0.1	24	IWTP Basin
Thallium	3.1	114	B/360
Vanadium	5.5	78	B/910 (Commissary)
Zinc	9.6	4000	11
Soluble antimony	17	710	22
Soluble cadmium	1.3	9.6	10

Table 3
The Range of Metals in Soil at McClellan AFB

Sheet 2 of 2

Metal	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Soluble chromium	160	180	5
Soluble cobalt	9.8	20	10
Soluble lead	8.2	670	10
Soluble nickel	26	55	5
Soluble zinc	--	390	10

Table 4
The Range of Total Petroleum Hydrocarbons and Oil and Grease in Soil at McClellan AFB

Sheet 1 of 1

Component	Concentration Range (mg/kg)		Site or Location With Highest Concentration
	Low	High	
Oil and Grease	280	490	38
Total Petroleum Hydrocarbons (TPH)	0.14	1000000	B/7 CRC Power Plant

Table 5
List of Contaminants by Site in Area A

Sheet 1 of 2

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
25 Nonhazardous Waste Disposal Pit			NA		110,700	Borings detected no contamination or buried waste.
37 General Refuse Disposal Pit	Toulene Oil and Grease	0.07-0.71 280-490	6	6-50	30,000	Waste material at 3.5 to 8 ft depth.
38 An Engine Repair Facility (Blg 475)	Acetone Benzene 2-Butaone Chlorobenzene 2-Chloroethylvinylether Chloroform Carbon disulfide Ethylbenzene 2-Hexanone 4-Methyl-2-pentanone Styrene 1,1,2,2-Tetrachloroethane 1,1,1-Trichloroethane Toulene Trichloroethylene Tetrachloroethylene Trans-1,2-dichloroethylene Total xylenes Acenaphthene Bis(2-ethylhexyl)phthalate Dinitrotoluene Dibenzofuran	0.25-2.1 0.01-4.1 0.04-12 15 0.23 0.01-0.1 0.02-0.03 72 190 43 5.9 4.7 0.02-0.56 0.01-17 0.01 0.01 0.01-0.02 1.6-4.30 0.14 0.14-1.3 0.23 0.10		15 9-70		Much of site is under Building 475.

Table 5
List of Contaminants by Site in Area A

Sheet 1 of 2

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
38 An Engine Repair Facility (Blg 475) (Continued)	Di-n-butylphthalate Hexachlorobutadiene 2-Methylnaphthalene 2-Nitroaniline Penanthrene 2,4,5-Trichlorophenol Oil and grease Arsenic Barium	0.10-0.13 0.2 0.58 0.18 0.13 0.12 250-540 31 160-520				
39 Burn Disposal Burial Pit					100,000	Borings showed no evidence of contamination or buried waste.
40 Eight Sludge Disposal Pits	Acetone 2-butenone 1,1,1-Trichloroethane Benzo[a]pyrene Bis(2-ethylhexyl)phthalate Oil and grease Arsenic	0.28-0.53 0.35 0.02 0.22 0.33-0.59 600-730 45	9	3-70	20,900	Sludge-like material to 6 ft depth at 2 southwest drying beds. Deepest samples showed no detectable contamination.

NA = Not Available

Note: In addition to the above investigation sites in Area A, 47 uninvestigated sites have been identified.

Table 6
List of Contaminants by Site in Area B

Sheet 1 of 3

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
30 A Radiological Chemical Laboratory	Acetone Chloroform Methylene chloride Toluene Bis(2-ethylhexyl)phthalate	0.14-0.17 0.01-0.03 0.06 0.02-0.03 2.9	6	28-60		Site is east of Blg 628. Solvents and low level radioactive wastewater from Blg 628 may have been discharged into the site.
35 A Scrap Metal Burial Pit	Arsenic	36			35,200	Site is west of and under Blg 652. Borings encountered no buried waste or fill material.
36 A Plating Chemical Storage Area	2-Butanone Toluene Trichloroethylene Bis(2-ethylhexyl)phthalate Oil and grease Cyanide	0.13-0.35 0.01-0.02 0.02 0.10 370-650 37	8	14-67		

Table 6
List of Contaminants by Site in Area B

Sheet 2 of 3

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
47 An Abandoned Plating Shop (Big 666)	Acetone Benzene 2-Butanone 2-Hexanone Toluene 1,1,1-Trichloroethane Trichlorethylene Tetrachloroethylene Total xylenes Bis(2-hexylhexyl)phthalate Arsenic Barium Zinc	0.11-0.43 0.01 0.11-0.16 0.23 0.01-0.05 0.02 0.01-0.03 0.01 0.02 0.12-0.15 26-30 180-250 1,200	14	7-80		Blg 666 removed.
48 An Abandoned Industrial Waste Treatment Plant	Acetone Chloroform Trichloroethylene Toluene 1,1,1-Trichloroethene Bis(2-ethylhexyl)phthalate Arsenic Barium Cyanide	0.11-0.23 0.01 0.03 0.09 0.02 0.10 38 170 0.8	7	10-80		Site contains 33 tanks, most containing residues. Soil borings were outside limits of site.

Table 6
List of Contaminants by Site in Area B

Sheet 3 of 3

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
Note: In addition to the above investigated site in Area B, 11 uninvestigated sites have been identified.						

Table 7
List of Contaminants by Site in Area C

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
7 An Industrial Sludge and Burning Pit	Acetone 2-Butanone Benzene Chloroform Chlorobenzene Dichloromethane Ethyl benzene 2-Hexanone 4-Methyl-2-pentanone Toluene Total xylenes	0.79-4.4 0.19-1.8 0.02 0.02-0.22 0.02 0.04-0.22 0.02-0.09 0.12-0.47 0.20-0.21 0.01-0.17 0.05-0.44	9	6-65	35,340	Pit averages 23 ft deep and contains primarily unburned plastic, paper, metal, cloth, and wood.
	Arochlor 1254	2				
	Bis(2-ethylhexyl)phthalate	1.4-19				
	Butyl Benzyl phthalate	0.23				
	Diethyl phthalate	0.12-0.14				
	Di-n-butyl phthalate	0.25-0.37				
	2,6-Dinitrotoluene	0.12				
	4-Methylphenol	0.10				
	N-nitrosodiphenylamine	0.02				
	Phenanthrene	0.11-0.28				
	Phenol	0.02-0.69				
	Oil and grease	0.25-3.4				
	Arsenic	42				
	Antimony	150				
	Barium	160-230				

Table 7
List of Contaminants by Site in Area C

Sheet 2 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Site Area (ft ²)	Approx. Comments
8 A Disposal Landfill	Acetone Benzene 2-Butanone Chloroform Dichloromethane Toluene Trans-1,2-dichloroethylene	0.32 0.01-0.02 0.21 0.03 0.11 0.04-0.09 0.14	9	6-80	58,725	Pit averages primarily 20 feet deep and contains previously concrete and asphalt rubble, but also includes wood, plastic, glass, metal, and vegetation.
	Butyl benzyl phthalate Bis(2-ethylhexyl)phthalate Benzof[a]pyrene 3,4 Benzo[fluoranthene Chrysene Diethyl phthalate Di-N-butyl phthalate Dibenz[<i>a,h</i>]anthracene Di-N-octyl phthalate Indeno[1,2,3- <i>c,d</i>]pyrene Phenanthrene	1.3 0.15-0.57 0.43 0.56 0.14 0.16 0.1-0.38 1.5 0.13-0.37 1.2 0.12				
	Oil and grease	300-6,170				
	Arsenic Antimony Cadmium Lead Vanadium	43 210 11 340 140				Did not contain buried waste or significant sources of contamination.
9 A Burn Debris Burial Pit						

Table 7
List of Contaminants by Site in Area C

Sheet 3 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
10 A Burn Debris Burial Pit	Acetone Benzyl alcohol Benzene Chloroform Chorobenzene Dichloromethane 2-Hexanone 4-Methyl-2-pentanone Toluene Trichloroethylene Total xylenes Anthracene Arochlor 1260 Acenaphthene Bis(2-ethylhexyl)phthalate Chrysene Dimethyl phthalate Di-N-butyl phthalate 2,6-Dinitrotoluene Diethyl phthalate 1,3-Dichlorobenzene 1,2-Dichlorobenzene Fluorene Fluoranthene 2-Methyl naphthalene	0.11-0.24 0.34 0.01 0.03-0.89 0.03 0.11-0.13 0.03 0.16 0.03-0.16 0.03 0.02 0.11 1.2-150 0.14 0.63-1.2 0.40 0.24 0.22-1.4 0.17-0.65 0.19-0.47 0.11 0.43 0.23 0.38 0.10-0.14	9	6-70	53,000	Borings showed buried debris averaged 10.5 ft in thickness to an average depth of 15.5 ft consisted of concrete, asphalt, metal, glass, rubber, and carbonaceous (burned) materials.

Table 7
List of Contaminants by Site in Area C

Sheet 4 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
10 A Burn Debris Burial Pit (continued)	Naphthalene Phenol Pentachlorophenol Pyrene Phenanthrene Oil and Grease	0.21 0.37 1.6 0.93 0.50 470-34,500				
	Antimony Barium Cadmium Chromium Copper Lead Nickel Silver Thallium Zinc	270-330 180-260 96-150 210-350 210-5,900 1,100-1,400 280 61-80 61-81 2,400-7,900				
	Soluable antimony Soluable cadmium Soluable copper Soluable lead Soluable zinc	17 2-9.6 58-110 110-670 390				
11 A Burn Debris Burial Pit	Acetone 2-Butanone Chloroform Chlorobenzene Dichloromethane Ethylbenzene Toluene Total xylenes	0.16-3.7 0.19 0.01-0.82 0.19-0.38 0.26 0.48 0.02-0.12 0.03-0.07	10	10-60	32,400	Borings showed waste averages 6 ft in thickness covered with an average of 11 ft of fill material. Wastes consisted of wood, metal, plastic, and carbonaceous materials.

Table 7
List of Contaminants by Site in Area C

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
11 A Burn Debris Burial Pit (continuud)	3,4-Benzofluoranthene Benzyl alcohol Benzoic acid Butyl Benzyl phthalate Bis(2-ethylhexyl)phthalate 2,4-Dimethylphenol Dibenzofuran 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Dimethyl phthalate Diethyl phthalate Di-N-butyl phthalate Fluorene Fluoranthene 2-Methyl naphthalene 4-Methylphenol 2-Methylphenol Naphthalene N-nitrosodiphenylamine Pyrene Phenanthrene Oil and grease	0.63-45 0.18 0.12 0.29-50 1.4-2 0.26 0.27-1.9 0.49-4.2 0.93-6.0 0.34 0.11-0.14 0.10-3.1 0.24 2.9 0.62-0.81 0.53-1.2 0.23-0.87 0.34-0.44 0.15-0.40 0.24 0.11-0.37 200-8,100				

Sheet 5 of 24

Table 7
List of Contaminants by Site in Area C

Sheet 6 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
11 A Burn Debris Burial Pit (continued)	Arsenic Antimony Barium Cadmium Chromium Copper Lead Mercury Thallium Zinc Soluwable chromium Soluwable lead	27 160 210-400 33-49 320-1,400 440-960 400-4,400 15 61 4,000 160 8.2-35				
12 A Burn Debris Burial Pit	Acetone 2-Butanone Chlorobenzene Chloroform Dichloromethane 1,1-Dichloroethylene 1,1-Dichloroethane Ethylbenzene Toluene Trichloroethylene Total xylenes Anthracene Acenaphthene	0.11-1.1 0.30 0.03-7.3 0.01-0.05 0.02-0.21 2.2 0.01 0.18-0.27 0.05-0.26 1.7 0.72-1.4 5.9 0.31-3.2	9	5.5-80	30,500	Borings showed waste averages 11.6 ft in thickness covered with an average of 7 ft of fill material. Wastes consisted of wood, metal, glass, wire, and plastic.

Table 7
List of Contaminants by Site in Area C

Sheet 7 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
A Burn Debris Burial Pit (continued)	Butyl benzyl phthalate	0.74				
	Bis(2-ethylhexyl)phthalate	0.12-10				
	Benzo[a]anthracene	1.2				
	Benzo[g,h,i]perylene	4.1				
	Benzo[al]pyrene	0.43				
	Benzyl alcohol	0.15				
	Benzoic acid	0.35				
	Chrysene	12				
	Di-N-butyl phthalate	0.14-3.4				
	1,4-Dichlorobenzene	1.4				
	1,2-Dichlorobenzene	2.8				
	Diethyl phthalate	0.11-0.26				
	Dimethyl phthalate	0.18				
	2,6-Dinitrotoluene	0.20-0.42				
	Dibenzofuran	3.5				
	Endosulfan I	0.02-0.04				
	Endosulfan sulfate	0.67				
	Fluoranthene	28				
	Fluorene	5.4				
	Hexachloroethane	0.15				
	Indeno[1,2,3-cd]pyrene	4.8				
	2-Methyl naphthalene	0.36-0.72				
	4-Methylphenol	0.26				
	Naphthalene	0.15-1.2				
	N-Nitrosodiphenylamine	0.10-0.11				
	4-Nitrophenol	3.3				
	Phenol	0.26				
	Phenanthrene	36				

Table 7
List of Contaminants by Site in Area C

Sheet 8 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
12 A Burn Debris Burial Pit (continued)	Oil and grease Antimony Barium Cadmium Copper Lead Thallium Zinc Soluvable lead	240-10,500 210 150-160 11-52 140-1,200 140-620 51 2,700 10-28				Borings showed waste 1.5 to 15.5 ft thick consisting of metal, wood, burlap, plastic, paper, and carbonaceous material.
13 Burn Debris Burial Pit	Acetone 2-Butanone Chlorobenzene Dichloromethane Ethylbenzene 2-Hexanone Styrene Toluene Total xylenes	0.13-76 0.18-43 0.01-0.02 0.03-0.15 0.04-2.5 2.6-4.9 0.02 0.01-1.1 0.04-1.5	10	6.5-80	54,000	
	Arochlor 1260 Acenaphthene Bis(2-ethylhexyl)phthalate Benzoic acid Chrysene Chlordane 4-Chloroaniline Di-N-butyl phthalate Diethyl phthalate	1-1.8 100 0.36-2.4 0.20 0.17 0.72 0.27 0.24-0.42 0.11-0.17				

Table 7
List of Contaminants by Site in Area C

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
13 Burn Debris Burial Pit (continued)	1,2-Dichlorozenzene 1,4-Dichlorobenzene 2,6-Dinitrotoluene 2,4-Dimethylphenol Fluroanthene 2-Methyl naphthalene 4-Methylphenol 2-Methylphenol N-nitrosodi-N-propylamine Naphthalene N-nitrodiphenylamine Pyrene Phenanthrene Phenol Pentachlorophenol Oil and grease	0.11-0.36 0.12 1.7 0.4 0.16 0.18-0.25 0.95 0.35 0.95 0.21-0.31 0.10-2.2 0.15 0.19 0.22 0.34 560-7,500				

Sheet 9 of 24

Table 7
List of Contaminants by Site in Area C

Sheet 10 of 24						
Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
14 A Burn Debris Burial Pit	2-Butanone Chloroform Chlorobenzene Dichloromethane Styrene Toluene Total xylenes	0.12 0.05 0.01-0.05 0.05-0.14 0.02 0.02-0.04 0.10-0.25				
	Acenaphthene Anthracene Butyl benzyl phthalate Bis(2-ethylhexyl)phthalate Benzyl alcohol Dimethyl phthalate 2,6-dinitrotoluene Di-n-butyl phthalate Dibenzofuran Diethyl phthalate 1,4-Dichlorobenzene 1,2-Dichlorobenzene Di-N-butyl phthalate Di-N-octyl phthalate Fluoranthene Fluorene 2-Methyl naphthalene Naphthalene N-Nitrosodiphenylamine Phenanthrene Phenol	0.21 0.15 0.27-0.37 0.18-11 0.1 0.22-0.88 0.1 0.1-1.3 0.23 0.23-0.30 0.61 0.14-0.84 0.20 0.16 0.43 0.30 0.14-0.18 0.12-0.22 0.18-1.4 0.20-1.3 0.13				

Table 7
List of Contaminants by Site in Area C

Sheet 11 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
14 A Burn Debris Burial Pit (continued)	Oil and grease Arsenic Antimony Barium Cadmium Copper Lead Mercury Thallium Zinc Soluable cadmium Soluable lead	360-4,100 43-47 220-310 170-330 19-49 350-730 900-970 29 71-81 1,100-3,100 3.6 13-89				Site used for disposal of sodium valves. Site did not contain buried waste or significant sources of contamination.
15 Backhoe Trench						Site used for disposal of sodium valves. Site did not contain buried waste or significant sources of contamination.
16 Backhoe Trench						Site used for disposal of sodium valves. Site did not contain buried waste or significant sources of contamination.
17 A Burn Debris Burial Pit						Site used for disposal of sodium valves. Site did not contain buried waste or significant sources of contamination.
18 A Burn Debris Burial Pit						Used for disposal of Sodium valves. Site did not contain buried waste or significant sources of contamination.

Table 7
List of Contaminants by Site in Area C

Sheet 12 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
19 A Burn Debris Burial Pit						Used for disposal of Sodium valves. Site did not contain buried waste or significant sources of contamination.
20 Sludge/Oil Pit						Used for disposal of Sodium valves. Site did not contain buried waste or significant sources of contamination.
21 Sludge/Oil Pit						Used for disposal of Sodium valves. Site did not contain buried waste or significant sources of contamination.
22 A Burn Debris Burial Pit	Acetone Benzene 2-Butanone Chlorobenzene Chloroform Dichloromethane Ethylbenzene 2-Hexanone 4 Methyl-2-pentanone Trichloroethylene Tetrachloroethylene Toluene Trans-1,2-dichloroethylene Total xylenes	0.24-1.1 0.02-0.19 6.3 0.02-6 0.01-0.04 0.03 0.14-3.4 13 1.8 0.05-28 0.05 0.01-5.2 0.04-0.54 0.38-13	10	5-80	40,000	Borings showed waste 14.5 to 24 feet in thickness consisting of metal, wire, concrete, asphalt, rubble, burned wood, glass, rubber, and sludge-like material. Site is south of and parallel to Industrial Wastewater Treatment Plant blending ponds.

Table 7
List of Contaminants by Site in Area C

Sheet 13 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
22 A Burn Debris Burial Pit (continued)	Acenaphthene Arochlor 1260 Anthracene Benzoic acid Butyl benzyl phthalate Bis(2-ethylhexyl)phthalate Benzo[a]anthracene Benzo[a]pyrene Benzo[k]fluoranthene Benzol[g,h,i]perylene 3,4-Benzofluoranthene Chrysene Dimethyl phthalate Diethyl phthalate Dibenzol[a,h]anthracene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Di-N-butyl phthalate Di-N-octyl phthalate 2,4-Dimethylphenol Fluorene Fluoranthene Indeno[1,2,3-cd]pyrene 2-Methyl naphthalene 4-Methylphenol 2-Methylphenol N-nitrosodiphenylamine Naphthalene Nitrobenzene Phenanthrene Pyrene Phenol	0.03-0.34 1 0.76 69 0.13-0.22 0.55-6 2 1.4 2 1.1 1.1 1.1 1.7 1.12 0.38 1.27 0.77 0.16-43 0.17-0.55 0.14 1.9-22 0.17-0.51 3.8 1.3 0.20-13 3.7-4.2 1.6-1.7 0.90-1.6 1.3-4.9 0.62 0.16-3.2 2.9 1.3-1.4				

Table 7
List of Contaminants by Site in Area C

Sheet 14 of 24						
Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Site Area (ft ²)	Comments
22 A Burn Debris Burial Pit (continued)	Oil and grease Antimony Arsenic Barium Cadmium Copper Lead Vanadium Zinc Soluable antimony	780-6,400 130 36-58 160-1,400 35-55 390-2,600 1,400-2,000 110 1,100-1,900 710				Borings showed site did not contain buried waste or did not appear to be a significant source of contamination.
28 Magpie Creek Debris Sludge Pit						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination.
32 A Hazardous Waste Storage Area						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination.
41 A Waste Disposal Fill	Acetone 2-Butanone Chloroform Toluene Tetrachloroethylene	0.14-1.9 0.39 0.01 0.01-0.05 0.01-0.02	10	2-30		Borings showed most of the buried debris has been removed from the site. Site is west of and may be under Bldg 704.

Table 7
List of Contaminants by Site in Area C

Sheet 15 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
41 A Waste Disposal Fill (continued)	Bis(2-ethylhexyl)phthalate Di-N-butyl phthalate 1,4-Dichlorobenzene 1,2-Dichlorobenzene N-nitrosodiphenylamine	0.30-1.6 0.11-0.46 0.20-0.41 0.25-0.47 0.14-0.22				
42 Three Oil Storage Ponds/ Refuse Burn Pit/ Waste Fuel Burning Pit	Arsenic 2-Butanone Benzene Chloroform Chlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane Dichloroethane 1,1-Dichloroethane 1,2-Dichloropropene Dichlorobromomethane Ethylbenzene 2-Hexanone 1,3-Dichloropropylene 4-Methyl-2-pentanone Styrene Toluene Trichloroethylene Tetrachloroethylene Trans-1,2-dichloroethylene 1,1,1-Trichloroethane Total xylenes	0.04-0.06 0.13-0.40 0.02-0.04 0.01-0.34 0.01-2.1 0.03-0.36 0.05 1.8 0.01 0.05 0.03 0.06-7.6 3.5 6.4 0.41-0.46 0.02-7.4 0.03-4.5 0.01-2.5 0.01-3.4 0.08 0.24-38	18	3-84	34,650	Borings showed oily dissolved soil at the oil storage ponds. Borings at the burn pit showed buried debris from 1 to 9 feet deep containing burn burn debris, wood, plastic, and metal.

Table 7
List of Contaminants by Site in Area C

Sheet 16 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
42 Three Oil Storage Ponds/ Refuse Burn Pit/ Waste Fuel Burning Pit (continued)	Arochlor 1254 Acenaphthene Benzoic acid Bis(2-ethylhexyl)phthalate 4-Chloroaniline 2,4-Dimethylphenol 1,4-Dichlorobenzene 1,2-Dichlorobenzene Diethyl phthalate Di-N-butyl phthalate 2,6-Dinitrotoluene Dibenzofuran Fluorene 2-Methyl naphthalene 4-Methylphenol 2-Methylphenol Naphthalene N-nitrosodiphenylamine Phenol Phenanthrene Oil and grease Arsenic Barium Cadmium Copper Lead Silver Soluable cadmium Soluable lead	1.2 0.15 0.47-1 0.20-7.5 0.12 0.14-0.46 0.22 0.34-0.48 0.16 0.18-0.75 0.52-0.69 0.10-1.2 0.24-0.56 8-13 0.24-3.5 0.54 0.17-3.2 0.22-0.28 0.59-0.99 0.16-0.52 230-9,600 29-36 190-240 20 6,600 670 54 1.3 80				

Table 7
List of Contaminants by Site in Area C

Sheet 17 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
43 A Waste Disposal Pit	Acetone Benzene Chlorobenzene Chloroform 2-Chloroethylvinyl ether Dichloromethane Ethylbenzene 2-Hexanone Toluene Total xylenes Acenaphthene Anthracene Arochlor 1254 Benzyl alcohol Butyl benzyl phthalate Bis(2-hexylethyl)phthalate Benzalpyrene Benzoic acid Benzofl anthracene Chrysene 4-Chloroaniline 2,4-Dimethylphenol Dibenzofuran 1,3-Dichlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene Di-N-butyl phthalate Diethylphthalate Dimethylphthalate 3,3-Dichlorobenzidine	0.13-0.51 0.05-0.08 0.04-7.9 0.01-0.03 0.02 0.06-0.16 0.34-0.49 0.13 0.02-0.52 0.66-2.3 0.37 0.31-0.46 4.6 0.33 0.23-0.49 0.37-5.1 0.43 48 0.51-1.1 0.51-1.5 7.2 1.3-11 0.51 0.61-2.4 1.1-20 3.6-11 0.12-2.7 0.22-4.6 0.14 0.19	9	5.5-70	20,250	Borings showed waste averages 10.3 ft in thickness and consisted of buried wood, metal, wire, glass, and plastic.

Table 7
List of Contaminants by Site in Area C

Sheet 18 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
43 A Waste Disposal Pit	2,4-Dinitrotoluene Floranthene Fluorene 2-Methyl napthalene 4-Methyphenol 2-Methyphenol Naphthalene Nitrobenzene N-Nitrosodiphenylamine Phenanthrene 1,2,4-Trichlorobenzene Oil and grease	0.36-1 0.34 0.38-0.96 1.3-3.8 2.4-3.5 0.45 1.5-6.1 0.75 0.15-1.1 1.4-1.8 0.60-1.9 900-17,000				
	Antimony	180-200				
	Arsenic	40				
	Barium	170-230				
	Chromium	210-340				
	Cadmium	36-110				
	Copper	400-1,100				
	Lead	780-1,500				
	Nickel	210				
	Thallium	61-71				
	Soluable cadmium	7.4				
	Soluable lead	9.7-110				
49 A Possible Burial Pit						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination.

Table 7
List of Contaminants by Site in Area C

Sheet 19 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
50 Settling Pond						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Located northwest of Bldg 704.
51 Holding Pond						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Located northwest of Industrial Wastewater Treatment Plant.
52 A Burial Pit	Acenaphthene Anthracene Bis(2-ethylhexyl)phthalate Benzo[a]anthracene Benzo[k]fluoranthene Benzo[a]pyrene Benzog,h,iperylene 3,4-Benzofluoranthene Chrysene Dibenzofuran 4,4-DDD 4,4-DDE Dibenzo[a,h]anthracene Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene 2-methyl napthalene Naphthalene	0.97 1.2 0.47 7.6 14 13 8.7 14 6.2 0.5 0.41 0.15 3.5 4.1 0.67 11 0.25 2.3	9	9-50		Borings showed buried debris 3 feet thick in one area and fill material to 18 feet in another. Located northwest of Bldg 704.

Table 7
List of Contaminants by Site in Area C

Sheet 20 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
52 A Burial Pit (continued)	Barium Cadmium Lead Soluable cadmium Soluable lead	161-185 20 106 2.4 13				Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located northwest of Bldg 704.
53 Settling Pond						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located south of Bldg 704. Site contained a possible burial pit.
54, 55, & 56 Storage Areas						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located south of Bldg 704.
57 A Possible Burial Pit						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located southwest of Industrial Wastewater Treatment Plant.
60 Holding Pond						

Table 7
List of Contaminants by Site in Area C

Sheet 21 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
61 & 62 Possible Chemical Waste Pit						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located southeast of Bldg 704.
63 & 64 Unlined Ditches						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located southeast of Bldg 704.
65 Possible Burial Pit						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located east of Bldg 692.
66 Possible Ditch and a Pond						Borings showed site did not contain buried waste or did not appear to be a significant source of contamination. Site located west of Bldg 721.
67 A Burial Disposal Area	Benzene Dichloroethane Ethybenzene Trichloroethylene Toluene Trans-1,2-dichlorethylene Total xylenes Vinyl chloride	0.11 0.87 0.22 0.84-1.6 0.16-0.63 3 0.84 1.8	10	9-80		Borings showed site contained buried debris at an average depth of 2 ft. Debris consisted of metal, glass, paper, plastic, concrete, and burned material. Located northwest of Bldg 702.

Table 7
List of Contaminants by Site in Area C

Sheet 22 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
67 A Burial Disposal Area (continued)	2,4-Dimethylphenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Di-N-butyl phthalate Indeno[1,2,3-cd]pyrene 2-Methyl napthalene 4-Methyl phenol 2-Methyl phenol Naphthalene Phenanthrene Pyrene	4.1-9.5 0.75-0.89 2.6-4.4 6.7-21 1.9 0.31 3.2 5.1 4.1 2.9-4.0 1.3 0.18-1				
	TPH	49-2,500				
	Arsenic Barium Cadmium Copper Lead Vanadium	67 165-174 11-24 201 190-419 155				
	Soluble cadmium Soluble lead	3 10-71				
68 Four Ponds	Chlorobenzene 1,2-Dichloroethane Trichloroethylene Total xylenes	0.21 0.64 0.37 0.40	9	4-80		Borings encountered sludge-soil mixture. Site located west of site 42 and under Industrial Wastewater Treatment Plant.

Table 7
List of Contaminants by Site in Area C

Sheet 23 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
68 Four Ponds (continued)	Bis(2-ethylhexyl)phthalate 4,4-DDE 4,4-DDD 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methyl naphthalene Naphthalene	2.6 0.01 0.01 0.21 1.5 0.32 0.61				
	TPH	230				
	Barium	185				
69 Two Burn Debris Burial Pits	Benzene Chlorobenzene Ethylbenzene Trans-1,2-dichloroethylene Trichloroethylene Toluene Total xylenes Vinyl Chloride	0.11 0.92-6.1 0.14-0.34 0.21-0.37 0.42-0.44 0.48 0.37-1.7 0.26-0.85	9	6.5-70	31,500	Borings in east pit showed buried debris from 2.5 to 16 ft and borings in wet pit showed buried debris from 11 to 9.5 feet. Debris consisted of metal, plastic, rubber, concrete, and wood.
	Bis(2-ethylhexyl)phthalate 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Diethyl phthalate Di-N-butyl phthalate 2,4-Dimethylphenol Fluoranthene	2-2.7 0.62 0.84-6 3-8.7 0.14 0.47 1.7-2.9 0.15				

Table 7
List of Contaminants by Site in Area C

Sheet 24 of 24

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
69 Two Burn Debris Burial Pits (continued)	2-Methyl naphthalene 4-Methylphenol 2-Methylphenol Naphthalene Phenol Phenanthrene Pyrene Hydrocarbons Barium Cadmium Chromium Copper Lead Soluable cadmium Soluable lead	0.35-1.7 0.86-2.3 0.62-1.2 1.7 0.16-0.87 0.20 0.25 65 163-178 11-87 225 142-501 540-2,770 5.7 9.8-20				

Table 8
List of Contaminants by Site in Area D

Sheet 1 of 7

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
1 A Refuse/Solid Waste Burn and Burial Pit	Ethylbenzene Methylene chloride Toluene Total xylenes	1.2 7.6 2.9 2.2	3	5-15	10,500	Borings showed waste zone averaged 2 to 18 feet in depth containing refuse and debris.
	Bis(2-ethylhexyl)phthalate	1.4-28				
	Cadmium Lead	150 1,000-2,000				
2 An Undewatered Industrial Wastewater Sludge Disposal and Burn Pit	1,1-Dichloroethane 1,1-Dichloroethylene Ethylbenzene 4-Methyl-2-pentanone Tetrachloroethylene Trichloroethylene Toluene 1,1,1-Trichloroethane 1,2-Dichloroethylene Total xylenes Vinyl chloride	0.27-110 6.8 8.2-19 0.90-18 0.28-19 1.3-79 2.4-330 2.5-330 1.3-73 3.7-92 15	6	5-55	20,000	Borings showed waste zone averaged 4 to 11 feet in depth containing refuse and debris.
	Bis(2-ethylhexyl)phthalate 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 4-Methylphenol Naphthalene Phenol Phenanthrene	5-180 66-380 3-12 7-46 76 6-64 13 0.25				

Table 8
List of Contaminants by Site in Area D

Sheet 2 of 7

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
2 Sludge Disposal and Burn Pit (continued)	Chromium Lead Soluble cadmium Soluble lead Soluble nickel	2,800-31,000 1,000-1,700 3.1 6.3-23 26				Borings showed waste zone averages 2 to 19 feet in depth containing refuse, debris, and sludge.
3 An Undewatered Industrial Waste-water Sludge Disposal and Burn Pit	Ethybenzene 4-Methyl-2-pentanone Toluene Total xylenes Anthracene Benzo[a]anthracene Bis(2-ethylhexyl)phthalate Benzo[k]fluoranthene 3,4-Benzofluoranthene Chrysene 1,2-Dichlorobenzene 1,4-Dichlorobenzene Di-n-butylphthalate Fluoranthene Fluorene Naphthalene Phenanthrene Pyrene Lead Soluble lead	3.2 0.49 0.40 8.5 0.44 0.37 0.97-24 2.9 2.9 0.22-0.76 0.38 0.18 19 0.12-1.8 0.17 1.2 0.13-1.6 0.15-2 2,100 23-36	5	5-32	50,700	

Table 8
List of Contaminants by Site in Area D

Sheet 3 of 7

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
4 An Undewatered Industrial Waste-water Sludge Disposal and Burn Pit	Acetone 2-Butanone Benzene Chlorobenzene 1,1-Dichloroethane 1,2-Dichloroethylene Ethylbenzene 4-Methyl-2-pentanone Methylene chloride 1,1,1-Trichloroethane 1,2-Trans-dichloroethylene Tetrachloroethylene Trichloroethylene Toluene Total xylenes	6.7-370 13 2.1-50 0.63-12 0.32-49.6 0.49-4.5 2.8-10 0.37-27.2 0.67-3.1 19.3-27.2 0.23-190 0.14-75 0.12-36 14.8-350 0.36-335 0.70-35			1,500	Borings showed waste zone averages 10 to 20 feet in depth containing sludge.
	Anthracene Acenaphthene Bis(2-ethylhexyl)phthalate Butyl-benzylphthalate 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Fluoranthene Naphthalene Pheranthene 1,2,4-Trichlorobenzene	1.5-2.6 1-1.6 1.4-250 17 31-76.1 290 520 1.6-2.4 3.6-46.8 2.1-2.6 4.9				

Table 8
List of Contaminants by Site in Area D

Sheet 4 of 7

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
5 An Undewatered Industrial Waste-water Sludge Disposal and Burn Pit	Acetone Benzene Carbon disulfide Chlorobenzene 1,1-Dichloroethane 1,1,1-Dichloroethylene Ethylbenzene 2-Hexanone Methylene chloride 4-Methyl-2-pentanone 1,1,1-Trichloroethane Tetrachloroethylene Trichloroethylene 1,2-Trans-dichloroethylene Toluene Total xylenes Bis(2-ethylhexyl)phthalate 1,2-Dichlorobenzene 1,4-Dichlorobenzene Di-n-butylphthalate Naphthalene Cadmium Chromium Copper Lead	6.5 0.16 0.16 3-17 3.1-26 0.45-1.7 3.4-45 1.3 1.9 1-10 2.9-58 0.68-11 0.21-31 2-21 2.3-150 11-140 100-150 9.4-10 1.3 14 1.9-22 2,100 33,000 4,200 4,500	6	10-50	15,600	Borings showed waste zone averaged 10 to 20 feet in depth containing sludge.

Table 8
List of Contaminants by Site in Area D

Sheet 5 of 7						
Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
	Soluble cadmium	2.7 160-180				
	Soluble chromium	7.8-14				
	Soluble lead	55				
	Soluble nickel					
6	Total xylenes	0.57	6	5-75	7,500	Borings found no waste at this site.
A Skimmed Oil Burn Area						
S	Acetone	46-65				
A Fuel and Solvent Disposal Pit	Ethylbenzene	0.80-3.9 3.2-4.4				
	4-Methyl-2-pentanone	0.63				
	1,1,1-Trichloroethane	0.38				
	1,2-Trans-dichloroethylene	0.27-0.33				
	Tetrachloroethylene	0.47-1.4				
	Toluene	0.19				
	Trichloroethylene	3.9-18				
	Total xylenes	0.74				
	Vinyl chloride					
	Bis(2-ethylhexyl)phthalate	6.5-26				
	1,2-Dichlorobenzene	5.5-33				
	1,3-Dichlorobenzene	1.2-3.4				
	1,4-Dichlorobenzene	2-7				
	Fluoranthene	1.2				
	Naphthalene	2.8-7.5				

Table 8
List of Contaminants by Site in Area D

Sheet 6 of 7

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
T	Acetone	19	3	10-13	8,400	Borings showed waste averaged 4 to 9 feet in depth containing sludge.
A Fuel/Solvent/Sludge Disposal Pit	Chlorobenzene	0.30				
	1,1-Dichloroethane	0.14-5.7				
	1,1-Dichloroethylene	0.40-4.5				
	Ethylbenzene	2.2-5				
	4-Methyl-2-pentanone	4.7-5.6				
	Tetrachloroethylene	4.1-36				
	Trichloroethylene	6.1-23				
	1,1,1-Trichloroethane	23-190				
	1,2-Trans-dichloroethylene	0.10-75				
	Toluene	19-30				
	Total xylenes	8.2-16				
	Bis(2-ethylhexyl)phthalate					
	1,2-Dichlorobenzene	16-256				
	1,3-Dichlorobenzene	100-290				
	1,4-Dichlorobenzene	12-42				
	Naphthalene	17-520				
	Cadmium	9.5-10				
	Soluble cadmium	170				
	Soluble lead					
	Soluble nickel					
26	1,1-Dichloroethylene	9.8				
	Trichloroethane	9.3-22				
An Undewatered Industrial Waste-water Sludge Pit	Trichloroethylene	43				
				to 68	40,000	Borings did not encounter waste other than gravelly or cobbly fill.

Table 8
List of Contaminants by Site in Area D

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples found	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
26 An Undewatered Industrial Waste-water Sludge Pit (continued)	Barium Nickel Vanadium		found found found			
27 A Sodium Value Disposal Pit						Site not found during investigation.
33 An Industrial Wastewater Sludge Landfarm						No borings were drilled where landfarming reportedly took place. Shovel excavations had low level of VOC readings on HNU.

Table 9
List of Contaminants in Other Areas

Sheet 1 of 2

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
23 A Burial Pit	Acetone 2-Butanone Chloroform Ethylbenzene Methylene chloride Trans-1,2-dichloroethylene Tetrachloroethylene 1,1,1-Trichloroethane Toluene Total xylenes Diphenylamine 2-Methyl naphthalene Phenanthrene Pentachlorophenol Oil and Grease Arsenic Barium	0.22 0.74 0.02-0.06 0.11 0.06 0.02-0.03 0.01 0.01 0.03 0.66 28 6.2 14 6.4 2,800 30-36 170	6	5-60	60,200	Reportedly the wastes were removed and disposed off site in 1970 prior to construction of Bldg 781. However to the north of and under Bldg 781 at 5 to 12 ft deep, construction debris, such as concrete, metal, wood, and asphalt, was found during Bldg 781 construction.
24 Ademolition and Scrap Material Burning and Burial Pit	Chloroform Chloroethane Chlorobenzene 1,2-Dichloroethane 1,1-Dichloroethane Ethylobenzene Toluene Trans-1,2-dichloroethylene Trichloroethylene Total xylenes Benzol[a]pyrene Bis (2-ethylhexyl)phthalate	0.01-0.02 0.03 0.14 0.03 0.02 0.03-0.27 0.01-0.34 0.02-0.08 0.10 0.76 1.2 0.11-2.8	9	8.5-79	49,600	Borings showed waste zone ranged from 3 to 20.5 feet in depth consisting of carbonaceous material, plastic, glass, wire, wood, concrete rubble, sludge, and metal strapping.

Table 9
List of Contaminants in Other Areas

Site No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
24 A Demolition and Scrap Material Burning and Burial Pit (continued)	Diethyl phthalate Diphenylamine Pentachlorophenol Oil and grease Barium Cadmium Copper Lead Zinc Soluble lead	25 1.8 1.7 430-18,000 210-660 11-56 210-930 170-1,200 1,800 31-35				
29 An Aircraft Generator Burial Pit					40,000	Borings showed no buried waste or fill material. Site located northeast of Bldg 700 and north of Civil Engineering storage yard.
31 Arifuse Incinerator					40,000	Borings showed no buried waste or incinerator ash.
34 Underground Waste Solvent Tanks	Acetone Dichloromethane Toluene Bis(2-ethylhexyl)phthalate Benzo[a]pyrene Beryllium	0.31-0.45 0.02-0.07 0.10 0.14-0.41 0.55 1.5	6	20-70	10,000	Tanks reportedly located 1,300 ft east of Bldg 640.
45 A Waste Paint Burial Pit					75,000	Borings showed undisturbed soil and no buried waste or fill material.

Table 10
List of Contaminants by Building or Location

Sheet 1 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Site 25 & Site 54	Anthracene Naphthalene Antimony Barium Cadmium Cobalt Chromium Copper Nickel Lead Silver Thallium Vanadium Zinc	0.19 1.1 3.0-5.5 37.4-112 1-3 3.5-9.6 5.6-25.7 6.8-19.4 6.8-15.8 6.8-70.2 0.6-1.7 22-35.5 14.4-32.2 15.2-90.1	9	1-15	--	Three borings for "Maintain Storm Drainage" at the south end of the runway. EMC 45.
B/1071 Staging Area	Bis(2-chloroethoxy)methane Bis(2-ethylhexyl)phthalate TPH Arsenic Barium Cobalt Chromium Copper Mercury Nickel Lead Thallium Vanadium Zinc	0.10 0.10-0.30 34 6.8-12.1 36.1-130 5.8-7.8 11.5-15.6 10.3-19.8 1.1-1.4 6.9-34 5.1-8.3 35.2-61 15.1-36.8 11.9-34.4	6	1-10	--	Staging area is located north and west of B/1071. EMC 47.

Table 10
List of Contaminants by Building or Location

Sheet 2 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
B/523 UST	Benzene Ethylbenzene Toluene Total xylenes	0.04-34 0.03-1.7 0.53-81 0.01-1.6	4	10	--	Samples taken southeast of B/523 in support of UST B/523 removal. EMC 43.
	Fluorene 2-Methylnaphthalene Naphthalene Phenanthrene	0.49 3.4 1.7 0.53				
	TPH	0.03-756 0.2				
	Barium Copper Zinc	0.9 0.9 0.7				
UST B/655 S B/6008A B/3 B/338 B/617	Bis(2-ethylhexyl)phthalate Fluoranthene Pyrene Phenanthrene	0.37-1.1 0.27-0.58 0.30-0.63 0.12-0.18		0.25-2		Samples taken in support of UST removal. EMC 46.
	TPH	50-470				
	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	1.9-2.6 7.5-12.9 33.7-153 0.3-0.4 0.5-1.2 6.2-7.8 10.6-24.1 17.1-32.2 0.7-3.0 0.6-1.2 13.7-25.5 6.7-40 5.1-17.9 17.4-43.3 35.9-104				

Table 10
List of Contaminants by Building or Location

Sheet 3 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/652	Bromodichloromethane	0.02		1-15		Locations of samples are: 1) west of B/652, 2) west of B/647, 3) southwest of B/692, 4) southwest of B/721, 5) west of B/722, 6) west of B/722, 8) southeast of B/1080, 9) north of B/1088 and northeast of B/1086, 11) east of B/489, 13) north of B/1082, and 14) north of Control Tower on Site P7. EMC 6.
B/647	Carbon tetrachloride	0.02				
B/692	Chlorobenzene	0.02				
B/721	Chloroform	0.02				
B/722	Ethybenzene	0.02-0.03				
B/1080	Tetrachloroethylene	0.02				
B/1086	Trichlorofluoromethane	0.14				
B/489	Toluene	0.04-0.17				
B/1092	Total xylenes	0.04-0.11				
Site P7	Bis(2-ethylhexyl)phthalate	0.64-3.9				
	Butyl benzyl phthalate	0.18-0.63				
	Di-N-butyl phthalate	0.15-0.27				
	Fluoranthene	0.26-0.27				
	Pyrene	0.18-0.49				
	Antimony	0.13-1.52				
	Arsenic	3.7-62				
	Barium	19.7-148				
	Beryllium	0.13-0.41				
	Cadmium	0.11-1.7				
	Cobalt	1.7-10.4				
	Chromium	3.5-17.5				
	Copper	9.7-95.5				
	Mercury	0.13-1.3				
	Molybdenum	0.27-2.4				
	Nickel	3.5-21				
	Lead	3.4-65.7				
	Silver	0.14-0.7				
	Selenium	3-11				
	Thallium	9.6-59.8				
	Vanadium	9.8-40.4				
	Zinc	9.6-62				

Table 10
List of Contaminants by Building or Location

Sheet 4 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/375	Benzene	0.01-0.03	12	1-10	--	Samples taken south of Building 375. EMC 1.
	Toluene	0.05-0.14				
	Total xylenes	0.04-0.18				
	Anthracene	0.04				
	Acenaphthene	0.02				
	Bis(2-ethylhexyl)phthalate	0.13-0.71				
	Benzo[b]fluoranthene	0.03				
	Benzo[k]fluoranthene	0.04				
	Butyl benzyl phthalate	0.04				
	Benzo[a]anthracene	0.03-0.05				
	Chrysene	0.03-0.04				
	Fluoranthene	0.24				
	Fluorene	0.02				
	Naphthalene	0.02				
	Pyrene	0.08-0.20				
	Arsenic	<0.01-3.4				
	Antimony	0.09-1.4				
	Barium	17.9-115.5				
	Beryllium	0.07-0.20				
	Cadmium	0.01-1.5				
	Cobalt	2.1-4.3				
	Chromium	2.5-17.3				
	Copper	10-193				
	Mercury	1-3.3				
	Molybdenum	0.06-0.93				
	Nickel	1.5-8.1				
	Lead	2.4-32.9				
	Silver	0.21-0.96				
	Selenium	0.2-0.6				
	Thallium	3.2-5.0				
	Vanadium	5.5-15.1				
	Zinc	14-121.3				
UST B/405	TPH	80	1		--	Sample taken after tank removal. EMC 42.

Table 10
List of Contaminants by Building or Location

Sheet 5 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
B/786 Add to Depot Warehouse	Butyl benzyl phthalate Bis(2-ethylhexyl)phthalate TPH Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Silver Selenium Thallium Vanadium Zinc	0.11-1.2 0.32-0.89 0.51-1.2 3.7-15.9 1.5-4.9 23.2-139 0.2-0.5 0.5-13.7 2.2-6.9 5.8-68.2 9.0-74.1 0.7-2.7 0.5-1.0 3.8-18.7 4.5-75.6 0.3-4.2 1.4-2.2 3.2-12.6 11.4-29.5 15.4-80.3	20	1-15		Samples taken north of Building 786. EMC 41. PRJY 901002.

Table 10
List of Contaminants by Building or Location

Sheet 6 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/1075 B/870	Benzene Ethylbenzene Toluene Total xylenes	0.04 0.06-1.2 0.06-1.5 0.28-9.2	4	6	-	Samples were taken from B/870 and B/1075 after UST removal. EMC 32.
	Anthracene	0.63				
	Benzo[a]anthracene	1.7				
	Bis(2-ethylhexyl)phthalate	0.12				
	Benzo[b]fluoranthene	3.1				
	Benzo[a]pyrene	2.4				
	Benzo[g,h,i]perylene	0.83				
	Chrysene	1.5				
	Dibenzo[a,h]anthracene	0.18				
	Fluoranthene	1.1-3.1				
	2-methylnaphthalene	0.78				
	Naphthalene	0.84				
	Phenanthrene	0.68				
	Pyrene	0.48-3.8				
		34.1-239				
	Barium	0.21-0.52				
	Beryllium	0.01-0.06				
	Cadmium	5.3-8.6				
	Cobalt	11.3-14.2				
	Chromium	8.8-16.5				
	Copper	0.23-0.37				
	Molybdenum	16.5-22.5				
	Nickel	5.3-14.4				
	Lead	32.3-47.8				
	Thallium	17.7-34.4				
	Vanadium	17.5-31.9				
	Zinc					

Table 10
List of Contaminants by Building or Location

Sheet 7 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/362 Basinwide Oil Switch Removal	Bis(2-ethylhexyl)phthalate Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.45-1.9 3.3-6.4 0.67-1.8 82-770 0.26-0.41 0.3-1.1 6-12 9.5-12.9 19.6-74.5 0.11-5.7 0.48-0.98 8.8-18.3 7.5-12.6 5.3-12.6 0.38-1.2 11.4-33.9 25.4-38.7 28.2-47.4	4	1-15	--	Samples taken from southwest of B/362. EMC 36. PRJY 880125.
East of Building 610	Bis(2-ethylhexyl)phthalate Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	0.46 10.1 62 0.3 3.5 5.5 15.7 14 1.6 0.7 10.1 29.5 8.8 22.4 30.3	1	surface	--	EMC 35.

Table 10 List of Contaminants by Building or Location						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
Peacekeeper Mall Project North of Building 250 HH	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	13.9 1.7 112 0.4 0.8 6.9 13.8 11.9 2.4 0.7 12.3 7.5 9.5 35.9 20	1	2.5	--	EMC 37.
Child Care Center, West of Building 1412 (PRJY)	Bis(2-ethylhexyl)phthalate Pyrene Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	0.20-0.42 0.56 9-26 1.6-10.4 80.5-142.6 0.3-0.8 0.4-3.8 5.6-9.6 12.2-24 19.5-30.4 2.2-6.1 0.8-2.9 11.2-23.9 6.8-22.4 2.7 13.6-40.3 31.5-61.5 24-39.7	6	1-15	--	EMC 32. PRJY 881004.

Table 10
List of Contaminants by Building or Location

Sheet 9 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Buildings 473; 743, 440, 437; 419, 405, 351; 655; and 786	Butyl benzyl phthalate Bis(2-ethylhexyl)phthalate Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Silver Selenium Thallium Vanadium Zinc	0.19-1.3 0.34-1.1 1.1-6.7 0.11-2.3 40.2-165.1 0.17-0.90 0.07-6.6 2.7-10 6.3-22.5 10.5-70.7 0.39-1.97 0.12-2.81 5.2-24.8 3.1-140 0.09-4.1 0.5-10.1 16.0-56.3 14.8-64.6 10.8-210.2	27	--	--	Sample locations and projects: South of B/473, conduit trench; south of B/443, cooling tower; north B/440, cooling tower; north of B/437, repair IWCS; northwest of B/419, repair IWCS; northwest of B/405, repair IWCS, east of B/351, repair IWCS; west of B/655, trench for A/C; and southwest of B/786, electrical service. EMC 30.

Table 10
List of Contaminants by Building or Location

Sheet 10 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
Construct Wash Rack B/257	Benzene Carbon tetrachloride Ethyl benzene Total xylenes	0.30 0.26 0.97 0.79	1	-	-	Sample taken east of B/251 and B/252. EMC 28.
	Bis(2-ethylhexyl)phthalate	0.25				
	TPH	285				
	Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	3.4 121 0.42 4.3 6.7 20.3 20 1.1 1.3 16.6 53.9 9.8 31.1 98.9				
Alter Electric Distribution B/720	Benzene Ethyl benzene Toluene Total xylenes	0.18-0.27 7.4-9.8 2.5-2.9 3.5-4.2	6	-	-	Samples taken west of B/720. EMC 29.
	Butyl benzyl phthalate Isophorone 2-Methylnaphthalene Naphthalene	0.39 0.38 0.96 0.65				
	TPH	13,1,670				

Table 10
List of Contaminants by Building or Location

Sheet 11 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Alter Electric Distribution B/720 (continued)	Arsenic Antimony Barium Beryllium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	5.4-8.0 2.0-2.8 52.5-65.8 0.2-0.3 4.7-6.3 10.2-15.9 7.4-9.2 1.2-1.6 0.6-0.8 5.8-11.7 6.9-7.6 3.9-7.7 24.4-27.5 9.4-14.7				
Connect Cooling Towers B/252	1,1-Dichloroethylene 1,4-Dichlorobenzene Ethyl benzene Toluene Tetrachloroethylene 1,1,1-Trichlorethane Trichloroethylene Total xylenes	0.55 5 0.19 0.28 1.2 4.9 0.03 1.8	1	5	-	Samples taken from trench south of B/252. EMC 27.
	Bis(2-ethylhexyl)phthalate 2-Methylnaphthalene Naphthalene Barium Beryllium Cadmium Cobalt Chromium Copper Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	2.5 0.39 0.29 75 0.29 1.3 4.4 13.1 38.8 0.59 12 19.2 1.8 23 27.8 26.3				

Table 10
List of Contaminants by Building or Location

Sheet 12 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Excavated Soil from Building 943	Benzene	0.01	12	--	--	Samples taken from project area.
	Ethylbenzene	0.01-0.02				
	Toluene	0.01-0.09				
	Total xylenes	0.01-0.07				
	Bis(2-ethylhexyl)phthalate	0.89-2.7				
	Butyl benzyl phthalate	0.01-0.02				
	Benzol[a]anthracene	0.02				
	Benzol[g,h,i]perylene	0.02				
	Chrysene	0.01				
	Di-n-butyl phthalate	0.02-0.04				
	Di-n-octyl phthalate	0.03				
	Phenanthrene	0.01-0.03				
	Pyrene	0.02-0.09				
	Arsenic	0.9-6.6				
	Barium	54.1-122.7				
	Beryllium	0.29-0.42				
	Cobalt	3-6.3				
	Chromium	7.2-12.1				
	Copper	5.4-11.4				
	Mercury	3.2-5				
	Molybdenum	0.16-0.55				
	Nickel	3.1-12.8				
	Lead	6-12.6				
	Selenium	5.4-8.6				
	Thallium	13.21.1				
	Vanadium	21.4-29				
	Zinc	10.7-25.7				

Table 10
List of Contaminants by Building or Location

Sheet 13 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/614	TPH	680	1	--	--	Sample taken from UST adjacent to B/614. EMC 8.
	Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Molybdenum Nickel Lead Selenium Silver Vanadium Zinc	0.3 32 0.42 0.32 4.6 18.9 14.9 0.44 21.5 21.8 0.5 0.30 19.6 72.3				
Jet Fuel Storage Facility B/318	Benzene Total xylenes	0.03 0.21	41	--	--	Samples were taken at the proposed facility. EMC 5.
	Bis(2-ethylhexyl)phthalate Butyl benzyl phthalate Di-n-butyl phthalate	0.60-2.6 0.18-0.51 0.11				
	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	0.1-4.6 0.07-1.16 36.6-300 0.25-0.59 0.03-1.3 1.9-22.6 7.2-47 9.3-60.2 0.2-7.1 5-17.4 4-38.1 0.3-3.5 28-88.2 17.5-41.2 14.9-74				

Table 10
List of Contaminants by Building or Location

Sheet 14 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
Repair Steam Line B/645	Bis(2-hexylhexyl)phthalate	0.01-0.04	4	--	--	
TPH		120-1,110				
	Arsenic	8.3-11.3				
	Antimony	1.5-2.1				
	Barium	25.2-105				
	Beryllium	0.3-0.4				
	Cadmium	0.5-0.8				
	Cobalt	4.3-7.0				
	Chromium	12.5-21.5				
	Copper	13.7-28.1				
	Mercury	2-3				
	Molybdenum	0.6-1.3				
	Nickel	11.5-17.9				
	Lead	4.5-10.2				
	Thallium	8-11.5				
	Vanadium	15.7-32.8				
	Zinc	16.3-46				
Conforming Storage Facility	Benzene	0.01	16	5-15	--	EMC 6.
	Chlorofluoromethane	0.02-0.12				
	1,1-Dichloroethylene	0.01				
	Toluene	0.01-0.04				
	Total xylenes	0.01-0.05				
	Bis(2-ethylhexyl)phthalate	1.2-2.2				
	Chrysene	0.02-0.04				
	Di-n-butyl phthalate	0.02-0.04				
	Diethyl phthalate	0.04-0.05				
	Fluoranthene	0.06				
	Phenanthrene	0.06				

Table 10
List of Contaminants by Building or Location

Sheet 15 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Conforming Storage Facility (continued)	Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	0.2-1.5 1.8-17.4 0.16-0.34 0.02-0.60 4.2-11.5 5.3-14.6 10.5-168.9 1.2-4 0.03-0.52 3.6-17.2 6.7-28.4 6.8-14.5 6.4-16.6 11.7-72.8				
Sound Suppressor Support North of B774	Ethyl benzene Toluene Total xylenes Bis(2-ethylhexyl)phthalate Butyl benzyl phthalate	0.01 0.01-0.03 0.01-0.04 0.74-29 0.48	17	1-15		Samples taken north of B774. EMC 15.
	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	5.7-17.2 0.54-1.2 43.3-179 0.20-0.40 0.08-1 3.2-8.2 7.1-14.9 12.8-57.1 3.6-10 0.51-1 7-35.7 5.9-56.5 3.9-9.8 33.3-90.9 14.1-23 19.4-60.2				

Table 10
List of Contaminants by Building or Location

Sheet 16 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Interim Hydraulic Facility West of B/241	Bis(2-ethylhexyl)phthalate Ethylbenzene Toluene Total xylenes	0.20-10.9 0.01 0.01-0.02 0.01-0.03	16	1-15	--	Samples were taken from west of B/241. EMC 13.
	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	9.8-33.0 0.5-1.9 45.8-465 0.12-0.50 0.13-0.71 4.2-8 5.6-15.8 18.4-113 4.4-10.5 0.8-1.7 6.9-20.3 3.5-22 6.9-16.8 0.22-0.77 24.2-73.9 9.7-26.5 17.6-63.2				
Remodel MA's Washrack B/375	Chloroform 1,1-Dichloroethylene Ethyl benzene Toluene Total xylene Tetrachloroethylene 1,1,1-Trichloroethane Trichloroethylene Trichlorofluoromethane Acenaphthene Anthracene Butyl benzyl phthalate Benzo(a)anthracene	0.01 0.01 0.01 0.06-0.19 0.02-0.05 0.02-0.10 0.01 0.01-0.02 0.01-0.76 0.01-0.02 0.02-0.30 0.02-0.53 0.02-0.39				

Table 10
List of Contaminants by Building or Location

Sheet 17 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Remodel MA's Washrack B/375 (continued)	Bis(2-ethylhexyl)phthalate	0.14-2.4				
	Benzo[k]fluoranthene	0.03-0.40				
	Benzo[b]fluoranthene	0.04-0.43				
	Benzo[a]pyrene	0.02-0.40				
	Benzo[g,h,i]perylene	0.12-0.27				
	Chrysene	0.04-0.58				
	Dibenz[a,h]anthracene	0.14				
	Di-n-butylphthalate	0.02-0.24				
	Di-n-octylphthalate	0.19-0.25				
	Fluoranthene	0.01-0.50				
	Indeno[1,2,3-cd]pyrene	0.12-0.15				
	2-Methylnaphthalene	0.22				
	N-nitroso-di-n-propylamine	1.6				
	Nitrobenzene	4.9				
	Naphthalene	3.9				
	Phenanthrene	0.01-0.56				
	Pyrene	0.03-1.2				
	Pentachlorophenol	0.42-0.44				
	Arsenic	0.6-7.7				
	Antimony	0.09-2				
	Barium	29.3-138				
	Beryllium	0.21-0.54				
	Cadmium	0.02-0.59				
	Cobalt	4.8-9.1				
	Chromium	7.9-32.8				
	Copper	28.1-159				
	Mercury	0.23-2.5				
	Nickel	7.9-20.3				
	Lead	4.0-19.4				
	Silver	0.17-0.66				
	Selenium	2.3-3.9				
	Thallium	4.5-18.6				
	Vanadium	4.5-33				
	Zinc	30.6-75.3				
UST B/1104	Oil and grease	356-950	2		--	Samples taken after UST was removed at B/1104. EMC 50.
	TPH	92-721				

Table 10
List of Contaminants by Building or Location

Sheet 18 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/395	Trichloroethylene Tetrachloroethylene Arsenic Antimony Barium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	0.01 0.01 15.4 3.8 87.3 8 15.1 32.9 1.7 1.4 16.9 12.6 53.8 39.3 33.4	1	8	--	Sample taken after UST was removed west of B/395. EMC 48.
Depot Hydraulic Facility North of B/241	Bis(2-ethylhexyl)phthalate	0.12-1.7	18	1-15	--	Samples taken north of B/241. PRJY 901023. EMC 10.
UST North of B/641	TPH		3			One sample taken from excavated soil and two samples taken fromsoil after UST removed north of B/641. EMC 51.

Table 10
List of Contaminants by Building or Location

Sheet 19 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/351 AB	Tetrachloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene	0.02 0.03-0.04 0.01 0.02	2	10	-	Samples taken after contaminated soil removed. EMC 52.
TPH		0.14				
	Barium Cobalt Chromium Copper Nickel Lead Thallium Vanadium Zinc	79.1-95.1 4.9-5.5 14.5-14.9 11.0-14.4 10.5-16.1 2.8-6.1 25.7-28.1 29.9-36.6 19.5-22.3				
UST B/91	Toluene	0.04	2			
1000 Area IW Line/New IWTP Site/Pit 8	Benzene Chloroform Ethylbenzene Toluene 1,1,2,2-Tetrachloroethane 1,1,1,2-Tetrachloroethane Trichlorofluoromethane Total xylenes Vinyl chloride	0.25 0.02 0.01-1.3 0.02-0.14 0.03 0.03 0.02-0.22 0.03-3.5 0.02	9			EMC 53. EMC 54.
	Bis(2-ethylhexyl)phthalate Butyl benzyl phthalate 1,2-Dichlorobenzene 1,4-Dichlorobenzene 1,3-Dichlorobenzene Di-n-butyl phthalate Fluoranthene 2-Methylnaphthalene Naphthalene Phenanthrene Pyrene	0.70-1.7 0.14 0.04 0.03 0.03 0.39 0.47 0.27 0.06-0.26 0.06 0.06				

Table 10
List of Contaminants by Building or Location

Sheet 20 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
1000 Area IW Line/New IWTP Site/Pit 8 (continued)	Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	0.4-1 60.2-123.3 0.18-0.28 0.13-0.87 2.8-5 3.3-12.2 4.5-13.5 2.9-4.7 0.04-0.5 0.07-9.4 7.6-32.9 0.9-2.2 11-22.1 13-22.7 16.3-44.4	9	1-15	-	One sample taken near pump house between B/362 and B/365; two samples taken east of B/362.
Fire Sprinkler System B/362	Bis(2-ethylhexyl)phthalate 3,3-Dichlorobenzidine	0.13-0.62 0.11				
	Arsenic Barium Beryllium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	11.2-40.9 16.8-147 0.2-0.6 3-16.4 5.5-14 7-27.4 1.6-3.6 0.8-1.7 6.1-17.7 2.6-14.4 4.5-16.2 8.9-26.1 15.8-54.3 11-39.2				

Table 10
List of Contaminants by Building or Location

Sheet 21 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST West of B/334	Arsenic Barium Beryllium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	33.0-33.4 122-133 0.5-0.6 4.3-4.6 12.3-19 15.3-16.7 2.4-2.5 0.9 13.7-15 4-4.7 11-11.5 0.3 21.4-22.4 40.1-42.5 24.8-30.6	2	--	--	Samples taken to determine UST contamination. EMC 39.
Vehicle Maintenance Facility B/431	Acenaphthene Bis(2-ethylhexyl)phthalate Butyl benzyl phthalate Di-n-butyl phthalate Diethyl phthalate Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Molybdenum Nickel Lead Selenium Thallium Vanadium Zinc	0.32 0.14-0.61 0.14-1 0.22-0.36 0.13-0.26 1.1-2.9 0.19-0.56 44.3-152 0.30-0.56 0.05-1 3.5-9.9 8.4-78 11.1-133 0.13-1.2 6.7-48.4 5.6-61.9 0.1-1.2 23.6-52.4 23.3-46.1 18.1-190	26	1-15	--	Samples taken northeast of B/431. EMC 4.

Table 10
List of Contaminants by Building or Location

Sheet 22 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Utility Lines B/610	Bis(2-ethylhexyl)phthalate Butyl benzyl phthalate	0.77-1.2 0.35-101	6	1-12	--	Samples were taken from proposed trenchline. EMC 3.
	Arsenic	2.2-6.5				
	Antimony	1.7-2.8				
	Barium	43.2-632				
	Beryllium	0.22-0.43				
	Cadmium	0.23-0.96				
	Cobalt	2.6-7.7				
	Chromium	11.2-40				
	Copper	17.7-53				
	Mercury	0.29-4				
	Molybdenum	0.49-3.4				
	Nickel	14-25.7				
	Lead	7.3-10.4				
	Selenium	5.3-10.3				
	Silver	0.47-1.1				
	Thallium	21.5-44.1				
	Vanadium	23.7-30.6				
	Zinc	29.7-69.8				
UST Lincoln Receiver Site	Ethylbenzene	0.03	6		--	Samples taken from around UST.
	Toluene	0.02				
	Total xylenes	0.04				
	TPH	0.13-1.1				
Warehouse N of B/783	Benzene	0.01-0.03	60	1-10	--	EMC 7.
	Chloroform	0.01				
	1,1-Dichloroethane	0.01				
	1,2-Dichloropropane	0.02				
	Ethyl benzene	0.01-0.02				
	Toluene	0.01-0.04				
	Total xylenes	0.01-0.03				
	1,1,2,2-Tetrachloroethane	0.02				
	1,1,1-Trichloroethane	0.01				
	Trichlorofluoromethane	0.01-0.09				
	Bis(2-ethylhexyl)phthalate	0.47-1.7				
	Butyl benzyl phthalate	0.11-2.8				

Table 10
List of Contaminants by Building or Location

Sheet 23 of 56

Building or Location No. & Description	Contaminants	Concentration Range (me/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Warehouse N of B/783 (continued)	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	1.2-16.1 0.07-1.1 21.1-126 0.1-0.55 0.06-3.3 0.9-10.9 4.5-25.2 11.1-199 1.1-8.6 0.22-1.2 2.2-25.5 3-14.4 1-8.8 0.05-0.86 12.8-102 6.8-44.3 10.6-177				
JBI Paint Booth	Ethyl benzene Toluene Total xylenes Bis(2-ethylhexyl)phthalate	0.01 0.01 0.02 0.24	6	1-15	--	EMC 25. West of B/243F.
	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Thallium Vanadium Zinc	6.2-17.1 1.9-23 42.3-127 0.2-0.5 0.6-1.3 3.8-8.4 9.1-26.4 24-162 1-4.1 0.8-1.5 5.8-32.5 6.0-10.4 3.9-18.7 22-38.9 19-57.1				

Table 10 List of Contaminants by Building or Location						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/458, B/655E, B/658	Arsenic Antimony Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Silver Thallium Vanadium Zinc	6.6-9.4 3.8-4.3 46.1-114 0.3-0.5 0.6-0.7 7.1-8 9.6-16.8 14.2-77.2 1.8-2.1 1.2-1.5 12.5-17.1 11-17.8 1.1-1.3 11.5-15.7 26.7-39.5 26.6-84.7	5	--	--	Samples taken after contaminated soil removed. EMC 34.

Sheet 24 of 56

Table 10
List of Contaminants by Building or Location

Sheet 25 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Commissary Expansion B/910	Total xylenes	3.1-48	0.1 1.2-1.5 0.02-0.04			
	Di-n-butyl phthalate					
	Bis(2-ethylhexyl)phth					
	Naphthalene					
	TPH	202-20435				
	Antimony	3.1-3.3				
	Arsenic	11-24				
	Barium	37-128				
	Cadmium	0.1				
	Chromium	13-23				
	Cobalt	4.0-10				
	Copper	7.7-26				
	Mercury	1.6-2.2				
	Molybdenum	2.2-2.9				
	Nickel	8-17				
	Lead	4.8-13				
	Selenium	4.8-5.7				
	Silver	0.5-1.3				
	Thallium	1.1-79				
	Vanadium	20.78				
	Zinc	47-62				
Davis-Drums and Bins	Ethyl benzene Xylenes	0.2 6.7				
	TPH	258-9120				
	Barium	0.1-0.2				
	Chromium	0.03				

Table 10
List of Contaminants by Building or Location

Sheet 26 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
TF6-TF7	TPH Antimony Arsenic Barium Cadmium Chromium Cobalt Copper Molybdenum Nickel Lead Thallium Vanadium Zinc	79-867 1.0 10.2 65.2 3.2 12.9 19.3 3.2 1.1 9.0 6.1 14.5 16.7 15.4				
B/486	Antimony Arsenic Barium Chromium Cobalt Copper Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc		3.1 2.8 20.7 3.9 1.8 6.6 2.1 1.2 6.1 3.7 0.5 3.8 6.7 25.7			

Table 10
List of Contaminants by Building or Location

Sheet 27 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Haggan Sub-station	Arochlor 1254 Dieldrin	1.0-8.0 0.02-0.6	136	2.1-3.6 10.32 72-137 0.2-0.5 15-24 4.5-8.6 14-30 1.5-1.8 2.9-6.5 15-37 9-11 3.4-4.6 0.3-0.5 31-47 34-51 28-38		
B/911 Shopping Center Expansion	TPH Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc		65	7.6-8.1 11.3-16.4 0.6 7.6-9.9 8.9-4 18-20 1.0-2.4 1.1-2.2 12-27 13-27 3.4-4.6 1.1-4.5 47-51 48-55 37-70		

Table 10
List of Contaminants by Building or Location

Sheet 28 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Midland Staging Area	Heptachlor epoxide	0.03				
	Antimony	3.1-6.6				
	Arsenic	6.8-11				
	Barium	48-612				
	Beryllium	0.5				
	Chromium	18-30				
	Cobalt	3.9-6.8				
	Copper	13-36				
	Molybdenum	1.1-1.8				
	Mercury	2.4-7.4				
	Nickel	6-16				
	Lead	4.2-66				
	Selenium	4.8-7.4				
	Silver	0.5-1.3				
	Thallium	3-16				
	Vanadium	22-36				
	Zinc	21-82				
UST B/253 East & West	TPH	40-94				
UST 701-1-DF	TPH	63				
B/450E-1 Electrical Upgrade	Di-n-butyl-phthalate	0.05-0.17				
	Barium	0.23-0.6				
	Cobalt	0.07				
UST B/329	Ethyl benzene	0.09-0.5				
	Xylenes	0.5-1.8				
B/692 Install Staircase	Barium	0.83				
	Zinc	0.12				
UST B/252	Xylenes	0.02				
	TPH	405				
B/687 DRMO Storage Fac.	Barium	0.19-0.8				
	Copper	0.089-0.21				

Table 10
List of Contaminants by Building or Location

Sheet 29 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Lincoln Site Pond rim NE	Ethyl Benzene Xylenes	0.03 0.04				
	TPH	390-1070				
	Antimony	3.6-4.2				
	Arsenic	11				
	Barium	41.47				
	Beryllium	0.5-0.6				
	Chromium	21-24				
	Cobalt	4.6-15				
	Copper	15-26				
	Molybdenum	1-1.1				
	Mercury	3.9-4.9				
	Nickel	11-14				
	Lead	11-46				
	Selenium	4.4-4.8				
	Silver	0.8				
	Thallium	1.3-3.3				
	Vanadium	31-38				
	Zinc	29-38				
B/628	Antimony	2.1-3.3				
	Arsenic	1.9-2.7				
	Barium	108-240				
	Beryllium	0.5-0.6				
	Chromium	16-19				
	Cobalt	4.6-7.2				
	Copper	5-15				
	Molybdenum	1				
	Mercury	3.9-4.9				
	Nickel	12-14				
	Lead	3.3-6				
	Selenium	4.0-5.2				
	Silver	0.5-0.8				
	Thallium	33-46				
	Vanadium	35-46				
	Zinc	24-55				
B/1080 South TOD Warehouse	Barium	0.3-0.7				
	Zinc	0.5-0.6				

Table 10
List of Contaminants by Building or Location

Sheet 30 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/1028 A&B	TPH	0.2-19				
B704	Trichloroethylene	0.2				
	Antimony	11				
	Arsenic	2.5				
	Barium	178				
	Beryllium	0.6				
	Chromium	13-32				
	Cobalt	5.2				
	Copper	111				
	Molybdenum	1.4				
	Mercury	2.2				
	Nickel	23				
	Lead	342				
	Silver	2.6				
	Thallium	25				
	Vanadium	26				
	Zinc	403				
UST B/766	TPH	7100-7250				
UST B/251	TPH	105				
UST B/783 P	Antimony	8.8				
	Arsenic	2.9				
	Barium	38				
	Beryllium	0.6				
	Chromium	13				
	Cobalt	2.6				
	Copper	9				
	Molybdenum	3.1				
	Mercury	1.7				
	Nickel	6.8				
	Lead	13.4				
	Selenium	1.9				
	Silver	0.5				
	Thallium	20.3				
	Vanadium	12				
	Zinc	19				

Table 10
List of Contaminants by Building or Location

Sheet 31 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/339 East & West	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Silver Thallium Vanadium Zinc	3.8-4.2 13-14 109-154 0.4-0.6 12-17 6.4-8 13-17 1.2-1.3 3.1-3.3 16-19 4.2-11 0.7-0.8 22-25 32-94 24-28				
B/720	Ethyl Benzene Toluene Xylenes	7.4-10 2.5-2.8 3.3-4.2				
	TPH	1180-1570				
B/1412	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	3.1-6.6 6.8-11 48-130 0.5 0.4-1.5 18-22 3.9-6.8 13-36 1.1-1.8 2.4-7.4 6-16 4.2-66 4.8-7.4 0.5-1.3 3-16 22-36 24-39				

Table 10
List of Contaminants by Building or Location

Sheet 32 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
B/525	Ethyl Benzene Toluene Xylenes	1.8 0.5 4.8				
B/4000	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	1.5-2.3 18-22 96-135 0.4-2.3 0.5-1.6 11-20 7.1-10 19-29 13-24 0.7-2.2 6-17 3.1-6.8 1.9-3 0.5 56-61 33-41 58-59	6710			
B/4004 N	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	8.8 24 58 0.6 0.3 10 2.6 9 3.1 1.7 6.8 13.4 1.9 0.5 20.3 12 19				

Table 10
List of Contaminants by Building or Location

Sheet 33 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/4004 N (continued)	Bis(2-ethylhexyl)phthalate Di-n-butyl phthalate	0.4 0.2				
	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.2-0.6 1.2-1.4 44-117 0.3-0.4 0.1-0.9 10-22 3.5-10 12-91 0.4-1.8 0.7-1.2 9.25 6.3-32 1.9-4.2 0.3-0.6 21-51 29-33 22-117				
UST B/395	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	3.8 21 58 0.6 0.3 10 2.6 9 3.1 1.7 6.8 13.4 1.9 0.5 53 29 33				

Table 10
List of Contaminants by Building or Location

Sheet 34 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/362	Arsenic Barium Beryllium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	6.8-11 48-130 0.5 18-22 3.9-6.8 13-36 1.1-1.8 2.4-7.4 6-16 4.2-66 4.8-7.4 0.5-1.3 3-16 22-36 24-39				
B1	TPH	65-210				
	Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	8.4-36.9 50-147 0.3-0.4 13-14 4-5.1 10-35 6.1-17 2.6-3.6 0.2-0.3 21-37 22-28 11-20				

Table 10
List of Contaminants by Building or Location

Sheet 35 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/1437 Hospital	Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	4.8-21 101-424 0.2-0.4 7.9-23 4.0-6.2 21-36 5.8-42 8.1-19 6.1-0.3 38-84 19-48 23-46				
B/652	TPH	35-92				
	Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	5.9-12.9 59-173 0.4 15-17 5.6-7 10-14 7.6-17 2.5-4 0.3 32-40 30-40 14-33				

Table 10
List of Contaminants by Building or Location

Sheet 36 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
DET 42	Aceanapene	18				
	Anthene	19				
	Benzol[a]anthracene	18				
	Benzol[k]fluoranthene	117				
	Benzol[b]fluoranthene	55				
	Benzol[a]fluoranthene	112				
	Benzol[g,h,i]perylene	42				
	Chrysene	80				
	Dibenzofuran	2.5				
	Fluoranthene	88				
	Fluorene	4.4				
	Indeno[1,2,3-cd]pyrene	49				
	2-Methylnaphthalene	1.6				
	Naphthalene	2.7				
	Phenanthrene	54				
	Pyrene	106				
	Arsenic	8.4-12				
	Barium	56-100				
	Beryllium	0.4				
	Chromium	10-13.5				
	Cobalt	12-26				
	Copper	13-35				
	Nickel	9-20				
	Lead	3.9-7.0				
	Silver	0.6-0.7				
	Thallium	24-55				
	Vanadium	23-46				
	Zinc	18-32				

Table 10
List of Contaminants by Building or Location

Sheet 37 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/440 E	Ethyl benzene Xylenes	0.6 1.0	300-1050	8.8 24 158 0.6 10 2.6 9 3.1 1.7 6.8 13.4 1.9 0.5 12 19		
B/475 Small	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Vanadium Zinc	5-5.2 12-14 91-132 0.3-0.4 81-117 9.2-11 17.5 1-1.1 1.3 26-31 9.6-37 1.7-3.4 0.9-1.4 22-33 23-32 155-203				

Table 10
List of Contaminants by Building or Location

Sheet 38 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UE/Aero Club	Ethyl Benzene Toluene Xylenes	90-116 208-49000 154-1850				
UST B/344 N	TPH	1260-874000				
B/326 Drying Beds	Arsenic Barium Beryllium Chromium Cobalt Copper Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	33 122-133 0.5-0.6 4.3-4.6 12-19 15-16 0.9-1.1 2.5-2.6 14-15 4.0-4.7 11-12 0.3 21-22 40-42 24-31		30		
B/1093	TPH	TPH	26-60			
	Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	5.3 103-109 0.4 1.3-2.4 33-39 5.7-8 21-31 10-17 11-22 1.2 35-38 33-50 35-63				

Table 10
List of Contaminants by Building or Location

Sheet 39 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/1071	Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	8.1-13 36-130 0.5 12-17 10-12 6.8-11 16-31 8.3-15 0.5-0.6 35-62 37-48 33-41				
B/1080 S	TPH	53				
	Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	9.3-12 21-155 0.5-0.8 8.9-31 7-21 5.6-51 1.0-1.6 12-21 8.1-20 0.6-0.7 25-81 43-55 23-46				

Table 10
List of Contaminants by Building or Location

Sheet 40 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
TF3	Ethyl benzene Toluene Xylenes	0.06 0.4 0.2				
	TPH Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Thallium Vanadium Zinc	15-37 9-11 69-140 0.5-0.6 17 6.2-8.6 32-56 15-21 4.1-7.8 72-93 43-48 35-46				
B/360	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	4.3-7.5 8.8-27 136-469 0.6-0.7 20-22 10-43 12-22 2.5-4.6 20-36 11-19 0.6-0.9 95-114 43-44 39-70				

Table 10
List of Contaminants by Building or Location

Sheet 41 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Soil Holding Area Nos. 1-9	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	3.3-5.5 8.7-31 19-66 0.6-0.8 25-32 12-45 13-43 1.5-2.0 23-45 13-33 0.6-0.8 56-61 43-55 32-81				
Air Field Nos. 1, 2, 3	Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	3.8-17 109-223 0.3-0.6 9.5-21 10-43 12-22 2.5-4.6 20-36 11-19 0.6-0.9 95-114 43-44 39-70				
UST B/1105 N&S	TPH	92-721				
UST B/475 (TF6)	Ethyl benzene Toluene Xylenes	0.4-103 0.01-11 0.016-28				
B/1075 N & W Pile and Pit	TPH Barium Cobalt Zinc	100-21000 0.3-0.4 0.02 0.1-0.17				

Table 10
List of Contaminants by Building or Location

Sheet 42 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/1704	Barium Zinc	0.28 0.03				
B/243	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	1.4-14 3.1 25-1510 0.1 14-7800 108-1500 19-48 1.3-2 1.8-2.8 2.5-10.7 27-1020 7-2360 0.4-2 9.3-54 5-15 6-2460				
UST B/655	Ethyl benzene Toluene Xylene	6.6 71 20				Antimony Arsenic Barium Beryllium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc

Table 10
List of Contaminants by Building or Location

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/692	Barium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	28300 28900 4.5 4.4 25 19 97 32 1.9 87 15 3.3				
B/318 Jet Fuel Storage	Antimony Arsenic Barium Beryllium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.5-0.7 0.9-1.4 64-247 0.3-0.4 7.5-12 0.5-4 0.4-0.8 0.7-4 18-21 6-7.4 0.3-0.7 0.3-0.8 31-68 33-71 25-68				

Sheet 43 of 56

Table 10
List of Contaminants by Building or Location

Sheet 44 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/640 E	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.8-2.2 0.9-5.7 64-632 0.3-0.4 0.2-0.9 7.5-14 0.6-18 0.7-0.9 0.3-2.2 6-25 6-7.6 0.8-2.6 0.7-1.0 23-35 21-61 33-47				
B/7 CRC Power Plant	Ethyl benzene Toluene TPH	19 66 106-1000000				
B/614 Fuel Tank	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-2.5 0.9-1.6 96-111 0.6-0.9 22-44 14-23 12-22 1.6-2.1 20-36 11-19 0.6-0.9 92-103 43-44 39-70				

Table 10
List of Contaminants by Building or Location

Sheet 45 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mp/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
B/257	TPH Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	4.3-12 21-163 0.5-0.9 8.9-33 3.4-12 5.6-55 1.0-1.7 21-33 8.1-24 0.7-0.8 33-67 55-79 23-56	285			
UST B/658	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	4.3-7.5 8.8-27 56-146 0.6-0.7 20-22 10-43 12-22 2.5-4.6 20-36 11-19 0.6-0.9 95-114 43-44 39-70				

Table 10
List of Contaminants by Building or Location

Sheet 46 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
B/1048	Antimony Arsenic Barium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-4.6 6-9.8 59-126 12-17 10-32 11-22 2.5-4.6 20-36 11-19 0.6-0.9 84-98 43-44 39-70				
B/943A	Toluene Xylene	0.02-0.08 0.01-0.02				
	Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	4.3-12 21-163 0.5-0.9 8.9-33 3.4-12 5.6-55 1.0-1.7 21-33 8.1-24 0.7-0.8 33-67 55-79 23-56				

Table 10
List of Contaminants by Building or Location

Sheet 47 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Northridge	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	2.3-4.6 8.2-25 23-67 0.5-0.6 21-33 10-46 12-22 1.5-3.6 21-44 11-16 0.6-0.7 23-66 48-89 33-66				
B/774 N	Antimony Barium Beryllium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.5-1.1 67-120 0.3-0.5 7.5-13 0.6-4.4 0.4-0.9 0.7-5.3 1.3-2.1 3.3-7.9 0.3-0.6 0.1-0.3 45-66 33-82 25-69				

Table 10
List of Contaminants by Building or Location

Sheet 48 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Magpie Creek/Baily Loop	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-4.6 6-9.8 59-126 12-17 10-32 11-22 12-23 2.5-3.6 20-36 11-19 0.6-0.9 84-98 43-44 39-70				
IWTP Basin	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	1.4-14 3.1 31-140 0.1 14-16 41-403 19-48 1.3-2 1.8-2.5 2.5-10 31-125 2.3-5.0 13-24 5.3-9 5-19 117-457				

Table 10
List of Contaminants by Building or Location

Sheet 49 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/Kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
Taxiways 8 & 9	Barium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	12-17 2.3-3.1 2.1-3.3 10-14 21-44 11-16 0.6-0.7 23-66 48-89 33-66				
B783 I Street	Barium Beryllium Chromium Cobalt Copper Molybdenum Nickel Lead Selenium Silver Vanadium Zinc	71 0.6 10 2.6 9 3.1 6.8 13.4 1.9 0.5 12 19				
CE Soil Yard	Dichloromethane	0.2-0.5				
	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-2.6 0.5-1.3 23-73 0.5-1.6 1.8-3.1 1.0-5.9 12-22 1.5-3.6 21-44 11-16 0.6-0.7 12-36 18-29 13-16				

Table 10
List of Contaminants by Building or Location

Sheet 50 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
Capehart Service Station	Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Molybdenum Mercury Nickel Lead Selenium Silver Thallium Vanadium Zinc	0.4-0.6 0.6 31-44 0.5-0.6 1.1-1.3 0.5-1.4 1.2-3.1 0.3-1.2 1.8-2.1 2.5-10 2.4-2.8 0.2-0.8 0.2-0.3 5.3-9.1 5-11 117-457				
B/209 Soil Piles	Barium Beryllium Cadmium Chromium Cobalt Molybdenum Mercury Nickel Lead Silver Thallium Vanadium Zinc	61-84 0.2-0.4 0.3-0.4 5-6.3 1.6-3.4 0.3-1.1 1.8-2.6 2.5-10 2.4-2.8 0.5-0.9 2-7.1 5-11 57-75				

Table 10
List of Contaminants by Building or Location

Sheet 51 of 56						
Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
FAA N & S	Ethyl benzene Toluene Xylene	0.04-0.1 0.2 0.1				
B/431	Ethyl benzene Toluene Xylene TPH	1.3-2.2 8.2-25 23-64 0.5-0.6 21-33 10-46 12-22 1.5-3.6 21-44 11-16 0.6-0.7 23-66 48-89 33-66 0.02 0.16 0.25 384-508				

Table 10
List of Contaminants by Building or Location

Sheet 52 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth (ft)	Approx. Site Area (ft ²)	Comments
B/650 NE	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-2.6 0.5-1.3 23-73 0.5-1.6 1.8-3.1 1.0-5.9 12-22 1.5-3.6 21-44 11-16 0.6-0.7 12-36 18-29 13-16				
B/712 Rifle Range	Ethyl benzene Toluene Xylene	0.04 0.1 0.2				

Table 10
List of Contaminants by Building or Location

Sheet 53 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft.)	Approx. Site Area (ft. ²)	Comments
Sling Test Facility	Anthraene Benzo[a]anthracene Benzo[b]fluoranthene Benzo[a]fluoranthene Benzol[g,h,i]perlyene Chrysene Dibenzofuran Fluoranthene Fluorene Indeno[1,2,3-cd]pyrene Phenanthrene Pyrene Arsenic Barium Beryllium Chromium Cobalt Copper Nickel Lead Silver Thallium Vanadium Zinc	3.4 7.3 7.6 6.8 1.9 8 0.6 15.3 11.1 4.6 12.1 15 0.8-1.2 23-44 0.1-0.3 12-33 16-19 1.6-11 9-23 3.8-12 0.2-0.3 25-69 22-47 45-123				

Table 10
List of Contaminants by Building or Location

Sheet 54 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Aprox. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
ADAL Paint Complex	Ethyl benzene Toluene	0.04-0.1 0.2				
	Antimony	1.3-2.2				
	Arsenic	8.2-25				
	Barium	23-64				
	Beryllium	0.5-0.6				
	Chromium	21-33				
	Cobalt	10-46				
	Copper	12-22				
	Mercury	1.5-3.6				
	Nickel	21-44				
	Lead	11-16				
	Silver	0.6-0.7				
	Thallium	23-66				
	Vanadium	48-89				
	Zinc	33-66				
B/241	Ethyl benzene Toluene Xylene	0.3-4.3 0.1-0.6 0.5-12				
	TPH	450-13200				
WTP - Free Oil Samples	TPH	437-703				
B/340	Ethyl benzene Toluene Xylene	0.1 0.2 0.1				

Table 10
List of Contaminants by Building or Location

Sheet 55 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mp/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
IW Lines	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	0.7-0.8 0.5-1.6 24-58 0.5-0.7 1.8-3.1 1.0-5.9 12-22 1.5-3.6 21-44 11-16 0.6-0.7 12-36 18-29 13-16				
Site 6 & 7 E & W	Antimony Arsenic Barium Beryllium Chromium Cobalt Copper Mercury Nickel Lead Silver Thallium Vanadium Zinc	1.3-2.1 8.2-25 23-67 0.5-0.6 21-33 10-46 12-22 1.5-3.6 21-44 11-16 0.6-0.7 23-66 48-89 33-66				
IWTP (Spill)	TPH	1464-1710				

Table 10
List of Contaminants by Building or Location

Sheet 56 of 56

Building or Location No. & Description	Contaminants	Concentration Range (mg/kg)	No. of Samples	Approx. Depth of Samples (ft)	Approx. Site Area (ft ²)	Comments
UST B/351 A,B,C	Ethyl benzene Toluene Xylenes	0.1 0.2 0.5				
	TPH	420				
	Antimony	3.3-5				
	Arsenic	8.3-17				
	Barium	91-146				
	Beryllium	0.6-0.7				
	Chromium	20-23				
	Cobalt	10-43				
	Copper	12-22				
	Mercury	2.5-3.6				
	Nickel	20-28				
	Lead	11-33				
	Silver	0.6-0.7				
	Thallium	46-75				
	Vanadium	43-64				
	Zinc	0.9-5				

Appendix A
DATA REVIEW OF ADMINISTRATIVE RECORD

DATA REVIEW OF ADMINISTRATIVE RECORD

1. Final Report for Groundwater Contamination as of 30 April 81; Brunner and Zipfel; 4/30/81.
Missing from Shelf.
2. Installation Restoration Program (IRP) Records Search; CH2M HILL; 7/81.
Record search and identification of contamination, etc.
May be some relevant data, but most of it is contained in more recent documents.
3. IRP Phase II Confirmation Vol. 1 & 2 Final Report; Engineering Science; 6/83.
Report to determine groundwater contamination and recommend measures to mitigate contaminated areas, develop monitoring program.

A few good cross sections and some soil sampling results. Some TCE contamination info.
4. IRP Phase III/IV Area D Site Characterization Tech Memo 1 & Tech. Memo 3; CH2M HILL; 8/84.
Includes hydrogeologic evaluation and large geologic sections.
5. Interim Presurvey Report Phase II Stage 2, Activities and IRP Work Plan; Radian; 9/28/84.
Proposal for work. See No. 8.
6. Source Control Feasibility Study Area D; CH2M HILL; 9/84.
Compares alternatives for controlling existing hazardous waste disposal sites.
Summary of Site Characterization (No. 4).
7. IRP Phase III/IV Area D Site Characterization Study; CH2M HILL; 10/84.
Details sites in Area D. Assesses character of wastes and extent of soil contamination. Some cross sections and boring logs, but should be more recent data.
- 8&9. IRP Phase II Stage 2-1 Draft Final Report; Radian; 11/1/84.
Some good cross sections. No. 13 is Final.
10. IRP Phase III/IV Area D-Final Report; CH2M HILL; 2/85.
See also Nos. 4, 6 & 7
Source Control Feasibility Study & Site Characterization study. Shows groundwater contamination and geologic fence diagram. Proposes well locations, cap locations, source control.

11. Site Characterization of A, B, C and Other Sites; McLaren; 3/85.
Summarizes IRP/FS data previously gathered. Lots of cross sections, ground-water contours, water and waste sample borings, extent of TCE and other contamination.
12. 10% Submittal Design Analysis for MTN Groundwater Cleanup, Area D, Membrane Cover Installation; CH2M HILL; 3/27/85.
See No. 14 for Final.
13. IRP Phase II Stage 2-1 Final; Radian; 5/85.
Detailed discussions of results for 13 tasks in this stage. Some good cross sections.
14. Design Analysis for MTN Groundwater Cleanup Area D, Cap Installation; CH2M HILL; 5/85.
Final design analysis for major elements of cap installation.
15. Area D Monitoring Extraction Tech. Report No. 1; McLaren; 7/85.
System confirmation by computer modeling. Contains background data and chemical quality of groundwater in Area D. Some discussion of hydraulic conductivity.
16. IRP Phase II Stage 2 Resampling of Monitoring Wells-Tech. Report; Radian; 7/11/85.
Describes resampling and reanalysis effort, as well as the analytical results, for 45 wells. Original sampling and analysis was done in Fall '84.
17. Off-Base Quarterly Sampling and Analysis; Radian; 8/85.
Off-Base.
18. Proposal for Initial Groundwater Treatment System Area D; Metcalf & Eddy; 8/16/85.
Proposes using vapor phase carbon adsorber for treatment system.
19. Groundwater Monitoring Program for Surface Impoundments at IWTP; McLaren; 9/26/85.
Deals primarily with Area C1, come cross sections through sites with chemical analysis.
20. Hydrogeologic Assessment Report for Surface Impoundments Area C; INEL; 9/85.
& Missing from Shelf
21. See No. 134 & 135 for similar, more recent document.

22. MAFB Off-Base Well Survey Vol. 1-31 & Tech. Report; Radian; 1985.
thru Off-Base.
- 53.
54. Area D Monitoring/Extraction System Tech. Report No. 2; McLaren; 1/86.
No. 15 is Tech. Report 1.
Testing of initial extraction well and system confirmation by computer modeling.
Results of 30-day aquifer test (recommended in No. 15), data from monitoring wells, results from computer modeling and water quality data. Lots of borehole lithology.
55. Tech Memo for Shallow Investigation Program in areas A, B, C and other Sites-Area A; McLaren; 2/86.
See also Nos. 60, 61, 64.
Presents results of shallow exploration program for 5 sites in area A. Lots of soil boring logs. Details results at each site. Collected to lead to RAP (No. 64).
56. Tech Memo for Shallow Investigation Program in Areas A, B, C, and Other Sites-Area B; McLaren; 2/86.
See also Nos. 57, 62, 63.
Presents results of shallow exploration program at 5 sites in Area B. Lots of soil boring logs. Details results at each site. Collected to lead to RAP (No. 62).
57. Area B Site Characterization Groundwater Report; McLaren; 2/86.
See also Nos. 56, 62, 63.
Presents results of source area groundwater program in Area B. Water level contour maps, distribution of contaminants, borehole lithology. Collected to lead to RAP (No. 62).
58. MAFB Off-Base Well Sampling and Analysis; Radian; 2/86.
Off-Base
59. Tech. Memo for Shallow Investigation Program for A, B, C and other Sites-Other Sites; McLaren; 4/86.
See also No. 68.
Six sites not in area A, B, C, or D. Presents results of shallow exploration program at these sites. Details results at each site, cross-sections of sites, soil boring logs and chemical analysis.
60. Report on Contamination in Area A; McLaren; 4/86.
See also Nos. 55, 61, 64.
Brings together groundwater info and soil info to lead to RAP (No. 64). Cross sections of sites with contamination, chemical results from soil samples, water level contours.

61. Area A Site Characterization Groundwater Report; McLaren; 4/86.
See also Nos. 62, 64, 55.
Presents results of source area groundwater program in area A. Water level contour maps, distribution of contaminants, borehole lithology. Collected to lead to RAP (No. 64).
62. Area B Source Control Feasibility Study and Remedial Action Plan (RAP); McLaren; 4/86.
See also Nos. 56, 57, 63
To develop alternative solutions for contaminated sites in Area B. Cross sections of sites with positive chemical results, vertical & horizontal distributions of TCE.
63. Report on Contamination in Area B; McLaren; 4/86.
See also Nos. 56, 57, 62.
Brings together groundwater and soil info to lead to RAP(No. 62). Cross sections of sites with contamination, chemical results from soil samples, water level contours.
64. Area A Source Control Feasibility Study and Remedial Action Plan (RAP); McLaren; 5/86.
See also Nos. 55, 60, 61
To develop alternative solutions for contaminated sites in Area A. Cross section of sites, vertical and horizontal distribution of TCE.
65. Area C Site Characterization Groundwater Report; McLaren; 5/86.
See also Nos. 75, 76
Presents results of source area groundwater program in area C. Water level contour maps, borehole lithology, distribution of contaminants. Collected to lead to RAP (No. 76).
66. Off-Base Well Sampling Second Quarter, Analytical Results, Physical Analysis
& 67. and Appendices; Radian; 5/86.
Off-Base
68. Other Areas Site Control Feasibility Study and Remedial Action Plan (RAP); McLaren; 5/86.
For mitigating soil and groundwater contamination of sites not in Area A, B, C or D. Vertical distributions of soil contamination, some chemical concentrations in groundwater.
69. Tech Memo for Shallow Investigation Program in A, B, C and Others-Area C
thru Site Characterization; McLaren; 5/86.
71. Data collected to assist in RAP for Area C. Goes into a lot of detail about each site in Area C. Analytical results from borings, aerial photographs.

72. IRP Sampling and Analysis Program, Round 3, Informal Tech. Memo; Radian; 6/86.
74. Sample results and analysis, and raw laboratory data for groundwater monitoring wells.
75. Report of Contamination in Area C; McLaren; 6/86.
To help develop RAP (No. 76). Details the extent of groundwater and soil contamination in Area C, each site. Positive analytical results from boring, cross-sections of sites with positive chemical results.
76. Area C Source Control Feasibility Study and Remedial Action Plan (RAP); McLaren; 6/86.
To mitigate groundwater and soil contamination identified in No. 75. Some good vertical and horizontal distributions of TCE contamination.
77. Basewide Report on Contamination; McLaren, 7/86.
See No. 81 for Final.
Geologic cross-sections of all areas & specific sites. Discussion of geology & hydrology of all areas.
78. Off-Base Sampling & Analysis Third Quarter 1986; Radian; 8/86.
- & 79. Off-Base
80. Acetone/Ketone Study; Metcalf & Eddy; 8/86.
Area D. Evaluates various methods of treating groundwater to get rid of acetone/ketones.
81. Final Basewide Report on Contamination; McLaren; 12/86.
Report on contamination in all areas. Pulls together data from previous reports. Leads to RAP (No. 82). Water contour maps, cross sections of sites with chemical results, some vertical distributions of soil contamination. Should be good source of info.
82. Final Basewide Source Control Feasibility Study & RAP; McLaren; 12/86.
Some discussion of geologic and hydrologic info. Vertical distributions of TCE in all areas.
83. Response to Regulatory Agencies and Air Force Comments on McLaren Site Characterization and RAP; McLaren; 12/86.
Responses to comments by EPA, DHS, Regional, City of Sac, AF HQ, etc. to No. 82.
84. IRP Phase II Stage 2-2, Final Report for 6/85-12/86; Radian; 12/86.
- thru
86. Installation of 38 monitor wells on- and off-base; sampling and analysis. Plates showing elevation of water levels. Some geologic cross sections, etc. in No. 84. Shows occurrence of contaminants in wells.

87. Final Operations and Maintenance Manual for Area D Cap; CH2M HILL; 12/86.
Operations and maintenance manual, but may have some relevant info regarding cap. Shows utilities, cap cross section.
88. Operations and Maintenance Manual for Groundwater Treatment Facility; Metcalf and Eddy
89. Well Sampling and Analysis-Fourth Quarter 1986; Radian; 2/87.
thru These quarterly sampling reports show levels of contamination in wells.
93. Looking at them over a period of a few years might show how contamination & has changed, migration of contaminants, etc. Also contains some good maps of
97. wells sampled and contamination found.
94. Area D Monitoring/Extraction System Tech. Report No. 4, Operation and Maintenance Manual; McLaren; 3/87.
Some good cross sections.
95. IRP-Interim Tech. Report Stage 2-3 Aquifer Testing and Evaluation; Radian; 3/87.
Determines hydrologic characteristics of local groundwater flow system. Should be good source of info.
96. 30-Day Performance Test Report for Groundwater Treatment Facility; Metcalf and Eddy; 4/87.
Groundwater from Area D. Lots of analysis of influent and effluent.
98. IRP-Phase IV-A Work Plan for Site Characterization Assessment- Museum Site:
Oak Ridge National Lab.: 5/87.
Proposed museum site, south of Building 814, contaminated soil from aircraft maintenance.
99. IRP-Phase II Stage 2-4 Interim Tech. Report; Radian; 6/87.
& Further defines extent and magnitude of subsurface contamination. Installation
100. of wells. Good cross sections.
101. Quarterly Sampling and Analysis Program-First Quarter 1987 (No. 101 through 104), Second Quarter 1987(No. 106 through 110), Third Quarter 1987 (No. 113 through 120), Fourth Quarter 1987(No. 137 through 145); Radian; 6/87, 7/87, 10/87, 2/88.
Quarterly sampling reports for 1987. Might be good to see changes from previous and future quarterly reports.

105. Groundwater Sampling Protocol Manual for MAFB; Radian; 6/87.
Groundwater sampling protocol and instruction to be used with quarterly sampling. Not really any relevant info.
111. IRP-Phase II Stage 2-3 Subregional Groundwater Flow Monitoring; Radian; 8/87.
Develops conceptual model for groundwater system around Base. Some possibly relevant groundwater info.
112. IRP Phase IV-A Task No. 1-Site Characterization Assessment for Area D; Oak Ridge National Lab; 8/87.
Work Plan.
121. Supporting Documents for Monitoring and Extraction System, Area C; EG&G Idaho; 7/27/87.
Health and Safety Plan for Interim Extraction Project.
122. IRP Phase II Stage 2-5 Off-Base Remedial Investigation and Alternative Assessment Report; Radian; 10/87.
133. Off-Base
134. Hydrogeologic Assessment Report for Surface Impoundments-Area C; EG&G thru Idaho; 12/87.
135. Discusses waste characteristics, surface wells, groundwater, vadose zone. Some good cross sections.
136. Monthly Monitoring Reports-Area D; Metcalf and Eddy; 1/88 through 8/88.
Also Nos. 146, 147, 148, 149, 155, 156, 157. No. 163 is similar.
Useful for comparison.
150. IRP Stage 3-Groundwater Sampling and Analysis-First Quarter 1988 (No. 150 through 154), Second Quarter 1988(No. 159,160), Third Quarter 1988 (Nos. 164, 165, 168), Fourth Quarter 1988(Nos. 174, 176, 177, 178); Radian; 6/88, 9/88, 10/88, 3/89.
Groundwater sampling and analysis for 1988. Useful for comparison to earlier and later documents.
158. Dismantling of Building 666 and IWTP No. 4; Idaho National Engineering Lab; 8/88.
Building 666 was an electroplating shop in Area B. Describes cleanup. Shows depth of sumps, pits, and reservoirs after cleanup.
161. Quality Assurance Project Plan (QAPP); Radian; 9/88.
& QA/QC procedures for RI/FS at Base. Used by field sampling teams.
- 162.

163. Monthly Monitoring Report-Areas C & D; Metcalf and Eddy; 9/88 through 12/89.
Also Nos. 166, 167, 169, 171, 172, 173, 175, 179, 183, 185, 186, 187, 191, 193.
No. 136 is similar.
Useful for comparison.
170. IRP Stage 3 RI/FS Management Plan Draft Copy; Radian; 1/89.
Describes approach to be taken to incorporate results of previous investigations into RI/FS process.
180. Performance Work Statement-Decommission of Building 628; EG&G; 5/89.
Radioactive waste in rear of building 628 in Area B. Mostly about building-description, waste disposal, contamination, etc.
181. IRP Stage 5 Area B Groundwater Operable Unit RI Analytical Data and QA/QC Report-Groundwater Samples; Radian; 6/89.
Lots of groundwater sampling results, Area B.
182. IRP Stage 3 Groundwater Sampling and Analysis-First Quarter 1989 (No. 182), Second Quarter 1989 (No. 192), Third Quarter 1989 (Nos. 188,189,190,194), Fourth Quarter 1989 (Nos. 196,197,198); Radian; 6/89.
May be useful for comparison to each other. Good plates. Shows TCE contamination.
184. MAFB Interagency Agreement; MAFB; 6/89.
No relevant info.
195. IRP Stage 3 Annual Technical Report, Groundwater Sampling-1988; Radian; 11/89.
Examines analytical and hydrologic data collected through 12/88. Looks like a very good, up-to-date source of info. Shows contaminant distribution and migration for all areas. Good plates and maps.
199. IRP Stage 3 Letter of Recommendation for Continuance of Groundwater Sampling and Analysis Program; Radian; 3/90.
Defends continuance of groundwater sampling program.
200. Quarterly Geologic Monitoring Report-Area C and D; Metcalf and Eddy; 3/90.
Used to detect any groundwater level changes and relationship to extraction operation. Good plates. Might be useful to compare to earlier monthly monitoring (See No. 163).
201. IRP Stage 3 QA/QC Letter-Groundwater Sampling-January to March 1990; thru Radian; 5/90.
203. Compare to earlier QA/QC Letters.

204. IRP Stage 3 Operable Unit B Preliminary Assessment Summary Report; Radian; 5/90.
206. Some contamination info for various sites.
207. IRP Stage 3 QAPP; Radian; 5/90.
Procedures for QA,QC activities.
208. IRP Stage 6-Preliminary Groundwater Operable Unit Remedial Investigation Sampling and Analysis; Radian; 2/90.
Scope of work, methods and rationale for Hydrogeologic assessment. Good, up-to-date cross sections and maps, discussions of hydrology.
209. IRP Stage 5-Analytical Data Summary: Preliminary Pathways Assessment-Surface Water and Stream Sediment Samples; Radian; 5/90.
Surface water contamination.
210. IRP Stage 3-Groundwater Sampling Data Summary-Fourth Quarter 1989; Radian; 5/90.
Should be good for comparison to earlier reports. Good plates (most up-to-date).
211. Administrative Record Correspondence 10/88 through 3/89.