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FINAL

REVISED HUMAN HEALTH BASELINE RISK ASSESSMENT

FOR

OPERABLE UNIT 1

DEFENSE SUPPLY CENTER RICHMOND

Prepared For

Defense Logistics Agency

and

Defense Supply Center Richmond

December 2006

8005 Outer Circle Road, BrooksCity-Base, TX 78235

4 December 2006

Mr. Jesse Perez
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Subject: Final Revised Human Health Baseline Risk Assessment for Operable Unit 1, Defense Supply Center Richmond (DSCR).
Contract No. FA8903-04-D-8691, Task Order 0016

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Dear Mr. Perez,

Earth Tech, Inc. (Earth Tech) is pleased to submit the above-referenced document. Earth Tech and DSCR have responded to all written comments on the draft final version of this document and the suggested changes have been incorporated in the final version. Additional copies of this document have been issued as shown on the attached distribution list.

If you have any questions or comments, please contact the undersigned at (210) 271-0925.

Sincerely
Earth Tech, Inc.

Manish M Joshi, P.E.
Project Manager

Enclosures

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Final

REVISED HUMAN HEALTH BASELINE RISK ASSESSMENT FOR OPERABLE UNIT 1 DEFENSE SUPPLY CENTER RICHMOND

Prepared For:

Defense Supply Center Richmond

Defense Logistics Agency

Air Force Center for Environmental Excellence

Prepared By:

Earth Tech, Inc.

Contract No. FA8903-04-D-8671

Task Order 0016

December 2006

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LIST OF ACRONYMS AND ABBREVIATIONS

µg	microgram
ADD	average daily dose
ARAR	applicable or relevant and appropriate requirement
bgs	below ground surface
BHC	hexachlorocyclohexane
CEM	conceptual exposure model
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm	centimeter
COC	chemical of concern
COPC	chemical of potential concern
CSFo	cancer slope factor (oral)
CV	coefficient of variation
4,4'-DDT	4,4,'-dichlorodiphenyltrichloroethane
DLA	Defense Logistics Agency
DQO	data quality objective
DSCR	Defense Supply Center – Richmond
EPA	United States Environmental Protection Agency
EPC	exposure point concentration
GI	gastrointestinal
HHBRA	Human Health Baseline Risk Assessment
HI	hazard index
HQ	hazard quotient
IA	intake assumption
IRIS	Integrated Risk Information System
J&E	Johnson and Ettinger
kg	kilogram
LOAEL	lowest-observed-adverse-effect-level
m^3	cubic meters
MDC	maximum detected concentration
MDRD	minimum detectable relative difference
MEK	methyl ethyl ketone
MF	modifying factor
mg	milligram
NCEA	National Center for Environmental Assessment
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NOAEL	no-observed-adverse-effect-level
OSA	open storage area
OU	operable unit
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PEF	particulate emission factor
POL	petroleum, oils, and lubricants
PPRTV	provisional peer-reviewed toxicity values
PRG	preliminary remediation goal
QA	quality assurance
QC	quality control
RAGS	Risk Assessment Guidance for Superfund
RBC	risk-based concentration

RCRA	Resource Conservation and Recovery Act
RfC	reference concentration
RfD	reference dose
ROD	record of decision
SF	slope factor
SSL	soil screening level
TCE	trichloroethylene
UCL	upper confidence limit
UF	uncertainty factor
USGS	U.S. Geological Survey
VDEQ	Virginia Department of Environmental Quality
VOC	volatile organic compound
WOE	weight-of-evidence
WRS	Wilcoxon Rank Sum

EXECUTIVE SUMMARY

INTRODUCTION

The Defense Supply Center Richmond (DSCR) is located 11 miles south of Richmond, Virginia, and 16 miles north of Petersburg, Virginia, in Chesterfield County. Purchased by the U.S. Army in 1941, the DSCR is operated by the Defense Logistics Agency (DLA).

The DSCR was added to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) in 1987. A human health risk assessment was prepared in subsequent remedial investigations and feasibility studies (Law Engineering and Environmental Services, Inc. [Law] 1992). Based on the original risk evaluation, the Record of Decision (*ROD*) for Operable Unit (OU)1, which was signed in May of 1992, included an interim remedy that restricted access at the Open Storage Area (OSA) to limit exposure to site soils and incorporated institutional controls (DLA 1992). As part of the requirements under CERCLA, 5-year reviews were conducted in 1997 and 2003.

The initial 5-year review (Law 1997) stated that the interim remedy (i.e., institutional controls) continued to prevent direct exposure to site soils. The results of the second 5-year review (Mactec 2003) also indicated that the interim remedy continued to function as intended in the *ROD* in preventing direct exposures to soils; however, three elements of the remedy needed reconsideration:

1. Chemical concentrations in soil may have the potential to leach to groundwater.
2. Inhalation of soil vapor in buildings needed to be evaluated.
3. Continuing source(s) of groundwater contamination needed to be identified.

In accordance with the 5-year review recommendations for OU1 (Mactec 2003), inhalation of soil vapor in current and future buildings is included in this Revised Human Health Baseline Risk Assessment (HHBRA) along with direct routes of exposure to soil. Other potential hazards, including the leaching and potential impacts of contaminants to groundwater, are addressed in the OU6 groundwater evaluation (Mactec 2005a).

DATA QUALITY ASSESSMENT

Numerous soil samples have been collected over time at various OU1 locations. In accordance with the approved Human Health Risk Assessment Work Plan (Mactec 2005a as modified), data collected prior to 1992 were not included in the chemical data set for OU1. In 1998, soil samples were collected as part of an investigation for a natural gas pipeline through OU1. In 2002, soil samples were collected along the western road as part of an investigation for a fiber-optics line. Four soil gas samples were collected in

April 2004 adjacent to buildings in which storage activities take place. The soil samples collected in 1998 and 2002 and soil gas samples collected in 2004 were used to estimate risks at OU1. Chemicals detected at least once underwent a screening procedure to identify those chemicals that should be retained for further evaluation.

LAND USE AND RECEPTORS

Access to the OSA by various receptors is limited by the restrictions of fencing and the OSA's location within an operating U.S. Armed Forces complex. Therefore, on-site receptors are restricted to industrial workers and construction workers. A distinction was made for industrial workers who spend more time outside and are involved with potential direct contact with soils and indoor workers who may be exposed to contaminated soils brought into a building, but are likely to be exposed via inhalation of volatile organic compounds (VOCs) in indoor air. The following current and future receptors were evaluated for OU1:

- Current and future on-site outdoor industrial workers (adult),
- Current and future on-site indoor industrial workers (adult),
- Future on-site construction workers (adult), and
- Current and future off-site residents (adult/child).

The exposure pathways by which receptors may become exposed are incidental ingestion, dermal contact, and inhalation of fugitive particulates (i.e., dust) for outside industrial workers and construction workers, ingestion and dermal contact with soils and inhalation of volatile chemicals in indoor air for indoor industrial workers, and inhalation of fugitive particulates for off-site residents.

CHEMICALS OF POTENTIAL CONCERN

To identify those site-related chemicals of potential concern (COPCs), a screening process is needed whereby analytical results are compared to levels having negligible potential for adverse health effects. Through this screening process, chemicals that have little potential for causing adverse health are omitted from further evaluation, and COPCs are retained for a more rigorous risk evaluation.

Fifty-seven chemicals were detected in surface and subsurface soils at OU1 with a frequency of detection ranging from 3 percent to 100 percent (Tables ES-1 and ES-2). Identifying COPCs for further evaluation required that a detected chemical exceed the protective risk-based concentration (RBC) developed for screening purposes (i.e., the United States Environmental Protection Agency [EPA] Region III industrial soil risk-based concentration RBC or RBC calculated for a construction trench worker, whichever is lower) or potentially pose an unacceptable risk through inhalation of indoor air (Tables ES-1 and ES-2).

TABLE ES-1

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-related? (Site Levels >Background?)	Basis of Test	p-Value (or a-value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
Metals/Inorganics by Method 6010B																		
Aluminum	23	23	100%	YES	YES	Two sample t-test	0.006	5.28E+03	2.02E+04	6.81E+02	YES	2.3E+04	N	NO	Nap	Nap	--	NO
Antimony	1	15	7%	YES	YES[e]	--	--	1.30E+00	1.30E+00	1.30E+00	NO	2.4E+01	N	NO	Nap	Nap	--	NO
Arsenic	22	22	100%	YES	YES	Gehan	0.005	1.20E+00	1.32E+02	2.60E-02	YES	1.9E+00	C	YES	Nap	Nap	--	YES
Barium	23	23	100%	YES	NO	Two sample t-test	0.203	1.40E+01	1.14E+02	2.10E+02	NO	4.6E+03	N	NO	Nap	Nap	--	NO
Chromium III (f)	23	23	100%	YES	YES	Two sample t-test	0.008	6.43E+00	2.79E+01	2.00E+08	NO	1.3E+05	N	NO	Nap	Nap	--	NO
Chromium VI (f)	23	23	100%	YES	YES	Two sample t-test	0.008	1.07E+00	4.66E+00	4.20E+00	YES	7.8E+01	N	NO	Nap	Nap	--	NO
Cobalt	20	20	100%	YES	YES	Two sample t-test	0.005	8.90E-01	6.90E+00	6.60E+01	NO	1.7E+02	N	NO	Nap	Nap	--	NO
Copper	23	23	100%	YES	NO	WRS	0.326	2.60E+00	1.77E+01	1.10E+03	NO	9.1E+02	N	NO	Nap	Nap	--	NO
Iron	23	23	100%	YES	YES	Two sample t-test	0.015	8.56E+03	4.35E+04	5.54E+02	YES	6.8E+03	N	YES	Nap	Nap	--	YES
Lead	23	23	100%	YES	NO	Two sample t-test	0.060	6.40E+00	5.75E+01	2.70E+01	YES	7.5E+02	N	NO	Nap	Nap	--	NO
Manganese	23	23	100%	YES	NO	WRS	0.087	1.50E+00	2.75E+02	9.50E+01	YES	4.8E+02	N	NO	Nap	Nap	--	NO
Nickel	23	23	100%	YES	YES	Two sample t-test	0.018	9.20E-01	1.03E+01	9.52E+01	NO	1.5E+03	N	NO	Nap	Nap	--	NO
Selenium	14	23	61%	YES	YES	Quantile	0.046	5.80E-01	1.10E+00	1.90E+00	NO	1.1E+02	N	NO	Nap	Nap	--	NO
Thallium	19	23	83%	YES	YES	Quantile	0.026	5.10E-01	1.01E+01	3.60E-01	YES	1.6E+00	N	YES	Nap	Nap	--	YES
Vanadium	23	23	100%	YES	YES	Two sample t-test	0.020	1.55E+01	5.44E+01	7.30E+01	NO	7.9E+01	N	NO	Nap	Nap	--	NO
Zinc	23	23	100%	YES	NO	Two sample t-test	0.065	4.10E+00	5.92E+01	1.40E+03	NO	6.8E+03	N	NO	Nap	Nap	--	NO
Pesticides by Method 8081A																		
Aldrin	1	23	4%	NO	YES[e]	--	--	9.50E-04	9.50E-04	7.70E-03	NO	1.7E-01	C	NO	8E-11	Nap	NO	NO
beta-BHC	2	23	9%	YES	YES[e]	--	--	2.40E-04	3.50E-04	3.10E-03	NO	1.6E+00	C	NO	Nap	Nap	--	NO
gamma-BHC	4	15	27%	YES	YES[e]	--	--	1.20E-03	1.80E-03	4.30E-03	NO	2.2E+00	C	NO	Nap	Nap	NO	NO
alpha-Chlordane	1	23	4%	NO	YES[e]	--	--	1.70E-02	1.70E-02	9.20E-01	NO	8.2E+00	C	NO	2E-10	8E-06	NO	NO
4,4'-DDD	2	23	9%	YES	YES[e]	--	--	1.38E-03	2.10E-01	1.10E+01	NO	1.2E+01	C	NO	Nap	Nap	--	NO
4,4'-DDE	5	23	22%	YES	YES[e]	--	--	1.00E-03	6.30E-03	3.50E+01	NO	8.4E+00	C	NO	Nap	Nap	NO	NO
4,4'-DDT	10	23	43%	YES	YES[e]	--	--	2.00E-03	4.75E-02	1.20E+00	NO	8.4E+00	C	NO	Nap	Nap	--	NO
Dieldrin	1	23	4%	NO	YES[e]	--	--	1.14E-03	1.14E-03	2.20E-03	NO	1.8E-01	C	NO	7E-10	Nap	NO	NO
Endosulfan II	1	23	4%	NO	YES[e]	--	--	8.25E-04	8.25E-04	2.00E+00	NO	1.4E+02	N	NO	Nap	Nap	NO	NO
Endrin	1	23	4%	NO	YES[e]	--	--	5.00E-04	5.00E-04	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Endrin ketone	1	23	4%	NO	YES[e]	--	--	1.57E-02	1.57E-02	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Heptachlor	7	23	30%	YES	YES[e]	--	--	3.20E-04	1.00E-03	8.40E-01	NO	6.4E-01	C	NO	4E-07	Nap	NO	NO
Heptachlor epoxide	5	23	22%	YES	YES[e]	--	--	1.90E-04	3.40E-02	2.50E-02	YES	3.1E-01	C	NO	Nap	Nap	--	NO
PAHs by Method 8270C																		
Acenaphthene	1	23	4%	NO	NO	Quantile	0.179	6.10E+00	6.10E+00	1.00E+01	NO	6.1E+03	N	NO	Nap	Nap	NO	NO
Anthracene	1	23	4%	NO	NO	Quantile	0.051	3.80E+00	3.80E+00	4.70E+01	NO	3.1E+04	N	NO	Nap	Nap	--	NO
Benzo(a)anthracene	6	23	26%	YES	NO	Quantile	0.058	9.23E-02	1.05E+01	1.50E+00	YES	3.9E+00	C	YES	Nap	Nap	--	YES
Benzo(a)pyrene	8	23	35%	YES	NO	Quantile	0.051	5.91E-02	9.60E+00	3.70E-01	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Benzo(b)fluoranthene	9	23	39%	YES	NO	Quantile	0.051	9.90E-02	9.70E+00	4.50E+00	YES	3.9E+00	C	YES	5E-09	Nap	NO	YES
Benzo(g,h,i)perylene	2	23	9%	YES	NO	Quantile	0.051	2.33E-01	3.80E+00	Nav	--	Nav	--	--	Nap	Nap	--	NO
Benzo(k)fluoranthene	4	23	17%	YES	NO	Quantile	0.051	1.76E-01	7.80E+00	4.50E+01	NO	3.9E+01	C	NO	Nap	Nap	--	NO
Carbazole	1	23	4%	NO	NO	Quantile	0.051	3.50E+00	3.50E+00	4.70E-01	YES	1.4E+02	C	NO	Nap	Nap	--	NO
Chrysene	7	23	30%	YES	NO	Quantile	0.051	8.79E-02	1.05E+01	1.50E+02	NO	3.9E+02	C	NO	2E-10	Nap	NO	NO
Dibenzo(a,h)anthracene	1	23	4%	NO	NO	Quantile	0.051	1.85E+00	1.85E+00	1.40E+00	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Dibenzofuran	1	23	4%	NO	NO	Quantile	0.051	2.90E+00	2.90E+00	3.80E-01	YES	4.5E+01	N	NO	Nap	Nap	NO	NO
Fluoranthene	8	23	35%	YES	NO	Quantile	0.058	1.02E-01	1.95E+01	6.30E+02	NO	4.1E+03	N	NO	Nap	Nap	--	NO
Fluorene	1	23	4%	NO	NO	Quantile	0.051	4.80E+00	4.80E+00	1.40E+01	NO	4.1E+03	N	NO	Nap	Nap	NO	NO
Indeno(1,2,3-cd)pyrene	3	23	13%	YES	NO	Quantile	0.051	1.02E-01	3.85E+00	1.30E+01	NO	3.9E+00	C	NO	Nap	Nap	--	NO
2-Methylnaphthalene	1	23	4%	NO	NO	Quantile	0.051	1.20E+00	1.20E+00	4.40E-01	YES	4.1E+02	N	NO	Nap	Nap	NO	NO
Naphthalene	1	23	4%	NO	NO	Quantile	0.046	3.50E+00	3.50E+00	1.50E-02	YES	4.5E+02	N	NO	Nap	4E-01	YES	YES
Phenanthrene	5	23	22%	YES	NO	Quantile	0.051	7.98E-02	1.55E+01	Nav	--	Nav	--	--	Nap	Nap	--	NO
Pyrene	8	23	35%	YES	NO	Quantile	0.051	1.04E-01	1.85E+01	6.80E+01	NO	3.1E+03	N	NO	Nap	Nap	NO	NO
PCBs by Method 8081A or 8082																		
Aroclor 1260	5	23	22%	YES	YES[e]	--	--	1.37E-02	4.11E-02	Nav	NO	1.4E+00	C	NO	Nap	Nap	--	NO

TABLE ES-1

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-related? (Site Levels >Background?)	Basis of Test	p-Value (or a-value)	Minimum Detected Concentration (mg/kg)[e]	Maximum Detected Concentration (mg/kg)[e]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
VOCs by Method 8260B																		
1,1-Dichloroethane	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	5.10E-01	NO	2.4E+03	N	NO	Nap	8E-04	NO	NO
Acetone	8	13	62%	YES	YES[c]	--	--	1.60E-02	8.93E-02	2.20E+00	NO	9.2E+04	N	NO	Nap	Nap	NO	NO
Benzene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	1.90E-03	YES	5.2E+01	C	NO	7E-07	9E-03	NO	NO
Chloroform	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	9.10E-05	YES	3.2E+01	C	NO	2E-06	Nap	YES	YES
Ethylbenzene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	1.50E+00	NO	2.8E+02	N	NO	3E-08	7E-05	NO	NO
Methyl ethyl ketone	1	15	7%	YES	YES[c]	--	--	5.60E-03	5.60E-03	2.90E+00	NO	1.6E+04	N	NO	Nap	5E-06	NO	NO
Pentachlorophenol	1	15	7%	YES	YES[c]	--	--	2.60E-03	2.60E-03	Nav	NO	2.4E+01	C	NO	Nap	Nap	--	NO
Toluene	6	23	26%	YES	YES[c]	--	--	1.50E-03	2.03E-03	8.80E-01	NO	8.2E+03	N	NO	Nap	2E-05	NO	NO
Trichloroethene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	2.60E-04	YES	6.0E+00	C	NO	8E-06	5E-03	YES	YES
SVOCs by Method 8270C																		
bis(2-Ethylhexyl)phthalate	1	23	4%	NO	YES[c]	--	--	1.20E-01	1.20E-01	2.90E+03	NO	2.0E+02	C	NO	Nap	Nap	--	NO

Notes:

(a) See text for definition of risk assessment dataset.

(b) (No. Detections/ No. Analyses) x 100.

(c) From EPA Region III RBCs (2005a). SSLs from the RBC tables were unavailable for aluminum, cobalt, iron, lead, mercury, and nickel, and were computed as shown in Table 2-10.
Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(d) Lower value between USEPA Region III industrial RBC (2005a) and calculated trench worker RBC (Appendix C1) Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(e) Comparisons to background could not be made since the chemical in background samples was either not included in the analysis or was not detected.

(f) Although only total chromium data was collected for the site, the RBC for chromium is presented separately for Cr(III) and Cr(VI). A ratio of 6:1 is assumed for Cr(III).Cr(VI).

USEPA. 2005a. EPA Region 3 Risk-Based Concentration Tables. October. Values from April 2005 table used for aluminum and cobalt.

Bolded chemicals exceed one or more screening criteria

COPC Chemical of Potential Concern
FOD Frequency of Detection
mg/kg Milligrams of chemical per kilogram of soil
Nap Not applicable
Nav Not available
PAHs Polynuclear Aromatic Hydrocarbons
RBC Risk-based Concentration
SSL Soil Screening Level
SVOCs Semivolatile Organic Compounds
VOCs Volatile Organic Compounds

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SUBSURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-Related? (Site Levels >Background?)	Basis of Test	p-Value (or a value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
Metals/Inorganics by Method 6010B																		
Aluminum	31	31	100%	YES	YES	Two sample t-test	0.027	3.67E+03	2.02E+04	6.81E+02	YES	2.3E+04	N	NO	Nap	Nap	--	NO
Antimony	1	16	6%	YES	YES[c]	--	--	1.30E+00	1.30E+00	1.30E+01	NO	2.4E+01	N	NO	Nap	Nap	--	NO
Arsenic	28	28	100%	YES	YES	Gehan	0.000	1.20E+00	1.32E+02	2.60E-02	YES	1.9E+00	C	YES	Nap	Nap	--	YES
Barium	31	31	100%	YES	YES	Two sample t-test	0.024	1.37E+01	1.14E+02	2.10E+02	NO	4.6E+03	N	NO	Nap	Nap	--	NO
Chromium III (f)	31	31	100%	YES	YES	Two sample t-test	0.002	3.69E+00	2.79E+01	2.00E+08	NO	1.3E+05	N	NO	Nap	Nap	--	NO
Chromium VI (f)	31	31	100%	YES	YES	Two sample t-test	0.002	6.14E-01	4.66E+00	4.20E+00	YES	7.8E+01	N	NO	Nap	Nap	--	NO
Cobalt	23	23	100%	YES	YES	Two sample t-test	<0.001	7.30E-01	6.90E+00	6.60E+01	NO	1.7E+02	N	NO	Nap	Nap	--	NO
Copper	31	31	100%	YES	NO	WRS	0.861	1.70E+00	1.77E+01	1.10E+03	NO	9.1E+02	N	NO	Nap	Nap	--	NO
Iron	31	31	100%	YES	YES	WRS	0.003	3.09E+03	4.35E+04	5.54E+02	YES	6.8E+03	N	YES	Nap	Nap	--	YES
Lead	31	31	100%	YES	NO	WRS	0.296	4.40E+00	5.75E+01	2.70E+01	YES	7.5E+02	N	NO	Nap	Nap	--	NO
Manganese	29	29	100%	YES	NO	WRS	0.350	1.30E+00	2.75E+02	9.50E+01	YES	4.8E+02	N	NO	Nap	Nap	--	NO
Nickel	31	31	100%	YES	NO	WRS	0.121	5.70E-01	1.03E+01	9.52E+01	NO	1.5E+03	N	NO	Nap	Nap	--	NO
Selenium	14	31	45%	YES	YES	Quantile	0.046	5.80E-01	1.10E+00	1.90E+00	NO	1.1E+02	N	NO	Nap	Nap	--	NO
Thallium	26	30	87%	YES	YES	Quantile	0.038	5.10E-01	1.01E+01	3.60E-01	YES	1.6E+00	N	YES	Nap	Nap	--	YES
Vanadium	31	31	100%	YES	YES	Two sample t-test	0.001	1.55E+01	5.44E+01	7.30E+01	NO	8.0E+01	N	NO	Nap	Nap	--	NO
Zinc	31	31	100%	YES	YES	Two sample t-test	<0.001	2.90E+00	5.92E+01	1.40E+03	NO	6.8E+03	N	NO	Nap	Nap	--	NO
Pesticides by Method 8081A																		
Aldrin	1	31	3%	NO	YES[c]	--	--	9.50E-04	9.50E-04	7.70E-03	NO	1.7E-01	C	NO	8E-11	Nap	NO	NO
beta-BHC	3	31	10%	YES	YES[c]	--	--	4.10E-04	1.05E-03	3.10E-03	NO	1.6E+00	C	NO	Nap	Nap	--	NO
gamma-BHC	4	15	27%	YES	YES[c]	--	--	1.20E-03	1.80E-03	4.30E-03	NO	2.2E+00	C	NO	Nap	Nap	NO	NO
alpha-Chlordane	2	31	6%	YES	YES[c]	--	--	2.90E-04	1.70E-02	9.20E-01	NO	8.2E+00	C	NO	2E-10	8E-06	NO	NO
4,4'-DDD	2	31	6%	YES	YES[c]	--	--	1.38E-03	2.10E-03	1.10E+01	NO	1.2E+01	C	NO	Nap	Nap	--	NO
4,4'-DDE	5	31	16%	YES	YES[c]	--	--	1.00E-03	6.30E-03	3.50E+01	NO	8.4E+00	C	NO	Nap	Nap	NO	NO
4,4'-DDT	10	31	32%	YES	YES[c]	--	--	2.00E-03	4.75E-02	1.20E+00	NO	8.4E+00	C	NO	Nap	Nap	--	NO
Dieldrin	1	31	3%	NO	YES[c]	--	--	1.14E-03	1.14E-03	2.20E-03	NO	1.8E-01	C	NO	7E-10	Nap	NO	NO
Endosulfan II	2	31	6%	YES	YES[c]	--	--	6.30E-04	8.25E-04	2.00E+00	NO	1.4E+02	N	NO	Nap	Nap	NO	NO
Endrin	1	31	3%	NO	YES[c]	--	--	5.00E-04	5.00E-04	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Endrin ketone	1	31	3%	NO	YES[c]	--	--	1.57E-02	1.57E-02	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Heptachlor	13	31	42%	YES	YES[c]	--	--	1.80E-04	1.00E-03	8.40E-01	NO	6.4E-01	C	NO	4E-07	Nap	NO	NO
Heptachlor epoxide	6	31	19%	YES	YES[c]	--	--	1.90E-04	3.40E-02	2.50E-02	YES	3.1E-01	C	NO	Nap	Nap	--	NO
PAHs by Method 8270C																		
Acenaphthene	1	31	3%	NO	NO	Quantile	0.179	6.10E+00	6.10E+00	1.00E+01	NO	6.1E+03	N	NO	Nap	Nap	NO	NO
Anthracene	1	31	3%	NO	NO	Quantile	0.051	3.80E+00	3.80E+00	4.70E+01	NO	3.1E+04	N	NO	Nap	Nap	--	NO
Benzo(a)anthracene	6	31	19%	YES	NO	Quantile	0.058	9.23E-02	1.05E+01	1.50E+00	YES	3.9E+00	C	YES	Nap	Nap	--	YES
Benzo(a)pyrene	8	31	26%	YES	NO	Quantile	0.051	5.91E-02	9.60E+00	3.70E-01	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Benzo(b)fluoranthene	9	31	29%	YES	NO	Quantile	0.051	9.90E-02	9.70E+00	4.50E+00	YES	3.9E+00	C	YES	5E-09	Nap	NO	YES
Benzo(ghi)perylene	2	31	6%	YES	NO	Quantile	0.051	2.33E-01	3.80E+00	Nav	--	Nav	--	--	Nap	Nap	--	NO
Benzo(k)fluoranthene	4	31	13%	YES	NO	Quantile	0.051	1.76E-01	7.80E+00	4.50E+01	NO	3.9E+01	C	NO	Nap	Nap	--	NO
Carbazole	1	31	3%	NO	NO	Quantile	0.051	3.50E+00	3.50E+00	4.70E-01	YES	1.4E+02	C	NO	Nap	Nap	--	NO
Chrysene	7	31	23%	YES	NO	Quantile	0.051	8.79E-02	1.05E+01	1.50E+02	NO	3.9E+02	C	NO	2E-10	Nap	NO	NO
Dibenzo(a,h)anthracene	1	31	3%	NO	NO	Quantile	0.051	1.85E+00	1.85E+00	1.40E+00	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Dibenzofuran	1	31	3%	NO	NO	Quantile	0.051	2.90E+00	2.90E+00	3.80E-01	YES	4.5E+01	N	NO	Nap	Nap	NO	NO
Fluoranthene	8	31	26%	YES	NO	Quantile	0.058	1.02E-01	1.95E+01	6.30E+02	NO	4.1E+03	N	NO	Nap	Nap	--	NO
Fluorene	1	31	3%	NO	NO	Quantile	0.051	4.80E+00	4.80E+00	1.40E+01	NO	4.1E+03	N	NO	Nap	Nap	NO	NO
Indeno(1,2,3-cd)pyrene	3	31	10%	YES	NO	Quantile	0.051	1.02E-01	3.85E+00	1.30E+01	NO	3.9E+00	C	NO	Nap	Nap	--	NO
2-Methylnaphthalene	1	31	3%	NO	NO	Quantile	0.051	1.20E+00	1.20E+00	4.40E-01	YES	4.1E+02	N	NO	Nap	Nap	NO	NO
Naphthalene	1	31	3%	NO	NO	Quantile	0.046	3.50E+00	3.50E+00	1.50E-02	YES	4.5E+02	N	NO	Nap	4E-01	YES	YES
Phenanthrene	5	31	16%	YES	NO	Quantile	0.051	7.98E-02	1.55E+01	Nav	--	Nav	--	--	Nap	Nap	--	NO
Pyrene	8	31	26%	YES	NO	Quantile	0.051	1.04E-01	1.85E+01	6.80E+01	NO	3.1E+03	N	NO	Nap	Nap	NO	NO
PCBs by Method 8081A or 8082																		
Aroclor 1260	5	31	16%	YES	YES[c]	--	--	1.37E-02	4.11E-02	Nav	NO	1.40E+00	C	NO	Nap	Nap	--	NO

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SUBSURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-Related? (Site Levels >Background?)	Basis of Test	p-Value (or a value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
VOCs by Method 8260B																		
1,1-Dichloroethane	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	5.10E-01	NO	2.4E+03	N	NO	Nap	8E-04	NO	NO
Acetone	8	21	38%	YES	YES[e]	--	--	1.60E-02	8.93E-02	2.20E+00	NO	9.2E+04	N	NO	Nap	Nap	NO	NO
Benzene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	1.90E-03	YES	5.2E+01	C	NO	7E-07	9E-03	NO	NO
Chloroform	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	9.10E-05	YES	3.2E+01	C	NO	2E-06	Nap	YES	YES
Ethylbenzene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	1.50E+00	NO	2.8E+02	N	NO	3E-08	7E-05	NO	NO
Methyl ethyl ketone	1	15	7%	YES	YES[e]	--	--	5.60E-03	5.60E-03	2.90E+00	NO	1.6E+04	N	NO	Nap	5E-06	NO	NO
Pentachlorophenol	1	15	7%	YES	YES[e]	--	--	2.60E-03	2.60E-03	Nav	NO	2.4E+01	C	NO	Nap	Nap	--	NO
Toluene	6	31	19%	YES	YES[e]	--	--	1.50E-03	2.03E-03	8.80E-01	NO	8.2E+03	N	NO	Nap	2E-05	NO	NO
Trichloroethene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	2.60E-04	YES	6.0E+00	C	NO	8E-06	5E-03	YES	YES
SVOCs by Method 8270C																		
bis(2-Ethylhexyl)phthalate	3	31	10%	YES	YES[e]	--	--	8.60E-02	1.50E+00	2.90E+03	NO	2.00E+02	C	NO	Nap	Nap	--	NO

Notes:

(a) See text for definition of risk assessment dataset.

(b) (No. Detections/ No. Analyses) x 100.

(c) From EPA Region 3 RBCs (2005a). SSLs from the RBC tables were unavailable for aluminum, cobalt, iron, lead, mercury, and nickel, and were computed as shown in Table 2-10.
Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(d) Lower value between USEPA Region III industrial RBC (2005a) and calculated trench worker RBC (Appendix C1). Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone

(e) Comparisons to background could not be made since the chemical in background samples was either not included in the analysis or was not detected.

(f) Although only total chromium data was collected for the site, the RBC for chromium is presented separately for Cr(III) and Cr(VI). A ratio of 6:1 is assumed for Cr(III):Cr(VI).

USEPA. 2005a. EPA Region 3 Risk-Based Concentration Tables. October. Values from April 2005 table used for aluminum and cobalt.

Bolded chemicals exceed one or more screening criteria

COPC	Chemical of Potential Concern
FOD	Frequency of Detection
mg/kg	Milligrams of chemical per kilogram of soil
Nap	Not applicable
Nav	Not available
PAHs	Polynuclear Aromatic Hydrocarbons
RBC	Risk-based Concentration
SSL	Soil Screening Level
SVOCs	Semivolatile Organic Compounds
VOCs	Volatile Organic Compounds

For surface and subsurface soil intervals, 10 chemicals met the above conditions and are considered COPCs for OU1:

- Arsenic
- Iron
- Thallium
- Benzo[a]anthracene
- Benzo[a]pyrene
- Benzo[b]fluoranthene
- Dibenz[a,h]anthracene
- Naphthalene
- Chloroform
- Trichloroethene (TCE)

These 10 chemicals were further evaluated in a site-specific risk assessment even though the polynuclear aromatic hydrocarbons (PAHs) were determined to be present at background levels.

EXPOSURE ASSESSMENT

The exposure assessment identifies the degree of exposure one would expect for receptors at the site. Exposure is measured as the average daily dose (ADD) a receptor receives as a result of chemical concentrations in various exposure media and receptor-specific exposure factors. Two elements needed in estimating the ADD are the concentration of COPCs to which a receptor is expected to be (or become) exposed (i.e., exposure point concentration [EPC]) and the intake factors that estimate the degree to which chemicals enter the body of the receptor.

EXPOSURE POINT CONCENTRATIONS

EPCs are typically represented by average concentrations. For adequately sized data sets, EPA has developed ProUCL software for determining a conservative estimate for the average concentration (EPA 2004a). The estimates involve computing the upper percent confidence level (UCL) (95 UCL to 99 UCL) on the mean concentration in accordance with ProUCL recommendation. Because the uncertainty of the UCL increases as the detection frequency decreases, ProUCL was utilized only for those data sets having fewer than (or equal to) 15 percent non-detections; where the UCL exceeded the maximum detected concentration (MDC), the latter was used as the EPC. For chemicals with fewer than 11 detections, the MDC was used as the EPC.

ESTIMATION OF AVERAGE DAILY DOSES

The chemical intake or ADD for each receptor and exposure route was calculated using the general equation (EPA 1989). Averaging time (and as a result, ADD) is different for carcinogens and

noncarcinogens. To determine the ADD from dermal absorption, the dermal absorption factor for each COPC is included. Equations used to calculate the specific ADD for each receptor and exposure pathway are presented in Appendix D.

TOXICITY ASSESSMENT

Information about chemical toxicity is needed in estimating risks. Toxicity values provide a quantitative estimate of the relationship between the magnitude of exposure and the likelihood or severity of adverse health effects (i.e., dose-response assessment [EPA 1989]). The derivation of toxicity values differs for carcinogens and noncarcinogens and results in cancer slope factors (CSFs) and reference doses (RfDs), respectively. EPA provided policy for identifying the appropriate toxicity values for use in risk assessments (EPA 2003a). In the policy, a hierarchy was defined that was to be used in selecting the appropriate toxicity values. The foremost source of toxicity information is the Integrated Risk Information System (IRIS); when toxicity information and factors are not available in IRIS, a provisional value is sought (EPA 2003a). Sources for provisional values include the EPA's provisional peer-reviewed toxicity values for Superfund, Agency for Toxic Substances and Disease Registry minimal risk levels, National Center for Environmental Assessment, and the Office of Environmental Health Hazard Assessment of the California EPA.

RISK CHARACTERIZATION

In the risk characterization, ADDs of each COPC are applied in conjunction with toxicity values (RfDs and CSFs) to estimate non-carcinogenic and carcinogenic health risks.

Risk estimates are presented for each receptor and include the background contribution (Table ES-3). Total carcinogenic risk and non-carcinogenic hazard estimates are determined by summing the risks of all pathways.

Table ES-3. Risk Characterization Summary – Operable Unit 1

Current Industrial Worker		HI	Risk
	TOTAL	0.5	1E-04
	Background:	<0.01	5E-05
	Site-Related:	0.5	4E-05
Future Outdoor Industrial Worker		**HI**	**Risk**
	TOTAL	0.3	9E-05
	Background:	<0.01	6E-05
	Site-Related:	0.3	3E-05
Current Indoor Industrial Worker		**HI**	**Risk**
	TOTAL	<0.01	1E-07
	Background:	--	2E-09
	Site-Related:	<0.01	1E-07
Future Indoor Industrial Worker		**HI**	**Risk**
	TOTAL	0.2	1E-07
	Background:	0.2	2E-09
	Site-Related:	<0.01	1E-07
Future Construction Worker		**HI**	**Risk**
	TOTAL	1	5E-06
	Background:	<0.01	3E-06
	Site-Related:	1	2E-06
Current/Future Off-site Residents		**HI**	**Risk**
	TOTAL	<0.01	<1E-07

Notes

HI	Hazard Index
Risk	Incremental Lifetime Cancer Risk

UNCERTAINTY ANALYSIS

Uncertainties affecting the risk estimates occur in each element of the risk assessment process, namely data assessment, exposure assessment, toxicity assessment, and risk characterization. However, based on the conservative nature of the risk assessment process, the risk estimates presented are likely overestimated. One reason for the potential overestimation of risks is data representativeness.

The data set used to evaluate risks at OU1 was taken from the 1998 soil investigation for the natural gas line and the 2002 soil survey for the fiber-optics line. Although the results from these soil surveys may not accurately reflect site-related drum recoupment and drum storage activities, the data do provide important information on the concentrations to which receptors may become exposed within OU1.

Samples were originally collected from other areas of OU1; however, during the data assessment period for this HHBRA, all data collected prior to 1992 were removed because of uncertainty associated with the quality of the data. The removal of data from these locations resulted in a less representative data set since sample locations used to estimate risks at OU1 are disproportionately focused along one storage row and along the western road. Based on a qualitative evaluation of the pre-1992 data, the following conclusions can be made regarding representativeness of the current data set:

- The current data set is likely adequate in identifying COPCs since the MDCs of all additional chemicals in the pre-1992 data were at least an order of magnitude lower than RBCs for direct exposure.
- Except as stated below, the current data set is likely sufficiently representative to estimate risks even though average chemical concentrations could potentially be underestimated or overestimated.
- The current data set may identify chemical-specific risks as site-related (e.g., arsenic) although the chemical may be present at background levels.

CONCLUSIONS AND RECOMMENDATIONS

Potential cancer risk for current outdoor industrial workers exposed to surface soil was estimated at 1E-04. For future outdoor workers who may become exposed to COPCs in surface and subsurface soils, the potential cancer risk was 9E-05. These estimates are within the target risk range of 1E-06 to 1E-04. Much of this risk (approximately 70 percent) is due to background levels of carcinogenic PAHs. Without background contribution, the estimated cancer risks for current and future industrial workers are 4E-05 and 3E-05, respectively. This remaining site-related risk is due primarily to arsenic. Non-cancer hazard estimates were below 1.

Potential risks for current indoor workers were below target risk levels since the only chemicals detected in soil gas samples (i.e., 1,2,4-trimethylbenzene and hexane) were not detected at concentrations that could pose an unacceptable risk for indoor exposures. For future indoor workers, the potential cancer risk from indoor vapor inhalation was estimated at 1E-07, which is below the target risk range of 1E-06 to 1E-04. The estimated non-cancer hazard was below 1.

Potential cancer risk for future construction workers who may become exposed to surface and subsurface soils was estimated at 5E-06, which is within the target risk range of 1E-06 to 1E-04. The estimated non-cancer hazard was near 1, with arsenic posing much of the risk. Target organ segregation resulted in no organ-specific hazard that exceeded the target hazard of 1.

For outdoor industrial workers and construction workers, incidental soil ingestion is the exposure pathway producing most of the overall chemical dose, with most of the risk (and hazard) due to arsenic and benzo[a]pyrene. The estimates for outdoor industrial workers and construction workers are likely conservative for the following reasons:

- The estimates assume the reasonable maximum exposure scenario.
- The site-related risk is predominantly driven by arsenic, for which the MDC of 132 milligrams per kilogram highly weights the EPC.
- The data set used to calculate EPCs is likely biased high, resulting in potentially elevated EPCs and the potentially incorrect conclusion that certain chemicals (most notably, arsenic) exceed background concentrations.
- The bioavailability of arsenic and benzo[a]pyrene in soil is likely lower than the bioavailability of these COPCs in water or food used during toxicity testing.

A number of background chemicals were detected at levels that exceeded EPA Region III industrial soil RBCs, including most notably benzo[a]pyrene and dibenz[a,h]anthracene.

Potential cancer risks associated with exposure to background levels in surface and subsurface soils were estimated as 5E-05 for current industrial workers, 6E-05 for future industrial workers, and 3E-06 for future construction workers. These risk levels are approximately 1 to 2 times higher than the risk posed by site-related COPCs.

1.0 INTRODUCTION

1.1 PURPOSE

1.1.0.1 This document presents a Revised Human Health Baseline Risk Assessment (HHBRA) for Operable Unit (OU) 1 at the Defense Supply Center Richmond (DSCR), Virginia. OU1 consists of a 43-acre fenced drum storage area known as the Open Storage Area (OSA). The Revised HHBRA estimates risks at OU1 based on current and anticipated future land use with an industrial exposure scenario. Previous HHBRAs at the OSA focused on direct exposure to soils. This HHBRA also focuses on the soils of the OSA and includes indirect exposure pathways not previously considered.

1.2 CERCLA RISK ASSESSMENT PROCESS

1.2.0.1 The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) established a national approach to protect human health and the environment from current and potential threats from hazardous substances. Site chemical concentrations are evaluated in a HHBRA using the following steps:

- Data evaluation
- Exposure assessment
- Toxicity assessment
- Risk characterization
- Uncertainty evaluation

1.2.0.2 Data evaluation for the HHBRA includes evaluation of available chemical data, development of a data set, and identification of chemicals of potential concern (COPCs). The review of the available chemical data historically collected for site characterization encompasses evaluation of qualified results, removal of quality assurance (QA) and quality control (QC) results, and averaging of duplicate results. The maximum detected concentration (MDC) of each analyte is determined for each appropriate medium using this finalized data set. Coupled with information regarding detection frequency and background levels of various chemicals, MDCs are compared to conservative risk-based screening levels that are protective of human health to narrow the data set to those chemicals likely to significantly contribute to the overall risk for the defined exposure pathways (i.e., COPCs).

1.2.0.3 The exposure assessment couples an exposure point concentration (EPC) with intake assumptions (IAs) to determine an average daily dose (ADD) for each COPC, receptor, and exposure pathway. Each COPC is statistically evaluated, and chemicals with fewer than (or equal to) 15 percent non-detections are analyzed using ProUCL to determine an upper confidence limit (UCL) on the mean concentrations with at least 95 percent confidence. The lesser of the UCL and the MDC is chosen as the

EPC for "direct" or soil exposure pathways and as the basis for calculating EPCs through "indirect" pathways. Indirect pathways involve at least one intermedium-transfer step.

1.2.0.4 The HHBRA toxicity assessment evaluates noncarcinogenic and carcinogenic effects using toxicity values from the United States Environmental Protection Agency's (EPA's) Integrated Risk Information System (IRIS) and provisional peer-reviewed toxicity values (PPRTVs) developed by the National Center for Environmental Assessment (NCEA) and the Superfund Health Risk Technical Support Center.

1.2.0.5 Risk characterization predicts the site-specific response for each receptor, pathway, and COPC by combining the ADD with dose-response toxicity values to produce noncarcinogenic hazard quotients (HQs) or individual incremental cancer risks. These chemical-specific and pathway-specific responses are summed for each receptor to produce the total noncarcinogenic hazard index (HI) and the incremental lifetime cancer risk and are then compared with acceptable levels as determined by regulatory agencies. Chemicals whose concentrations exceed benchmark levels established for the site are identified as chemicals of concern (COCs) and may require remedial action to mitigate potential health effects for receptors.

1.2.0.6 The HHBRA uncertainty analysis identifies and evaluates the effect of uncertainty in the values of the variables on the characterization of risk. Specifically, the uncertainty in major elements of the risk assessment (i.e., data evaluation, exposure assessment, toxicity assessment, and risk characterization) is evaluated to define the overall uncertainty in the risk assessment. This evaluation allows the level of conservatism to be qualified, thus providing a measure of confidence in the HHBRA results for application in risk management decisions.

1.2.0.7 The OU1 Revised HHBRA is based upon the *Draft Revised Human Health Baseline Risk Assessment Work Plan for DSCR* (as approved) *(Work Plan)* (Mactec 2005a). Revisions to earlier risk assessment work plans include the following items:

- Risks associated with the inhalation of volatile organic compounds (VOCs) that resulted from potential soil vapor migration will be evaluated for indoor industrial workers.
- Risks associated with background levels of various COPCs are identified and presented.
- Following EPA (1989) risk assessment guidance, "JB"-flagged data are eliminated from the data set and are not retained as nondetections. "B"-flagged data, chemicals with blank sample concentrations exceeding the QA criteria as defined in the *Final General Sampling and Analysis Plan* (Mactec 2004), are included in the total chemical database for OU1 (Attachment A.1 to Appendix A), but were removed from the data set prior to

HHBRA analysis. For OU1, "B"-flagged data were defined similarly for organic and inorganic chemicals.

- IAs are updated to reflect more recent regulatory guidance.

1.3 SITE DESCRIPTION

1.3.0.1 The DSCR is located 11 miles south of Richmond, Virginia, and 16 miles north of Petersburg, Virginia, in Chesterfield County (Figure 1-1). Purchased by the U.S. Army in 1941, the DSCR is operated by the Defense Logistics Agency (DLA). The main function at DSCR is to manage and furnish general military supplies to the U.S. Armed Forces and several Federal civilian agencies (Dames & Moore 1989). The OSA (OU1) supports this function by providing a 43-acre fenced and access-restricted area, which originally was used for the storage of bulk drummed chemicals and re-containment of damaged drums. The majority of the bulk drummed materials were 55-gallon drums containing petroleum, oils, and lubricants (POLs), but the inventory also includes solvents, pesticides, herbicides, and compressed gas.

1.3.0.2 The OSA is primarily a level, gravel-covered site that is not vegetated (Dames & Moore 1989). Natural near-surface soils are considered "made land" since they have been either regraded or removed (U.S. Department of Agriculture 1978, as cited in Dames & Moore 1989). Recent modifications to the OSA include construction of a recoupment annex building in 1995, a covered storage structure for oil drums, several large asphalt and gravel open storage areas, and asphalt and gravel roadways. The OSA is currently used primarily for the storage of empty compressed gas cylinders.

1.3.0.3 Soil types at OU1 range from a loamy sand to clay. The top 80 feet of stratigraphy consist of unconsolidated soils, including 15 to 25 feet of sand, silt, clay, and gravel of the Eastover Formation; approximately 11 feet of clay and silt of the Calvert Formation; 8 feet of dense silt, sand, and gravel of the Aquia Formation; and approximately 43 feet of sand and gravel of the Potomac Formation. The Calvert and Aquia Formations compose the confining unit that separates two aquifers.

1.3.0.4 The OSA has storm sewer inlets that feed into No-Name Creek. Surface drainage tends toward the northeast. Potential leaching of soil contaminants into the groundwater from this and adjacent OUs is addressed in a separate evaluation (i.e., the OU6 evaluation [Mactec 2005a]).

1.4 REGULATORY HISTORY

1.4.0.1 Soil samples have been collected at numerous locations to assess the impact of storage activities (Figure 1-2). Early investigations indicate that drummed chemicals were primarily stored on the ground surface or on pallets in stacks two- to four-containers high (Chemical Systems Laboratory 1981).

Past spills of POL and three pesticide spills between 1977 and 1980 produced stained soils. Analytical results of soil samples collected in these areas indicated the presence of polynuclear aromatic hydrocarbons (PAHs), metals (arsenic, antimony, cadmium, and chromium), VOCs, and pesticides.

1.4.0.2 As a result of these spill incidents, the DSCR was recommended for inclusion on the National Priorities List (NPL) under CERCLA in 1984 and was added to the NPL in 1987 (Law Engineering and Environmental Services, Inc. [Law] 1997). In 1986, EPA Region III issued a Corrective Action Permit to the DSCR pursuant to the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 *et seq.* (Law 1997). In 1989, three remedial investigation reports (including OU1) were issued as part of the RCRA permit activities to determine the extent and magnitude of contamination resulting from site activities (Dames & Moore 1989). The main COPCs identified in OU1 soil at that time were PAHs, with other constituents being VOCs, pesticides, and metals (antimony, arsenic, cadmium, and chromium). Most of the contamination was restricted to surface soil as the highest detections of PAHs, and pesticides were noted in soil samples from 0 to 4 feet below ground surface (bgs).

1.4.0.3 The risk assessment evaluated exposure to site soils by an on-site worker through ingestion, inhalation of fugitive dust, and dermal contact (Law 1994). The risk assessment also evaluated the inhalation of fugitive dust by off-site (but on-base) residents. The risk assessment did not evaluate inhalation of VOCs in vapors. The cumulative carcinogenic risk for the occupational adult worker was 3E-05, and the carcinogenic risk for the resident was 3E-06. For the site worker, risks for the incidental ingestion and dermal contact pathways were equal to or greater than 1E-05. The main carcinogenic risk drivers for the site worker were arsenic, beryllium, and several PAHs, and for the resident was arsenic. The cumulative HIs were below 1 for both receptors.

1.4.0.4 The final *Record of Decision (ROD) for OU1*, signed in May 1992, included an interim remedy that restricted access at the OSA to limit exposure to site soils and that incorporated institutional controls (DLA 1992).

1.4.0.5 During the initial 5-year review in 1997, the remedy presented in the *ROD* was reviewed to determine whether institutional controls were still protective of human health at OU1. Site data were compared to risk-based concentrations (RBCs). These RBCs were developed to be protective of a worker who may become exposed to site contaminants through incidental ingestion, dermal contact, or inhalation of fugitive dust during excavation activities (Law 1992). Because the level of exposure assumed in the derivation of RBCs is greater than that expected by on-site workers, the RBCs were deemed protective of industrial exposure scenarios anticipated for OU1. Chemical concentrations in soil were also compared to background levels to determine those COPCs that are the result of site-related activities. Only seven

chemicals exceeded background levels, including antimony, cadmium, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, di-n-octylphthalate, and 4,4'-dichlorodiphenyltrichloroethane (4,4'-DDT). Only the MDC of antimony (6.6 milligrams per kilogram [mg/kg]) exceeded the RBC of 6.0 mg/kg, but this sample was collected at a depth of over 15 feet bgs. The final recommendation of the 1997 5-year review was for no additional action but for continued implementation of institutional controls.

1.4.0.6 Since the 1997 5-year review, two additional soil sampling events have been conducted. In 1998, soil samples were collected prior to the installation of a natural gas line through OU1 (Mactec 2003), and in 2002, soil samples were collected prior to the installation of a fiber-optics line along the western road of OU1 (Central Virginia Laboratories and Consultants 2003).

1.4.0.7 The second 5-year review was completed in July 2003 (Mactec 2003). Data used in the review include all samples through the 1998 soil sampling event; however, results from the fiber-optics survey were not included. A site inspection of OU1 revealed changes to the site since the original remedy selection, including construction of a recoupment annex in 1994 and 1995, installation of a natural gas pipeline in 1999, and removal of railroad tracks in the area (Mactec 2003). Results of the second 5-year review indicated that the interim remedy (i.e., institutional controls) continues to function as intended in the *ROD* in preventing direct exposure to soils; however, three elements of the remedy needed reconsideration:

1. Chemical concentrations in soil may have had the potential to leach to groundwater.
2. Inhalation of soil vapor in buildings needed to be evaluated.
3. Continuing sources of groundwater contamination needed to be identified.

1.4.0.8 In accordance with the recommendations in the *Five-Year Review for OU1* (Mactec 2003), inhalation of soil vapor in current and future buildings is included in this Revised HHBRA, along with direct routes of exposure to soil (based on the 1998 and 2002 soil data). To address potential indoor inhalation in current buildings, four soil gas samples were collected in 2004 via Summa™ canisters. Other potential hazards, including the leaching and potential impacts of contaminants to groundwater, are addressed in the OU6 groundwater evaluation.

2.0 DATA EVALUATION

2.0.0.1 This section presents the details of the data quality assessment process that results in the final data set used for risk assessment purposes. This section also presents the procedures and results of a screening process by which COPCs are identified.

2.1 DATA QUALITY ASSESSMENT AND DATA REDUCTION

2.1.0.1 Numerous soil samples have been collected over time at various OU1 locations (see Figure 1-2). In addition, four soil gas samples were collected in April 2004 adjacent to buildings in which storage activities take place. Typically, a data quality assessment is conducted in accordance with the site QA management plan or program plan. In general, the data were validated by the analytical laboratory and underwent a separate third-party QA validation.

2.1.0.2 Data collected prior to 1992 were not included in the chemical data set for OU1 (Table A-1 of Appendix A) in accordance with the approved HHBRA Work Plan (Mactec 2005a, as modified). The effect on sample representativeness of removing pre-1992 data is discussed in Section 6, Uncertainty Analysis.

2.1.0.3 Soil samples collected in 1998 underwent a data quality validation process similar to that detailed in *Quality Assurance Project Plan* of the *Final General Sampling and Analysis Plan* (Mactec 2004). Soil samples obtained during the October 2002 proposed fiber-optic investigation in OU1 were analyzed, and the results were validated by Accutest according to its *Quality Assurance Management Plan*. The data were further validated by Test America Incorporated according to its *Quality Assurance Program Plan* (Central Virginia Laboratories and Consultants 2003).

2.1.0.4 Soil gas samples collected in 2004 were analyzed by approved laboratories and validated according to the procedures outlined above for soil (Mactec 2004). The chemical data set for soil gas, with the exception of the QA/QC results, is presented in Table A-2.

2.1.0.5 This HHBRA focuses on data from the impacted area(s) within OU1. Chemicals detected at least once underwent a screening procedure to identify those chemicals that should be retained for further evaluation. The resulting relevant data sets are identified to determine site-related chemicals and chemical EPCs to which receptors may reasonably be exposed. To obtain a data set that is relevant for risk assessment purposes and that meets the data quality objectives (DQOs) for the site, the chemical data set required further data selection filters or data reduction rules, as follows:

- Data for essential nutrients such as calcium, chloride, potassium, and sodium, for which EPA Region III RBCs are lacking, were omitted.
- Data for undetected chemicals were removed but were evaluated for adequacy of reporting limits.
- The OU-specific background sample CSMDPT-12SO was omitted.
- All QA/QC sample results were removed.
- Data qualified by the laboratory as "R" (rejected) were omitted.
- Data qualified by the laboratory as "B" were omitted. B-qualified data represent analyte concentrations that, depending on the chemical, were less than 5 or 10 times the concentration detected in the associated laboratory and/or field blank. As mentioned earlier, the "B" flag was applied to both inorganic and organic chemicals. As a result of blank contamination, 102 soil sample results were removed from the data set:
  - Common laboratory agent's acetone and methylene chloride invalidated 43 results.
  - The remaining 59 results were invalidated by the presence of at least one of the following metals in the laboratory or field blank: antimony, arsenic, beryllium, cobalt, manganese, mercury, or thallium.
- Duplicate sample results and original sample results were averaged where present (Mactec 2005a). When either or both results were non-detections, the reporting limit was halved before averaging.
- Data results for α-chlordane were added to results for γ-chlordane, and the sum was combined with "Technical Chlordane" since each of these isomers were analyzed in different samples.

Evaluation of Sample Reporting Limits

2.1.0.6 The lower value between two non-residential sets of soil RBCs were used as screening levels in this evaluation since the restricted future use of the site excludes residential use: EPA Region III industrial RBCs and soil RBCs that were derived to be protective of a construction trench worker (see Section 2.3.4). Reporting limits were evaluated to determine if they were sufficiently below the appropriate screening values. Specifically, the range of reporting limits for each non-detected chemical in soil was compared to the lower value between EPA Region III industrial soil RBC and the RBC that was derived for a worker in a trench setting (Table 2-1). The range of reporting limits for all chemicals in both surface soil and subsurface soil was below the RBCs. Therefore, the exclusion of non-detected chemicals is not believed to result in an underestimation of risk, even if a chemical is truly present at or below its reporting limit.

2.1.0.7 Reporting limits for soil-gas results were also evaluated for their adequacy in meeting screening purposes. While guidance for the EPA Johnson-Ettinger (J&E) model provides soil-gas screening values, these criteria were developed for the residential exposure scenario (EPA 2002a) and were deemed inappropriate for evaluation of the industrial scenario. To screen chemicals for the industrial setting, the model was configured as follows. Soil and exposure conditions were the same as those identified in Section 2.3.5 and Section 3.2. Toxicity values in the model were updated with current information from the Oak Ridge National Laboratory's Risk Assessment Information System (2005). No route-to-route extrapolation was used to estimate either the unit risk factor or the reference concentration (RfC) from oral toxicity information. Reporting limits were then input into the J&E model, and the resulting risk estimates were tabulated (Table 2-2). An example of the J&E model run for benzene is presented in Table A-3 of Appendix A.

2.1.0.8 Fourteen of the 45 chemicals analyzed in the soil gas had reporting limits that could potentially lead to a significant, but unrecognized, indoor risk (Table 2-2). If any of these 14 chemicals are truly present in soil at the reporting limits, indoor air risks could be significantly underestimated. However, of these 14 chemicals, only benzene, chloroform, and trichloroethylene (TCE) were detected in soil. Each of these three chemicals was detected only once. Therefore, the likelihood of these chemicals truly being present in soil-gas and improperly omitted as COPCs in soil is low.

2.1.0.9 Based on the data quality assessment and reduction procedures identified above, the final chemical data set used to evaluate risks at OU1 was established for both soil sample results and soil gas results (Tables A-4 and A-5 in Appendix A). In accordance with the *Work Plan* (Mactec 2005a), soil data were segregated into surface and subsurface soil data. While surface soil was originally defined as the interval between 0 and 2 feet bgs, data for OU1 were collected from the 0- to 3-foot bgs interval. Subsurface soil samples consist of the 3- to 6-foot bgs interval. However, since exposure to subsurface soils first requires exposure to surface soils, the subsurface soil interval used in this risk evaluation includes the 0- to 3-foot bgs interval.

2.1.0.10 Potential vapor migration may also occur from groundwater and soil depths greater than 15 feet. Potential vapor migration from groundwater will be further assessed in a separate evaluation (OU6) (Mactec 2005a). While data from soil depths greater than 15 feet were originally collected, all of these data were collected prior to 1992. Without knowing the quality of this data set, its use in evaluating vapor migration is questionable and therefore was not used.

2.1.0.11 The final soil data set used to evaluate risks at OU1 consists of 15 inorganic metals, 9 VOCs, 18 PAHs plus 1 additional semivolatile organic compound, 13 pesticides, and 1 polychlorinated biphenyl (PCB). Each of these chemicals was evaluated for its potential to pose an unacceptable risk at OU1.

2.2 CONCEPTUAL EXPOSURE MODEL

2.2.0.1 The evaluation of risks at OU1 requires an understanding of chemicals present, persons who are or may become exposed, and the manner in which they are potentially exposed. The conceptual exposure model (CEM) is a schematic representation of the chemical source areas, chemical release mechanisms, environmental transport media, potential exposure routes, and potential receptors. It is used to guide the evaluation of potential exposures so that relevant pathways, exposure routes, and ultimately risk can be evaluated in the HHBRA. The primary purpose of the CEM in this risk evaluation is to represent chemical sources and exposure pathways that may result in human health risks. Only potentially complete exposure pathways are evaluated quantitatively in the risk assessment, consistent with EPA guidance (EPA 1989). A complete exposure pathway includes all of the following elements:

- Sources and types of chemicals present
- Affected media
- Chemical release and transport mechanisms
- Known and potential routes of exposure
- Known or potential human and environmental receptors

2.2.0.2 The absence of any one of these elements results in an incomplete exposure pathway, which requires no further evaluation. Figure 2-1 is the CEM for current and anticipated future receptors potentially exposed to COPCs in surface and subsurface soil at OU1. Information from the CEM is transcribed into a table format as recommended in the *Risk Assessment Guidance for Superfund (RAGS), Part D* (EPA 2001a) and presented as Table A-6 (Appendix A). The exposure pathways for each scenario and each receptor shown in the CEM are described below.

2.2.1 Land Use and Receptors

2.2.1.1 Access to the OSA by various receptors is limited by the restrictions of fencing and its location within an operating U.S. Armed Forces complex. Therefore, on-site receptors are restricted to industrial workers and construction workers. A distinction was made between outdoor industrial workers, who spend more time outside and are potentially in direct contact with soils, and indoor workers, who are more likely to be exposed via inhalation of VOCs in indoor air. While workers may actually engage in both indoor and outdoor activities, the separate evaluation of these two exposure scenarios provides a conservative estimate of risks associated with each of these exposure scenarios. For example, exposure

for indoor workers was purposely restricted to the inhalation of indoor VOCs during a complete work day to maximize potential chemical intake from this exposure pathway. For an indoor worker to be significantly exposed to soils would require less time spent indoors and more time spent outdoors. Thus, the additional chemical intake that could occur from exposure to soils would be countered by the reduction of intake through the inhalation of indoor VOCs. The addition of intake from exposure to soil to that from indoor inhalation of VOCs was not calculated since each is based on a complete work day; their addition essentially adds two work days together, creating an unlikely exposure setting. In addition to on-site workers, off-site residents may also be indirectly exposed to site soils through the migration of soil dust. Therefore, the current human receptors identified for evaluation include the following:

- Current on-site outdoor industrial workers (adult)
- Current on-site indoor industrial workers (adult)
- Current off-site residents (adult/child) residing in the downwind direction

2.2.1.2 Future land use at OU1 is restricted to industrial use. Therefore, future on-site receptors are expected to remain similar to the current use. However, future construction of office buildings or warehouses or the installation of utilities could provide a different type of exposure condition that requires separate evaluation. Because unrestricted future development at the boundary of the installation is possible, the location for off-site residential use is much closer than for the current situation. Future receptors include:

- Future on-site outdoor industrial workers (adult)
- Future on-site indoor industrial workers (adult)
- Future on-site construction workers (adult)
- Future off-site residents (adult/child) residing at the facility boundary

2.2.2 Exposure Pathways

2.2.2.1 Exposure pathways are specifically associated with the environmental medium being evaluated. In a generic context, soil, water, and air pathways may facilitate exposure; each of these might result in intake by applicable exposure routes, such as ingestion, dermal absorption, or inhalation. In most settings, exposure pathways may be incomplete or complete. Some exposure pathways that may be technically complete are deemed insignificant and need not be evaluated further. The rationale for designating exposure pathways as complete, incomplete, or complete but insignificant is presented below.

Potentially Complete Exposure Pathways

2.2.2.2 Based on analysis of the CEM, the following exposure pathways were considered for evaluation:

- Incidental ingestion of chemicals in surface soil is potentially complete for current on-site outdoor industrial workers since work activities would likely require them to come into direct contact with surface soils.

- Incidental ingestion of chemicals in subsurface soil is potentially complete for future on-site construction workers since work activities would likely require them to come into direct contact with subsurface soils. Excavation activities could expose subsurface soils or re-deposit them on the ground surface, providing exposure for future outdoor on-site industrial workers.

- Dermal absorption of chemicals in surface soil is potentially complete for current on-site outdoor industrial workers since work activities would likely require them to come into direct contact with surface soils.

- Dermal absorption of chemicals in subsurface soil is potentially complete for future on-site construction workers since work activities would likely require them to come into direct contact with subsurface soils. Excavation activities could expose subsurface soils or re-deposit them on the ground surface, providing exposure for future outdoor on-site industrial workers.

- Inhalation of fugitive particulates from surface soils is potentially complete for current on-site outdoor industrial workers engaged in outdoor activities during dust-generating conditions.

- Inhalation of fugitive particulates from subsurface soils (if disturbed or otherwise re-deposited on the ground after excavation) is potentially complete for all future receptors engaged in outdoor activities during dust-generating conditions.

- Inhalation of VOCs that have migrated from soil source areas into indoor air for current and future on-site indoor workers is potentially complete.

- Inhalation of VOCs that have migrated from groundwater source areas into indoor air for on-site indoor workers and off-site residents. This pathway will be evaluated as part of a separate groundwater evaluation (OU6).

- Inhalation by construction workers of VOCs that have migrated from groundwater source areas into a trench during excavation activities. This pathway will be evaluated as part of a separate groundwater evaluation (OU6).

- Dermal absorption and ingestion of chemicals in groundwater may be potentially complete for future on-site and off-site residents through possible use of groundwater as a source for tap water. Current off-site residents do not utilize groundwater as their drinking water source. This pathway will be evaluated as part of groundwater (OU6).

2.2.2.3 Although groundwater beneath OU1 will be evaluated as a separate OU, the total risk for current and future on-site workers includes only exposure to VOCs in groundwater that may migrate into buildings or ambient air. The uncertainty associated with the exclusion of groundwater from the estimation of site risks is presented in Section 6.2, Uncertainties in Exposure Assessment.

Incomplete or Insignificant Exposure Pathways

2.2.2.4 Of those exposure pathways that are presented on Figure 2-1, several have been deemed incomplete, insignificant, or not applicable to the HHBRA. Thus, these pathways do not warrant quantitative assessment. The rationale for excluding a pathway from further evaluation includes:

- Inhalation of VOCs in ambient air resulting from surface soils and subsurface soils by all current and future receptors is considered a complete, but insignificant exposure pathway because of the expected degree of dilution in ambient air as VOC vapors mix with fresh air, the degree of dispersion expected with any travel distance due to local wind conditions, and the general infrequency with which VOCs are detected in soils (only one detection except for acetone and toluene). The low detections of risk drivers such as 2 ug/kg of chloroform and trichloroethene are at least an order of magnitude lower than screening values that can be calculated using USEPA's online calculator tool (http://rais.ornl.gov/epa/ssl1.shtml) (Table A-7, Appendix A).

2.3 CHEMICALS OF POTENTIAL CONCERN

2.3.0.1 The presence of the chemicals in soil may be the result of site-related activities or due to natural or anthropogenic background conditions. The detection of a chemical in soil does not necessarily mean it is problematic; some chemicals may have the potential to cause adverse health while others do not. To identify those site-related chemicals in soil that could potentially pose adverse health (i.e., COPCs), a screening process is needed whereby analytical results are compared to levels having negligible potential for adverse health effects. Through this screening process, chemicals that have little potential for causing adverse health are omitted from further evaluation, and COPCs are retained for a more rigorous risk evaluation.

2.3.0.2 The identification of COPCs at OU1 consisted of a four-step evaluation (Mactec 2005a):

1. Frequency of detection for each chemical detected in soil
2. Comparison of site-related chemical data sets to background data sets
3. Comparison of MDCs to applicable or relevant and appropriate requirements (ARARs)
4. Comparison of MDCs to RBCs

2.3.0.3 Each of these steps is detailed below.

2.3.1 Frequency of Detection

2.3.1.1 Significant risks from a site are not likely to result from exposure to chemicals that are not frequently present. The frequencies of detection for each detected chemical in surface soil, subsurface soil, and soil gas are presented in Tables 2-3 through 2-5. Early risk assessment guidance for Superfund identified a minimum detection frequency of 5 percent for chemicals to be further evaluated (EPA 1989).

At DSCR, this criterion may be used only if the chemical is not reasonably associated with site-related activities, the concentration of detections is low, and the chemical is infrequently detected in all other media (Mactec 2005a). Because of the uncertainty of whether the chemical was ever used, stored, or otherwise present at the site, this criterion alone was insufficient to eliminate possible COPCs in soil at OU1.

2.3.2 Comparison to Background

2.3.2.1 Analytical data from OU1 reflect site-related activities and background conditions (whether naturally occurring or anthropogenic). To specifically ascertain risks associated with OU1, the evaluation of risks from site-related activities would ideally consider only those chemicals with concentrations that are greater than background. Therefore, the evaluation of risks from OU1 considered all chemicals; however, those background chemicals likely to pose significant risks are identified and reported. The difference between these two risk estimates, as reported, can then be taken as the risk associated with site-related activities.

2.3.2.2 Background comparisons entailed statistical evaluations that focused on either mean (or median) values when the data set had sufficient detections, or if not, on the highest values of a ranked ordered set. Including the procedures outlined in the work plan (Mactec 2005a), the following process details the steps taken to identify those chemicals that are present at OU1 above background and are considered site-related.

2.3.2.3 The background data set (Table A-8, Appendix A) includes 53 chemicals detected in any of 18 locations throughout the facility, including 1 within OU1 (Figure 2-2) (Mactec 2005a). The data set for risk assessment purposes at OU1 identified 57 detected chemicals. Of these chemicals, only 37 were included in the background comparison. Others were omitted because either the chemicals were not analyzed in background soil samples or were not detected in the background samples. Regardless of the reason, the following 27 chemicals have no background complement for comparison purposes, and as such, are considered site-related:

- 1,1-Dichloroethane
- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- Acetone
- Aldrin
- Antimony
- Aroclor 1260
- Benzene
- beta-Hexachlorocyclohexane (BHC)
- gamma-BHC
- bis(2-Ethylhexyl)phthalate
- Carbazole
- Chloroform
- Technical-chlordane
- Dibenzofuran
- Dieldrin
- Endosulfan II
- Endrin
- Endrin ketone
- Ethylbenzene
- Heptachlor
- Heptachlor epoxide
- Methyl ethyl ketone (MEK)
- Pentachlorophenol
- Toluene
- TCE

2.3.2.4 The method used to compare each of the remaining 30 chemicals to background concentrations is based on the procedure described in the approved *Work Plan* (Mactec 2005a as modified), with one minor change as described below. The choice of method used for the background comparison depended in part upon the number of detections and distributions of data in both the OU1 and background data sets. Where all or virtually all results are detections, the sample set is adequate to estimate mean values. When available for both site and background areas, data sets with sufficient detections allow for the use of parametric statistical tests such as the two sample *t*-test. Up to a frequency of 15 percent, nondetections will have little influence on estimates of mean values, and the use of parametric tests provides the most powerful statistical method to detect differences in mean concentrations between OU1 and background soils.

2.3.2.5 As the number of nondetections increases, estimates of the mean values become increasingly uncertain because the reporting limits for nondetected results have greater influence in these estimates. In these instances (e.g., when nondetected values are greater than 15 percent but less than 50 percent), comparisons between site and background conditions cannot accurately be evaluated using mean values and must instead rely on median values. The Wilcoxon Rank Sum (WRS) test (for data sets with single reporting limits) and the Gehan test (for data sets with multiple reporting limits) are nonparametric methods of evaluating median values. Once the proportion of nondetections increases above 50 percent, the use of median values becomes highly uncertain, and another nonparametric method such as the Quantile test must be used to identify differences between the higher values (or the right tails) of each distribution.

2.3.2.6 Information about the distribution of data and the frequency of detections was used in identifying the appropriate test to compare site and background data. ProUCL version 3.01 (EPA 2004a)

was used to determine whether the distribution of each data set in OU1 or background surface soils is normal, is lognormal, follows a gamma distribution, or follows none of these distributions. One-half the reporting limit was used for all nondetected sample results in preparing the data sets for ProUCL input (Appendix A, Table A-9). Since many of the statistical tests require that the data be normally distributed or can be approximated by the normal distribution through manipulation such as the natural log-transformation, data sets that are neither normal or lognormal were deemed nonparametric. If both the site data and background data follow either the normal or lognormal distribution, a two sample t-test was used. For lognormal distributions, the data were first transformed using natural logarithm. If the distributions for site data and background were not the same, a nonparametric test was used. Table 2-6 identifies the distribution, the frequency of detection, and the statistical test chosen for background comparisons in the surface soil and subsurface soil intervals.

2.3.2.7 Two sample t-tests were used to detect differences in mean concentrations for most metals. Where the variance of the site data and background data was not significantly different using the F-test (and assumed equal), Student's *t*-test was utilized using an estimate of the variance from a pooled data set; where variances were significantly different, the Satterthwaite *t*-test was used. Each of these tests was run at an alpha level (or acceptable false positive rate) of 5 percent and used an Excel® spreadsheet. The resulting p-value for each F-test and two sample *t*-test is presented in Table 2-7. Chemical comparisons to background are also presented in Tables 2-3 and 2-4 for surface and subsurface soils, respectively.

2.3.2.8 The WRS test or Gehan test was used when either site data or background data contained too few detections to accurately apply statistical tests to mean values (i.e., when percent nondetections exceeded 15 percent), when the distribution of either data set was neither normal or lognormal (i.e., nonparametric), or when the normal or lognormal distribution could not adequately characterize both data sets as required by parametric tests. The WRS test requires the same reporting limit for nondetections (a rarity); it was used only for those metals having 100 percent detections but for which the normal or lognormal distribution did not apply to both distributions. For all other data sets meeting the above conditions, the Gehan test was used. The WRS or Gehan test was applied as a one-tail test since the question investigated is whether the chemical at the site is greater than background. Results of these nonparametric tests on median values are presented in Table 2-8 as p-values. Tables 2-3 and 2-4 indicate whether the chemical is greater than background for surface and subsurface soils, respectively. Individual WRS or Gehan evaluations are presented in Tables B1-1 through B2-9 of Appendix B.

2.3.2.9 Statistical tests, such as the Quantile test, provide a method of comparing highest values (detections or assigned proxy values for nondetections) between site data and background data (Tables B3-1 through B3-36 of Appendix B). When the highest values are predominantly from the site data, one concludes the chemical at the site is greater than at background locations. A proprietary Excel spreadsheet developed for Earth Tech (Redus 2001) uses the calculated rank of each datum in the combined data set to identify the highest ranked values. The test is run at specified levels for alpha that are based on the size of the data set. For surface soil at OU1, for which there are approximately 17 background samples and 23 site samples, generally the 5 highest values must come from the site in order to conclude that the chemical is greater than background. For the subsurface soil evaluation (which includes the surface soil interval), the seven highest values must come from the site in order to conclude that the chemical is greater than background. Results of the Quantile tests for each chemical are presented in Appendix B and are summarized in Table 2-9 with the alpha-level for each test. Tables 2-3 and 2-4 indicate whether the chemical is greater than background for surface and subsurface soils, respectively.

2.3.2.10 The results of various statistical tests identified the following chemicals in surface soil that exceed background levels:

- Aluminum
- Arsenic
- Chromium
- Cobalt
- Iron
- Nickel
- Selenium
- Thallium
- Vanadium

2.3.2.11 No organic chemical was determined to be statistically above background levels even though the highest detection for each PAH occurred in site soils. However, as noted above, numerous organic chemicals were determined to be site-related because they were not analyzed or detected in background soil samples. The evaluation of subsurface soils (which included surface soils as well) did not change the conclusions of the background evaluations.

2.3.3 Comparison to ARARS

2.3.3.1 Unlike groundwater, which has Federally implemented standards, soil and soil gas have no ARARs. As such, no comparison to ARARs can be made for soil or soil gas, and no chemical was eliminated as a potential COPC using this criterion.

2.3.4 Comparison to RBCs

2.3.4.1 EPA Region III has developed RBCs for both residential and industrial exposure assumptions in soil that correspond to cancer risks of 1E-06 and a noncancer HQ of 1.0 (EPA 2005a). Because the future land use at OU1 is restricted to industrial and construction worker scenarios, the industrial RBCs were evaluated as soil screening criteria. The HHBRA Work Plan (Mactec 2005a, as modified) states that the screening of data from site media will include RBCs that are protective of a construction worker who works in a trench. The Virginia Department of Environmental Quality (VDEQ) Voluntary Remediation Program provides a prescribed method for evaluating sites, including the use of EPA Region III residential soil RBCs to identify COPCs (VDEQ 2006). VDEQ also provides the method for evaluating a trench worker who may be exposed to groundwater.

2.3.4.2 At the DSCR, groundwater is evaluated as a separate OU such that soil is the only medium of interest at OU1 in the evaluation of the trench worker. While VDEQ has developed a model to estimate contaminant transfer from groundwater to a trench worker's air space, a similar model from soil is not available. Instead, development of soil RBCs that are protective of trench workers were derived from modified versions of algorithms (EPA 2002b, Appendix C1). The calculated trench worker RBCs include exposure through ingestion, dermal contact, and inhalation; EPA Region III RBCs only consider incidental ingestion. The lower value between the calculated trench worker RBCs and EPA Region III industrial RBCs was chosen for screening site data in the identification of COPCs. Screening of soil constituents against RBCs utilized MDCs for each of the soil intervals evaluated for risks (i.e., 0 to 3 feet for surface soil; 0 to 6 feet for subsurface soil). Results of these comparisons identified several carcinogenic PAHs and three metals that are present at levels exceeding the RBCs used for screening purposes (Tables 2-3 and 2-4). Only the three metals (arsenic, iron, and thallium) exceeding background levels are considered site-related.

2.3.5 Soil Vapor Intrusion

2.3.5.1 For RBCs to be relevant in the evaluation, exposure pathways and exposure parameters in the CEM should be similar to those used to develop the RBCs for comparison. The industrial exposure pathways and default exposure parameters are assumed to be the same as those used to develop industrial preliminary remediation goals (PRGs). However, the RBCs provided by EPA Region III do not include potential exposure to chemicals resulting from vapor intrusion into buildings. Because several warehouses are present at OU1 (e.g., Buildings 41 and 54), the potential migration of volatile chemicals from soil to indoor air was also considered during the screening process. Two methods were used to assess this potential exposure pathway: (1) evaluation of chemicals in soil and (2) the assessment of

chemicals in soil gas. Both media were evaluated because soil gas results are restricted to locations near existing buildings, whereas soil provides information about soil vapor migration for future buildings. Additionally, chemicals in soil gas may have originated from groundwater instead of soil. For the evaluation of chemicals in soil, MDCs were used in running the J&E model for indoor air using the simplified screening version (EPA 2002c) with the following modifications and assumptions:

- The type of construction was assumed to be slab-on-grade with a depth of 15 centimeters (cm).
- The depth to contamination was assumed to be 15 cm.
- A loamy sand soil type was conservatively chosen.
- Soil vapor permeability was estimated using soil type.
- The vapor intrusion flow rate was calculated based on soil and building characteristics.

2.3.5.2 All other parameters for the vapor intrusion model were default values. Modeled VOC concentrations in indoor air were then inserted into the dose and risk algorithms (presented in Sections 3 and 5). The inhalation risks associated with the inhalation of vapors that have migrated into indoor air are presented in Table 2-3 for surface soil and Table 2-4 for subsurface soil. Any chemical that potentially poses a cancer risk greater than 1E-06 and/or a noncancer hazard greater than 0.1 was retained as a COPC. Those chemicals posing potential inhalation risks above target levels include naphthalene, chloroform, and TCE. However, each of these chemicals was detected in only one site sample, with chloroform and TCE being co-located.

2.3.5.3 A second method for identifying chemicals that potentially could pose unacceptable indoor risks was to retain those chemicals in soil for which soil gas concentrations pose potentially unacceptable indoor risks. The draft guidance for the J&E model provides screening values for soil gas (EPA 2002a). Four soil gas samples were collected by installing Summa™ canisters adjacent to Buildings 41 and 54 at 1 to 2 feet bgs near the bottom of building foundations. Soil gas samples were analyzed by a modified air sample Method TO14. Only two VOCs were detected in soil gas, 1,2,4-trimethylbenzene and hexane. Neither of these chemicals was detected in soils or was present in soil gas at concentrations that could potentially pose an unacceptable indoor risk (Table 2-5). Therefore, the screening of soil gas at OU1 did not identify any additional chemicals in soil that require further risk evaluation.

2.3.6 Screening Results: Identification of COPCs

2.3.6.1 Fifty-seven chemicals were detected in surface and subsurface soils at OU1 with a frequency of detection ranging from 3 percent to 100 percent (Tables 2-3 and 2-4). Many of those chemicals infrequently detected (less than 5 percent) were co-located at one of two locations, OSA-SB-03 and OSA-SB-10. Although chemicals are sometimes omitted as COPCs if infrequently detected, this criterion was not used to screen potential COPCs. While direct contact with soils would likely occur over the entire exposure area, potential construction of buildings at individual locations could result in higher exposures near these locations.

2.3.6.2 Metals and PAHs were compared to background levels (Tables 2-3 and 2-4). Most of the metals (with the exception of barium, copper, lead, manganese, and zinc) exceeded background levels. None of the PAHs was determined to exceed background despite the highest detection occurring in OU1 soils. For many VOCs and all pesticides, the absence of detections in background soil precluded comparisons; these chemicals were necessarily considered site-related.

2.3.6.3 MDCs were compared to soil screening levels (SSLs) to identify those chemicals that may have the potential to leach to groundwater to the extent of posing unacceptable risks from groundwater exposure (Tables 2-3 and 2-4). A dilution attenuation factor of 20 was used in defining these SSLs since future groundwater use would most likely occur at off-site locations. For those chemicals without listed SSLs, values were calculated from Region III tap water RBCs or Federal action levels and soil characteristics (Table 2-10). For screening purposes, noncarcinogenic chemicals were adjusted by a factor of one-tenth to account for possible cumulative effects. Chemicals exceeding SSLs included three VOCs, nine PAHs, one pesticide, and seven metals. The MDC of 7 of these 20 chemicals also exceeded RBCs for direct exposure. These are benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, arsenic, iron, and thallium.

2.3.6.4 Potential inhalation risks associated with volatile chemicals were also estimated for indoor workers. Using MDCs, naphthalene, chloroform, and TCE may have the potential to migrate into buildings and pose unacceptable risks.

2.3.6.5 Identifying COPCs for further evaluation required that a detected chemical exceed the protective RBC or potentially pose an unacceptable risk through inhalation of indoor air (Tables 2-3 and 2-4). For surface and subsurface soil intervals, 10 chemicals met the above conditions and are considered COPCs for OU1:

- Arsenic

- Iron
- Thallium
- Benzo[a]anthracene
- Benzo[a]pyrene
- Benzo[b]fluoranthene
- Dibenz[a,h]anthracene
- Naphthalene
- Chloroform
- TCE

2.3.6.6 These 10 chemicals were further evaluated in a site-specific risk assessment, even though the PAHs were determined to be present at background levels.

3.0 EXPOSURE ASSESSMENT

3.0.0.1 The exposure assessment identifies the degree of exposure one would expect for receptors at the site. Exposure is measured as the ADD a receptor receives as a result of chemical concentrations in various exposure media and receptor-specific exposure factors. Units for ADD are milligrams per kilogram per day. Using receptors and exposure pathways identified in the CEM, the exposure assessment details those elements needed to quantitatively estimate the dose. Two elements needed in estimating the ADD are the concentration of COPC to which a receptor is expected to be (or become) exposed (also known as the EPC) and intake factors that estimate the degree to which chemicals enter the body of the receptor. These are detailed below.

3.1 ESTIMATION OF EXPOSURE POINT CONCENTRATIONS

3.1.0.1 The concentration of COPCs in a given medium varies temporally and spatially. The anticipated level of contamination to which one is exposed is likely an average level. EPCs are typically represented by average concentrations. For adequately sized data sets, EPA has developed ProUCL software for determining a conservative estimate for the average concentration (EPA 2004a). The estimates involve computing the upper percent confidence level (95 UCL to 99 UCL) on the mean concentration. Where the 95 percent UCL fails to provide adequate coverage, a 97.5 percent or 99 percent confidence limit of the mean is selected, per ProUCL recommendation.

3.1.0.2 When data sets are relatively small (fewer than 10 samples), there is great uncertainty in the confidence of the calculated 95 percent UCL (EPA 1992a). For data sets of 10 – 20 samples, estimates of the mean are only somewhat better; only when there are more than 20 samples are estimates close to the true mean. All data sets at OU-1 have at least 15 samples. Uncertainty also increases as the number of non-detected results increases. ProUCL makes no evaluation of non-detected results; professional judgment is needed in selecting the minimum number of samples or detections to run ProUCL with minimal influence due to non-detected results. To minimize the bias associated with data sets having large percentage of non-detections, ProUCL Version 3 will be applied to all chemicals (retained after the original risk screening) having a frequency of non-detection of less than or equal to 15 percent. For all other chemicals having a frequency of non-detection greater than 15 percent, no UCL of the mean will be calculated and the MDC will be used as the EPC. In general, when the MDC exceeds the 95 percent UCL, the 95 percent UCL is chosen as the EPC. Alternatively, when the maximum value is less than the 95 percent UCL, the maximum value is chosen as the EPC. According to EPA's most recent guidance for calculating UCLs for EPCs (EPA 2002d), "defaulting to the maximum value of small data sets may be the best approach to use in evaluating risk at a site." To derive the 95 percent UCL and to minimize

uncertainties that may arise with the use and application of various statistical software packages, ProUCL was used to calculate the 95 percent UCLs. To simplify, the following rules were applied when choosing the EPC:

1. When the percentage of non-detections exceeded 15, the MDC was used as the EPC.
2. When the percentage of non-detections less than or equal to 15, the UCL on the mean was calculated using the ProUCL software; the UCL was selected based on the recommended output of the ProUCL results.

3.1.0.3 Data distributions and calculated UCLs of the mean for each COPC are presented where appropriate for surface and subsurface soil intervals (Table C2 in Appendix C).

3.1.0.4 Exposure to COPCs at OU1 may occur from direct contact with soils (through incidental ingestion or dermal contact) or may occur indirectly from the inhalation of airborne particulates and chemical vapors. The inhalation of COPCs requires their transfer from soil to air as a result of either vaporization or the generation of airborne dust. Ongoing vaporization since the original spill incident would likely reduce the source area to the extent that VOC concentrations in air are expectedly low. Additionally, the expected degree of dilution of VOCs in ambient air due to mixing and dispersion, and the general infrequency with which VOCs are detected in soils likely result in an insignificant chemical dose from inhalation. This assertion is further supported by comparing the maximum detected concentrations of TCE and chloroform in soil to soil screening levels protective of ambient air exposures (Table A-7, Appendix A). Therefore, the inhalation of VOCs in ambient air was not evaluated further.

3.1.0.5 The inhalation of particulates may occur for outdoor industrial workers and construction workers, but the level of particulates generated is different for each receptor because of differences in work activities. To estimate the concentration of dust and associated COPCs, separate methods were utilized for the outdoor industrial worker and the construction worker. For the former, the reciprocal of the standard EPA default particulate emission factor (PEF) of 1.36 E+09 cubic meters per kilogram (m^3/kg) (or 7.35 E-10 kg/m^3) was chosen to represent dust concentrations (EPA 2002b). For the construction worker, dust concentrations were estimated using algorithms provided in Section 5.0 of the supplemental soil screening guidance (EPA 2002b). Based on assumptions about weather conditions (chosen to be the same as those of the closest station similarly evaluated [Philadelphia, Pennsylvania]), presumed size of construction area (2 acres), and the length and width of a construction road (295 feet long and 20 feet wide), a PEF for construction activities was calculated to be 7.44 E+06 m^3/kg (Mactec 2005b). This PEF value translates to a calculated dust concentration of 1.34E-07 kg/m^3 to which construction workers may be exposed (Table 3-1).

3.1.0.6 Volatile chemicals could migrate from soil to indoor air due to vapor intrusion. Chemical concentrations in indoor air were estimated using the advanced version of the J&E model (Advance model from soil emissions, ver. 3.0 [EPA 2002c]). Model runs for TCE, chloroform, benzo[b]fluoranthene, and naphthalene are provided in Appendix C3.

3.1.0.7 EPCs in surface soil and subsurface soil are presented in Table 3-1. For indirect exposure to COPCs through inhalation of particulates, dust concentrations for outdoor industrial workers and construction workers and the resulting COPC concentrations are also presented.

3.2 CHEMICAL INTAKE ASSUMPTIONS

3.2.0.1 The CEM identifies those pathways through which receptors at OU1 are potentially exposed. For each route of exposure, COPCs enter the body through routes of exposure that are relevant to each receptor. Receptor-specific intake factors or IAs are used to quantitate the ADD of each COPC (Table 3-2). Most factors are standard values frequently used to evaluate a reasonable maximum exposure scenario with the exception of inhalation rate. While the *Exposure Factors Handbook* (EPA 1997a) presents various inhalation rates for the adult worker, the hourly inhalation rate of 0.83 m^3 per hour is based on an adult daily rate of 20 m^3 per day. Additionally, the exposure frequency for outdoor industrial workers is 225 days per year (EPA 2002b) instead of 250 days per year typically used. All IAs used are taken from the approved *Work Plan* (Mactec 2005a).

Estimation of Average Daily Doses

3.2.0.2 Chemical intake or ADD for each receptor and exposure route was calculated using the following general equation (EPA 1989):

$$ADD = EPC \times \frac{IA1 \times IA2 \times \ldots \times IAn}{BW \times AT}$$

3.2.0.3 where

ADD	=	average daily dose
EPC	=	exposure point concentration
IA1	=	intake assumption 1 defining the contact rate with COPC 1
IA2	=	intake assumption 2 defining the contact rate with COPC 2
IAn	=	intake assumption n defining the contact rate with COPC n
BW	=	body weight in kilograms
AT	=	averaging time (different for carcinogens and noncarcinogens)

3.2.0.4 Averaging time (and as a result, ADD) is different for carcinogens and noncarcinogens. To determine the ADD from dermal absorption, the dermal absorption factor for each COPC is needed (Table 3-3). The ADD for each receptor and exposure pathway is presented in Table 3-4. Equations used to calculate the ADD specific for each receptor and exposure pathway, are presented in Tables D-1 through D-10 (Appendix D).

4.0 TOXICITY ASSESSMENT

4.0.0.1 The purpose of the toxicity assessment is to weigh the available evidence regarding the potential for chemicals to cause adverse health effects and to provide a quantitative estimate of the relationship between the magnitude of exposure and the likelihood or severity of adverse health effects (i.e., dose-response assessment [EPA 1989]). Toxicity values are used to provide a quantitative estimate of the relationship between the magnitude of exposure and the potential for adverse health effects.

4.0.0.2 EPA provided policy for identifying the appropriate toxicity values for use in risk assessments (EPA 2003a). In the policy, a hierarchy was defined that was to be used in selecting the appropriate toxicity values. The foremost source of toxicity information is IRIS; when toxicity information and factors are not available in IRIS, a provisional value is sought (EPA 2003a). Sources for provisional values include the EPA's PPRTV for Superfund, Agency for Toxic Substances and Disease Registry minimum risk levels, NCEA, and the Office of Environmental Health Hazard Assessment of the California EPA.

4.0.0.3 The process by which toxicity values are derived is different for noncarcinogens and carcinogens. Each is presented below.

4.1 TOXICITY VALUES FOR NONCARCINOGENS

4.1.0.1 Toxicity values are presented as reference doses (RfDs) for noncarcinogens. The EPA Region III RBC table provided all the RfDs and sources of those RBCs used in this assessment (EPA 2005a). Non-carcinogenic chemicals with provisional values are listed and discussed in the uncertainty section (Section 6).

4.1.0.2 Oral RfDs (expressed in units of mg/kg-day) have been developed to evaluate the potential for adverse noncancer health effects from ingestion of chemicals. Chronic RfDs are specifically developed to be protective for long-term exposure to a chemical and are generally used to evaluate the potential noncancer effects associated with exposure periods between 7 years and a lifetime (EPA 1989). Although exposures for construction workers at OU1 are likely to be less than 1 year, the same chronic RfDs used to evaluate industrial workers were conservatively used for construction workers. The uncertainty associated with this approach is discussed in the uncertainty section (Section 6). Final RfDs used in this assessment are presented in Table 4-1.

4.1.0.3 The RfD is derived from a no-observed-adverse-effect-level (NOAEL) or a lowest-observed-adverse-effect-level (LOAEL). For the risk assessment, a NOAEL is the key datum obtained from a

study of a dose-response relationship. It is the highest level tested at which no adverse effects were demonstrated. In some studies, only a LOAEL rather than a NOAEL is available. However, the use of a LOAEL requires additional uncertainty factors (UFs) and modifying factors (MFs) to ensure that a health-protective toxicity value is used.

4.1.0.4 UFs are typically 10-fold factors used for estimating RfDs from laboratory data (EPA 2005b) to account for the (1) variation in sensitivity among the members of the human population (i.e., inter-human or intra-species variability); (2) uncertainty in extrapolating animal data to humans (i.e., interspecies variability); (3) uncertainty in extrapolating from data obtained in a study with less-than-lifetime exposure to lifetime exposure (i.e., extrapolating from sub-chronic to chronic exposure); (4) uncertainty in extrapolating from a LOAEL rather than from a NOAEL; and (5) uncertainty associated with extrapolation from animal data when the database is incomplete.

4.1.0.5 MFs are included to reflect the scientific uncertainties not explicitly addressed using UFs, and range from 1 to 10. The default value for an MF is 1.

4.1.0.6 Methods used to derive inhalation RfDs are conceptually similar to those used to derive oral RfDs. However, the actual analysis of inhalation exposures is more complex than that for oral exposures because of the dynamics and differential structures of the respiratory system and the ability to account for the inhaled dose in the experiment design of laboratory studies. The reference values from inhalation studies are generally reported as a RfC in air (milligrams per cubic meter [mg/m^3]). However, these values are converted to RfDs for use in risk assessments by using a human body weight of 70 kg and inhalation rate of 20 m^3 per day.

4.2 TOXICITY VALUES FOR CARCINOGENS

4.2.0.1 The predominant theory behind cancer development as it relates to risk assessment is that a small number of molecular events can evoke changes in a single cell, which can lead to uncontrolled cellular proliferation and, eventually, to cancer. In this model (i.e., the linear low dose model), it is assumed that there is no level of exposure to a chemical that does not pose "a finite probability, however small, of generating a carcinogenic response" (EPA 1989). Recent insight into the cancer processes does, however, suggest that theoretically, a threshold mechanism may be operative, especially if the cancer is a ". . . secondary effect of toxicity or of an induced physiological change that is itself a threshold" (EPA 2003c). Generally, data are not yet sufficient to apply the "threshold" concept in the development of risk assessments for carcinogens that are intended to be protective of the potentially exposed receptor group.

There are, however, chemicals such as chloroform, for which the slope factor (SF) is based on a threshold concept. Thus, the linear low-dose model is still considered applicable in most instances.

4.2.0.2 The evaluation of the chemical carcinogenicity is a complex process that can be summarized by two primary steps. Initially, the toxicity database for a substance is evaluated for its potential utility in assessing carcinogenic potential. In this step, a weight-of-evidence (WOE) classification is assigned to the chemical. The WOE classification scheme is designed to present the likelihood that a chemical will cause cancer in humans based on the strength of supporting human and/or animal data.

4.2.0.3 Currently, there are two WOE classifications available for use in conjunction with human health risk assessments. The WOE discussion provided in the existing IRIS chemical profiles for most chemicals is based on the 1986 EPA guidelines. The most recent WOE classification is defined in the latest EPA cancer risk assessment guidelines (EPA 2005c) and is designed to revise and replace the *Guidelines for Carcinogen Risk Assessment* published in September 1986. The IRIS program has begun incorporation of all new WOE discussion/criteria into revised or new IRIS chemical profiles. The WOE descriptors based on the current 2005 Guidelines are summarized as:

- "Likely to Be Carcinogenic to Humans" – This descriptor reflects strong evidence of carcinogenicity.
- "Suggestive Evidence of Carcinogenic Potential" – This descriptor is used when there is sufficient evidence to demonstrate potential carcinogenicity to humans.
- "Inadequate Information to Assess Carcinogenic Potential" – This descriptor is used when there is sufficient evidence to suggest a concern for potential carcinogenic effects in humans, but data are not sufficient for a strong conclusion.
- "Not Likely to Be Carcinogenic to Humans" – This descriptor is used when data are determined to be inadequate for applying one of the other three descriptors.

4.2.0.4 Because most of the chemicals in the IRIS profiles still need to be updated, the WOE classifications defined by EPA (1986) are still used when interpreting this risk assessment and as shown in the toxicity profiles on the IRIS system. The WOE classifications used in this risk assessment are defined as:

- Group A: Known human carcinogen
- Group B: Probable human carcinogen
- Group B1: Limited evidence of carcinogenicity in humans
- Group B2: Sufficient evidence in animals, but inadequate evidence in humans

- Group C: Possible human carcinogen (limited evidence of carcinogenicity in animals in the absence of human data)
- Group D: Human carcinogenicity not classifiable because of lack of data
- Group E: Evidence of non-carcinogenicity in humans (no evidence in at least two adequate animal tests in different species or in both epidemiological and animal studies)

4.2.0.5 The second step in evaluating chemical carcinogenicity is quantifying the potency. Oral cancer slope factors (CSFo) are expressed as the proportion of a population affected per mg/kg-day dose and are typically reported in units of $(mg/kg\text{-}day)^{-1}$. Currently, CSFo are derived for chemicals with WOE classifications of A, B1, or B2, and occasionally C (noted above). Inhalation cancer toxicity data are presented as a unit risk (expressed as $[mg/m^3]^{-1}$ or micrograms per cubic meter $[\mu g/m^3]^{-1}$) and can be interpreted as "... the increase in the lifetime risk of an individual who is exposed for a lifetime to either 1 mg/m^3 or $\mu g/m^3$ of the cancer agent" (EPA 1986). EPA Region III converted unit risks to CSFo by multiplying by the inhalation rate of 20 m^3/day and dividing by a body weight of 70 kg. SFs for carcinogenic chemicals evaluated in this HHBRA are based on either the value used by EPA Region III (e.g., arsenic) or presented by NCEA (for TCE) (EPA 2001b). While several values for the oral SF have been presented for TCE, the higher value of 4E-01 mg/kg-day-1 was chosen for this evaluation. The uncertainty associated with this choice is presented in Section 6.3. Final SFs used in this assessment are presented in Table 4-1.

Availability of Toxicity Values

4.2.0.6 Some chemicals may exhibit both carcinogenic and non-carcinogenic health effects. Toxicity values are generally available for the oral route of exposure. Inhalation toxicity values have also been developed for some constituents. While route-to-route extrapolations are sometimes used when there are no toxicity values available for a given route of exposure, route-to-route extrapolation was not employed to estimate inhalation toxicity values for this HHBRA.

4.2.0.7 Chemical disposition in the body may determine the dose of a toxicant that reaches the target organ, confounding the interpretation of toxicity values. For instance, toxicity values for the oral exposure pathway are based on applied or administered doses, whereas those for dermal exposures, which rarely result in the entire applied dose entering systemic circulation, should ideally be based on absorbed doses. Because this phenomenon is poorly quantified, toxicity values for evaluating risk from dermal exposure often require route-to-route (oral-to-dermal) extrapolations that take into account the differences between applied and absorbed doses. EPA

has not developed specific toxicity values for the dermal pathway. Therefore, in accordance with the EPA dermal guidance (2004b), dermal values were derived by adjusting oral toxicity factors by chemical-specific gastrointestinal (GI) absorption factors, as shown in Table 4-1. While the orally administered dose is often not entirely absorbed from the GI tract into systemic circulation, no adjustment was made since oral toxicity factors are based on applied doses.

5.0 RISK CHARACTERIZATION

5.0.0.1 In the risk characterization, ADDs of each COPC are applied in conjunction with toxicity values (RfDs and CSFs) to estimate non-carcinogenic and carcinogenic health risks. The derivation of these risk estimates is presented below. Carcinogenic risk and non-carcinogenic hazard tables prepared for each exposure pathway are presented in Tables D-1 through D-7 for the current and future industrial worker and Tables D-8 through D-10 for the construction worker (Appendix D). A summary risk table for each receptor and each impacted medium is presented in each subsequent subsection.

5.1 HAZARD QUOTIENTS AND HAZARD INDICES

5.1.0.1 The potential for non-carcinogenic effects is characterized by comparing noncarcinogenic ADD with chemical-specific RfDs. The resulting ratio is the HQ and is derived in the following manner:

$$Noncancer\ Hazard\ Quotient = \frac{Chemical\ Intake\left(\frac{mg}{kg-day}\right)}{RfD\left(\frac{mg}{kg-day}\right)}$$

5.1.0.2 For each COPC, a unitless HQ of 1 or less indicates that no unacceptable health risk is expected from the exposure conditions evaluated. An HQ above 1 does not indicate that an actual health threat exists, but that there is concern for potential adverse health effects.

5.1.0.3 To assess multiple exposures to multiple chemicals, the HQs for each chemical are summed to yield an HI. If a receptor is exposed through multiple pathways, HIs from all relevant pathways are summed to obtain the total HI for that receptor. Where an HI exceeds 1, target organ segregation was conducted in which an HI is calculated for each target organ potentially affected by the COPCs.

5.2 CANCER RISKS

5.2.0.1 Potential carcinogenic effects are characterized in terms of the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen. Excess lifetime cancer risk is calculated by multiplying the estimated carcinogenic ADD by the cancer CSF, as follows:

$$Incremental\ \ Lifetime\ \ Cancer\ Risk = AverageDailyDose\left(\frac{mg}{kg-day}\right) \times CSF\left(\frac{mg}{kg-day}\right)^{-1}$$

5.2.0.2 EPA's target acceptable incremental lifetime cancer risk range is 1E-06 to 1E-04 (1 in 1,000,000 to 1 in 10,000) (EPA 1991). The risks resulting from exposure to multiple carcinogens are assumed to be additive. The total cancer risk is estimated by summing the risks estimated for each COPC and for each pathway.

5.3 RESULTS

5.3.0.1 Risk estimates are presented for both the industrial worker and the construction worker and for each exposure pathway. Total carcinogenic risk and non-carcinogenic hazard are determined by summing the risks of all pathways.

5.3.1 On-site Industrial Worker

5.3.1.1 Current outdoor industrial use of OU1 results in possible exposure to COPCs in surface soil, whereas future exposures could include subsurface soils if they are excavated and subsequently redistributed on the ground surface. Estimated risks and hazards for current and future outdoor industrial workers are presented in Table 5-1. Risks associated with background levels are provided for comparison purposes and include exposure to carcinogenic PAHs. Risks from site-related chemicals are also presented. Pathway-specific risks are presented in Tables D-1 through D-6 of Appendix D.

Table 5-1. Summary of Health Risks for Current and Future Outdoor Industrial Workers

Exposure Pathway	Outdoor Industrial Workers			
	Current		Future	
	HI	CR	HI	CR
Ingestion of Soil	0.4	6E-05	0.3	6E-05
Dermal Contact with Soil	0.08	3E-05	0.06	3E-05
Inhalation of Soil	<0.01	2E-08	<0.01	1E-08
Total	**0.5**	**1E-04**	**0.3**	**9E-05**
(Risk from Background)	(<0.01)	(5E-05)	(<0.01)	(6E-05)
Risk without Background Contribution	**0.5**	**4E-05**	**0.3**	**3E-05**

Notes:
CR – excess cancer risk
HI – hazard index

5.3.1.2 The carcinogenic risk estimates of 1E-04 for current outdoor workers and 9E-05 for future outdoor workers are within the target risk range of 1E-06 to 1E-04 established by the EPA under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Incidental ingestion constitutes the greatest exposure pathway, with arsenic and benzo[a]pyrene posing approximately 90 percent of the risk (Tables D-1 and D-4 of Appendix D). The arsenic EPC of 74.7 mg/kg is heavily influenced by the maximum detection of 132 mg/kg, which occurred in the northwest corner of OU1 at

SB-01. The risk from benzo[a]pyrene was estimated using the MDC of 9.6 mg/kg (detected at OSA-SB-03) as the EPC.

5.3.1.3 Background conditions at DSCR include PAHs and naturally occurring metals. Cancer risks associated with potential exposure to background conditions were estimated as 5E-05 for the current outdoor industrial worker and 6E-05 for the future outdoor industrial worker. These risk estimates are driven primarily by background levels of benzo[a]pyrene. Without this background contribution, the estimated carcinogenic risk from site-related activities is 4E-05 for the current outdoor industrial worker and 3E-05 for the future outdoor industrial worker, with arsenic representing over 80 percent of the risk. These estimates are within the potential target risk range of 1E-06 to 1E-04 established by the EPA under the NCP.

5.3.1.4 Estimated non-carcinogenic hazard indices for current and future outdoor industrial workers are less than 1.0. Incidental ingestion is the most significant pathway.

5.3.2 Indoor Industrial Worker

5.3.2.1 Indoor workers are potentially exposed via inhalation to chemical vapors that may migrate into buildings. For current indoor workers, results from soil gas analysis provide the best estimate of chemical concentrations in indoor air. For future indoor workers, soil results are used to estimate indoor air concentrations. Estimated cancer risk and noncancer hazard for future indoor industrial workers are presented in Table 5-2. Pathway-specific risks for the future indoor workers are presented in Table D-7 of Appendix D. Risks associated with background levels are provided for comparison purposes and include exposure to PAHs. Risks from site-related chemicals are also presented.

Table 5-2. Summary of Health Risks for Current and Future Indoor Industrial Workers

Exposure Pathway	Indoor Industrial Workers			
	Current		Future	
	HI	CR	HI	CR
Ingestion of Soil	--	--	--	--
Dermal Contact with Soil	--	--	--	--
Inhalation of Soil	<0.01	--	--	--
Total	**<0.01**	--	**0.2**	**1E-07**
(Risk from Background)	--	--	(0.2)	(2E-09)
Risk without Background Contribution	**<0.01**	--	**<0.01**	**1E-07**

Notes:
CR – excess cancer risk
HI – hazard index

5.3.2.2 Carcinogenic risk estimate could not be estimated for current indoor industrial workers since no carcinogen was detected in the soil-gas results. For future indoor industrial workers, the estimated carcinogenic risk is 1E-07, which is below the target risk range of 1E-06 to 1E-04. The estimate used results from the EPA's J&E model and is driven mostly by single low detections of TCE and chloroform (Table D-7 in Appendix D). Noncancer hazard associated with indoor vapor inhalation is less than 1 for both current and future indoor workers and is driven by the presence of 1,2,4-trimethylbenzene for current workers and naphthalene for future indoor workers. Naphthalene and other PAHs are present in soils at background levels.

5.3.3 Future Construction Worker

5.3.3.1 Estimated risks and hazards for future construction workers exposed to subsurface soils (includes surface soils) are presented in Table 5-3. Risks from naturally occurring background conditions are presented for comparison. Risks from site-related chemicals are also presented. Risk estimates for the ingestion, dermal absorption, and inhalation pathways are presented in Tables D-8 through D-10 of Appendix D.

Table 5-3. Summary of Health Risks for Future Construction Workers

Exposure Pathway	Future Construction Workers	
	HI	CR
Ingestion of Soil	1E+00	4E-06
Dermal Contact with Soil	1E-01	1E-06
Inhalation of Soil	<0.01	6E-08
Total	**1E+00**	**5E-06**
(Risk from Background)	(<0.01)	(3E-06)
Risk without Background Contribution	**1E+00**	**2E-06**

Notes:
CR – excess cancer risk
HI – hazard index

5.3.3.2 The carcinogenic risk estimate of 5E-06 is within the target risk range of 1E-06 to 1E-04 established by the EPA under the NCP. Incidental ingestion constitutes the greatest exposure pathway with arsenic and benzo[a]pyrene posing approximately 85 percent of the risk (Table D-8 of Appendix D). The arsenic EPC of 74.7 mg/kg is heavily influenced by the maximum detection of 132 mg/kg, which occurred in the northwest corner of OU1 at SB-01. The MDC of 9.6 mg/kg for benzo[a]pyrene was assigned as the EPC since few detections preclude an accurate estimate of the UCL of the mean.

5.3.3.3 Cancer risks associated with potential exposure to background conditions were estimated as 3E-06 for the construction worker. These risk estimates are driven primarily from background levels of benzo[a]pyrene. Without this contribution, the estimated carcinogenic risk from site-related activities is 2E-06, which is within the potential target risk range of 1E-06 to 1E-04.

5.3.3.4 The estimated non-carcinogenic HI for future construction workers is 1.0. Incidental ingestion is the most significant pathway, with arsenic representing approximately two-thirds of the noncancer hazard.

5.3.3.5 Target organ segregation results in a noncancer hazard of 0.8 for both the skin and vascular tissue (primarily from exposure to arsenic), 0.3 for the GI tract (primarily due to iron), and 0.2 for the liver (primarily from exposure to thallium). Estimates of noncancer hazards for the kidney, reproductive system, and whole body effects are all less than 0.1. Each of the organ-specific noncancer hazard estimates is below the target level of 1.

5.3.4 Off-site Residents

5.3.4.1 Risks for off-site residents who may be potentially exposed to site soils through the migration of soil dust were evaluated qualitatively by comparing inhalation risks for on-site receptors. Risks to on-site outdoor industrial workers and construction workers from the inhalation of particulates are less than 1E-07 (Tables D-3, D-6 and D-10 of Appendix D). This risk level is over an order of magnitude below the 1E-06 point of departure. Given the expected level of dispersion between OU1 and the nearest off-based location, the concentration of dust is expectedly low. Although the time spent at a residence is longer than an occupational workday (up to 3 times longer), the resulting chemical doses for a residential receptor would likely be lower than for on-site receptors primarily because of dispersion effects. Thus, resulting risks would likely remain below the 1E-06 point of departure.

6.0 UNCERTAINTY ANALYSIS

6.0.0.1 Uncertainty and limitations are inherent in the risk assessment process. The level of certainty associated with the conclusions of the HHBRA is conditional upon the quality of data and models used to identify COPCs and estimate EPCs, the assumptions made in estimating exposure conditions, and the methods used to develop toxicity factors. This risk assessment has been developed to be protective rather than accurately predictive. As a result, the risk assessment is believed to represent a substantial overestimation of cancer risk and noncancer hazard. This section presents a discussion of some of the uncertainties inherent in the risk assessment with focus on key factors believed to influence the risk assessment process and application to risk management activities. Uncertainties involved in each major step of the risk assessment process (i.e., data assessment, exposure assessment, toxicity assessment, and risk characterization) are discussed separately below.

6.1 UNCERTAINTIES IN DATA ASSESSMENT

6.1.0.1 *Omitted Results.* Some of the analytical results for OU1 were omitted because either the data were collected prior to 1992 or the data were "B-flagged." The validation of data collected prior to 1992 could not be verified, and their inclusion would have introduced additional uncertainty into estimates of EPCs. As later samples provide a better characterization of current conditions at OU1, the exclusion of older data is not expected to negatively impact risk conclusions.

6.1.0.2 A review of the historical data indicates that the MDCs of chemicals detected in the pre-1992 data, but not included in this Revised HHBRA, are all below soil screening values (i.e., EPA Region III industrial soil RBCs or calculated trench worker RBCs, whichever is lower). Therefore, the exclusion of older soil data from the risk assessment data set has no effect on the identification of COPCs and is not likely to have a significant effect on calculated EPCs or the outcome of this Revised HHBRA.

6.1.0.3 Data were B-flagged when the chemicals were also detected in associated blank samples; the presence and concentration of the chemicals in site samples were uncertain. The omission of B-flagged data may result in either the underestimation or overestimation of EPCs to which receptors are potentially exposed.

6.1.0.4 *Reporting Limit Evaluation.* Several chemicals in surface soil and subsurface soil were not detected in any of the collected samples. These chemicals may not have been detected because they truly are not present or the reporting limit was insufficient to detect their presence. If any of these chemicals were truly present, risk would be underestimated. The degree of this potential underestimation in soil can be evaluated by comparing reporting limits to RBCs. For soil, all reporting limits were below EPA

Region III industrial RBCs and calculated trench worker RBCs. Therefore, this uncertainty is not likely to have a significant effect on the outcome of this Revised HHBRA.

6.1.0.5 Fourteen of the 45 chemicals analyzed in soil gas had reporting limits that could potentially lead to a significant, but unrecognized, indoor risk. If any of these 14 chemicals are truly present in soil at the reporting limits, indoor air risks could be significantly underestimated. However, of these 14 chemicals, only benzene, chloroform, and TCE were detected in soil. Each of these three chemicals was detected only once. Also, the two VOCs detected in soil gas, 1,2,4-trimethylbenzene and hexane, were not detected in any soil sample. Therefore, the likelihood of chemicals truly being present in soil gas and improperly omitted as COPCs in soil is low.

6.1.0.6 For detected chemicals, reporting limits may influence EPC calculations. However, for soils at OU1, reporting limits were of no significance for each of the 10 COPCs. While arsenic and iron were detected in all samples, the single detections of chloroform and TCE precluded any reasonable calculation of 95 percent UCLs, and their single detections were used as EPCs. For the PAHs, MDCs were used as EPCs such that reporting limits were of no consequence in identifying EPCs. For thallium, reporting limits were insignificant in estimating 95 percent UCLs since (1) the frequency of detection was approximately 85 percent in both surface and subsurface soil intervals, and (2) reporting limits were below all detections and not elevated because of laboratory interferences.

6.1.0.7 *Identification of COPCs.* EPA Region III industrial soil RBCs or calculated trench worker RBCs (whichever is lower) were used to identify COPCs. The trench worker RBCs were derived using default exposure factors from VDEQ. These include the assumptions that the worker is exposed in a trench for 4 hours per event, the exposure frequency is 125 days per year, and the construction or trenching activity lasts for 1 year. The use of industrial RBCs or trench worker RBCs is likely adequately protective of general construction workers. For the evaluation of carcinogens, EPA Region III industrial soil RBCs were lower than calculated trench worker RBCs. Industrial soil RBCs are protective of construction workers because chemicals intake is averaged over a lifetime. While a general construction worker is assumed to ingest more soil per day (330 mg/day versus 100 mg/day for the industrial worker), the outdoor industrial worker is assumed to be present and exposed for much longer period of time (25 years versus 0.5 year for the construction worker). Thus, the ADD of carcinogens is greater for the industrial worker than the general construction worker or trench worker.

6.1.0.8 Calculated trench worker RBCs were generally lower than EPA Region III industrial RBCs for noncarcinogens. The time over which the chemical dose is averaged is only over the period of exposure; the ADD for the trench worker or a general construction worker is greater than that for the

industrial worker. Because exposure conditions for the trench worker are likely greater than those for a general construction worker, trench worker RBCs are likely protective of a general construction worker. The conservative exposure assumptions for the trench worker (e.g., higher soil ingestion rate) likely permit the use of trench worker RBCs for a general construction worker scenario without significant underreporting of COPCs.

6.1.0.9 *Data Representativeness.* Risk management decisions for OU1 should be made with the proper understanding of the effectiveness of sampling design and sample results. While the data validation process permits evaluation of the analytical results and determines whether they meet intended or minimum requirements, a second aspect of the effectiveness is the understanding of the degree to which sample locations and associated results are representative of the exposure area (i.e., OU1).

6.1.0.10 Soil data at OU1 were used to evaluate risks in three steps: (1) to identify COPCs by comparing MDCs to non-residential RBCs; (2) to calculate a conservative estimate of the average COPC concentration to which receptors may become exposed; and (3) to make background comparisons. Soil samples at OU1 were originally collected in areas where contamination was most likely to occur—the drum recoupment area and the drum storage areas. However, the final soil data set used to characterize risks came from investigations for the installation of a natural gas pipeline and a fiber-optics line.

6.1.0.11 Data from soil samples collected along the western road for the fiber-optics line were included in determining whether chemicals exceeded background and for estimating UCLs of mean chemical concentrations. From this data subset come several high detections, including the MDC of 132 mg/kg for arsenic. Additionally, 9 of the 10 highest detections of arsenic came from samples collected along this road. Other than the MDC of 132 mg/kg, no other arsenic detection exceeded 40 mg/kg. Naturally occurring levels of arsenic are reportedly as high as 73 mg/kg by the U.S. Geological Survey (USGS, as reported in Dames & Moore 1989). Excluding background chemicals such as carcinogenic PAHs, arsenic is the main risk driver for both carcinogenic and noncarcinogenic endpoints. While chemical concentrations along this road (and along the natural gas pipeline) may not reflect drum recoupment and storage activities at OU1, they do provide important information on the concentrations to which receptors may become exposed, and for this reason were retained in the data set.

6.1.0.12 Samples from other areas of OU1 were originally collected (Figure 1-2); however, during the data assessment period for this HHBRA, all data collected prior to 1992 were removed in accordance with the approved HHBRA work plan. The removal of data from these locations resulted in a less representative data set since sample locations used to estimate risks at OU1 (Figure 1-2) are disproportionately focused along one storage row and along the western road. The degree to which the

resulting data set is less representative of conditions at OU1 and the potential bias associated with its use is further evaluated below through a qualitative assessment of the pre-1992 data.

Identification of COPCs

6.1.0.13 The pre-1992 data set includes sample locations from additional drum areas and areas on the eastern portion of OU1. These locations were sampled to investigate the drum recoupment area and its potential for groundwater contamination (e.g., DMS-61 near storage row 39 and MW-15 through MW-18) and as part of the Corrective Action Permit Modification for the construction of a newer recoupment building and connector warehouse (Dames & Moore 1989). In all, 56 samples were collected prior to 1992 from a range of depths (to 56 feet bgs), with 30 collected in the top 2 feet of the soil surface (Appendix E). The chemicals detected in these omitted soil results are similar to those used in the assessment with the following notable differences:

- Additional inorganic chemicals that were detected include beryllium, cadmium, mercury, silver, and cyanide. Frequency of detection ranged between 9 percent and 21 percent, and MDCs were less than 1/10 of respective RBCs.
- Additional organic chemicals that were detected include 2,4-D, methylene chloride, mixed xylenes, dibutyl- and dioctyl-phthalate, benzoic acid, and 4-nitrophenol. Other than methylene chloride and dioctylphthalate, chemicals were detected in one or two soil samples. MDCs were near or less than 1/1,000 of the respective RBCs.

6.1.0.14 Although additional chemicals were detected in the pre-1992 data set, the levels of these chemicals suggest additional COPCs were not overlooked. Therefore, the current data set is likely appropriately representative in identifying COPCs.

Calculation of Average Chemical Concentrations

6.1.0.15 Representativeness expresses the degree to which the data accurately and precisely represent a selected characteristic of the sampled population. For OU1, the chosen characteristic for this HHBRA is the average chemical concentration over the entire site to which receptors may become exposed. While designed to identify the extent and degree of contamination, the judgmental sampling provides a data set that is likely biased in any estimate of average concentrations. The data set used in the current risk estimates may result in average concentrations that are potentially biased high. A qualitative assessment of the pre-1992 data provides a method of judging the possible degree to which average concentrations are biased high or low.

6.1.0.16 A number of chemicals in the pre-1992 data set were detected at concentrations that were greater than those of the final data set used in this HHBRA, including, most notably, chloroform (due to its contribution, along with TCE, to the risk for indoor workers). Chloroform was detected more frequently and at a MDC that is approximately 6 times greater than the MDC (and EPC) of the actual data set used. This information suggests that the presence of chloroform may not be as isolated as reported by the single detection in the current data set, and that additional soil samples could provide more accurate estimates of the average concentration to which receptors may be exposed. However, while additional samples could improve representativeness, the currently used data set is likely sufficiently representative. Whether the current data set is adequately representative depends upon how significantly risk estimates would likely change with additional sampling. For example, a more accurate mean chloroform concentration would not significantly alter the risk estimate for indoor workers since TCE, and not chloroform, is the risk driver for this pathway, and TCE was not detected in any soil samples collected prior to 1992. A six-fold increase in the chloroform EPC would lead only to a two-fold increase in the resulting risk. Therefore, the older data suggest that a more representative data set would not likely identify significant contaminants levels such that risks as currently estimated would be significantly underestimated.

6.1.0.17 For numerous compounds, including the carcinogenic PAHs, concentrations detected in the pre-1992 data were similar to the post-1992 data set used to evaluate risks; however, the MDCs were over an order of magnitude lower in the pre-1992 data. Therefore, the risks from carcinogenic PAHs as currently estimated would probably not change since they are based on MDCs. However, the presence of additional detections of carcinogenic PAHs would justify the use of a UCL of the mean concentration as the EPCs, as opposed to the MDCs, are currently used. Resulting risks may be reduced by as much as an order of magnitude.

Background Comparisons

6.1.0.18 Average concentrations, along with MDCs, are used in defining EPCs. Another equally important characteristic of the sampled population is whether levels noted in site soils exceed background levels. For two sample *t*-tests, background comparisons utilize average or mean chemical concentrations. A quantitative assessment can evaluate whether the resulting number of samples is appropriate to detect differences between areas impacted by site activities and those unimpacted by site activities (i.e., background areas).

6.1.0.19 Estimates of appropriate sample size require several characteristics of the parameter in question, namely how variable the measurements are for the parameter (as measured by the coefficient of variation [CV]), the distribution of the parameter, and the minimum detectable relative difference (MDRD) between site data and background. If the data set used to make background comparisons is truly biased high, then risks associated with certain chemicals (most notably, arsenic) may be attributed to site-related activities when in actuality, they are due to background condition at the site. Several inorganic chemicals were statistically determined to be present at levels exceeding background, including the risk driver arsenic.

6.1.0.20 Equations used to estimate sample size assume data are normally distributed or can be made to follow the normal distribution through mathematical transformation. For several COPCs, such as iron, the distribution is known and the appropriate sample size can be evaluated. For other COPCs, such as arsenic, the distribution is unknown or nonparametric.

6.1.0.21 For normally distributed chemicals, estimates of sample size are given by the following equation (EPA 1992a):

$$N = [(Z_\alpha + Z_\beta)/D]^2 + Z_\alpha^2/2$$

6.1.0.22 where

D = MDRD between site and background conditions/CV
Z_α = Percentile of the standard normal curve at a confidence level of 1 - α (or 1 - the acceptable Type I error rate)
Z_β = Percentile of the standard normal curve at a power level of 1 - β (or 1 - the acceptable Type II error rate)

6.1.0.23 Although not specifically stated in the *Final General Sampling and Analysis Plan for DSCR* (Mactec 2004), minimum recommended requirements for statistical performance objectives typically include a confidence of 90 percent (i.e., $\alpha = 0.1$) and a power of 80 percent (i.e., $\beta = 0.2$) (EPA 1992a). For COPCs with low variability, such as iron (CV = 44 percent), the number of samples required to detect a MDRD of 20 percent is 22. With 23 samples collected in the surface soil, a sufficient number of samples were collected to detect differences in iron concentrations. However, for COPCs with high or extreme variability such as arsenic (CV = 200 percent), many more would theoretically be needed to detect differences between background and the site. That differences were detected for many inorganic chemicals with high variability using two sample *t*-tests or nonparametric tests suggests that the 23 samples used to represent surface soil and 31 samples for subsurface soil may be biased high and may not accurately reflect true chemical concentrations across OU1. Therefore, the confidence with which

differences are noted between background and site soils is lower (and much lower in some cases, such as arsenic) than desired or designed.

6.1.0.24 Additional detections of COPCs could also result in their re-definition as site-related chemicals. Fortunately for carcinogenic PAHs at OU1, this possibility seems unlikely. PAHs were determined via the Quantile test to be present at background levels, even though MDCs occurred in the OSA. Based on information from the pre-1992 data set, however, the preponderance of highest detections would likely remain from the background data set such that PAHs at OU1 would continue to be present at background levels.

6.1.0.25 In summary, the uncertainty associated with the representativeness of the data set likely overestimates risks, although it may improperly attribute certain chemical-specific risks (including most notably, arsenic) to site-related activities.

6.2 UNCERTAINTIES IN EXPOSURE ASSESSMENT

6.2.0.1 Uncertainty in the exposure assessment is a function of several factors, including assumptions regarding actual current and/or future site land use, identification of relevant receptor groups and activities, and even the extent to which certain chemicals are physiologically retained and transferred to target organs of the selected receptors.

6.2.0.2 *Receptor and Exposure Pathway Assumptions:* For this evaluation, assumptions have been made to realistically characterize current and future site use. The exposure pathways evaluated were those considered to be significant. While other pathways could potentially be present (e.g., the inhalation of VOCs in ambient air that has migrated from soils), these other pathways are likely insignificant relative to those identified for each receptor. If receptors are truly exposed through any of these additional pathways, risk would be underestimated, but only to an insignificant degree.

6.2.0.3 The only possible exception to this assumption is the potential ingestion of chemicals in site soil by the indoor worker. Cancer risks and non-cancer hazards for the indoor worker were estimated as 1E-07 and 0.2, respectively. The additional risk and hazard from the incidental ingestion of impacted soils could theoretically be as high as that noted for the outdoor worker (i.e., 6E-05 and 0.4, respectively). While this additional exposure would produce an overall cancer risk of 6E-05 and noncancer hazard of 0.6 for the indoor worker, these estimates are likely biased high for the following reasons:

1) Any soil adhered to shoes or clothing would likely be a combination of soils between the home residence and the site, and not restricted to site-related soils;

2) Walkways into existing buildings are over an improved surface such as concrete or asphalt, which limits the opportunity for site-related soils to adhere to clothing;

3) Entrances into work buildings include mats for wiping soles of shoes, which limit the amount of soil that adheres to shoes.

Therefore, any additional risk to the indoor worker from incidental ingestion of chemicals in site soils likely does not elevate the overall risk to the indoor worker to unacceptable levels.

6.2.0.4 *Exclusion of Groundwater:* Groundwater was omitted from the evaluation of risks at OU1. Its evaluation as a separate OU serves to streamline the assessment process and provides a mechanism for the potential delisting of surface OUs. While exposure to chemicals in groundwater may be limited for current receptors (especially outdoor workers exposed to ambient VOCs), risks for current and future indoor workers could be underestimated. The degree of potential underestimation is unknown until the results of the groundwater evaluation (OU6) are available.

6.2.0.5 *Chosen Exposure Factors*: All of the exposure factors that are used to characterize average daily doses are conservatively developed to evaluate the reasonable maximum exposure scenario. The use of these conservative factors ensures that, if anything, the risk is overestimated.

6.2.0.6 One exception to the general rule is the inhalation rate for the construction worker, which is based on 20 m^3/day (Mactec 2005a). While this rate is the adult daily inhalation rate that EPA Region III uses, it includes periods of activity and rest. This daily rate is for industrial workers and not necessarily specific to construction workers. The *Exposure Factors Handbook* (EPA 1997a) provides more accurate estimates of the inhalation rate for outdoor workers engaged in heavy, medium, and light activity. While using the daily inhalation rate may underestimate the actual inhalation rate for the construction worker, the conservative nature of other exposure factors likely offsets this effect and continues to provide an overall conservative estimate of the ADD. Additionally, exposure through inhalation provides a small proportion of the overall chemical dose such that risks are not substantially under-reported.

6.2.0.7 *Exposure Point Concentrations:* Because of the inherent variability of sample collection, sample analysis, and distributions in the environment, the determination of an EPC that represents an average exposure with confidence can be difficult. EPA guidance (1992b) allows the use of the "lesser" of the two values between the MDC and the 95 percent UCL. When samples are collected (and therefore define a data set) and when the variability among the observations is great, the 95 percent UCL will likely be greater than the maximum concentration. Defaulting to the lesser of the two concentrations helps to

minimize the overestimation of risk, but does not eliminate the potential to overestimate the risk based on the "average" exposure condition, which is the anticipated level of exposure. The EPC could, in fact, yield an overestimate or underestimate of risk depending on the true underlying distribution of the data/chemical concentrations.

6.2.0.8 *Use of Default Particulate Emission Factors.* While it is true that activity-specific PEFs may be developed to characterize risk during site-specific activities, the extent to which any activity dominates an exposure scenario is limited by the frequency of occurrence relative to other exposure routes (i.e., oral, dermal). In this assessment, the default PEF was used for the outdoor industrial worker and the result on the risk estimate could be an overestimate or underestimate based on the actual PEF value that would result from any site-specific activities. A site-specific PEF value was calculated for the construction worker.

6.2.0.9 *Bioavailability of COPCs.* Cancer risk and non-cancer hazard estimates from the oral exposure route were evaluated against toxicity values that are based on applied doses. Whether risks/hazards from potential oral doses at DSCR are accurately estimated using these oral toxicity values depends upon two factors: (1) the bioavailability of chemicals in the toxicity dosing regimen used to develop the toxicity values and (2) the chemical-soil association at DSCR. For a given applied dose, a chemical in a more bioavailable form will be subject to systemic metabolic processes to a greater extent than responses resulting from other chemical forms that are less bioavailable. Dosing regimens for toxicity testing usually rely on chemicals in relatively bioavailable forms, such as in water or food, that differ from those in soil evaluated at DSCR. For example, hyperpigmentation and keratosis or internal organ and skin cancer demonstrated by arsenic were based on various arsenic concentrations in water (IRIS 2005b), a relatively bioavailable form of arsenic. Toxicity testing of benzo[a]pyrene used a dosing regimen of the chemicals in food, again a likely bioavailable form of PAH. Though not specifically stated in IRIS, the bioavailability of inorganic arsenic in water is likely much higher than the bioavailability of arsenic found in soil. The EPA SSG (2002d) states that arsenic absorption through the GI tract is 95 percent efficient and that for PAHs is 58 to 89 percent.

6.2.0.10 The assumption of high bioavailability of COPCs in soil almost assuredly overestimates the true degree of chemical assimilation through ingestion, and as a result overestimates potential risk from exposure at the site. For example, incremental lifetime cancer risks including chemicals at background levels were driven by the presence of carcinogenic PAHs. However, PAHs have recently been re-evaluated for their bioavailability through the ingested exposure route (Ramesh et al. 2004). For PAHs that are in soil, the mean percentage of bioavailability was 31 percent, suggesting that risks from exposure

to PAH in soil via ingestion could be overestimated by up to a factor of three. Since most of the chemical intake documented in this assessment is through ingestion (Appendix F), estimated cancer risks and non-cancer hazards are likely overestimated by approximately a factor of 2 to 3.

6.2.0.11 Estimates of cancer risks and non-cancer hazards without the contribution of chemicals at background levels were driven by the presence of arsenic. The actual availability of arsenic through the GI tract is reported as 41 percent in the Oak Ridge National Laboratory Risk Assessment Information System (ORNL 2005). One study has reported a range of bioavailability of arsenic in primates between 10 and 25 percent (Roberts, S. M., et al. Draft Document). Thus, the intake of biologically available levels of arsenic through ingestion (the main route of exposure) and the resulting risks/hazards are likely overestimated by a factor of 2 to 10.

6.2.0.12 In summary, based on the assessment of land use, receptor selection, associated activities and exposure factors, and the bioavailability of COPCs, the exposure assessment is believed to overestimate risk. However, the contribution to risk from potential exposure to chemicals in groundwater has not yet been determined. While the risk from exposure to chemicals in soil is likely overestimated, the overall site risks could potentially remain underestimated.

6.3 UNCERTAINTIES IN TOXICITY ASSESSMENT

6.3.0.1 Toxicity assessment involves the selection of noncancer toxicity indices (i.e., RfDs) and CSFs.

6.3.0.2 *Reference Doses:* RfDs are developed using animal data that must be applied to human receptors for the risk assessment. The process typically involves application of several UFs and MFs to animal test data that lower the RfD, given extrapolation from animal tests to human health risk assessment. For instance, UFs of 10 are often applied to animal data to reduce a threshold dose 10-fold to arrive at the RfD. This application of the UFs is likely to overestimate non-carcinogenic toxicity as noted by Dourson et al. (1997).

6.3.0.3 Expected exposure for the construction worker is less than 1 year, but the noncancer risks for the construction worker were estimated using chronic RfDs. Although the chronic RfD for many chemicals is derived from a LOAEL or NOAEL under a subchronic dosing regimen (to which an UF of 10 is applied), the chronic RfD for the main noncancer risk driver arsenic is not. The chronic RfD for arsenic (as provided by IRIS) and the subchronic RfD (as provided by the Health Effects Assessment Summary Tables [EPA 1997b]) are both listed as 3E-04 mg/kg-day. Therefore, the use of chronic RfDs results in the slight overestimation of non-cancer hazards for construction workers. However, since the

hazard estimate was at the target level using chronic RfDs, non-cancer hazards would be at or below the target level using subchronic RfDs.

6.3.0.4 *Cancer Slope Factors:* SFs developed by the EPA are conservative and represent the upper bound limit (i.e., upper 95 percent UCL) on the probability of a cancer response occurring. Thus, the actual carcinogenic risk due to exposure to selected chemicals is likely to be lower than the actual risk experienced by the receptor. One other source of uncertainty in the toxicity assessment lies in extrapolating experimental carcinogenic observations at high doses to the low doses experienced by the human population of interest. Because there is no empirical way to detect risks below the 5 to 10 percent range, assumptions must be made about the shape of the dose-response curve in the low dose region (Rodricks 1992). Because the standard default is to assume that all carcinogens have a linear no-threshold dose-response curve, the cancer potency for carcinogenic COPCs (e.g., arsenic) is likely overestimated.

6.3.0.5 *Dermal Toxicity Values:* Toxicity values for evaluation of the dermal exposure route should be based on an absorbed dose of a chemical. Because most oral toxicity values are based on an applied dose, the oral toxicity value may be adjusted by the degree of GI absorption to derive an absorption-based toxicity value. Where the GI absorption is sufficiently close to 100 percent, no adjustment is required. EPA's *Dermal Guidance* recommends adjustment for only those chemicals with a GI absorption of less than 50 percent (EPA 2004b). Values for GI absorption used in this assessment were mostly taken from *Dermal Guidance*. All of these recommended values for GI absorption exceeded the 50 percent threshold such that no adjustment of the oral toxicity value was performed. Other sources for information regarding GI absorption, such as the Oak Ridge National Laboratory Risk Assessment Information System (2005), provide lower GI absorption values for several of the COPCs, which would require adjustment of the oral toxicity values. The use of GI absorption values from EPA's *Dermal Guidance* may underestimate the risk/hazard associated with the dermal exposure pathway. The degree to which overall site risks for each receptor may be underestimated depends on the relative contribution of the dermal exposure pathway.

6.3.0.6 *Chemicals with Provisional Toxicity Values*: The primary source of toxicity information is the EPA IRIS system. When a toxicity value is not available in IRIS, other sources of toxicity information can be considered in accordance with EPA guidance (EPA 2003a). These additional sources are considered provisional. In this assessment, the RBCs for several chemicals were based on provisional toxicity values. The chemicals with provisional RfDs (for noncancer risk) include:

- Chloroform
- Iron
- TCE

6.3.0.7 The chemicals with provisional CSFs (cancer risk) include:

- TCE
- Benz[a]anthracene
- Benzo[b]fluoranthene
- Dibenz[a,h]anthracene

6.3.0.8 Several provisional CSFs have been presented for TCE; the high-end value was used in developing RBCs used for screening purposes, and as the CSF for TCE in all risk calculations. While risks from TCE may be overestimated as a result, repercussions of using either the higher slope factor or a mid-point value is of little consequence since TCE is of little concern at OU1. Although all of the aforementioned chemicals have provisional toxicity values, the uncertainty associated with these values is of little significance at OU1 since none is a risk driver (as compared to arsenic and benzo[a]pyrene) for this site.

6.3.0.9 *Chemicals Without Toxicity Values*: When chemicals do not have available toxicity factors, the chemicals cannot be evaluated and potential contribution to the risk/hazard estimates cannot be completed. In all likelihood, the detection of chemicals without toxicity values will yield an underestimate of risk because the chemicals would not be included in the cumulative risk/hazard estimates. In this assessment, magnesium, calcium, potassium, sodium, phenanthrene, and benzo[g,h,i]perylene were all detected and without toxicity values; therefore, risks could be underestimated based on this uncertainty. Because magnesium, calcium, potassium, and sodium are essential nutrients and because the magnitude of the detected concentrations in the media at OU1 is relatively small, it is not expected that the exclusion of these nutrients will underestimate risk. The lack of toxicity data for phenanthrene and benzo[g,h,i]perylene (both non-carcinogens) is not expected to substantially impact the noncancer risk estimate.

6.4 UNCERTAINTIES IN ESTIMATION OF SITE-RELATED RISK

6.4.0.1 EPA guidance indicates that carcinogenic risks and HQs resulting from various multiple chemicals should be considered additive (EPA 1989). In the absence of supporting data for synergy or antagonism, the assumption of additivity could overestimate or underestimate potential cancer risk or HQs for receptors.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.0.0.1 The HHBRA for surface and subsurface soil at OU1 identified 10 chemicals as COPCs: arsenic, iron, thallium, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, dibenz[a,h]anthracene, naphthalene, chloroform, and TCE. A number of chemicals, including all PAHs, were detected in soil samples but were not detected at levels that exceeded background conditions. To be considered a COPC, one of two conditions was met: (1) the MDC of the chemical exceeded the RBSL (i.e., the lower value between the EPA Region III industrial soil RBC and calculated trench worker RBC), or (2) the potential chemical-specific inhalation risk for indoor workers is above a cancer or noncancer target level.

7.0.0.2 Cancer risks and noncancer hazards for each receptor at OU1 were estimated assuming exposure through relevant pathways, as summarized in Table 7-1. Risks were also summarized in a format recommended by RAGS, Part D (EPA 2001a) in which chemical risk drivers for each receptor and exposure pathway were identified (Appendix F).

7.0.0.3 Risks were estimated for outdoor and indoor industrial workers and construction workers. While exposure for outdoor workers included soil ingestion, dermal absorption, and inhalation of particulates, indoor workers are likely exposed only through inhalation of volatile chemicals from soil vapor migration. Evaluation of current indoor workers at Buildings 41 and 54 (also known as Building 232) used soil gas results from samples collected in Summa™ canisters. Potential risks for future indoor workers were evaluated by modeling indoor air concentrations from volatile soil COPCs.

7.0.0.4 Potential cancer risk for current outdoor industrial workers exposed to surface soil was estimated to be 1E-04. For future outdoor workers who may become exposed to COPCs in surface and subsurface soils, the potential cancer risk was 9E-05. These estimates are within the target risk range of 1E-06 to 1E-04. Much of this risk (approximately 70 percent) is due to background levels of carcinogenic PAHs. Without background contribution, the estimated cancer risks for current and future industrial workers are 4E-05 and 3E-05, respectively. This remaining site-related risk is due primarily to arsenic. Noncancer hazard estimates were below 1.

7.0.0.5 Potential risks for current indoor workers were below target risk levels since the only chemicals detected in soil gas samples (i.e., 1,2,4-trimethylbenzene and hexane) were not detected at concentrations that could pose an unacceptable risk for indoor exposures. For future indoor workers, the potential cancer risk from indoor vapor inhalation was estimated at 1E-07, which is below the target risk range of 1E-06 to 1E-04. The estimated noncancer hazard was below 1.

7.0.0.6 Potential cancer risk for future construction workers who may become exposed to surface and subsurface soils was estimated at 5E-06, which is within the target risk range of 1E-06 to 1E-04. The estimated noncancer hazard was near 1, with arsenic posing much of the risk. Target organ segregation resulted in no organ-specific hazard that exceeded the target hazard of 1.

7.0.0.7 For outdoor industrial workers and construction workers, incidental soil ingestion is the exposure pathway producing most of the overall chemical dose, with most of the risk (and hazard) due to arsenic and benzo[a]pyrene. The estimates for outdoor industrial workers and construction workers are likely conservative for the following reasons:

- The estimates assume the reasonable maximum exposure scenario.
- The site-related risk is predominantly driven by arsenic, for which the MDC of 132 mg/kg highly weights the EPC.
- The data set produced EPCs that may be biased high, resulting in potentially elevated EPCs and the potentially incorrect conclusion that certain chemicals (most notably, arsenic) exceeds background concentrations.

7.0.0.8 A number of background chemicals were detected at levels that exceeded Region III industrial soil RBCs, including, most notably, benzo[a]pyrene and dibenz[a,h]anthracene. Potential cancer risks associated with exposure to background levels in surface and subsurface soils were estimated as 5E-05 for current industrial workers, 6E-05 for future industrial workers, and 3E-06 for future construction workers. These risk levels are approximately 1 to 2 times higher than the risk posed by site-related COPCs.

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TABLES

TABLE 2-1

REPORTING LIMIT EVALUATION IN SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 6010B				
Beryllium	7440417	1.61E+03	0.555 - 0.6	0.0%
Cadmium	7440439	7.28E+02	0.02 - 0.6	0.0%
Mercury	7439976	3.10E+01	0.06 - 0.06	0.0%
Silver	7440224	3.84E+03	0.04 - 1.8	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 7471A				
Mercury	7439976	3.10E+01	0.068 - 0.082	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8081A				
2,4,5-T	93765	1.00E+04	0.0076 - 0.0084	0.0%
2,4,5-TP (Silvex)	93721	8.20E+03	0.0076 - 0.0084	0.0%
2,4-D	94757	7.49E+03	0.038 - 0.042	0.0%
2,4-DB	94826	8.20E+03	0.076 - 0.084	0.0%
alpha-BHC (benzene hexachloride)	319846	4.50E-01	0.00014 - 0.0021	0.0%
Dalapon	75990	2.00E+04	0.038 - 0.042	0.0%
delta-BHC	319868	--	0.00019 - 0.00498	--
Dicamba	1918009	3.10E+04	0.0076 - 0.0084	0.0%
Dichloroprop	120365	--	0.0038 - 0.0042	--
Dinoseb	88857	6.68E+02	0.0076 - 0.0084	0.0%
Endosulfan I	115297	1.36E+03	0.00019 - 0.0042	0.0%
Endosulfan sulfate	1031078	--	0.00038 - 0.0042	--
Endrin aldehyde	7421934	--	0.00038 - 0.015	--
gamma-Chlordane	57749	8.20E+00	0.00017 - 0.0017	0.0%
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94746	3.34E+02	1.9 - 2.1	0.0%
MCPP (2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	1.00E+03	1.9 - 2.1	0.0%
Methoxychlor	72435	1.14E+03	0.0012 - 0.021	0.0%
Toxaphene	8001352	2.60E+00	0.015 - 0.16	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8151A				
2,4,5-T	93765	1.00E+04	0.022 - 0.024	0.0%
2,4,5-TP (Silvex)	93721	8.20E+03	0.022 - 0.024	0.0%
2,4-D	94757	7.49E+03	0.045 - 0.049	0.0%
2,4-DB	94826	8.20E+03	0.22 - 0.24	0.0%
Dalapon	75990	2.00E+04	0.22 - 0.24	0.0%
Dicamba	1918009	3.10E+04	0.022 - 0.024	0.0%
Dichloroprop	120365	--	0.022 - 0.024	--
Dinoseb	88857	6.68E+02	0.022 - 0.024	0.0%
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94746	3.34E+02	11 - 12	0.0%
MCPP (2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	1.00E+03	11 - 12	0.0%
Picloram	1918021	--	0.22 - 0.24	--
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8260B				
1,1,1-Trichloroethane	71556	1.56E+04	0.0051 - 0.0062	0.0%
1,1,2,2-Tetrachloroethane	79345	1.40E+01	0.0051 - 0.0062	0.0%
1,1,2-Trichloroethane	79005	5.00E+01	0.0051 - 0.0062	0.0%
1,1-Dichloroethene	75354	1.74E+03	0.0051 - 0.0062	0.0%
1,2-Dichloroethane	107062	3.10E+01	0.0051 - 0.0062	0.0%
1,2-Dichloroethene, total	540590	2.04E+03	0.006 - 0.006	0.0%
1,2-Dichlorpropane	78875	3.35E+01	0.0051 - 0.0062	0.0%
2-Hexanone	591786	--	0.006 - 0.012	--
4-Methyl-2-pentanone	108101	7.6E+04	0.006 - 0.012	0.0%
Bromodichloromethane	75274	4.60E+01	0.0051 - 0.0062	0.0%

TABLE 2-1

REPORTING LIMIT EVALUATION IN SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
Bromoform	75252	3.60E+02	0.0051 - 0.0062	0.0%
Carbon Disulfide	75150	2.76E+03	0.01 - 0.012	0.0%
Carbon Tetrachloride	56235	2.20E+01	0.0051 - 0.0062	0.0%
Chlorobenzene	108907	1.11E+03	0.0051 - 0.0062	0.0%
Chloroethane	75003	9.90E+02	0.0051 - 0.0062	0.0%
cis-1,2-Dichloroethene	156592	1.00E+04	0.0051 - 0.0062	0.0%
cis-1,3-Dichloropropene	10061015	--	0.0051 - 0.0062	--
Dibromochloromethane	124481	3.40E+01	0.0051 - 0.0062	0.0%
Methyl bromide	74839	--	0.0051 - 0.0062	--
Methylene Chloride	75092	3.80E+02	0.0051 - 0.0062	0.0%
Styrene	100425	3.51E+04	0.0051 - 0.0062	0.0%
Tetrachloroethene	127184	5.30E+00	0.0051 - 0.0062	0.0%
trans-1,2-Dichloroethene	156605	5.51E+02	0.0051 - 0.0062	0.0%
trans-1,3-dichloropropene	542756	2.90E+01	0.0051 - 0.0062	0.0%
Vinyl Chloride	75014	4.00E+00	0.0051 - 0.0062	0.0%
Xylenes, Total	1330207	1.96E+03	0.005 - 0.019	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8260C				
Bromodichloromethane	75274	4.60E+01	0.006 - 0.006	0.0%
Bromoform	75252	3.60E+02	0.006 - 0.006	0.0%
Bromomethane	74839	3.18E+02	0.006 - 0.006	0.0%
Carbon Disulfide	75150	2.76E+03	0.006 - 0.006	0.0%
Carbon Tetrachloride	56235	2.20E+01	0.006 - 0.006	0.0%
Chlorobenzene	108907	1.11E+03	0.006 - 0.006	0.0%
Chloroethane	75003	9.90E+02	0.006 - 0.006	0.0%
Chloromethane	74873	6.48E+01	0.006 - 0.006	0.0%
cis-1,3-Dichloropropene	10061015	--	0.006 - 0.006	--
Dibromochloromethane	124481	3.40E+01	0.006 - 0.006	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8270C				
1,2,4-Trichlorobenzene	120821	2.24E+03	0.19 - 0.41	0.0%
1,2-Dichlorobenzene	95501	1.47E+04	0.19 - 0.41	0.0%
1,3-Dichlrobenzene	541731	6.81E+02	0.19 - 0.41	0.0%
1,4-Dichlorobenzene	106467	1.20E+02	0.19 - 0.41	0.0%
2- & 3-Methylphenol		5.10E+04	0.19 - 0.21	0.0%
2,4,5-Trichlorophenol	95954	1.00E+05	0.19 - 2	0.0%
2,4,6-Trichlorophenol	88062	2.60E+02	0.19 - 0.41	0.0%
2,4-Dichlorophenol	120832	3.10E+03	0.19 - 0.41	0.0%
2,4-Dimethylphenol	105679	2.00E+04	0.19 - 0.41	0.0%
2,4-Dinitrophenol	51285	4.54E+02	0.95 - 1	0.0%
2,4-Dinitrotoluene	121142	4.54E+02	0.19 - 0.41	0.0%
2,6-Dinitrotoluene	606202	1.00E+03	0.19 - 0.41	0.0%
2-Chloronaphthalene	91587	8.20E+04	0.19 - 0.41	0.0%
2-Chlorophenol	95578	5.10E+03	0.19 - 0.41	0.0%
2-Methyl-4,6-Dinitrophenol	534521	1.00E+02	0.38 - 2	0.0%
2-Methylphenol	95487	1.14E+04	0.37 - 0.41	0.0%
2-Nitroaniline	88744	6.50E+02	0.95 - 1	0.0%
2-Nitrophenol	88755	--	0.19 - 0.41	--
3,3'-Dichlorobenzidine	91941	6.40E+00	0.37 - 0.42	0.0%
3-Nitroaniline	99092	6.81E+01	0.38 - 1	0.0%
4-bromophenyl-phenylether	101553	--	0.19 - 0.41	--

TABLE 2-1

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HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
4-Chloro-3-Methylphenol	59507	--	0.19 - 0.41	--
4-Chloroaniline	106478	5.30E+01	0.19 - 0.41	0.0%
4-Chlorophenyl-phenyl ether	7005723	--	0.19 - 0.41	--
4-Methylphenol	106445	1.14E+03	0.19 - 0.41	0.0%
4-Nitroaniline	100016	1.40E+02	0.95 - 2	0.0%
4-Nitrophenol	100027	--	0.95 - 2	--
Acenaphthylene	208968	--	0.37 - 0.41	--
Benzoic Acid	65850	2.67E+06	0.95 - 1	0.0%
Benzyl Alcohol	100516	3.10E+05	0.19 - 0.21	0.0%
bis(2-Chloroethoxy) Methane	111911	--	0.19 - 0.41	0.0%
bis(2-Chloroethyl) Ether	111444	2.60E+00	0.37 - 0.41	0.0%
bis(2-chloroisopropyl) ether	108601	4.10E+01	0.19 - 0.41	0.0%
Butylbenzylphthalate	85687	1.50E+03	0.19 - 0.41	0.0%
Diethyl phthalate	84662	8.20E+05	0.19 - 0.41	0.0%
Dimethylphthalate	131113	2.27E+06	0.19 - 0.41	0.0%
di-n-Butylphthalate	84742	1.00E+05	0.19 - 0.41	0.0%
di-n-Octylphthalate	117840	9.08E+03	0.19 - 0.41	0.0%
Hexachlorbenzene	118741	1.80E+00	0.19 - 0.41	0.0%
Hexachlorobutadiene	87683	3.70E+01	0.19 - 0.41	0.0%
Hexachlorocyclopentadiene	77474	6.10E+03	0.19 - 0.41	0.0%
Hexachloroethane	67721	2.00E+02	0.19 - 0.41	0.0%
Isophorone	78591	3.00E+03	0.19 - 0.41	0.0%
Nitrobenzene	98953	2.45E+02	0.19 - 0.41	0.0%
N-Nitrosodi-N-Propylamine	621647	4.10E-01	0.19 - 0.41	0.0%
N-Nitroso-Diphenylamine	86306	5.80E+02	0.19 - 0.41	0.0%
Pentachlorophenol	87865	2.40E+01	0.95 - 2	0.0%
Phenol	108952	6.81E+04	0.19 - 0.41	0.0%
Cyanide (free)	57125	4.54E+03	0.22 - 0.31	0.0%
Surface Soil (0 to 3 feet bgs) (mg/kg) by Method 8082				
Aroclor 1016	12674112	1.59E+01	0.01 - 0.19	0.0%
Aroclor 1221	11104282	1.40E+00	0.0082 - 0.19	0.0%
Aroclor 1232	11141165	1.40E+00	0.011 - 0.19	0.0%
Aroclor 1242	53469219	1.40E+00	0.0052 - 0.19	0.0%
Aroclor 1248	12672296	1.40E+00	0.0093 - 0.19	0.0%
Aroclor 1254	11097691	1.40E+00	0.0033 - 0.19	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 6010B				
Beryllium	7440417	1.61E+03	0.555 - 0.6	0.0%
Cadmium	7440439	7.28E+02	0.02 - 0.6	0.0%
Mercury	7439976	3.10E+01	0.05 - 0.09	0.0%
Silver	7440224	3.84E+03	0.04 - 1.8	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 7471A				
Mercury	7439976	3.10E+01	0.068 - 0.082	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8081A				
2,4,5-T	93765	1.00E+04	0.0076 - 0.0084	0.0%
2,4,5-TP (Silvex)	93721	8.20E+03	0.0076 - 0.0084	0.0%
2,4-D	94757	7.49E+03	0.038 - 0.042	0.0%
2,4-DB	94826	8.20E+03	0.076 - 0.084	0.0%
alpha-BHC	319846	4.50E-01	0.00014 - 0.0021	0.0%
Dalapon	75990	2.00E+04	0.038 - 0.042	0.0%

TABLE 2-1

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DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
delta-BHC	319868	--	0.00019 - 0.00498	--
Dicamba	1918009	3.10E+04	0.0076 - 0.0084	0.0%
Dichloroprop	120365	--	0.0038 - 0.0042	--
Dinoseb	88857	6.68E+02	0.0076 - 0.0084	0.0%
Endosulfan I	115297	1.36E+03	0.00019 - 0.0043	0.0%
Endosulfan sulfate	1031078	--	0.00038 - 0.0042	--
Endrin aldehyde	7421934	--	0.00038 - 0.015	--
gamma-Chlordane	57749	8.20E+00	0.00017 - 0.0017	0.0%
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94746	3.34E+02	1.9 - 2.1	0.0%
MCPP (2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	1.00E+03	1.9 - 2.1	0.0%
Methoxychlor	72435	1.14E+03	0.0012 - 0.021	0.0%
Toxaphene	8001352	2.60E+00	0.013 - 0.16	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8151B				
2,4,5-T	93765	1.00E+04	0.022 - 0.024	0.0%
2,4,5-TP (Silvex)	93721	8.20E+03	0.022 - 0.024	0.0%
2,4-D	94757	7.49E+03	0.045 - 0.049	0.0%
2,4-DB	94826	8.20E+03	0.22 - 0.24	0.0%
Dalapon	75990	2.00E+04	0.22 - 0.24	0.0%
Dicamba	1918009	3.10E+04	0.022 - 0.024	0.0%
Dichloroprop	120365	--	0.022 - 0.024	--
Dinoseb	88857	6.68E+02	0.022 - 0.024	0.0%
MCPA (2-Methyl-4-chlorophenoxyacetic acid)	94746	3.34E+02	11 - 12	0.0%
MCPP (2-(2-Methyl-4-chlorophenoxy)propionic acid	93652	1.00E+03	11 - 12	0.0%
Picloram	1918021	--	0.22 - 0.24	--
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8260B				
1,1,1-Trichloroethane	71556	1.56E+04	0.0051 - 0.0062	0.0%
1,1,2,2-Tetrachloroethane	79345	1.40E+01	0.0051 - 0.0062	0.0%
1,1,2-Trichloroethane	79005	5.00E+01	0.0051 - 0.0062	0.0%
1,1,2-Trichlorotrifluoroethane	76131	3.10E+07	0.0051 - 0.0062	0.0%
1,1-Dichloroethene	75354	1.74E+03	0.0051 - 0.0062	0.0%
1,2-Dichloroethane	107062	3.10E+01	0.0051 - 0.0062	0.0%
1,2-Dichloroethene, total	540590	2.04E+03	0.006 - 0.006	0.0%
1,2-Dichlorpropane	78875	3.35E+01	0.0051 - 0.0062	0.0%
2-Hexanone	591786	--	0.006 - 0.012	--
4-Methyl-2-pentanone	108101	7.6E+04	0.006 - 0.012	0.0%
Bromodichloromethane	75274	4.60E+01	0.0051 - 0.0062	0.0%
Bromoform	75252	3.60E+02	0.0051 - 0.0062	0.0%
Carbon Disulfide	75150	2.76E+03	0.01 - 0.012	0.0%
Carbon Tetrachloride	56235	2.20E+01	0.0051 - 0.0062	0.0%
Chlorobenzene	108907	1.11E+03	0.0051 - 0.0062	0.0%
Chloroethane	75003	9.90E+02	0.0051 - 0.0062	0.0%
cis-1,2-Dichloroethene	156592	1.00E+04	0.0051 - 0.0062	0.0%
cis-1,3-Dichloropropene	10061015	--	0.0051 - 0.0062	0.0%
Dibromochloromethane	124481	3.40E+01	0.0051 - 0.0062	0.0%
Methyl bromide	74839	--	0.0051 - 0.0062	0.0%
Methyl chloride	74873	3.80E+02	0.0051 - 0.0062	0.0%
Styrene	100425	3.51E+04	0.0051 - 0.0062	0.0%
Tetrachloroethene	127184	5.30E+00	0.0051 - 0.0062	0.0%
trans-1,2-Dichloroethene	156605	5.51E+02	0.0051 - 0.0062	0.0%

TABLE 2-1

REPORTING LIMIT EVALUATION IN SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
trans-1,3-dichloropropene	542756	2.90E+01	0.0051 - 0.0062	0.0%
Vinyl Chloride	75014	4.00E+00	0.0051 - 0.0062	0.0%
Xylenes, Total	1330207	1.96E+03	0.005 - 0.019	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8260C				
Bromodichloromethane	75274	4.60E+01	0.006 - 0.006	0.0%
Bromoform	75252	3.60E+02	0.006 - 0.006	0.0%
Bromomethane	74839	3.18E+02	0.006 - 0.006	0.0%
Carbon Disulfide	75150	2.76E+03	0.006 - 0.006	0.0%
Carbon Tetrachloride	56235	2.20E+01	0.006 - 0.006	0.0%
Chlorobenzene	108907	1.11E+03	0.006 - 0.006	0.0%
Chloroethane	75003	9.90E+02	0.006 - 0.006	0.0%
Chloromethane	74873	6.48E+01	0.006 - 0.006	0.0%
cis-1,3-Dichloropropene	10061015	--	0.006 - 0.006	0.0%
Dibromochloromethane	124481	3.40E+01	0.006 - 0.006	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8270C				
1,2,4-Trichlorobenzene	120821	2.24E+03	0.19 - 0.41	0.0%
1,2-Dichlorobenzene	95501	1.47E+04	0.19 - 0.41	0.0%
1,3-Dichlrobenzene	541731	6.81E+02	0.19 - 0.41	0.0%
1,4-Dichlorobenzene	106467	1.20E+02	0.19 - 0.41	0.0%
2- & 3-Methylphenol		5.10E+04	0.19 - 0.21	0.0%
2,4,5-Trichlorophenol	95954	1.00E+05	0.19 - 2	0.0%
2,4,6-Trichlorophenol	88062	2.60E+02	0.19 - 0.41	0.0%
2,4-Dichlorophenol	120832	3.10E+03	0.19 - 0.41	0.0%
2,4-Dimethylphenol	105679	2.00E+04	0.19 - 0.41	0.0%
2,4-Dinitrophenol	51285	4.54E+02	0.95 - 2	0.0%
2,4-Dinitrotoluene	121142	4.54E+02	0.19 - 0.41	0.0%
2,6-Dinitrotoluene	606202	1.00E+03	0.19 - 0.41	0.0%
2-Chloronaphthalene	91587	8.20E+04	0.19 - 0.41	0.0%
2-Chlorophenol	95578	5.10E+03	0.19 - 0.41	0.0%
2-Methyl-4,6-Dinitrophenol	534521	1.00E+02	0.38 - 2	0.0%
2-Methylphenol	95487	1.14E+04	0.37 - 0.41	0.0%
2-Nitroaniline	88744	6.50E+02	0.95 - 2	0.0%
2-Nitrophenol	88755	--	0.19 - 0.41	--
3,3'-Dichlorobenzidine	91941	6.40E+00	0.37 - 0.42	0.0%
3-Nitroaniline	99092	6.81E+01	0.38 - 2	0.0%
4-bromophenyl-phenylether	101553	--	0.19 - 0.42	--
4-Chloro-3-Methylphenol	59507	--	0.19 - 0.42	--
4-Chloroaniline	106478	5.30E+01	0.19 - 0.42	0.0%
4-Chlorophenyl-phenyl ether	7005723	--	0.19 - 0.41	0.0%
4-Methylphenol	106445	1.14E+03	0.19 - 0.41	0.0%
4-Nitroaniline	100016	1.40E+02	0.95 - 2	0.0%
4-Nitrophenol	100027	--	0.2 - 2	0.0%
Acenaphthylene	208968	--	0.37 - 0.41	0.0%
Benzoic Acid	65850	2.67E+06	0.95 - 1	0.0%
Benzyl Alcohol	100516	3.10E+05	0.19 - 0.21	0.0%
bis(2-Chloroethoxy) Methane	111911	--	0.19 - 0.41	--
bis(2-Chloroethyl) Ether	111444	2.60E+00	0.19 - 0.41	0.0%
bis(2-chloroisopropyl) ether	108601	4.10E+01	0.19 - 0.41	0.0%
Butylbenzylphthalate	85687	1.50E+03	0.19 - 0.41	0.0%

TABLE 2-1

REPORTING LIMIT EVALUATION IN SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	CAS	Soil Screening Criterim[a] (mg/kg)	Range of Reporting Limits (mg/kg)	Frequency of Exceedance
Diethyl phthalate	84662	8.20E+05	0.19 - 0.41	0.0%
Dimethylphthalate	131113	2.27E+06	0.19 - 0.41	0.0%
di-n-Butylphthalate	84742	1.00E+05	0.19 - 0.41	0.0%
di-n-Octylphthalate	117840	9.08E+03	0.19 - 0.41	0.0%
Hexachlorbenzene	118741	1.80E+00	0.19 - 0.41	0.0%
Hexachlorobutadiene	87683	3.70E+01	0.19 - 0.41	0.0%
Hexachlorocyclopentadiene	77474	6.10E+03	0.19 - 0.41	0.0%
Hexachloroethane	67721	2.00E+02	0.19 - 0.41	0.0%
Isophorone	78591	3.00E+03	0.19 - 0.41	0.0%
Nitrobenzene	98953	2.45E+02	0.19 - 0.41	0.0%
N-Nitrosodi-N-Propylamine	621647	4.10E-01	0.19 - 0.41	0.0%
N-Nitroso-Diphenylamine	86306	5.80E+02	0.19 - 0.41	0.0%
Pentachlorophenol	87865	2.40E+01	0.95 - 2	0.0%
Phenol	108952	6.81E+04	0.19 - 0.41	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 9012				
Cyanide (free)	57125	4.54E+03	0.22 - 0.31	0.0%
Subsurface Soil (0 to 6 feet bgs) (mg/kg) by Method 8082				
Aroclor 1016	12674112	1.59E+01	0.01 - 0.19	0.0%
Aroclor 1221	11104282	1.40E+00	0.0082 - 0.19	0.0%
Aroclor 1232	11141165	1.40E+00	0.011 - 0.19	0.0%
Aroclor 1242	53469219	1.40E+00	0.0052 - 0.19	0.0%
Aroclor 1248	12672296	1.40E+00	0.0093 - 0.19	0.0%
Aroclor 1254	11097691	1.40E+00	0.0033 - 0.19	0.0%

Notes:

[a] The screening criteria are the lower value between EPA Region III industrial RBCs and calculated trench worker RBCs (Appendix C1).

bgs = below ground surface

mg/kg = milligrams per kilogram

% = percent

-- = No RBC available.

TABLE 2-2

REPORTING LIMIT EVALUATION IN SOIL GAS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Range of Reporting Limits (mg/m^3)	Potential Cancer Risk if Truly at Reporting Limit	Potential Noncancer Hazard Quotient if Truly at Reporting Limit	Cancer Risk exceed 10^{-6} or HQ exceed 1?	Chemical Detected in Soil?
Soil Gas by MOD-TO14 (mg/m^3)					
1,1,1-Trichloroethane	0.064 - 0.068	--	0.01	No	No
1,1,2,2-Tetrachloroethane	0.064 - 0.068	1E-05	--	Yes	No
1,1,2-Trichloro-1,2,2-trifluoroethane	0.064 - 0.068	--	0.0004	No	No
1,1,2-Trichloroethane	0.064 - 0.068	2E-05	--	Yes	No
1,1-Dichloroethane	0.064 - 0.068	--	0.05	No	Yes
1,1-Dichloroethene	0.064 - 0.068	--	0.32	No	No
1,2,4-Trichlorobenzene	0.064 - 0.068	--	0.02	No	No
1,2-Dibromoethane	0.064 - 0.068	4E-04	0.21	Yes	No
1,2-Dichlorobenzene	0.064 - 0.068	--	0.003	No	No
1,2-Dichloroethane	0.064 - 0.068	6E-05	--	Yes	No
1,2-Dichloropropane	0.064 - 0.068	--	2.64	Yes	No
1,3,5-Trimethylbenzene	0.064 - 0.068	--	0.13	No	No
1,3-Dichlorobenzene	0.064 - 0.068	--	--	No	No
1,4-Dichlorobenzene	0.064 - 0.068	--	0.001	No	No
2-Chlorotoluene	0.064 - 0.068	--	--	No	No
Benzene	0.064 - 0.068	5E-05	--	Yes	Yes
Bromodichloromethane	0.064 - 0.068	--	--	No	No
Bromoform	0.064 - 0.068	2E-07	--	No	No
Bromomethane	0.064 - 0.068	--	8.77	Yes	No
Carbon disulfide	0.064 - 0.068	--	0.11	No	No
Carbon tetrachloride	0.064 - 0.068	2E-04	--	Yes	No
Chlorobenzene	0.064 - 0.068	--	0.18	No	No
Chloroethane	0.064 - 0.068	--	0.01	No	No
Chloroform	0.064 - 0.068	1E-04	--	Yes	Yes
Chloromethane	0.064 - 0.068	5E-05	0.89	Yes	No
cis-1,2-Dichloroethene	0.064 - 0.068	--	--	No	No
cis-1,3-Dichloropropene	0.064 - 0.068	--	--	No	No
Dibromochloromethane	0.064 - 0.068	--	--	No	No
Dichlorodifluoromethane	0.064 - 0.068	--	0.39	No	No
Dichlorotetrafluoroethane	0.064 - 0.068	--		No	No
Ethylbenzene	0.064 - 0.068	--	0.005	No	Yes
Hexachlorobutadiene	0.064 - 0.068	2E-07	--	No	No
m,p-Xylenes [a]	0.13 - 0.14	--	0.09	No	No

TABLE 2-2

REPORTING LIMIT EVALUATION IN SOIL GAS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Range of Reporting Limits (mg/m^3)	Potential Cancer Risk if Truly at Reporting Limit	Potential Noncancer Hazard Quotient if Truly at Reporting Limit	Cancer Risk exceed 10^{-6} or HQ exceed 1?	Chemical Detected in Soil?
Methylene chloride	0.064 - 0.068	5E-05	0.89	Yes	No
o-Xylene [a]	0.064 - 0.068	--	0.03	No	No
Styrene	0.064 - 0.068	--	0.001	No	No
Tetrachloroethene	0.064 - 0.068	4E-06	0.04	Yes	No
Toluene	0.064 - 0.068	--	0.002	No	Yes
trans-1,2-Dichloroethene	0.064 - 0.068	--	0.49	No	No
trans-1,3-Dichloropropene	0.064 - 0.068	--	--	No	No
trans-1,4-Dichloro-2-butene	0.064 - 0.068	--	--	No	No
Trichloroethene	0.064 - 0.068	5E-04	0.34	Yes	Yes
Trichlorofluoromethane	0.064 - 0.068	--	0.07	No	No
Vinyl chloride	0.064 - 0.068	3E-04	0.99	Yes	No

NOTES:
mg/m^3 = Milligrams of chemical per cubic meter of air
[a] Toxicity information for mixed xylenes used.
Risks estimated using EPA spreadsheet of the Johnson & Ettinger Model for Subsurface Vapor Intrusion into Buildings (USEPA 2002c).
the Oak Ridge National Laboratory's Risk Assessment Information System (ORNL 2005).

USEPA. 2002c. http://www.epa.gov/oswer/riskassessment/airmodel/johnson_ettinger.htm
Oak Ridge National Laboratory. 2005. Online toxicity information database: http://risk.lsd.ornl.gov/index.shtml

TABLE 2-3

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-related? (Site Levels >Background?)	Basis of Test	p-Value (or a-value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
Metals/Inorganics by Method 6010B																		
Aluminum	23	23	100%	YES	YES	Two sample t-test	0.006	5.28E+03	2.02E+04	6.81E+02	YES	2.3E+04	N	NO	Nap	Nap	--	NO
Antimony	1	15	7%	YES	YES[e]	--	--	1.30E+00	1.30E+00	1.30E+00	NO	2.4E+01	N	NO	Nap	Nap	--	NO
Arsenic	22	22	100%	YES	YES	Gehan	0.005	1.20E+00	1.32E+02	2.60E-02	YES	1.9E+00	C	YES	Nap	Nap	--	YES
Barium	23	23	100%	YES	NO	Two sample t-test	0.203	1.40E+01	1.14E+02	2.10E+02	NO	4.6E+03	N	NO	Nap	Nap	--	NO
Chromium III (f)	23	23	100%	YES	YES	Two sample t-test	0.008	6.43E+00	2.79E+01	2.00E+08	NO	1.3E+05	N	NO	Nap	Nap	--	NO
Chromium VI (f)	23	23	100%	YES	YES	Two sample t-test	0.008	1.07E+00	4.66E+00	4.20E+00	YES	7.8E+01	N	NO	Nap	Nap	--	NO
Cobalt	20	20	100%	YES	YES	Two sample t-test	0.005	8.90E-01	6.90E+00	6.60E+01	NO	1.7E+02	N	NO	Nap	Nap	--	NO
Copper	23	23	100%	YES	NO	WRS	0.326	2.60E+00	1.77E+01	1.10E+03	NO	9.1E+02	N	NO	Nap	Nap	--	NO
Iron	23	23	100%	YES	YES	Two sample t-test	0.015	8.56E+03	4.35E+04	5.54E+02	YES	6.8E+03	N	YES	Nap	Nap	--	YES
Lead	23	23	100%	YES	NO	Two sample t-test	0.060	6.40E+00	5.75E+01	2.70E+01	YES	7.5E+02	N	NO	Nap	Nap	--	NO
Manganese	23	23	100%	YES	NO	WRS	0.087	1.50E+00	2.75E+02	9.50E+01	YES	4.8E+02	N	NO	Nap	Nap	--	NO
Nickel	23	23	100%	YES	YES	Two sample t-test	0.018	9.20E-01	1.03E+01	9.52E+01	NO	1.5E+03	N	NO	Nap	Nap	--	NO
Selenium	14	23	61%	YES	YES	Quantile	0.046	5.80E-01	1.10E+00	1.90E+00	NO	1.1E+02	N	NO	Nap	Nap	--	NO
Thallium	19	23	83%	YES	YES	Quantile	0.026	5.10E-01	1.01E+01	3.60E-01	YES	1.6E+00	N	YES	Nap	Nap	--	YES
Vanadium	23	23	100%	YES	YES	Two sample t-test	0.020	1.55E+01	5.44E+01	7.30E+01	NO	7.9E+01	N	NO	Nap	Nap	--	NO
Zinc	23	23	100%	YES	NO	Two sample t-test	0.065	4.10E+00	5.92E+01	1.40E+03	NO	6.8E+03	N	NO	Nap	Nap	--	NO
Pesticides by Method 8081A																		
Aldrin	1	23	4%	NO	YES[e]	--	--	9.50E-04	9.50E-04	7.70E-03	NO	1.7E-01	C	NO	8E-11	Nap	NO	NO
beta-BHC	2	23	9%	YES	YES[e]	--	--	2.40E-04	3.50E-04	3.10E-03	NO	1.6E+00	C	NO	Nap	Nap	--	NO
gamma-BHC	4	15	27%	YES	YES[e]	--	--	1.20E-03	1.80E-03	4.30E-03	NO	2.2E+00	C	NO	Nap	Nap	NO	NO
alpha-Chlordane	1	23	4%	NO	YES[e]	--	--	1.70E-02	1.70E-02	9.20E-01	NO	8.2E+00	C	NO	2E-10	8E-06	NO	NO
4,4'-DDD	2	23	9%	YES	YES[e]	--	--	1.38E-03	2.10E-01	1.10E+01	NO	1.2E+01	C	NO	Nap	Nap	--	NO
4,4'-DDE	5	23	22%	YES	YES[e]	--	--	1.00E-03	6.30E-03	3.50E+01	NO	8.4E+00	C	NO	Nap	Nap	NO	NO
4,4'-DDT	10	23	43%	YES	YES[e]	--	--	2.00E-03	4.75E-02	1.20E+00	NO	8.4E+00	C	NO	Nap	Nap	--	NO
Dieldrin	1	23	4%	NO	YES[e]	--	--	1.14E-03	1.14E-03	2.20E-03	NO	1.8E-01	C	NO	7E-10	Nap	NO	NO
Endosulfan II	1	23	4%	NO	YES[e]	--	--	8.25E-04	8.25E-04	2.00E+00	NO	1.4E+02	N	NO	Nap	Nap	NO	NO
Endrin	1	23	4%	NO	YES[e]	--	--	5.00E-04	5.00E-04	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Endrin ketone	1	23	4%	NO	YES[e]	--	--	1.57E-02	1.57E-02	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Heptachlor	7	23	30%	YES	YES[e]	--	--	3.20E-04	1.00E-03	8.40E-01	NO	6.4E-01	C	NO	4E-07	Nap	NO	NO
Heptachlor epoxide	5	23	22%	YES	YES[e]	--	--	1.90E-04	3.40E-02	2.50E-02	YES	3.1E-01	C	NO	Nap	Nap	--	NO
PAHs by Method 8270C																		
Acenaphthene	1	23	4%	NO	NO	Quantile	0.179	6.10E+00	6.10E+00	1.00E+01	NO	6.1E+03	N	NO	Nap	Nap	NO	NO
Anthracene	1	23	4%	NO	NO	Quantile	0.051	3.80E+00	3.80E+00	4.70E+01	NO	3.1E+04	N	NO	Nap	Nap	--	NO
Benzo(a)anthracene	6	23	26%	YES	NO	Quantile	0.058	9.23E-02	1.05E+01	1.50E+00	YES	3.9E+00	C	YES	Nap	Nap	--	YES
Benzo(a)pyrene	8	23	35%	YES	NO	Quantile	0.051	5.91E-02	9.60E+00	3.70E-01	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Benzo(b)fluoranthene	9	23	39%	YES	NO	Quantile	0.051	9.90E-02	9.70E+00	4.50E+00	YES	3.9E+00	C	YES	5E-09	Nap	NO	YES
Benzo(g,h,i)perylene	2	23	9%	YES	NO	Quantile	0.051	2.33E-01	3.80E+00	Nav	--	Nav	--	--	Nap	Nap	--	NO
Benzo(k)fluoranthene	4	23	17%	YES	NO	Quantile	0.051	1.76E-01	7.80E+00	4.50E+01	NO	3.9E+01	C	NO	Nap	Nap	--	NO
Carbazole	1	23	4%	NO	NO	Quantile	0.051	3.50E+00	3.50E+00	4.70E-01	YES	1.4E+02	C	NO	Nap	Nap	--	NO
Chrysene	7	23	30%	YES	NO	Quantile	0.051	8.79E-02	1.05E+01	1.50E+02	NO	3.9E+02	C	NO	2E-10	Nap	NO	NO
Dibenzo(a,h)anthracene	1	23	4%	NO	NO	Quantile	0.051	1.85E+00	1.85E+00	1.40E+00	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Dibenzofuran	1	23	4%	NO	NO	Quantile	0.051	2.90E+00	2.90E+00	3.80E-01	YES	4.5E+01	N	NO	Nap	Nap	NO	NO
Fluoranthene	8	23	35%	YES	NO	Quantile	0.058	1.02E-01	1.95E+01	6.30E+02	NO	4.1E+03	N	NO	Nap	Nap	--	NO
Fluorene	1	23	4%	NO	NO	Quantile	0.051	4.80E+00	4.80E+00	1.40E+01	NO	4.1E+03	N	NO	Nap	Nap	NO	NO
Indeno(1,2,3-cd)pyrene	3	23	13%	YES	NO	Quantile	0.051	1.02E-01	3.85E+00	1.30E+01	NO	3.9E+00	C	NO	Nap	Nap	--	NO
2-Methylnaphthalene	1	23	4%	NO	NO	Quantile	0.051	1.20E+00	1.20E+00	4.40E-01	YES	4.1E+02	N	NO	Nap	Nap	NO	NO
Naphthalene	1	23	4%	NO	NO	Quantile	0.046	3.50E+00	3.50E+00	1.50E-02	YES	4.5E+02	N	NO	Nap	4E-01	YES	YES
Phenanthrene	5	23	22%	YES	NO	Quantile	0.051	7.98E-02	1.55E+01	Nav	--	Nav	--	--	Nap	Nap	--	NO
Pyrene	8	23	35%	YES	NO	Quantile	0.051	1.04E-01	1.85E+01	6.80E+01	NO	3.1E+03	N	NO	Nap	Nap	NO	NO
PCBs by Method 8081A or 8082																		
Aroclor 1260	5	23	22%	YES	YES[e]	--	--	1.37E-02	4.11E-02	Nav	NO	1.4E+00	C	NO	Nap	Nap	--	NO

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-related? (Site Levels >Background?)	Basis of Test	p-Value (or a-value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
VOCs by Method 8260B																		
1,1-Dichloroethane	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	5.10E-01	NO	2.4E+03	N	NO	Nap	8E-04	NO	NO
Acetone	8	13	62%	YES	YES[c]	--	--	1.60E-02	8.93E-02	2.20E+00	NO	9.2E+04	N	NO	Nap	Nap	NO	NO
Benzene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	1.90E-03	YES	5.2E+01	C	NO	7E-07	9E-03	NO	NO
Chloroform	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	9.10E-05	YES	3.2E+01	C	NO	2E-06	Nap	YES	YES
Ethylbenzene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	1.50E+00	NO	2.8E+02	N	NO	3E-08	7E-05	NO	NO
Methyl ethyl ketone	1	15	7%	YES	YES[c]	--	--	5.60E-03	5.60E-03	2.90E+00	NO	1.6E+04	N	NO	Nap	5E-06	NO	NO
Pentachlorophenol	1	15	7%	YES	YES[c]	--	--	2.60E-03	2.60E-03	Nav	NO	2.4E+01	C	NO	Nap	Nap	--	NO
Toluene	6	23	26%	YES	YES[c]	--	--	1.50E-03	2.03E-03	8.80E-01	NO	8.2E+03	N	NO	Nap	2E-05	NO	NO
Trichloroethene	1	23	4%	NO	YES[c]	--	--	2.00E-03	2.00E-03	2.60E-04	YES	6.0E+00	C	NO	8E-06	5E-03	YES	YES
SVOCs by Method 8270C																		
bis(2-Ethylhexyl)phthalate	1	23	4%	NO	YES[c]	--	--	1.20E-01	1.20E-01	2.90E+03	NO	2.0E+02	C	NO	Nap	Nap	--	NO

Notes:

(a) See text for definition of risk assessment dataset.

(b) (No. Detections/ No. Analyses) x 100.

(c) From EPA Region III RBCs (2005a). SSLs from the RBC tables were unavailable for aluminum, cobalt, iron, lead, mercury, and nickel, and were computed as shown in Table 2-10.
Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(d) Lower value between USEPA Region III industrial RBC (2005a) and calculated trench worker RBC (Appendix C1). Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(e) Comparisons to background could not be made since the chemical in background samples was either not included in the analysis or was not detected.

(f) Although only total chromium data was collected for the site, the RBC for chromium is presented separately for Cr(III) and Cr(VI). A ratio of 6:1 is assumed for Cr(III):Cr(VI).

USEPA. 2005a. EPA Region 3 Risk-Based Concentration Tables. October. Values from April 2005 table used for aluminum and cobalt.

Bolded chemicals exceed one or more screening criteria

COPC Chemical of Potential Concern
FOD Frequency of Detection
mg/kg Milligrams of chemical per kilogram of soil
Nap Not applicable
Nav Not available
PAHs Polynuclear Aromatic Hydrocarbons
RBC Risk-based Concentration
SSL Soil Screening Level
SVOCs Semivolatile Organic Compounds
VOCs Volatile Organic Compounds

TABLE 2-4

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SUBSURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-Related? (Site Levels >Background?)	Basis of Test	p-Value (or a value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
Metals/Inorganics by Method 6010B																		
Aluminum	31	31	100%	YES	YES	Two sample t-test	0.027	3.67E+03	2.02E+04	6.81E+02	YES	2.3E+04	N	NO	Nap	Nap	--	NO
Antimony	1	16	6%	YES	YES[c]	--	--	1.30E+00	1.30E+00	1.30E+01	NO	2.4E+01	N	NO	Nap	Nap	--	NO
Arsenic	28	28	100%	YES	YES	Gehan	0.000	1.20E+00	1.32E+02	2.60E-02	YES	1.9E+00	C	YES	Nap	Nap	--	YES
Barium	31	31	100%	YES	YES	Two sample t-test	0.024	1.37E+01	1.14E+02	2.10E+02	NO	4.6E+03	N	NO	Nap	Nap	--	NO
Chromium III (f)	31	31	100%	YES	YES	Two sample t-test	0.002	3.69E+00	2.79E+01	2.00E+08	NO	1.3E+05	N	NO	Nap	Nap	--	NO
Chromium VI (f)	31	31	100%	YES	YES	Two sample t-test	0.002	6.14E-01	4.66E+00	4.20E+00	YES	7.8E+01	N	NO	Nap	Nap	--	NO
Cobalt	23	23	100%	YES	YES	Two sample t-test	<0.001	7.30E-01	6.90E+00	6.60E+01	NO	1.7E+02	N	NO	Nap	Nap	--	NO
Copper	31	31	100%	YES	NO	WRS	0.861	1.70E+00	1.77E+01	1.10E+03	NO	9.1E+02	N	NO	Nap	Nap	--	NO
Iron	31	31	100%	YES	YES	WRS	0 003	3.09E+03	4.35E+04	5.54E+02	YES	6.8E+03	N	YES	Nap	Nap	--	YES
Lead	31	31	100%	YES	NO	WRS	0.296	4.40E+00	5.75E+01	2.70E+01	YES	7.5E+02	N	NO	Nap	Nap	--	NO
Manganese	29	29	100%	YES	NO	WRS	0.350	1.30E+00	2.75E+02	9.50E+01	YES	4.8E+02	N	NO	Nap	Nap	--	NO
Nickel	31	31	100%	YES	NO	WRS	0.121	5.70E-01	1.03E+01	9.52E+01	NO	1.5E+03	N	NO	Nap	Nap	--	NO
Selenium	14	31	45%	YES	YES	Quantile	0.046	5.80E-01	1.10E+00	1.90E+00	NO	1.1E+02	N	NO	Nap	Nap	--	NO
Thallium	26	30	87%	YES	YES	Quantile	0.038	5.10E-01	1.01E+01	3.60E-01	YES	1.6E+00	N	YES	Nap	Nap	--	YES
Vanadium	31	31	100%	YES	YES	Two sample t-test	0.001	1.55E+01	5.44E+01	7.30E+01	NO	8.0E+01	N	NO	Nap	Nap	--	NO
Zinc	31	31	100%	YES	YES	Two sample t-test	<0.001	2.90E+00	5.92E+01	1.40E+03	NO	6.8E+03	N	NO	Nap	Nap	--	NO
Pesticides by Method 8081A																		
Aldrin	1	31	3%	NO	YES[c]	--	--	9.50E-04	9.50E-04	7.70E-03	NO	1.7E-01	C	NO	8E-11	Nap	NO	NO
beta-BHC	3	31	10%	YES	YES[c]	--	--	4.10E-04	1.05E-03	3.10E-03	NO	1.6E+00	C	NO	Nap	Nap	--	NO
gamma-BHC	4	15	27%	YES	YES[c]	--	--	1.20E-03	1.80E-03	4.30E-03	NO	2.2E+00	C	NO	Nap	Nap	NO	NO
alpha-Chlordane	2	31	6%	YES	YES[c]	--	--	2.90E-04	1.70E-02	9.20E-01	NO	8.2E+00	C	NO	2E-10	8E-06	NO	NO
4,4'-DDD	2	31	6%	YES	YES[c]	--	--	1 38E-03	2.10E-03	1.10E+01	NO	1.2E+01	C	NO	Nap	Nap	--	NO
4,4'-DDE	5	31	16%	YES	YES[c]	--	--	1 00E-03	6.30E-03	3.50E+01	NO	8.4E+00	C	NO	Nap	Nap	NO	NO
4,4'-DDT	10	31	32%	YES	YES[c]	--	--	2.00E-03	4.75E-02	1.20E+00	NO	8.4E+00	C	NO	Nap	Nap	--	NO
Dieldrin	1	31	3%	NO	YES[c]	--	--	1.14E-03	1.14E-03	2.20E-03	NO	1.8E-01	C	NO	7E-10	Nap	NO	NO
Endosulfan II	2	31	6%	YES	YES[c]	--	--	6.30E-04	8.25E-04	2.00E+00	NO	1.4E+02	N	NO	Nap	Nap	NO	NO
Endrin	1	31	3%	NO	YES[c]	--	--	5.00E-04	5.00E-04	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Endrin ketone	1	31	3%	NO	YES[c]	--	--	1.57E-02	1.57E-02	5.40E-01	NO	6.8E+00	N	NO	Nap	Nap	--	NO
Heptachlor	13	31	42%	YES	YES[c]	--	--	1.80E-04	1.00E-03	8.40E-01	NO	6.4E-01	C	NO	4E-07	Nap	NO	NO
Heptachlor epoxide	6	31	19%	YES	YES[c]	--	--	1.90E-04	3.40E-02	2.50E-02	YES	3.1E-01	C	NO	Nap	Nap	--	NO
PAHs by Method 8270C																		
Acenaphthene	1	31	3%	NO	NO	Quantile	0.179	6.10E+00	6.10E+00	1.00E+01	NO	6.1E+03	N	NO	Nap	Nap	NO	NO
Anthracene	1	31	3%	NO	NO	Quantile	0.051	3.80E+00	3 80E+00	4.70E+01	NO	3.1E+04	N	NO	Nap	Nap	--	NO
Benzo(a)anthracene	6	31	19%	YES	NO	Quantile	0.058	9.23E-02	1.05E+01	1.50E+00	YES	3.9E+00	C	YES	Nap	Nap	--	YES
Benzo(a)pyrene	8	31	26%	YES	NO	Quantile	0.051	5.91E-02	9.60E+00	3.70E-01	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Benzo(b)fluoranthene	9	31	29%	YES	NO	Quantile	0.051	9.90E-02	9.70E+00	4.50E+00	YES	3.9E+00	C	YES	5E-09	Nap	NO	YES
Benzo(ghi)perylene	2	31	6%	YES	NO	Quantile	0.051	2.33E-01	3.80E+00	Nav	--	Nav	--	--	Nap	Nap	--	NO
Benzo(k)fluoranthene	4	31	13%	YES	NO	Quantile	0.051	1.76E-01	7.80E+00	4.50E+01	NO	3.9E+01	C	NO	Nap	Nap	--	NO
Carbazole	1	31	3%	NO	NO	Quantile	0.051	3.50E+00	3.50E+00	4.70E-01	YES	1.4E+02	C	NO	Nap	Nap	--	NO
Chrysene	7	31	23%	YES	NO	Quantile	0.051	8.79E-02	1.05E+01	1.50E+02	NO	3.9E+02	C	NO	2E-10	Nap	NO	NO
Dibenzo(a,h)anthracene	1	31	3%	NO	NO	Quantile	0.051	1.85E+00	1.85E+00	1.40E+00	YES	3.9E-01	C	YES	Nap	Nap	--	YES
Dibenzofuran	1	31	3%	NO	NO	Quantile	0.051	2.90E+00	2.90E+00	3.80E-01	YES	4.5E+01	N	NO	Nap	Nap	NO	NO
Fluoranthene	8	31	26%	YES	NO	Quantile	0.058	1.02E-01	1.95E+01	6.30E+02	NO	4.1E+03	N	NO	Nap	Nap	--	NO
Fluorene	1	31	3%	NO	NO	Quantile	0.051	4 80E+00	4.80E+00	1.40E+01	NO	4.1E+03	N	NO	Nap	Nap	NO	NO
Indeno(1,2,3-cd)pyrene	3	31	10%	YES	NO	Quantile	0.051	1.02E-01	3.85E+00	1.30E+01	NO	3.9E+00	C	NO	Nap	Nap	--	NO
2-Methylnaphthalene	1	31	3%	NO	NO	Quantile	0.051	1.20E+00	1.20E+00	4.40E-01	YES	4.1E+02	N	NO	Nap	Nap	NO	NO
Naphthalene	1	31	3%	NO	NO	Quantile	0.046	3.50E+00	3.50E+00	1.50E-02	YES	4.5E+02	N	NO	Nap	4E-01	YES	YES
Phenanthrene	5	31	16%	YES	NO	Quantile	0.051	7.98E-02	1.55E+01	Nav	--	Nav	--	--	Nap	Nap	--	NO
Pyrene	8	31	26%	YES	NO	Quantile	0.051	1.04E-01	1.85E+01	6.80E+01	NO	3.1E+03	N	NO	Nap	Nap	NO	NO
PCBs by Method 8081A or 8082																		
Aroclor 1260	5	31	16%	YES	YES[c]	--	--	1.37E-02	4.11E-02	Nav	NO	1.40E+00	C	NO	Nap	Nap	--	NO

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SUBSURFACE SOILS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections[a]	Number of Analyses[a]	FOD[b]	FOD >= 5%?	Chemical Site-Related? (Site Levels >Background?)	Basis of Test	p-Value (or a value)	Minimum Detected Concentration (mg/kg)[a]	Maximum Detected Concentration (mg/kg)[a]	DAF20 SSL (mg/kg)[c]	MDC>SSL?	Risk-Based Concentrations (mg/kg)[d]	Basis of RBC	MDC>RBC?	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
VOCs by Method 8260B																		
1,1-Dichloroethane	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	5.10E-01	NO	2.4E+03	N	NO	Nap	8E-04	NO	NO
Acetone	8	21	38%	YES	YES[e]	--	--	1.60E-02	8.93E-02	2.20E+00	NO	9.2E+04	N	NO	Nap	Nap	NO	NO
Benzene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	1.90E-03	YES	5.2E+01	C	NO	7E-07	9E-03	NO	NO
Chloroform	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	9.10E-05	YES	3.2E+01	C	NO	2E-06	Nap	YES	YES
Ethylbenzene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	1.50E+00	NO	2.8E+02	N	NO	3E-08	7E-05	NO	NO
Methyl ethyl ketone	1	15	7%	YES	YES[e]	--	--	5.60E-03	5.60E-03	2.90E+00	NO	1.6E+04	N	NO	Nap	5E-06	NO	NO
Pentachlorophenol	1	15	7%	YES	YES[e]	--	--	2.60E-03	2.60E-03	Nav	NO	2.4E+01	C	NO	Nap	Nap	--	NO
Toluene	6	31	19%	YES	YES[e]	--	--	1.50E-03	2.03E-03	8.80E-01	NO	8.2E+03	N	NO	Nap	2E-05	NO	NO
Trichloroethene	1	31	3%	NO	YES[e]	--	--	2.00E-03	2.00E-03	2.60E-04	YES	6.0E+00	C	NO	8E-06	5E-03	YES	YES
SVOCs by Method 8270C																		
bis(2-Ethylhexyl)phthalate	3	31	10%	YES	YES[e]	--	--	8.60E-02	1.50E+00	2.90E+03	NO	2.00E+02	C	NO	Nap	Nap	--	NO

Notes:

(a) See text for definition of risk assessment dataset.

(b) (No. Detections/ No. Analyses) x 100.

(c) From EPA Region 3 RBCs (2005a). SSLs from the RBC tables were unavailable for aluminum, cobalt, iron, lead, mercury, and nickel, and were computed as shown in Table 2-10.
Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(d) Lower value between USEPA Region III industrial RBC (2005a) and calculated trench worker RBC (Appendix C1). Values for chlordane were used for alpha-chlordane, endosulfan for Endosulfan II, and endrin for endrin ketone.

(e) Comparisons to background could not be made since the chemical in background samples was either not included in the analysis or was not detected.

(f) Although only total chromium data was collected for the site, the RBC for chromium is presented separately for Cr(III) and Cr(VI). A ratio of 6:1 is assumed for Cr(III):Cr(VI)

USEPA. 2005a. EPA Region 3 Risk-Based Concentration Tables. October. Values from April 2005 table used for aluminum and cobalt.

Bolded chemicals exceed one or more screening criteria

COPC	Chemical of Potential Concern
FOD	Frequency of Detection
mg/kg	Milligrams of chemical per kilogram of soil
Nap	Not applicable
Nav	Not available
PAHs	Polynuclear Aromatic Hydrocarbons
RBC	Risk-based Concentration
SSL	Soil Screening Level
SVOCs	Semivolatile Organic Compounds
VOCs	Volatile Organic Compounds

TABLE 2-5

SELECTION OF CHEMICALS OF POTENTIAL CONCERN IN SOIL GAS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Number of Detections	Number of Analyses	FOD (a)	FOD >= 5%?	Chemical Site-Related? (Site Levels >Background?)	Maximum Detected Concentration (mg/m^3)	Indoor Air Cancer Risk Associated with MCD	Indoor Air Noncancer Hazard Associated with MCD	Risk or Hazard Exceed Target Level?	COPC?
VOCs by Modified Method TO-14 (b)										
Hexane	2	4	50%	YES	YES (c)	4.05E-04	Nav	5E-04	NO	No
1,2,4-Trimethylbenzene	1	4	25%	YES	YES (c)	8.65E-05	Nav	3E-03	NO	No

Notes:

(a) (No. Detections/ No. Analyses) x 100.

(b) Results from 4 Summa canisters installed near the foundations of Buildings 41 and 54.

(c) Comparisons to background could not be made since the chemical in background samples was either not included in the analysis or was not detected.

COPC Chemical of Potential Concern
FOD Frequency of Detection
mg/m3 Milligrams of chemical per cubic meter of air
Nav Not available since chemicals are not carcinogenic.
VOCs Volatile Organic Compounds

SELECTION OF STATISTICAL TEST FOR BACKGROUND COMPARISONS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

	SURFACE SOIL INTERVAL						SUBSURFACE SOIL INTERVAL					
Chemical	Distribution: Site Data	FOD: Site Data	Distribution: Background Data	FOD: Background Data	Chosen Statistical Test	Rationale	Distribution: Site Data	FOD: Site Data	Distribution: Background Data	FOD: Background Data	Chosen Statistical Test	Rationale
Metals/Inorganics by Method 6010B												
Aluminum	N	100%	N	100%	Two sample t-test	(1)	LN	100%	N (or LN)	100%	Two sample t-test	(1)
Antimony	Nap	7%	Nav	0%	--	(2)	Nap	6%	Nav	0%	--	(2)
Arsenic	NP	100%	LN	89%	Gehan	(3)	NP	100%	NP	73%	Gehan	(3)
Barium	LN	100%	LN	100%	Two sample t-test	(1)	LN	100%	LN	100%	Two sample t-test	(1)
Chromium	LN	100%	N (or LN)	100%	Two sample t-test	(1)	LN	100%	LN	100%	Two sample t-test	(1)
Cobalt	LN	100%	N (or LN)	100%	Two sample t-test	(1)	LN	100%	N (or LN)	100%	Two sample t-test	(1)
Copper	N	100%	LN	100%	WRS	(4)	N (or LN)	100%	LN	100%	WRS	(4)
Iron	LN	100%	LN	100%	Two sample t-test	(1)	N	100%	LN	100%	WRS	(4)
Lead	LN	100%	LN	100%	Two sample t-test	(1)	NP	100%	LN	100%	WRS	(4)
Manganese	G	100%	N	100%	WRS	(4)	G	100%	LN	100%	WRS	(4)
Nickel	N	100%	N	100%	Two sample t-test	(1)	NP	100%	N (or LN)	100%	WRS	(4)
Selenium	NP	61%	NP	38%	Quantile	(5)	NP	45%	NP	32%	Quantile	(5)
Thallium	LN	83%	NP	6%	Quantile	(5)	LN	87%	NP	3%	Quantile	(5)
Vanadium	N	100%	N	100%	Two sample t-test	(1)	N (or LN)	100%	LN	100%	Two sample t-test	(1)
Zinc	LN	100%	LN	100%	Two sample t-test	(1)	LN	100%	LN	100%	Two sample t-test	(1)
Pesticides by Method 8081A												
Aldrin	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
beta-BHC	Nap	9%	Nav	0%	--	(2)	Nap	10%	Nav	0%	--	(2)
gamma-BHC	Nap	27%	Nav	0%	--	(2)	Nap	27%	Nav	0%	--	(2)
alpha-Chlordane	Nap	4%	Nav	0%	--	(2)	Nap	6%	Nav	0%	--	(2)
4,4'-DDD	Nap	9%	Nav	0%	--	(2)	Nap	6%	Nav	0%	--	(2)
4,4'-DDE	Nap	22%	Nav	0%	--	(2)	Nap	16%	Nav	0%	--	(2)
4,4'-DDT	Nap	43%	Nav	0%	--	(2)	Nap	32%	Nav	0%	--	(2)
Dieldrin	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Endosulfan II	Nap	4%	Nav	0%	--	(2)	Nap	6%	Nav	0%	--	(2)
Endrin	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Endrin ketone	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Heptachlor	Nap	30%	Nav	0%	--	(2)	Nap	42%	Nav	0%	--	(2)
Heptachlor epoxide	Nap	22%	Nav	0%	--	(2)	Nap	19%	Nav	0%	--	(2)
PAHs by Method 8270C												
Acenaphthene	NP	4%	LN	53%	Quantile	(5)	NP	3%	LN	53%	Quantile	(5)
Anthracene	NP	4%	LN	65%	Quantile	(5)	NP	3%	LN	65%	Quantile	(5)
Benzo(a)anthracene	NP	26%	G	81%	Quantile	(5)	NP	19%	G	81%	Quantile	(5)
Benzo(a)pyrene	NP	35%	LN	82%	Quantile	(5)	NP	26%	LN	82%	Quantile	(5)
Benzo(b)fluoranthene	NP	39%	LN	82%	Quantile	(5)	NP	29%	LN	82%	Quantile	(5)
Benzo(g,h,i)perylene	NP	9%	LN	82%	Quantile	(5)	NP	6%	LN	82%	Quantile	(5)
Benzo(k)fluoranthene	NP	17%	LN	71%	Quantile	(5)	NP	13%	LN	71%	Quantile	(5)
Carbazole	NP	4%	Nav	0%	--	(2)	NP	3%	Nav	0%	--	(2)
Chrysene	NP	30%	LN	88%	Quantile	(5)	NP	23%	LN	88%	Quantile	(5)
Dibenzo(a,h)anthracene	NP	4%	G	71%	Quantile	(5)	NP	3%	G	71%	Quantile	(5)
Dibenzofuran	NP	4%	Nav	0%	--	(2)	NP	3%	Nav	0%	--	(2)

SELECTION OF STATISTICAL TEST FOR BACKGROUND COMPARISONS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

	SURFACE SOIL INTERVAL						SUBSURFACE SOIL INTERVAL					
Chemical	Distribution: Site Data	FOD: Site Data	Distribution: Background Data	FOD: Background Data	Chosen Statistical Test	Rationale	Distribution: Site Data	FOD: Site Data	Distribution: Background Data	FOD: Background Data	Chosen Statistical Test	Rationale
Fluoranthene	NP	35%	LN	94%	Quantile	(5)	NP	26%	LN	94%	Quantile	(5)
Fluorene	NP	4%	LN	59%	Quantile	(5)	NP	3%	LN	59%	Quantile	(5)
Indeno(1,2,3-cd)pyrene	NP	13%	LN	76%	Quantile	(5)	NP	10%	LN	76%	Quantile	(5)
2-Methylnaphthalene	NP	4%	LN	41%	Quantile	(5)	NP	3%	LN	41%	Quantile	(5)
Naphthalene	NP	4%	LN	48%	Quantile	(5)	NP	3%	LN	48%	Quantile	(5)
Phenanthrene	NP	22%	LN	94%	Quantile	(5)	NP	16%	LN	94%	Quantile	(5)
Pyrene	NP	35%	LN	94%	Quantile	(5)	NP	26%	LN	94%	Quantile	(5)
PCBs by Method 8081A or 8082												
Aroclor 1260	Nap	22%	Nav	0%	--	(2)	Nap	16%	Nav	0%	--	(2)
VOCs by Method 8260B												
1,1-Dichloroethane	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Acetone	Nap	62%	Nav	0%	--	(2)	Nap	38%	Nav	0%	--	(2)
Benzene	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Chloroform	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Ethylbenzene	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
Methyl ethyl ketone	Nap	7%	Nav	0%	--	(2)	Nap	7%	Nav	0%	--	(2)
Pentachlorophenol	Nap	7%	Nav	0%	--	(2)	Nap	7%	Nav	0%	--	(2)
Toluene	Nap	26%	Nav	0%	--	(2)	Nap	19%	Nav	0%	--	(2)
Trichloroethene	Nap	4%	Nav	0%	--	(2)	Nap	3%	Nav	0%	--	(2)
SVOCs by Method 8270C												
bis(2-Ethylhexyl)phthalate	Nap	4%	Nav	0%	--	(2)	Nap	10%	Nav	0%	--	(2)

Notes:

FOD	Frequency of Detection
mg/kg	Milligrams of chemical per kilogram of soil
Nap	Not applicable since no background detections for comparing data sets.
Nav	Not available without background detection.
PAHs	Polynuclear Aromatic Hydrocarbons
SVOCs	Semivolatile Organic Compounds
VOCs	Volatile Organic Compounds

Rationale:

(1)	Site and background data sets have few or no nondetections and equal variances.
(2)	Chemical not detected or analyzed in background locations.
(3)	Site and background data sets have different distributions. One or both data sets have few nondetections with varying reporting limits.
(4)	Site and background data sets have different distributions. Both data sets have no nondetections.
(5)	Site or background data set has fewer than 50 % detections.

TABLE 2-7

TWO SAMPLE T-TEST RESULTS FOR BACKGROUND COMPARISONS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Soil Interval	Distribution Used to Compare Site and Background Data	Variances Equal?	p-Value	Site Exceeds Background?	p-Value
Aluminum	Surface	Normal	Yes	0.548	Yes	0.006
	Subsurface	Lognormal	Yes	0.070	Yes	0.027
Barium	Surface	Lognormal	Yes	0.389	No	0.203
	Subsurface	Lognormal	Yes	0.484	Yes	0.024
Chromium	Surface	Lognormal	No	0.033	Yes	0.008
	Subsurface	Lognormal	No	0.035	Yes	0.002
Cobalt	Surface	Lognormal	Yes	0.521	Yes	0.005
	Subsurface	Lognormal	Yes	0.553	Yes	<0.001
Iron	Surface	Lognormal	No	<0.001	Yes	0.015
	Subsurface	Nap				
Lead	Surface	Normal	Yes	0.280	No	0.060
	Subsurface	Nap				
Nickel	Surface	Normal	No	0.012	Yes	0.018
	Subsurface	Nap				
Vanadium	Surface	Normal	Yes	0.057	Yes	0.020
	Subsurface	Lognormal	No	<0.001	Yes	0.001
Zinc	Surface	Lognormal	Yes	0.687	No	0.065
	Subsurface	Lognormal	Yes	0.586	Yes	<0.001

Note:
Nap Not applicable since two sample t test was not used for background comparison.

TABLE 2-8

WILCOXON RANK SUM OR GEHAN TEST RESULTS FOR BACKGROUND COMPARISONS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Soil Interval	Test Used to Compare Site and Background Data	Z-score	Critical Z Value	Site Exceeds Background?	p-Value
Arsenic	Surface	Gehan	2.560	1.645	Yes	0.005
	Subsurface	Gehan	4.770	1.645	Yes	<0.001
Copper	Surface	WRS	0.451	1.645	No	0.326
	Subsurface	WRS	-1.086	1.645	No	0.861
Iron	Surface	Nap				
	Subsurface	WRS	2.782	1.645	Yes	0.003
Lead	Surface	Nap				
	Subsurface	WRS	0.546	1.645	No	0.293
Manganese	Surface	WRS	1.359	1.645	No	0.087
	Subsurface	WRS	0.386	1.645	No	0.350
Nickel	Surface	Nap				
	Subsurface	WRS	1.169	1.645	No	0.121

Note:
Nap Not applicable since nonparametric test was not used for background comparison.

TABLE 2-9

QUANTILE TEST RESULTS FOR BACKGROUND COMPARISONS
HUMAN HEALTH BASELINE RISK ASSESSMENT - OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Soil Interval	No. of Results in Combined Data Set	Definition of Site Release	Alpha of Test	No. of Site Results in Highest 'r' Values	Site Exceeds Background?
2-Methylnaphthalene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	3	No
Acenaphthene	Surface	40	3 highest values are from OU-1*	0.179	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Anthracene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Benzo(a)anthracene	Surface	39	6 highest values are from OU-1	0.031	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Benzo(a)pyrene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Benzo(b)fluoranthene	Surface	40	5 highest values are from OU-1	0.051	2	No
	Subsurface	48	7 highest values are from OU-1	0.036	3	No
	Surface	40	5 highest values are from OU-1	0.051	2	No
	Subsurface	48	7 highest values are from OU-1	0.036	2	No
Benzo(k)fluoranthene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Chrysene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Dibenz(a,h)athracene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Fluoranthene	Surface	39	6 highest values are from OU-1	0.031	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Fluorene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Indeno(1,2,3-cd)pyrene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	2	No
Naphthalene	Surface	48	4 highest values are from OU-1	0.046	1	No
	Subsurface	79	5 of 6 highest values are from OU-1	0.032	1	No
Phenanthrene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	1	No
Pyrene	Surface	40	5 highest values are from OU-1	0.051	1	No
	Subsurface	48	7 highest values are from OU-1	0.036	2	No
Selenium	Surface	39	5 highest values are from OU-1	0.046	5	Yes
	Subsurface	65	4 highest values are from OU-1	0.046	4	Yes
Thallium	Surface	40	6 highest values are from OU-1	0.026	6	Yes
	Subsurface	66	4 highest values are from OU-1	0.038	4	Yes

Notes:
* The necessary increase of r and k to include ties lead to a required r that was higher than the number of site results. Values for r and k adjusted to exclude the ties.

TABLE 2-10

CALCULATED SOIL SCREENING LEVELS
HUMAN HEALTH BASELINE RISK ASSESSMENT -
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Tapwater RBC (µg/L)[a]	Kd (L/kg)[b]	SSL (DAF=20) (mg/kg)[c]
Metals/Inorganics:			
Aluminum	3.7E+04	9.0E+00	6.8E+03
Cobalt	7.3E+02	4.5E+01	6.6E+02
Iron	1.1E+04	2.5E+01	5.5E+03
Lead[d]	1.5E+01	9.0E+02	2.7E+02
Mercury[e]	1.1E+01	5.2E+01	1.1E+01
Nickel	7.3E+02	6.5E+01	9.5E+02

Notes

(a) From USEPA (2005a).

(b) From USEPA (2004c).

(c) Tapwater RBC x DAF x CF x [Kd + (Pw/pb)] with Pw (water-filled soil porosity) = 0.3, Pa (air-filled water porosity) = 0.134, pb (dry soil bulk density, kg/L) = 1.5, (When DAF = 20) CF = 0.001. Equation and soil property values from USEPA (1999).

(d) Tap water RBC based on federal action level.

(e) Tap water RBC based on mercury chloride.

USEPA. 1999. Region III Soil-to-Groundwater SSLs. Memorandum from Jennifer Hubbard to RBC table Users. October 27.
USEPA. 2004c. Superfund Chemical Data Matrix: http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.
USEPA. 2005a. Region III: http://www.epa.gov/reg3hwmd/risk/human/rbc/rbc1004.pdf.

DAF	Dilution Attenuation Factor
Kd	Soil-water partition coefficient
L/kg	liters per kilogram
mg/kg	milligrams per kilogram
RBC	Risk-Based Concentration
SSL	Soil Screening Level
µg/L	micrograms per liter

TABLE 3-1

EXPOSURE POINT CONCENTRATIONS
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

COPC	Current Industrial Worker, Direct Contact (IWcur,dc) (mg/kg) (a)	Current Industrial Worker, Dust (IWcur,du) (kg/m^3) (b)	Current Industrial Worker, Air Chemical-Dust (IWcur,du,c) (mg/m^3) (c)	Future Industrial Worker, Direct Contact (IWfut,dc) (mg/kg) (d)	Future Industrial Worker, Dust (IWfut,du) (kg/m^3) (b)	Future Industrial Worker, Air Chemical-Dust (IWfut,du,c) (mg/m3) (e)	Future Indoor Industrial Worker, Air Chemical-Vapor (IWfut,v,c) (mg/m3) (g)	Construction Worker, Direct Contact (CWdc) (mg/kg) (d)	Construction Worker, Dust (CWdu) (kg/m3) (f)	Construction Worker, Air Chemical-Dust (CWdu,c) (mg/m3) (h)
Metals/Inorganics:										
Arsenic	7.47E+01	7.35E-10	5.49E-08	5.99E+01	7.35E-10	4.40E-08	--	5.99E+01	1.34E-07	8.05E-06
Iron	2.34E+04	7.35E-10	1.72E-05	2.07E+04	7.35E-10	1.52E-05	--	2.07E+04	1.34E-07	2.78E-03
Thallium	1.01E+01	7.35E-10	7.43E-09	3.04E+00	7.35E-10	2.24E-09	--	3.04E+00	1.34E-07	4.09E-07
Organics:										
Benzo(a)anthracene	1.05E+01	7.35E-10	7.72E-09	1.05E+01	7.35E-10	7.72E-09	--	1.05E+01	1.34E-07	1.41E-06
Benzo(a)pyrene	9.60E+00	7.35E-10	7.06E-09	9.60E+00	7.35E-10	7.06E-09	--	9.60E+00	1.34E-07	1.29E-06
Benzo(b)fluoranthene	9.27E-01	7.35E-10	6.82E-10	9.70E+00	7.35E-10	7.13E-09	3.33E-07	9.70E+00	1.34E-07	1.30E-06
Dibenzo(a,h)anthracene	1.85E+00	7.35E-10	1.36E-09	1.85E+00	7.35E-10	1.36E-09	--	1.85E+00	1.34E-07	2.49E-07
Naphthalene	3.50E+00	7.35E-10	2.57E-09	3.50E+00	7.35E-10	2.57E-09	2.57E-03	3.50E+00	1.34E-07	4.70E-07
Chloroform	2.00E-03	7.35E-10	1.47E-12	2.00E-03	7.35E-10	1.47E-12	9.64E-06	2.00E-03	1.34E-07	2.69E-10
TCE	2.00E-03	7.35E-10	1.47E-12	2.00E-03	7.35E-10	1.47E-12	9.64E-06	2.00E-03	1.34E-07	2.69E-10
bis(2-Ethylhexyl)phthalate	1.20E-01	7.35E-10	8.82E-11	1.50E+00	7.35E-10	1.10E-09	--	1.50E+00	1.34E-07	2.02E-07

Notes

(a) Lesser of MDC and 95UCL soil chemical concentration derived from shallow samples (0-3') for all locations (Appendix C, Table C1).

(b) Derived from the ambient Particulate Emissions Factor (PEF) of 1.36E+09m^3/kg (USEPA, 2002b).

(c) IWcur,dc x IWcur,du.

(d) Lesser of MDC and 95UCL soil chemical concentration derived from samples for all depths for all locations (Appendix C, Table C1).

(e) IWfut,dc x IWfut,du.

(f) Equal to the reciprocal of the Particulate Emission Factor for the construction worker (Equation 5-5 of USEPA 2002).

(g) Results of the Johnson & Ettinger modeling (Appendix C).

(h) CWdc x Cwdu

COPC Chemical of Potential Concern

mg/kg Milligrams per kilogram

mg/m^3 Milligrams per cubic meter

USEPA. 2002b. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December.

TABLE 3-2

INTAKE ASSUMPTIONS
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Industrial Worker				
Intake Assumption	Symbol	Units	Value	
Soil ingestion rate	IR	mg/d	100	(a)
Soil adherence factor	SAF	mg/cm^2-d	0.2	(b)
Exposed skin area	SA	cm^2	3300	(b)
Inhalation rate	InR	m^3/hr	0.83	(c)
Exposure time	ET	hr/d	8	(d)
Conversion factor	CF	kg/mg	1.00E-06	
Exposure frequency	EF	d/yr		
outdoor			225	(e)
indoor			250	(f)
Exposure duration	ED	yr	25	(f)
Carcinogenic averaging time	Atc	d	25550	(g)
Non-carcinogenic averaging time	Atn	d	9125	(g)
Body weight	BW	kg	70	(h)

Construction Worker				
Intake Assumption	Symbol	Units	Value	
Soil ingestion rate	IR	mg/d	330	(i)
Soil adherence factor	SAF	mg/cm^2-d	0.3	(i)
Exposed skin area	SA	cm^2	3300	(b), (i)
Inhalation rate	InR	m^3/hr	0.83	(c) , (i)
Exposure time	ET	hr/d	8	(d)
Conversion factor	CF	kg/mg	1.00E-06	
Exposure frequency	EF	d/yr	250	(f)
Exposure duration	ED	yr	0.5	(j)
Carcinogenic averaging time	Atc	d	25550	(g)
Non-carcinogenic averaging time	Atn	d	182.5	(g)
Body weight	BW	kg	70	(h)

Notes:

(a) Default value for an adult (USEPA, 2003b)
(b) RAGS E recommendation for adult worker (USEPA, 2004b).
(c) The default value for an adult based upon 20m^3/d (USEPA, 2003c)
(d) typical workday
(e) Recommended value for outdoor industrial worker (USEPA 2002b).
(f) Default occupational value for an adult (USEPA, 2003b)
(g) Default averaging time for noncarcinogens is exposure duration in days; for carcinogens, it is a 70-year lifetime in days (USEPA, 2003a)
(h) Default value for an adult (USEPA, 2003b)
(i) Recommended value for construction worker (USEPA, 2002b)
(j) Assumed work schedule for the construction worker is 5 days per week for 26 weeks (Mactec 2005a).

cm^2	centimeters squared
d	day
d/yr	days per year
hr/d	hours per day
kg	kilogram
kg/mg	kilograms per milligram
m/cm^2-d	milligrams per centimeter squared per day
m^3/hr	cubic meters per hour
mg/d	milligrams per day
yr	year

MacTec. 2005a. Draft Revised Human Health Baseline Risk Assessment Workplan. Defense Supply Center Richmond. May.
USEPA. 1991. Risk Assessment Guidance for Superfund: Volume 1 Human Health Evaluation Manual (Part B: Development of Preliminary Risk-Based Remediation Goals.) Interim. October.
USEPA. 1997a. Exposure Factors Handbook, Volume I. August.
USEPA. 2002b. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, OSWER 9355.4-24.
USEPA. 2003b. Technical Background Information: Development of Risk-Based Concentrations. Region 3. April 16.
USEPA. 2003c. Updated Dermal Exposure Assessment Guidance. Region 3. June.
USEPA 2004b. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final

TABLE 3-3

DERMAL ABSORPTION FACTORS
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	Dermal Absorption Factor (DeAF)	Reference
Metals/Inorganics:		
Arsenic	0.03	(a)
Iron	0.01	(b)
Thallium	0.01	(b)
Organics:		
Benzo(a)anthracene	0.13	(a)
Benzo(a)pyrene	0.13	(a)
Benzo(b)fluoranthene	0.13	(a)
Dibenzo(a,h)anthracene	0.13	(a)
Naphthalene	0.13	(a)
Chloroform	0.03	(b)
TCE	0.03	(b)

Notes:

(a) USEPA. 2004b. Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Assessment). Final. July.

(b) USEPA Region III default.

TABLE 3-4

AVERAGE DAILY DOSE
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

	Average Daily Dose (mg/kg-day)							
	Noncarcinogenic				Carcinogenic			
Receptor/Chemical	Soil Ingestion	Dermal Absorption	Dust Inhalation	Indoor Vapor Inhalation	Soil Ingestion	Dermal Absorption	Dust Inhalation	Indoor Vapor Inhalation
Current Outdoor Industrial Worker								
Metals/Inorganics:								
Arsenic	6.6E-05	1.3E-05	3.2E-09	--	2.3E-05	4.7E-06	1.2E-09	--
Iron	2.1E-02	1.4E-03	1.0E-06	--	7.4E-03	4.9E-04	3.6E-07	--
Thallium	8.9E-06	5.9E-07	4.4E-10	--	3.2E-06	2.1E-07	1.6E-10	--
Organics:								
Benzo(a)anthracene	9.2E-06	7.9E-06	4.5E-10	--	3.3E-06	2.8E-06	1.6E-10	--
Benzo(a)pyrene	8.5E-06	7.3E-06	4.1E-10	--	3.0E-06	2.6E-06	1.5E-10	--
Benzo(b)fluoranthene	8.2E-07	7.0E-07	4.0E-11	--	2.9E-07	2.5E-07	1.4E-11	--
Dibenzo(a,h)anthracene	1.6E-06	1.4E-06	8.0E-11	--	5.8E-07	5.0E-07	2.9E-11	--
Naphthalene	3.1E-06	2.6E-06	1.5E-10	--	1.1E-06	9.4E-07	5.4E-11	--
Chloroform	1.8E-09	3.5E-10	8.6E-14	--	6.3E-10	1.2E-10	3.1E-14	--
TCE	1.8E-09	3.5E-10	8.6E-14	--	6.3E-10	1.2E-10	3.1E-14	--
Future Outdoor Industrial Worker								
Metals/Inorganics:								
Arsenic	5.3E-05	1.0E-05	2.6E-09	--	1.9E-05	3.7E-06	9.2E-10	--
Iron	1.8E-02	1.2E-03	8.9E-07	--	6.5E-03	4.3E-04	3.2E-07	--
Thallium	2.7E-06	1.8E-07	1.3E-10	--	9.6E-07	6.3E-08	4.7E-11	--
Organics:								
Benzo(a)anthracene	9.2E-06	7.9E-06	4.5E-10	--	3.3E-06	2.8E-06	1.6E-10	--
Benzo(a)pyrene	8.5E-06	7.3E-06	4.1E-10	--	3.0E-06	2.6E-06	1.5E-10	--
Benzo(b)fluoranthene	8.5E-06	7.3E-06	4.2E-10	--	3.1E-06	2.6E-06	1.5E-10	--
Dibenzo(a,h)anthracene	1.6E-06	1.4E-06	8.0E-11	--	5.8E-07	5.0E-07	2.9E-11	--
Naphthalene	3.1E-06	2.6E-06	1.5E-10	--	1.1E-06	9.4E-07	5.4E-11	--
Chloroform	1.8E-09	3.5E-10	8.6E-14	--	6.3E-10	1.2E-10	3.1E-14	--
TCE	1.8E-09	3.5E-10	8.6E-14	--	6.3E-10	1.2E-10	3.1E-14	--

TABLE 3-4

AVERAGE DAILY DOSE
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

	Average Daily Dose (mg/kg-day)							
	Noncarcinogenic				Carcinogenic			
Receptor/Chemical	Soil Ingestion	Dermal Absorption	Dust Inhalation	Indoor Vapor Inhalation	Soil Ingestion	Dermal Absorption	Dust Inhalation	Indoor Vapor Inhalation
Indoor Industrial Worker								
Metals/Inorganics:								
Arsenic	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Organics:								
Benzo(a)anthracene	--	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	2.2E-08	--	--	--	7.8E-09
Dibenzo(a,h)anthracene	--	--	--	--	--	--	--	--
Naphthalene	--	--	--	1.7E-04	--	--	--	6.0E-05
Chloroform	--	--	--	6.3E-07	--	--	--	2.2E-07
TCE	--	--	--	6.3E-07	--	--	--	2.2E-07
Construction Worker								
Metals/Inorganics:								
Arsenic	1.9E-04	1.7E-05	5.3E-07	--	1.4E-06	1.2E-07	3.8E-09	--
Iron	6.7E-02	2.0E-03	1.8E-04	--	4.8E-04	1.4E-05	1.3E-06	--
Thallium	9.8E-06	2.9E-07	2.7E-08	--	7.0E-08	2.1E-09	1.9E-10	--
Organics:								
Benzo(a)anthracene	3.4E-05	1.3E-05	9.2E-08	--	2.4E-07	9.4E-08	6.6E-10	--
Benzo(a)pyrene	3.1E-05	1.2E-05	8.4E-08	--	2.2E-07	8.6E-08	6.0E-10	--
Benzo(b)fluoranthene	3.1E-05	1.2E-05	8.5E-08	--	2.2E-07	8.7E-08	6.1E-10	--
Dibenzo(a,h)anthracene	6.0E-06	2.3E-06	1.6E-08	--	4.3E-08	1.7E-08	1.2E-10	--
Naphthalene	1.1E-05	4.4E-06	3.1E-08	--	8.1E-08	3.1E-08	2.2E-10	--
Chloroform	6.5E-09	5.8E-10	1.8E-11	--	4.6E-11	4.2E-12	1.3E-13	--
TCE	6.5E-09	5.8E-10	1.8E-11	--	4.6E-11	4.2E-12	1.3E-13	--

TABLE 4-1

TOXICITY VALUES
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	RfC (mg/m^3)	Source	RfDi (mg/kg-d)	Source	RfDo (mg/kg-d)	Source	Target Organ	Source	GI Absorption	Source	RfDd [a] (mg/kg-d)	Source	URF $(mg/m^3)^{-1}$	Source	SFi $(mg/kg-d)^{-1}$	Source	SFo $(mg/kg-d)^{-1}$	Source	SFd $(mg/kg-d)^{-1}$	Source	WOE	Source
Metals/Inorganics:																						
Arsenic	Nav	Nav	Nav	Nav	3.00E-04	IRIS	skin, vascular complications	IRIS	9.50E-01	RAGS E	3.00E-04	RAGS E	4.30E+00	IRIS	1.51E+01	IRIS	1.50E+00	IRIS	1.50E+00	RAGS E	A	IRIS
Iron	Nav	Nav	Nav	Nav	3.00E-01	NCEA	GI tract	Casarett & Doull	1.50E-01	RAIS	4.50E-02	RAGS E	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav
Thallium [b]	Nav	Nav	Nav	Nav	7.00E-05	EPA Reg. III	liver	EPA Reg. III	1.00E+00	RAGS E	7.00E-05	RAGS E	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav
Organics:																						
Benzo(a)anthracene	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	5.80E-01	RAGS E	Nav	Nav	8.80E-02	NCEA	3.08E-01	NCEA	7.30E-01	NCEA	7.30E-01	RAGS E	B2	IRIS
Benzo(a)pyrene	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	5.80E-01	RAGS E	Nav	Nav	8.80E-01	NCEA	3.08E+00	NCEA	7.30E+00	IRIS	7.30E+00	RAGS E	B2	IRIS
Benzo(b)fluoranthene	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	5.80E-01	RAGS E	Nav	Nav	8.80E-02	NCEA	3.08E-01	NCEA	7.30E-01	NCEA	7.30E-01	RAGS E	B2	IRIS
Dibenzo(a,h)anthracene	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	5.80E-01	RAGS E	Nav	Nav	8.80E-01	NCEA	3.08E+00	NCEA	7.30E+00	NCEA	7.30E+00	RAGS E	B2	IRIS
Naphthalene	3.00E-03	IRIS	8.57E-04	IRIS	2.00E-02	IRIS	decreased body weights	IRIS	5.80E-01	RAGS E	2.00E-02	RAGS E	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav	Nav
Chloroform	Nav	Nav	1.40E-02	NCEA	1.00E-02	IRIS	liver	IRIS	5.10E-01	RAGS E	1.00E-02	RAGS E	2.30E-02	IRIS	8.10E-02	IRIS	Nav	Nav	Nav	Nav	B2	IRIS
TCE [c]	Nav	Nav	1.00E-02	NCEA	3.00E-04	NCEA	liver, kidney, reproduction	NCEA	5.10E-01	RAGS E	3.00E-04	RAGS E	5.70E-03	NCEA	4.00E-01	NCEA	4.00E-01	NCEA	4.00E-01	RAGS E	B1	USEPA 2001b

Notes:

(a) Dermal toxicity values adjusted per USEPA 2004b. Where a range of values for GI absorption is provided, the lowest value is used.

(b) Thallium salts (CAS # 7440280)

(c) The higher slope factor of 4.0E-01 $(mg/kg-d)^{-1}$ for the reported range of TCE was used to identify COPCs.

$(mg/kg-d)^{-1}$ per milligrams per kilogram per day
$(mg/m^3)^{-1}$ per milligram per cubic meter
IRIS Integrated Risk Information System
mg/kg-d milligrams per kilogram per day
mg/m^3 milligrams per cubic meter
Nav Not available
NCEA USEPA's National Center for Environmental Assessment
RAGS E Absorbed Toxicity Values from Equations 4.2 or 4.3 (USEPA 2004b).
RAIS Risk Assessment Information System - Oak Ridge National Laboratory (searched September 2005).
RfC Reference Concentration
RfDd Reference Dose (dermal)
RfDi Reference Dose (inhalation)
RfDo Reference Dose (oral)
SFd Slope Factor (dermal)
SFi Slope Factor (inhalation)
SFo Slope Factor (oral)
URF Unit Risk Factor
WOE Weight of Evidence; carcinogen classification according to USEPA (1989).

USEPA. 1989. Risk Assessment Guidance for Superfund - Human Health Evaluation Manual (Part A).
USEPA 2001b. Trichloroethylene Health Risk Assessment: Synthesis and Characterization (External Review Draft). USEPA EPA/600/P-01/002A. 01 AUGUST 2001. U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment, Washington Office, Washington, DC,
USEPA 2004b. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final
USEPA. 2005b. Integrated Risk Information System. On-line database.
Casarett & Doull's Toxicology: The Basic Science of Poisons, 5th Edition. New York: McGraw Hill Book Company. Klassen, Curtis D. ed. 1996.

Weight of Evidence; carcinogen classification
A = Human Carcinogen
B1 = Probable Human Carcinogen (with limited human evidence and sufficient animal evidence)
B2 = Probable Human Carcinogen (with inadequate human evidence but sufficient animal evidence)

TABLE 7-1

RISK CHARACTERIZATION SUMMARY
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Current Industrial Worker				
		HI	Risk	
	Soil Ingestion	4E-01	6E-05	(a)
	Dermal Contact	8E-02	3E-05	(b)
	Dust Inhalation	2E-07	2E-08	(c)
	TOTAL	**5E-01**	**1E-04**	
Future Outdoor Industrial Worker				
		HI	Risk	
	Soil Ingestion	3E-01	6E-05	(d)
	Dermal Contact	6E-02	3E-05	(e)
	Dust Inhalation	2E-07	1E-08	(f)
	TOTAL	**3E-01**	**9E-05**	
Future Indoor Industrial Worker				
		HI	Risk	
	Soil Ingestion	--	--	(g)
	Dermal Contact	--	--	(g)
	Dust Inhalation	--	--	(g)
	Vapor Inhalation	2E-01	1E-07	(h)
	TOTAL	**2E-01**	**1E-07**	
Future Construction Worker				
		HI	Risk	
	Soil Ingestion	1E+00	4E-06	(i)
	Dermal Contact	1E-01	1E-06	(j)
	Dust Inhalation	4E-05	6E-08	(k)
	TOTAL	**1E+00**	**5E-06**	

Notes

HI Hazard Index
(a) Table D-1.
(b) Table D-2.
(c) Table D-3.
(d) Table D-4.
(e) Table D-5.
(f) Table D-6.
(g) Not a significant exposure pathway for indoor workers. See Uncertainty Section.
(h) Table D-7.
(i) Table D-8.
(j) Table D-9.
(k) Table D-10.

FIGURES

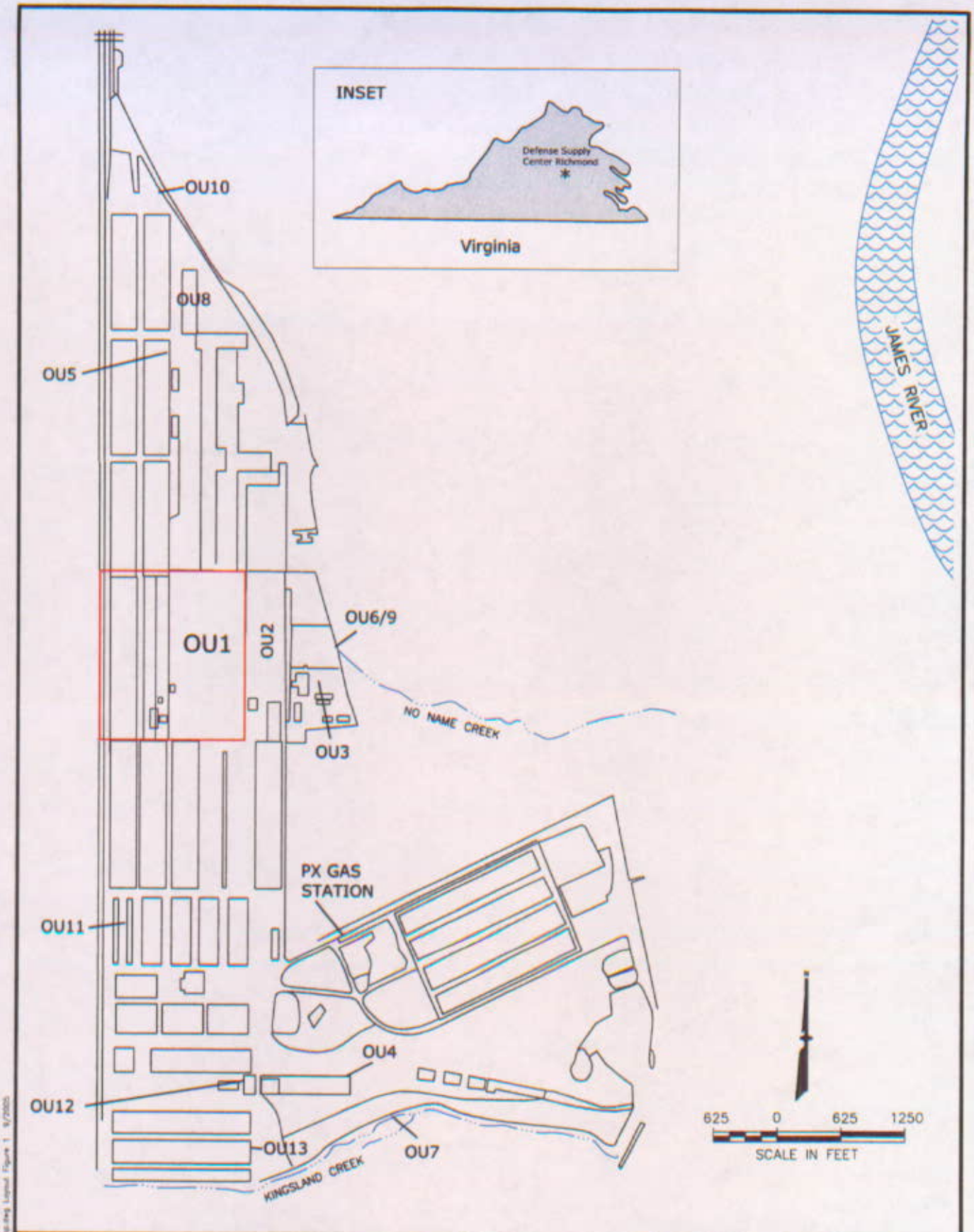

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FIGURE 1–1
ZONE LOCATIONS AND OPERABLE UNITS
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

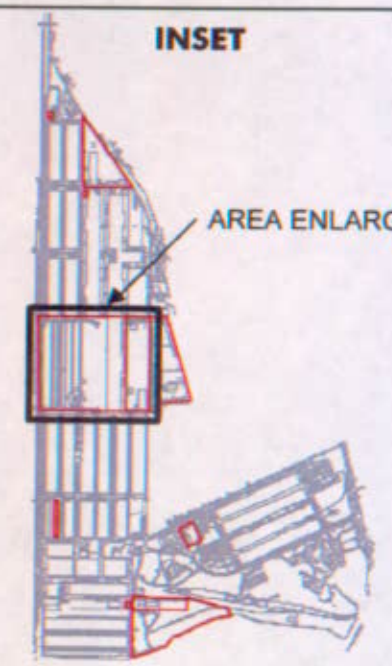
LEGEND

SAMPLE LOCATIONS USED FOR RISK ASSESSMENT PURPOSES

- ● SURFACE (0-3' bgs)
- ✱ SUBSURFACE (3-6' bgs)
- ❖ SUMMA CANISTER
- □ PRE-1992 (EXCLUDED)
- ◇ BACKGROUND STUDY LOCATION (EXCLUDED)
- ▭ OPERABLE UNIT

NOTE: EXPOSURE TO SUBSURFACE SOIL REQIRES EXPOSURE TO THE SURFACE SOIL INTERVAL.

INSET



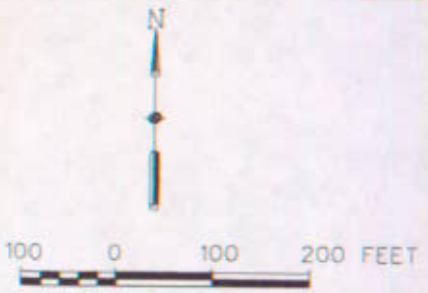


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FIGURE 1-2

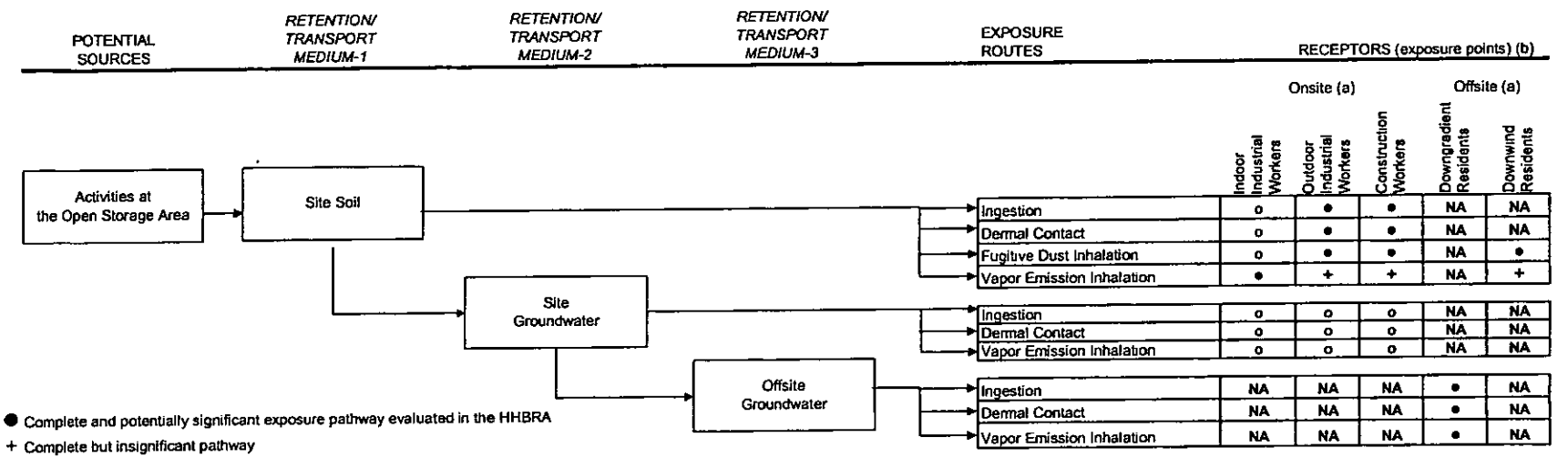
OU1 SOIL SAMPLING LOCATIONS

DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

CAD FILE: L:\Group\Cad\Stuart_Kent\SampLoc.DGN 09/08/2005

FIGURE 2-1

CONCEPTUAL EXPOSURE MODEL
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
Defense Supply Center Richmond
Richmond, Virginia



EXPOSURE ROUTES	Indoor Industrial Workers	Outdoor Industrial Workers	Construction Workers	Downgradient Residents	Downwind Residents
Ingestion	o	●	●	NA	NA
Dermal Contact	o	●	●	NA	NA
Fugitive Dust Inhalation	o	●	●	NA	●
Vapor Emission Inhalation	●	+	+	NA	+
Ingestion	o	o	o	NA	NA
Dermal Contact	o	o	o	NA	NA
Vapor Emission Inhalation	o	o	o	NA	NA
Ingestion	NA	NA	NA	●	NA
Dermal Contact	NA	NA	NA	●	NA
Vapor Emission Inhalation	NA	NA	NA	●	NA

● Complete and potentially significant exposure pathway evaluated in the HHBRA

\+ Complete but insignificant pathway

O Incomplete pathway

NA Not applicable

(a) The onsite industrial/commercial worker is the only worker to receive both current (surficial soils) and future (all soil depths) exposures. Restrictions will remain in place inperpetuity to prevent onsite residential exposure.

(b) DSCR groundwater receptors and pathways will be addressed in a separate HHBRA for OU 6.

PREPARED/DATE: LHO 8/02/05
CHECKED/DATE: SDK 10/31/05

APPENDIX A

RAW DATA, DATA REDUCTION, AND COMPARISON OF SITE VOLATILE CHEMICALS TO SOIL SCREENING LEVELS

TABLE OF CONTENTS

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
Sample Location:	OSA-SB-01	OSA-SB-02	OSA-SB-03	OSA-SB-03	OSA-SB-04	OSA-SB-05	OSA-SB-06	OSA-SB-07	OSA-SB-08	OSA-SB-09	OSA-SB-10	OSA-SB-11	OSA-SB-12	OSA-SB-13	OSA-SB-14	OSA-SB-15	OSA-SB-16	SB1	SB10	SB11
Sample Depth (ft.):	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	3 - 6	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	10/15/2002	10/15/2002	10/16/2002
Cyanide (Total) - SW846 9012A, mg/kg																				
Cyanide, total	<0.22	<0.23	<0.22	<0.23	<0.25	<0.24	<0.25	<0.25	<0.25	<0.25	<0.24	<0.23	<0.24	<0.24	<0.23	<0.23	<0.23	<0.31 U	<0.3 U	<0.3 U
Chlorinated Herbicides - SW846 8151A, mg/kg																				
2,4,5-T	<0.022	<0.023	NA	<0.023	<0.024	<0.023	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.024	<0.023	<0.0082 U	<0.0079 U	<0.008 U
2,4,5-TP (Silvex)	<0.022	<0.023	NA	<0.023	<0.024	<0.023	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.024	<0.023	<0.0082 U	<0.0079 U	<0.008 U
2,4-D	<0.045	<0.045	NA	<0.046	<0.048	<0.046	<0.049	<0.049	<0.049	<0.048	<0.049	<0.048	<0.049	<0.048	<0.046	<0.049	<0.046	<0.041 U	<0.039 U	<0.04 U
2,4-DB	<0.22	<0.23	NA	<0.23	<0.24	<0.23	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.23	<0.24	<0.23	<0.082 U	<0.079 U	<0.08 U
Dalapon	<0.22	<0.23	<0.23	NA	<0.24	<0.23	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.23	<0.24	<0.23	<0.041 U	<0.039 U	<0.04 U
Dicamba	<0.022	<0.023	<0.023	NA	<0.024	<0.023	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.024	<0.023	<0.0082 U	<0.0079 U	<0.008 U
Dichloroprop	<0.22	<0.23	<0.23	NA	<0.24	<0.23	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.23	<0.24	<0.23	<0.041 U	<0.039 U	<0.04 U
Dinoseb	<0.022	<0.023	<0.023	NA	<0.024	<0.023	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.024	<0.023	<0.0082 U	<0.0079 U	<0.008 U
MCPA	<11	<11	<11	NA	<12	<11	<12	<12	<12	<12	<12	<12	<12	<12	<11	<12	<11	<2.1 U	<2 U	<2 U
MCPP	<11	<11	<11	NA	<12	<11	<12	<12	<12	<12	<12	<12	<12	<12	<11	<12	<11	<2.1 U	<2 U	<2 U
Picloram	<0.22	<0.23	<0.23	NA	<0.24	<0.23	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.23	<0.24	<0.23	NA	NA	NA
Mercury - SW846 7471A, mg/kg																				
Mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.078 U	<0.07 U	<0.077 U
Metals - SW846 6010B, mg/kg																				
Aluminum	5280	6210	9360	9330	8480	9230	9330	6560	7510	8050	9150	3670	8080	4760	8410	6920	6150	16500	15600	16400
Antimony	0.25 B	0.32 B	0.44 B	0.5 B	0.27 B	0.39 B	0.61 B	0.21 B	0.28 B	0.37 B	0.33 B	<0.11	0.4 B	0.2 B	0.47 B	0.54 B	0.2 B	<0.6 U	<0.56 U	<0.59 U
Arsenic	1.2	1.3	3	2.9	2.1	2.2	4.5	0.93 B	1.8	5	0.68 B	0.81 B	2.6	2	4.7	1.6	4	132	5	2.8
Barium	26 6	30.3	25.7	33.5	31.9	26.8	14	14.5	17	16.9	30.2	22.7	19.3	18.2	22.2	13.7	18.5	114	26.7	50.5
Beryllium	0.18 B	0.17 B	0.16 B	0.19 B	0.19 B	0.13 B	0.14 B	0.06 B	0.16 B	0.24 B	0.11 B	0.08 B	0.12 B	0.1 B	0.17 B	0.14 B	0.11 B	<0.6 U	<0.56 U	<0.59 U
Cadmium	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.03	<0 03	<0.03	<0.02	<0.02	<0.02	<0.2	<0.02	<0.2	<0.6 U	<0.56 U	<0.59 U
Chromium	7.5	8.7	18.2	15.8	15.3	13.7	32.6	7.5	8.4	10.7	9.2	4.3	16.3	7.5	19.6	13	9.7	24.8	15.6	16.7
Cobalt	1.1	1.1	0.86	1.3	0.92	0.89	0.27 B	0.42 B	0.85 B	0.73	0.35 B	0.21 B	0.36 B	0.35 B	1.1	0.29 B	0.86	6.9	1.9	3
Copper	3.3	3.1	6.8	7.5	7.7	10	6.7	4.3	4.9	6.2	2.6	2.3	4.3	3.2	8.5	1.7	4.1	17.7	9.8	10
Iron	8560	8730	21400	18100	14900	13000	43500	6580	9920	13000	13500	3090	24900	10800	24500	23300	11900	27900	17800	21700
Lead	6.4	6.1	9.2	9.9	8.5	9.1	10.3	7	8.9	8.3	8.4	5.8	6.6	7.2	9.6	4.4	10.1	51.7	16	11.3
Magnesium	NA	NA	192	220	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	58.7	42	30.2	57.5	37.6	10.7	2.3	2.9	9.2	9.1	1.5	0.84 B	0.85 B	3.4	35.1	1.3	16.3	275	27.2	67.1
Mercury	0.06 B	0.09 B	0.07 B	0.08 B	0.06 B	0.06 B	0.08 B	0.06 B	<0.09	0.05 B	0.12 B	0.08 B	<0.06	<0.05	0.08 B	<0.05	0.11 B	NA	NA	NA
Nickel	1.8	1.8	NA	NA	2	2.5	1.3	1.5	2.5	2.2	0.92	0.58	0.98	0.8	2.9	0.57	1.3	10.2	6.2	8.9
Selenium	<0.29	<0.34	NA	NA	<0.38	<0.38	0.58	<0.31	<0.35	<0.38	<0.33	<0.29	<0.31	<0.32	<0.31	<0.29	<0.28	1.1	0.68	0.7
Silver	<0.05	<0.05	<0.06	<0.06	<0.06	<0.05	<0.05	<0.05	<0.05	<0.06	<0.05	<0.04	<0.05	<0.05	<0.05	<0.04	<0.04	<1.2 U	<1.1 U	<1.2 U
Thallium	1.9	1.8	NA	NA	3.1	2.9	10.1	1.5	2.3	3.1	3.4	0.81 B	5.8	2.6	5.8	5.5	2.9	1	0.65	0.63
Vanadium	15.5	16 7	NA	NA	24.8	29.3	50.3	22.9	22.6	24.4	18.3	16.3	28.4	24.5	33.6	23.4	20.1	50.6	30.7	37.6
Zinc	4.7	5.3	NA	NA	10.5	24.6	11.6	7.6	9.6	9.2	4.1	2.9	15.1	9.4	10.8	4	7.7	45.6	17.6	22.2
Organochlorine Pesticides - SW846 8081A, mg/kg																				
4,4'-DDD	<0.00035	<0.00036	<0.0037	0.0009 P	<0.00037	<0.00036	<0.00039	<0.00039	<0.00039	<0.00037	<0.00038	<0.00038	<0.00039	<0.00038	<0.00034	<0.00039	<0.00036	0.0021 J	<0.004 U	<0.004 U
4,4'-DDE	<0.00024	<0.00025	<0.0026	0.0007 P	<0.00026	<0.00025	<0.00027	<0.00026	<0.00027	<0.00026	<0.00026	<0.00026	<0.00027	<0.00026	<0.00025	<0.00027	<0.00025	0.0063	<0.004 U	<0.004 U
4,4'-DDT	<0.00023	<0.00024	<0.0024	<0.00024	<0.00025	<0.00024	<0.00025	<0.00025	<0.00026	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00024	<0.00026	<0.00024	0.0126	0.0047	<0.004 U
Aldrin	<0.00013	<0.00014	<0.0014	0.0012 P	<0.00014	<0.00014	<0.00015	<0.00014	<0.00015	<0.00014	<0.00014	<0.00014	<0.00015	<0.00014	<0.00014	<0.00015	<0.00014	<0.0021 U	<0.002 U	<0.002 U
alpha-BHC	<0.00014	<0.00015	<0.00015	<0.0015	<0.00015	<0.00015	<0.00016	<0.00016	<0.00016	<0.00015	<0.00016	<0.00015	<0.00016	<0.00015	<0.00015	<0.00016	<0.00015	<0.0021 U	<0.002 U	<0.002 U
alpha-Chlordane	<0.00011	<0.00011	0.018 P	0 016 P	<0.00012	<0.00011	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00012	<0.00011	0.00029 P	<0.00011	<0.0021 U	<0.002 U	<0.002 U
beta-BHC	0.00024 P	0.00041 P	<0.00093	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00009	<0.00015	<0.00009	<0.00009	<0.00009	<0.00009	0.00035 P	<0.0021 U	<0.002 U	<0.002 U
delta-BHC	<0.00046	<0.00048	<0.00047	<0.00498	<0.00049	<0.00048	<0.00051	<0.00051	<0.00051	<0.00049	<0.0005	<0.0005	<0.00051	<0.0005	<0.00048	<0.00051	<0.00048	<0.0021 U	<0.002 U	<0.002 U
Dieldrin	<0.00034	<0.00035	<0.0036	0.00047 P	<0.00036	<0.00035	<0.00038	<0.00037	<0.00068	<0.00036	<0.00037	<0.00037	<0.00038	<0.00037	<0.00036	<0.00038	<0.00035	<0.0041 U	<0.004 U	<0.004 U
Endosulfan I	<0.00019	<0.00019	<0.00019	<0.0043	<0 00043	<0.00019	<0.00021	<0.0002	<0.00021	<0.0002	<0.0002	<0.0002	<0.00021	<0.0002	<0.00019	<0.00021	<0.00019	<0.0041 U	<0.004 U	<0.004 U
Endosulfan II	<0.00041	<0.00042	<0.002	0.00065 P	<0.0002	<0.00042	<0.00045	<0.00045	<0.00045	<0.00043	<0.00044	<0.00044	<0.00045	0.00063 P	<0.00042	<0.00045	<0.00042	<0.0041 U	<0.004 U	<0.004 U
Endosulfan sulfate	<0.00039	<0.0004	<0.0004	<0.0041	<0.00041	<0.0004	<0.00042	<0.00042	<0.00043	<0.00041	<0.00042	<0.00041	<0.00042	<0.00042	<0.0004	<0.00043	<0.0004	<0.0041 U	<0.004 U	<0.004 U
Endrin	<0.00033	<0.00034	<0.0035	<0.00034	<0 00035	<0.00034	<0.00036	<0.00036	<0.00036	<0.00035	<0.00036	<0.00036	0.0005 P	<0.00036	<0.00034	<0.00036	<0.00034	<0.0041 U	<0.004 U	<0.004 U
Endrin aldehyde	<0.0014	<0.0015	<0.0015	<0.015	<0.0015	<0.0015	<0.0016	<0.0016	<0.0016	<0.0015	<0.0016	<0.0015	<0.0016	<0.0015	<0.0015	<0.0016	<0.0015	<0.0041 U	<0.004 U	<0.004 U
Endrin ketone	<0.0013	<0.022	0.0094 J	0.022 P	<0.0014	<0.0014	<0.0015	<0.0014	<0.0015	<0.0014	<0.0014	<0.0014	<0.0015	<0.0014	<0.0014	<0.0015	<0.0014	<0.0041 U	<0.004 U	<0.004 U
gamma-BHC	<0.00012	<0.00012	<0.00012	<0.0013	<0.00013	<0.00012	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	0.0012 J	<0.002 U	<0.002 U
gamma-Chlordane	<0.00017	<0.00017	<0.00017	<0.0017	<0.00018	<0.00017	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00017	<0.00018	<0.00017	<0.0021 U	<0.002 U	<0.002 U
Heptachlor	0.00039	0.00018 P	<0.0013	<0.00012	<0.00013	0.00079 P	0.00075 P	0.00062 P	<0.00084	0.00044 P	0.001 P	0.00073 P	0.00065 P	0.0006 P	0.00085	0.0002 P	0.00032 P	<0.0021 U	<0.002 U	<0.002 U
Heptachlor epoxide	<0.00012	<0.00012	0.029 P	0.039 E	<0.00013	<0.00012	<0.00013	<0.00013	<0.00013	<0.00013	0.00046 P	<0.00013	0.0013 P	0.00062 P	0.00072 P	<0.00013	0.00019 P	<0.0021 U	<0.002 U	<0.002 U
Methoxychlor	<0.0012	<0.0012	<0.0012	<0.013	<0.0013	<0.0012	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.021 U	<0.02 U	<0.02 U
PCB-1016	<0.01	<0.011	<0.011	<0.11	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.021 U	<0.02 U	<0.02 U
PCB-1221	<0.0082	<0.0084	<0.0084	<0.086	<0.0087	<0.0084	<0.009	<0.0089	<0.009	<0.0087	<0.0089	<0.0088	<0.009	<0.0088	<0.0085	<0.009	<0.0084	<0.021 U	<0.02 U	<0.02 U
PCB-1232	<0.011	<0.011	<0.011	<0.12	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.011	<0.021 U	<0.02 U	<0.02 U

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
Sample Location:	OSA-SB-01	OSA-SB-02	OSA-SB-03	OSA-SB-03	OSA-SB-04	OSA-SB-05	OSA-SB-06	OSA-SB-07	OSA-SB-08	OSA-SB-09	OSA-SB-10	OSA-SB-11	OSA-SB-12	OSA-SB-13	OSA-SB-14	OSA-SB-15	OSA-SB-16	SB1	SB10	SB11
Sample Depth (ft.):	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	3 - 6	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	10/15/2002	10/15/2002	10/16/2002
PCB-1242	<0.0052	<0.0053	<0.0053	<0.055	<0.0055	<0.0053	<0.0057	<0.0057	<0.0057	<0.0055	<0.0056	<0.0056	<0.0057	<0.0056	<0.0054	<0.0057	<0.0053	<0.021 U	<0.02 U	<0.02 U
PCB-1248	<0.0093	<0.0095	<0.0095	<0.098	<0.0098	<0.0095	<0.01	<0.01	<0.01	<0.0098	<0.01	<0.01	<0.01	<0.01	<0.0096	<0.01	<0.0096	<0.021 U	<0.02 U	<0.02 U
PCB-1254	<0.0033	<0.0034	<0.0034	<0.035	<0.0035	<0.0034	<0.0036	<0.0036	<0.0036	<0.0035	<0.0036	<0.0036	<0.0036	<0.0036	<0.0034	<0.0036	<0.0034	<0.021 U	<0.02 U	<0.02 U
PCB-1260	<0.0088	<0.0091	NA	NA	<0.0094	<0.0091	<0.0097	<0.0096	<0.0097	<0.0094	<0.0096	<0.0095	<0.0097	<0.0095	<0.0092	<0.0097	<0.0091	0.0411	<0.02 U	<0.02 U
Pentachlorophenol	<0.022	<0.023	<0.023	NA	<0.024	<0.023	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.024	<0.023	<0.0021 U	<0.002 U	<0.002 U
Toxaphene	<0.015	<0.016	<0.016	<0.16	<0.016	<0.016	<0.017	<0.017	<0.017	<0.013	<0.017	<0.017	<0.017	<0.017	<0.016	<0.017	<0.016	<0.021 U	<0.02 U	<0.02 U
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg																				
1,2,4-Trichlorobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
1,2-Dichlorobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
1,3-Dichlorobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
1,4-Dichlorobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2- & 3-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21 U	<0.2 U	<0.2 U
2,4,5-Trichlorophenol	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<0.21 U	<0.2 U	<0.2 U
2,4,6-Trichlorophenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2,4-Dichlorophenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2,4-Dimethylphenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2,4-Dinitrophenol	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<0.2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
2,4-Dinitrotoluene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2,6-Dinitrotoluene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2-Chloronaphthalene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2-Chlorophenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2-Methylnaphthalene	<0.37	<0.38	1.2	1.2	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
2-Methylphenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	NA	NA	NA
2-Nitroaniline	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
2-Nitrophenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
3,3-Dichlorobenzidine	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.41 U	<0.39 U	<0.4 U
3-Nitroaniline	<1.9	<0.38	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
4,6-Dinitro-2-methylphenol	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	NA	NA	NA
4,6-dinitro-o-cresol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.41 U	<0.39 U	<0.4 U
4-Bromophenyl phenyl ether	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
4-Chloro-3-methylphenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
4-Chloroaniline	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
4-Chlorophenyl phenyl ether	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
4-Methylphenol	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
4-Nitroaniline	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
4-Nitrophenol	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<0.2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
Acenaphthene	<0.37	<0.38	6.2 E	6	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Acenaphthylene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	NA	NA	NA
Anthracene	<0.37	<0.38	4.1	3.5	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Benzo(a)anthracene	<0.37	<0.38	11 E	10 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.37	<0.2 U	<0.2 U
Benzo(a)pyrene	<0.37	<0.38	10 E	9.2 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.364	<0.2 U	<0.2 U
Benzo(b)fluoranthene	<0.37	<0.38	11 E	8.4 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.927	<0.2 U	<0.2 U
Benzo(ghi)perylene	<0.37	<0.38	5.3	<4.6	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.233	<0.2 U	<0.2 U
Benzo(k)fluoranthene	<0.37	<0.38	7.5 E	8.1 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.271	<0.2 U	<0.2 U
Benzoic acid	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1 U	<0.99 U	<1 U
Benzyl alcohol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.21 U	<0.2 U	<0.2 U
bis(2-Chloroethoxy)methane	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
bis(2-Chloroethyl)ether	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
bis(2-Chloroisopropyl)ether	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
bis(2-Ethylhexyl)phthalate	<0.37	<0.38	<0.39	<0.38	<0.4	<0.38	<0.41	<0.41	1.5	0.086 J	<0.41	<0.4	<0.4	<0.39	0.12 J	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Butylbenzylphthalate	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Carbazole	<0.37	<0.38	3.7	3.3	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Chrysene	<0.37	<0.38	11 E	10 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.432	<0.2 U	<0.2 U
Dibenzo(a,h)anthracene	<0.37	<0.38	2.6	<2.2	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Dibenzofuran	<0.37	<0.38	3	2.8	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Diethylphthalate	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Dimethylphthalate	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
di-n-butyl phthalate	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
di-n-octyl phthalate	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Fluoranthene	<0.37	<0.38	20 E	19 E	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.579	<0.2 U	<0.2 U
Fluorene	<0.37	<0.38	5	4.6	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Hexachlorobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Hexachlorobutadiene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Hexachlorocyclopentadiene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
Sample Location:	OSA-SB-01	OSA-SB-02	OSA-SB-03	OSA-SB-03	OSA-SB-04	OSA-SB-05	OSA-SB-06	OSA-SB-07	OSA-SB-08	OSA-SB-09	OSA-SB-10	OSA-SB-11	OSA-SB-12	OSA-SB-13	OSA-SB-14	OSA-SB-15	OSA-SB-16	SB1	SB10	SB11
Sample Depth (ft.):	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	0 - 3	0 - 3	3 - 6	3 - 6	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	3 - 6	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/2/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	12/3/1998	10/15/2002	10/15/2002	10/16/2002
Hexachloroethane	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Indeno(1,2,3-cd)pyrene	<0.37	<0.38	5.3	<4.8	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.263	<0.2 U	<0.2 U
Isophorone	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Naphthalene	<0.37	<0.38	NA	NA	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Nitrobenzene	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
n-Nitroso-di-n-propylamine	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
N-Nitrosodiphenylamine	<0.37	<0.38	<0.38	<0.39	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	<0.21 U	<0.2 U	<0.2 U
Pentachlorophenol	<1.9	<1.9	<1.9	<1.9	<2	<1.9	<2	<2	<2	<2	<2	<2	<2	<2	<1.9	<2	<1.9	<1 U	<0.99 U	<1 U
Pyrene	<0.37	<0.38	NA	NA	<0.4	<0.38	<0.41	<0.41	<0.4	<0.39	<0.41	<0.4	<0.4	<0.39	<0.38	<0.41	<0.38	0.808	<0.2 U	<0.2 U
Volatile Organic Compounds - SW846 8260B, mg/kg																				
1,1,1-Trichloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,1,2,2-Tetrachloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,1,2-Trichloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,1-Dichloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 J	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,1-Dichloroethene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,2-Dichloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
1,2-Dichloroethene, total	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	NA	NA	NA
1,2-Dichloropropane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
2-Butanone	<0.011	<0.011	<0.011	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012 U	<0.011 U	<0.012 U
2-Hexanone	<0.011	<0.011	<0.006	<0.011	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012 U	<0.011 U	<0.012 U
4-Methyl-2-pentanone	<0.011	<0.011	<0.006	<0.011	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012 U	<0.011 U	<0.012 U
Acetone	0.061	<0.011	<0.012	0.036	<0.072	<0.011	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	0.016	0.0636 B	0.0365 JB	0.041 JB
Benzene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 J	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Bromodichloromethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Bromoform	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Bromomethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	NA	NA	NA
Carbon disulfide	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.012 U	<0.011 U	<0.012 U
Carbon tetrachloride	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Chlorobenzene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Chloroethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 J	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Chloromethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0 006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	NA	NA	NA
cis-1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0061 U	<0.0055 U	<0.0059 U
cis-1,3-Dichloropropene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Dibromochloromethane	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Ethylbenzene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 J	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Methyl bromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0061 U	<0.0055 U	<0.0059 U
Methyl chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0061 U	<0.0055 U	<0.0059 U
Methylene chloride	0.001 JB	0.001 JB	<0.006	0.001 JB	0.001 JB	0.001 JB	<0.006	<0.006	0.001 JB	0.001 JB	0.006 JB	0.005 JB	<0.006	0.004 JB	0.005 JB	0.004 JB	0.004 JB	0.0132 B	0.0136 B	0.01 JB
Styrene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Tetrachloroethene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Toluene	<0.006	<0.006	NA	NA	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	0.0015 J	<0.0059 U
trans-1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0061 U	<0.0055 U	<0.0059 U
trans-1,3-Dichloropropene	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Trichloroethene	<0.006	<0.006	NA	NA	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.002 J	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Vinyl chloride	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0061 U	<0.0055 U	<0.0059 U
Xylenes, Total	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.018 U	<0.016 U	<0.018 U

Notes:

B	Result is estimated due to blank contamination
D	Indicates that the analyte was reported from a diluted analysis
E	Estimated
J	Estimated, based on QC data
JB	Estimated; possibly biased high or false positive based on blank contamination
JH	Estimated; possibly biased high based on QC data
JL	Estimated; possibly biased low based on QC data
JQ	Estimated; value is between reporting limit and detection limit
M1	Estimated results; possibly biased high or false positive based on MS/MSD recovery
M2	Estimated results; possibly biased low or false negative based on MS/MSD recovery
NA	Not Analyzed
P	Indicates that there is greater than 25% difference for detected pesticide/aroclor results between the two GC columns
R	Rejected, unusable

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample
Sample Location:	SB12	SB13	SB14	SB15	SB2	SB3	SB4	SB4	SB5	SB6	SB7	SB8	SB9
Sample Depth (ft.):	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002
Cyanide (Total) - SW846 9012A, mg/kg													
Cyanide, total	<0.29 U	<0.31 U	<0.29 U	<0.3 U	<0.28 U	<0.29 U	<0.29 U	<0.28 U	<0.28 U	<0.29 U	<0.29 U	<0.3 U	<0.29 U
Chlorinated Herbicides - SW846 8151A, n													
2,4,5-T	<0.0078 U	<0.0084 U	<0.0077 U	<0.0081 U	<0.0076 U	<0.0078 U	<0.0077 U	<0.0076 U	<0.0076 U	<0.0076 U	<0.0078 U	<0.008 U	<0.0079 U
2,4,5-TP (Silvex)	<0.0078 U	<0.0084 U	<0.0077 U	<0.0081 U	<0.0076 U	<0.0078 U	<0.0077 U	<0.0076 U	<0.0076 U	<0.0076 U	<0.0078 U	<0.008 U	<0.0079 U
2,4-D	<0.039 U	<0.042 U	<0.038 U	<0.04 U	<0.038 U	<0.039 U	<0.039 U	<0.038 U	<0.038 U	<0.038 U	<0.039 U	<0.04 U	<0.039 U
2,4-DB	<0.078 U	<0.084 U	<0.077 U	<0.081 U	<0.076 U	<0.078 U	<0.077 U	<0.076 U	<0.076 U	<0.076 U	<0.078 U	<0.08 U	<0.079 U
Dalapon	<0.039 U	<0.042 U	<0.038 U	<0.04 U	<0.038 U	<0.039 U	<0.039 U	<0.038 U	<0.038 U	<0.038 U	<0.039 U	<0.04 U	<0.039 U
Dicamba	<0.0078 U	<0.0084 U	<0.0077 U	<0.0081 U	<0.0076 U	<0.0078 U	<0.0077 U	<0.0076 U	<0.0076 U	<0.0076 U	<0.0078 U	<0.008 U	<0.0079 U
Dichloroprop	<0.039 U	<0.042 U	<0.038 U	<0.04 U	<0.038 U	<0.039 U	<0.039 U	<0.038 U	<0.038 U	<0.038 U	<0.039 U	<0.04 U	<0.039 U
Dinoseb	<0.0078 U	<0.0084 U	<0.0077 U	<0.0081 U	<0.0076 U	<0.0078 U	<0.0077 U	<0.0076 U	<0.0076 U	<0.0076 U	<0.0078 U	<0.008 U	<0.0079 U
MCPA	<2 U	<2.1 U	<1.9 U	<2 U	<1.9 U	<2 U	<1.9 U	<1.9 U	<1.9 U	<1.9 U	<2 U	<2 U	<2 U
MCPP	<2 U	<2.1 U	<1.9 U	<2 U	<1.9 U	<2 U	<1.9 U	<1.9 U	<1.9 U	<1.9 U	<2 U	<2 U	<2 U
Picloram	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury - SW846 7471A, mg/kg													
Mercury	<0.077 U	<0.082 U	<0.075 U	<0.078 U	<0.071 U	<0.077 U	<0.076 U	<0.07 U	<0.068 U	<0.075 U	<0.077 U	<0.074 U	<0.068 U
Metals - SW846 6010B, mg/kg													
Aluminum	17400	15800	18800	20200	12100	18900	17900	12800	14800	13900	16900	15200	13900
Antimony	<0.58 U	<0.5 U	<0.57 U	<0.5 U	1.3	<0.59 U	<0.57 U	<0.54 U	<0.56 U	<0.56 U	<0.59 U	<0.58 U	<0.57 U
Arsenic	4.4	3.2	4.4	4.6	39.2	39.5	7.8	9.7	7.8	24.3	7.9	3.2	4.8
Barium	48.4	73.6	44.5	37.7	63.7	110	58.8	71	65	68.5	80.1	37.2	30.9
Beryllium	<0.58 U	<0.6 U	<0.57 U	<0.6 U	<0.56 U	<0.59 U	<0.57 U	<0.54 U	<0.56 U	<0.56 U	<0.59 U	<0.58 U	<0.57 U
Cadmium	<0.58 U	<0.6 U	<0.57 U	<0.6 U	<0.56 U	<0.59 U	<0.57 U	<0.54 U	<0.56 U	<0.56 U	<0.59 U	<0.58 U	<0.57 U
Chromium	20.6	18.5	23.5	24.9	15.9	26.8	25.3	16.6	19.3	24.1	19.7	17.8	19
Cobalt	2.3	3.5	2.4	2.6	2.9	4.6	2.8	2.7	3	3.5	2.8	1.5	1.6
Copper	10.8	9.4	12.8	12.1	8.5	14	8.2	9.2	9.6	11.3	7.4	9.1	10.6
Iron	22500	19600	25600	26300	12800	26800	24300	15600	18800	19700	13700	18400	22900
Lead	31.3	9.1	26.6	12	25.9	57.5	15	18.3	22.4	28.6	22	11	21.3
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	75.5	105	47.8	58.4	94.9	117	103	81.7	68.7	92.2	59.1	28.9	23.9
Mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	7.8	7.5	6.9	7.9	6.1	10.3	NA	NA	7.1	7.8	7.2	5	5.1
Selenium	0.74	<0.6 U	0.9	0.79	0.63	1	NA	NA	0.64	0.66	<0.59 U	0.7	0.95
Silver	<1.2 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.2 U	<1.1 U	<1.1 U	<1.1 U	<1.1 U	<1.2 U	<1.2 U	<1.1 U
Thallium	0.59	<0.6 U	0.97	0.88	0.56	1.1	NA	NA	<0.56 U	<0.56 U	<0.59 U	0.63	0.86
Vanadium	41.1	38.3	47.4	46.9	27.2	54.4	NA	NA	35.5	34.6	36.5	39.8	40.3
Zinc	59.2	24.2	23.7	20.9	35.2	38.8	NA	NA	23.5	25.5	18.4	15.5	15.4
Organochlorine Pesticides - SW846 8081													
4,4'-DDD	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
4,4'-DDE	0.0038 J	<0.0042 U	<0.0039 U	<0.004 U	0.0038	0.0063	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
4,4'-DDT	0.006	<0.0042 U	<0.0039 U	0.002 J	0.0039	0.0119	0.0045	<0.0038 U	<0.0039 U	0.0049	0.009	<0.004 U	0.0058
Aldrin	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
alpha-BHC	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
alpha-Chlordane	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
beta-BHC	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
delta-BHC	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
Dieldrin	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endosulfan I	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endosulfan II	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endosulfan sulfate	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endrin	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endrin aldehyde	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
Endrin ketone	<0.0039 U	<0.0042 U	<0.0039 U	<0.004 U	<0.0038 U	<0.0039 U	<0.0039 U	<0.0038 U	<0.0038 U	<0.0038 U	<0.0039 U	<0.004 U	<0.0039 U
gamma-BHC	<0.002 U	0.0012 J	<0.0019 U	<0.002 U	0.0018 J	<0.002 U	0.0019 J	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
gamma-Chlordane	<0.002 U	<0 0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
Heptachlor	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
Heptachlor epoxide	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.002 U	<0.002 U	<0.002 U
Methoxychlor	<0.02 U	<0.021 U	<0.019 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1016	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1221	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1232	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample
Sample Location:	SB12	SB13	SB14	SB15	SB2	SB3	SB4	SB4	SB5	SB6	SB7	SB8	SB9
Sample Depth (ft.):	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002
PCB-1242	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1248	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1254	<0.02 U	<0.021 U	<0.19 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
PCB-1260	0.0137 J	<0.021 U	<0.19 U	<0.02 U	0.0178	0.0261	<0.019 U	<0.019 U	0.0218	<0.019 U	<0.02 U	<0.02 U	<0.02 U
Pentachlorophenol	<0.002 U	<0.0021 U	<0.0019 U	<0.002 U	<0.0019 U	<0.002 U	NA	NA	<0.0019 U	<0.0019 U	0.0026	<0.002 U	<0.002 U
Toxaphene	<0.02 U	<0.021 U	<0.019 U	<0.02 U	<0.019 U	<0.02 U	<0.019 U	<0.019 U	<0.019 U	<0.019 U	<0.02 U	<0.02 U	<0.02 U
Semi-Volatile Organic Compounds - SW8													
1,2,4-Trichlorobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
1,2-Dichlorobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
1,3-Dichlorobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
1,4-Dichlorobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2- & 3-methylphenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,4,5-Trichlorophenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,4,6-Trichlorophenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,4-Dichlorophenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,4-Dimethylphenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,4-Dinitrophenol	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
2,4-Dinitrotoluene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2,6-Dinitrotoluene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2-Chloronaphthalene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2-Chlorophenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2-Methylnaphthalene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
2-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
2-Nitrophenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
3,3-Dichlorobenzidine	<0.39 U	<0.42 U	<0.39 U	<0.4 U	<0.38 U	<0.39 U	<0.39 U	<0.38 U	<0.38 U	<0.38 U	<0.39 U	<0.4 U	<0.39 U
3-Nitroaniline	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-dinitro-o-cresol	<0.39 U	<0.42 U	<0.39 U	<0.4 U	<0.38 U	<0.39 U	<0.39 U	<0.38 U	<0.38 U	<0.38 U	<0.39 U	<0.4 U	<0.39 U
4-Bromophenyl phenyl ether	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
4-Chloro-3-methylphenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
4-Chloroaniline	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
4-Chlorophenyl phenyl ether	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
4-Methylphenol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
4-Nitroaniline	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
4-Nitrophenol	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
Acenaphthene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Acenaphthylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Benzo(a)anthracene	0.232	<0.21 U	0.0923 J	<0.2 U	<0.19 U	0.139 J	0.0902 J	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Benzo(a)pyrene	0.299	<0.21 U	0.0987 J	0.0591 J	<0.19 U	0.16 J	0.0579 J	<0.19 U	<0.19 U	<0.19 U	0.0696 J	<0.2 U	<0.2 U
Benzo(b)fluoranthene	0.546	<0.21 U	0.131 J	0.123 J	0.099 J	0.307	0.166 J	<0.19 U	<0.19 U	<0.19 U	0.147 J	<0.2 U	<0.2 U
Benzo(ghi)perylene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Benzo(k)fluoranthene	0.246	<0.21 U	<0.19 U	<0.2 U	<0.19 U	0.176 J	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Benzoic acid	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
Benzyl alcohol	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
bis(2-Chloroethoxy)methane	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
bis(2-Chloroethyl)ether	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
bis(2-Chloroisopropyl)ether	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
bis(2-Ethylhexyl)phthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Butylbenzylphthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Carbazole	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Chrysene	0.272	<0.21 U	0.131 J	<0.2 U	<0.19 U	0.195 J	0.0847 J	0.131 J	<0.19 U	<0.19 U	0.0879 J	<0.2 U	<0.2 U
Dibenzo(a,h)anthracene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Dibenzofuran	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Diethylphthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Dimethylphthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
di-n-butyl phthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
di-n-octyl phthalate	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Fluoranthene	0.418	<0.21 U	0.306	0.102 J	<0.19 U	0.365	0.152 J	0.158 J	<0.19 U	<0.19 U	0.128 J	<0.2 U	<0.2 U
Fluorene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Hexachlorobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Hexachlorobutadiene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Hexachlorocyclopentadiene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U

TABLE A-1

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL
Revised Human Health Baseline Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Duplicate	Sample	Sample	Sample	Sample	Sample
Sample Location:	SB12	SB13	SB14	SB15	SB2	SB3	SB4	SB4	SB5	SB6	SB7	SB8	SB9
Sample Depth (ft.):	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
Sample Date:	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002	10/15/2002
Hexachloroethane	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Indeno(1,2,3-cd)pyrene	0.102 J	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Isophorone	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Naphthalene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	NA	NA	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Nitrobenzene	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
n-Nitroso-di-n-propylamine	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
N-Nitrosodiphenylamine	<0.2 U	<0.21 U	<0.19 U	<0.2 U	<0.19 U	<0.2 U	<0.19 U	<0.19 U	<0.19 U	<0.19 U	<0.2 U	<0.2 U	<0.2 U
Pentachlorophenol	<0.98 U	<1 U	<0.97 U	<1 U	<0.95 U	<0.98 U	<0.96 U	<0.95 U	<0.95 U	<0.95 U	<0.98 U	<1 U	<0.98 U
Pyrene	0.52	<0.21 U	0.255	0.104 J	<0.19 U	0.32	NA	NA	<0.19 U	<0.19 U	0.105 J	<0.2 U	<0.2 U
Volatile Organic Compounds - SW846 82													
1,1,1-Trichloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,1,2,2-Tetrachloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,1,2-Trichloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,1-Dichloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,1-Dichloroethene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,2-Dichloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
1,2-Dichloroethene, total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
2-Butanone	<0.012 U	<0.012 U	<0.012 U	<0.011 U	<0.011 U	<0.012 U	0.0062 J	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U
2-Hexanone	<0.012 U	<0.012 U	<0.012 U	<0.011 U	<0.011 U	<0.012 U	<0.011 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U
4-Methyl-2-pentanone	<0.012 U	<0.012 U	<0.012 U	<0.011 U	<0.011 U	<0.012 U	<0.011 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U
Acetone	0.0342 JB	0.0376 JB	0.0376 JB	0.0398 JB	0.122 B	0.0825 B		0.0946 B	0 0355 J	0.0347 J	0.0351 J	0.0322 JB	0.0347 J
Benzene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Bromodichloromethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Bromoform	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	<0.012 U	<0.012 U	<0.012 U	<0.011 U	<0.011 U	<0.012 U	<0.011 U	<0.01 U	<0.011 U	<0.011 U	<0.012 U	<0.012 U	<0.011 U
Carbon tetrachloride	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Chlorobenzene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Chloroethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Chloroform	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethylene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
cis-1,3-Dichloropropene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Dibromochloromethane	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0 0059 U	<0.0058 U	<0.0054 U
Ethylbenzene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Methyl bromide	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Methyl chloride	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Methylene chloride	0.0099 JB	0.0094 JB	0.0089 JB	0.0147 B	0.0147 B	0.0161 B	0.0123 B	0.0073 JB	0.0139 B	0.0095 JB	0.0105 JB	0.0126 B	0.0095 JB
Styrene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Tetrachloroethene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Toluene	<0.006 U	<0.0062 U	<0.006 U	0.0018 J	0.0016 J	<0.0062 U	NA	NA	<0.0053 U	0.0015 J	<0.0059 U	0.0015 J	<0.0054 U
trans-1,2-Dichloroethylene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
trans-1,3-Dichloropropene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Trichloroethene	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	NA	NA	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Vinyl chloride	<0.006 U	<0.0062 U	<0.006 U	<0.0055 U	<0.0056 U	<0.0062 U	<0.0056 U	<0.0051 U	<0.0053 U	<0.0054 U	<0.0059 U	<0.0058 U	<0.0054 U
Xylenes, Total	<0.018 U	<0.019 U	<0.018 U	<0.016 U	<0.017 U	<0.018 U	<0.017 U	<0.015 U	<0.016 U	<0.016 U	<0.018 U	<0.017 U	<0.016 U

Notes:

B	Result is estimated due to blank contamination
D	Indicates that the analyte was reported from a diluted analysis
E	Estimated
J	Estimated, based on QC data
JB	Estimated; possibly biased high or false positive based on blank contamination
JH	Estimated; possibly biased high based on QC data
JL	Estimated; possibly biased low based on QC data
JQ	Estimated; value is between reporting limit and detection limit
M1	Estimated results; possibly biased high or false positive based on MS/MSD recovery
M2	Estimated results; possibly biased low or false negative based on MS/MSD recovery
NA	Not Analyzed
P	Indicates that there is greater than 25% difference for detected pesticide/aroclor results between the two GC columns
R	Rejected, unusable

TABLE A-2

DATA SUMMARY TABLE
OPERABLE UNIT 1 - SOIL GAS
Revised Human Health Risk Assessment
Defense Supply Center, Richmond
Richmond, Virginia

Sample Type:	Sample	Sample	Sample	Sample
Sample Location:	BLDG 232-SUMMA 1	BLDG 232-SUMMA 2	BLDG 232-SUMMA 3	BLDG 41-SUMMA
Sample Date:	4/21/2004	4/21/2004	4/21/2004	4/21/2004
Soil Gas by MOD TO14 (mg/m^3)				
1,1,1-Trichloroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,1,2,2-Tetrachloroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,1,2-Trichloroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,1-Dichloroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,1-Dichloroethene	< 0.068	< 0.064	< 0.067	< 0.067
1,2,4-Trichlorobenzene	< 0.068	< 0.064	< 0.067	< 0.067
1,2,4-Trimethylbenzene	0.046	0.048 JQ	0.094	< 0.067
1,2-Dibromoethane	< 0.068	< 0.064	< 0.067	< 0.067
1,2-Dichlorobenzene	< 0.068	< 0.064	< 0.067	< 0.067
1,2-Dichloroethane	< 0.068	< 0.064	< 0.067	< 0.067
1,2-Dichloropropane	< 0.068	< 0.064	< 0.067	< 0.067
1,3,5-Trimethylbenzene	< 0.068	< 0.064	< 0.067	< 0.067
1,3-Dichlorobenzene	< 0.068	< 0.064	< 0.067	< 0.067
1,4-Dichlorobenzene	< 0.068	< 0.064	< 0.067	< 0.067
2-Chlorotoluene	< 0.068	< 0.064	< 0.067	< 0.067
4-Ethyltoluene	< 0.068	< 0.064	0.084	< 0.067
Benzene	< 0.068	< 0.064	< 0.067	< 0.067
Bromodichloromethane	< 0.068	< 0.064	< 0.067	< 0.067
Bromoform	< 0.068	< 0.064	< 0.067	< 0.067
Bromomethane	< 0.068	< 0.064	< 0.067	< 0.067
Carbon disulfide	< 0.068	< 0.064	< 0.067	< 0.067
Carbon tetrachloride	< 0.068	< 0.064	< 0.067	< 0.067
Chlorobenzene	< 0.068	< 0.064	< 0.067	< 0.067
Chloroethane	< 0.068	< 0.064	< 0.067	< 0.067
Chloroform	< 0.068	< 0.064	< 0.067	< 0.067
Chloromethane	< 0.068	< 0.064	< 0.067	< 0.067
cis-1,2-Dichloroethene	< 0.068	< 0.064	< 0.067	< 0.067
cis-1,3-Dichloropropene	< 0.068	< 0.064	< 0.067	< 0.067
Dibromochloromethane	< 0.068	< 0.064	< 0.067	< 0.067
Dichlorodifluoromethane	< 0.068	< 0.064	< 0.067	< 0.067
Dichlorotetrafluoroethane	< 0.068	< 0.064	< 0.067	< 0.067
Ethylbenzene	< 0.068	< 0.064	< 0.067	< 0.067
Hexachlorobutadiene	< 0.068	< 0.064	< 0.067	< 0.067
Hexane	< 0.068	0.44	< 0.067	0.15
m,p-Xylenes	< 0.14	< 0.13	< 0.13	< 0.13
Methyl tert-butyl ether	< 0.068	< 0.064	< 0.067	< 0.067
Methylene chloride	< 0.068	< 0.064	< 0.067	< 0.067
o-Xylene	< 0.068	< 0.064	< 0.067	< 0.067
Styrene	< 0.068	< 0.064	< 0.067	< 0.067
Tetrachloroethene	< 0.068	< 0.064	< 0.067	< 0.067
Toluene	< 0.068	< 0.064	< 0.067	< 0.067
trans-1,2-Dichloroethene	< 0.068	< 0.064	< 0.067	< 0.067
trans-1,3-Dichloropropene	< 0.068	< 0.064	< 0.067	< 0.067
trans-1,4-Dichloro-2-butene	< 0.068	< 0.064	< 0.067	< 0.067
Trichloroethene	< 0.068	< 0.064	< 0.067	< 0.067
Trichlorofluoromethane	< 0.068	< 0.064	< 0.067	< 0.067
Vinyl chloride	< 0.068	< 0.064	< 0.067	< 0.067

PREPARED/DATE: LHO 09/23/05
CHECKED/DATE: SDK 10/31/05

TABLE A-3

EVALUATION OF REPORTING LIMITS FOR BENZENE
USING THE JOHNSON ETTINGER VAPOR INTRUSION MODEL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

SL-SCREEN
Version 3.1; 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [0]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
71432	6.80E+01	Benzene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Depth below grade to top of contamination, L_1 (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	400	10	LS		

MORE

ENTER Vadose zone SCS soil type	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Vadose zone soil organic carbon fraction, f_{oc}^v (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
LS	1.62	0.39	0.078	0.002	

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (mg/kg)	Indoor exposure soil conc., noncarcinogen (mg/kg)	Risk-based indoor exposure soil conc., (mg/kg)	Soil saturation conc., Csat (mg/kg)	Final indoor exposure soil conc., (mg/kg)
2.02E-02	1.69E+00	2.02E-02	3.35E+05	2.02E-02

MESSAGE SUMMARY BELOW.

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.9E-05	5.9E-01

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
1,1-Dichloroethane	0.002	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	J	0.006	=	
1,1-dichloroethane	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	5.5	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	5.5	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	5.6	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	5.35	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	5.4	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	5.8	ND	
1,1-dichloroethane	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
1,1-Dichloroethane	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
2-methyl naphthalene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
2-Methylnaphthalene	1.2	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
2-Methylnaphthalene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
2-Methylnaphthalene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
4,4'-DDD	2.1	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	J		=	
4,4'-DDD	0.001375	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.00198	=	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	3.8	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB4	10/15/2002		SO	02-OSA-SB4 (0-3)		ug/kg	U	3.85	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
4,4'-DDD	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00035	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00036	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00037	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00036	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00039	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00039	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00039	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00037	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00038	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00038	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00039	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00038	ND	
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00034	ND	
4,4'-DDD	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00039	ND	

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
4,4'-DDD	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00036	ND	
4,4'-DDE	6.3	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
4,4'-DDE	6.3	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
4,4'-DDE	3.8	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	J		=	
4,4'-DDE	3.8	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg			=	
4,4'-DDE	0.001	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.001435	=	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	3.85	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
4,4'-DDE	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00024	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00025	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00025	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00027	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00027	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00027	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00026	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00025	ND	
4,4'-DDE	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00027	ND	
4,4'-DDE	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00025	ND	
4,4'-DDT	47.5	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg			=	
4,4'-DDT	12.6	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
4,4'-DDT	11.9	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
4,4'-DDT	9	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg			=	
4,4'-DDT	6	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
4,4'-DDT	5.8	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg			=	
4,4'-DDT	4.9	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg			=	
4,4'-DDT	4.7	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg			=	
4,4'-DDT	3.9	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg			=	
4,4'-DDT	2	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
4,4'-DDT	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
4,4'-DDT	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
4,4'-DDT	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
4,4'-DDT	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.9	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
4,4'-DDT	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00023	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00024	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.00024	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00024	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00026	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00025	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00024	ND	
4,4'-DDT	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00026	ND	
4,4'-DDT	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00024	ND	
Acenaphthene	6.1	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
acenaphthene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
acenaphthene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	

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RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Acenaphthene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Acenaphthene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Acetone	89.3	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg			=	
Acetone	35.5	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	J		=	
Acetone	35.1	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
Acetone	34.7	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	J		=	
Acetone	34.7	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	J		=	
Acetone	0.061	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.012	=	
Acetone	0.021	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.012	=	
Acetone	0.016	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.012	=	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.011	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.072	ND	
Acetone	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.011	ND	
Acetone	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.012	ND	
Acetone	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.012	ND	
Aldrin	0.00095	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.00077	=	
aldrin	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
aldrin	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00013	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00015	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00015	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00015	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00014	ND	
Aldrin	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00015	ND	
Aldrin	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00014	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
alphachlordane	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
alpha-Chlordane	0.017	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.00012	=	
alpha-Chlordane	0.00029	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg	P	0.00012	=	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00011	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00011	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00011	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00012	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00011	ND	
alpha-Chlordane	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00011	ND	
Aluminum	20200	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Aluminum	18900	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Aluminum	18800	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Aluminum	17400	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Aluminum	16900	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Aluminum	16500	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Aluminum	16400	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	

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RISK ASSESSMENT DATASET FOR SOIL
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Aluminum	15800	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Aluminum	15600	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Aluminum	15350	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Aluminum	15200	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Aluminum	14800	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Aluminum	13900	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Aluminum	13900	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Aluminum	12100	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Aluminum	9345	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Aluminum	9330	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Aluminum	9230	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Aluminum	9150	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Aluminum	8480	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Aluminum	8410	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Aluminum	8080	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Aluminum	8050	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Aluminum	7510	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Aluminum	6920	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Aluminum	6560	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Aluminum	6210	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Aluminum	6150	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Aluminum	5280	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Aluminum	4760	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Aluminum	3670	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Anthracene	3.8	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
anthracene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
anthracene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	

TABLE A-4

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OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Anthracene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Anthracene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Antimony	1.3	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Antimony	0	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg	U	0.6	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg	U	0.56	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg	U	0.59	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg	U	0.58	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg	U	0.5	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg	U	0.57	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg	U	0.5	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg	U	0.59	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg	U	0.555	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg	U	0.56	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg	U	0.56	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg	U	0.59	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg	U	0.58	ND	
Antimony	0	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg	U	0.57	ND	
Antimony	0	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.11	ND	
aroclor 1260	41.1	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
aroclor 1260	26.1	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
aroclor 1260	21.8	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg			=	
aroclor 1260	17.8	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg			=	
aroclor 1260	13.7	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	J		=	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	20	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	20	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	21	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	20	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	19	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	19	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	20	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	20	ND	
aroclor 1260	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	20	ND	
Arsenic	132	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Arsenic	39.5	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Arsenic	39.2	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Arsenic	24.3	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Arsenic	8.75	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Arsenic	7.9	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	

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TAB 4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Arsenic	7.8	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Arsenic	5	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Arsenic	5	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Arsenic	4.8	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Arsenic	4.7	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Arsenic	4.6	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Arsenic	4.5	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Arsenic	4.4	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Arsenic	4.4	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Arsenic	4	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Arsenic	3.2	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Arsenic	3.2	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Arsenic	2.95	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Arsenic	2.8	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Arsenic	2.6	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Arsenic	2.2	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Arsenic	2.1	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Arsenic	2	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Arsenic	1.8	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Arsenic	1.6	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Arsenic	1.3	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Arsenic	1.2	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Barium	114	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Barium	110	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Barium	80.1	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Barium	73.6	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Barium	68.5	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Barium	65	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Barium	64.9	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Barium	63.7	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Barium	50.5	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Barium	48.4	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Barium	44.5	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Barium	37.7	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Barium	37.2	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Barium	31.9	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Barium	30.9	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Barium	30.3	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Barium	30.2	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Barium	29.6	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Barium	26.8	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Barium	26.7	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Barium	26.6	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Barium	22.7	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Barium	22.2	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Barium	19.3	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Barium	18.5	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Barium	18.2	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Barium	17	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Barium	16.9	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Barium	14.5	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Barium	14	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Barium	13.7	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Benzene	0.002	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	J	0.006	=	
benzene	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	5.5	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	5.5	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	5.6	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	5.35	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	5.4	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	5.8	ND	
benzene	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
Benzene	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
Benzo(a)anthracene	370	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
Benzo(a)anthracene	232	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
Benzo(a)anthracene	139	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	J		=	
Benzo(a)anthracene	92.6	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
Benzo(a)anthracene	92.3	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	J		=	
Benzo(a)anthracene	10.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	

RISK ASSESSMENT DATASET FOR SOIL
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Benzo(a)anthracene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Benzo(a)anthracene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Benzo(a)anthracene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Benzo(a)pyrene	364	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
Benzo(a)pyrene	299	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
Benzo(a)pyrene	160	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	J		=	
Benzo(a)pyrene	98.7	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	J		=	
Benzo(a)pyrene	76.45	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
Benzo(a)pyrene	69.6	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
Benzo(a)pyrene	59.1	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
Benzo(a)pyrene	9.6	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Benzo(a)pyrene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Benzo(a)pyrene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Benzo(a)pyrene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Benzo(b)fluoranthene	927	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
Benzo(b)fluoranthene	546	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
Benzo(b)fluoranthene	307	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
Benzo(b)fluoranthene	147	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
Benzo(b)fluoranthene	131	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	J		=	
Benzo(b)fluoranthene	130.5	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
Benzo(b)fluoranthene	123	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
Benzo(b)fluoranthene	99	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	J		=	
Benzo(b)fluoranthene	9.7	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Benzo(b)fluoranthene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Benzo(b)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Benzo(ghi)perylene	233	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
Benzo(ghi)perylene	3.8	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		2.495	=	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Benzo(ghi)perylene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Benzo(k)fluoranthene	271	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
Benzo(k)fluoranthene	246	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
Benzo(k)fluoranthene	176	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	J		=	
Benzo(k)fluoranthene	7.8	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Benzo(k)fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
beta-BHC	0.00041	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg	P	0.00009	=	
beta-BHC	0.00035	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg	P	0.00009	=	
beta-BHC	0.00024	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg	P	0.00009	=	
beta-BHC	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.00051	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00015	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00009	ND	
beta-BHC	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00009	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	

RISK ASSESSMENT DATASET FOR SOIL
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
bis(2ethylhexl)phthalate	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
bis(2-Ethylhexyl)phthalate	1.5	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	=	
bis(2-Ethylhexyl)phthalate	0.12	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg	J	0.38	=	
bis(2-Ethylhexyl)phthalate	0.086	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg	J	0.39	=	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
bis(2-Ethylhexyl)phthalate	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Carbazole	3.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
carbazole	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
carbazole	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Carbazole	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Carbazole	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Chloroform	0.002	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	J	0.006	=	
chloroform	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	5.5	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	5.5	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	5.6	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	5.35	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	5.4	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	5.8	ND	
chloroform	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
Chloroform	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
Chromium	32.6	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Chromium	26.8	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Chromium	24.9	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Chromium	24.8	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Chromium	24.1	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	

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RISK ASSESSMENT DATASET FOR SOIL
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Chromium	23.5	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Chromium	20.95	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Chromium	20.6	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Chromium	19.7	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Chromium	19.6	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Chromium	19.3	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Chromium	19	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Chromium	18.5	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Chromium	17.8	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Chromium	17	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Chromium	16.7	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Chromium	16.3	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Chromium	15.9	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Chromium	15.6	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Chromium	15.3	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Chromium	13.7	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Chromium	13	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Chromium	10.7	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Chromium	9.7	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Chromium	9.2	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Chromium	8.7	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Chromium	8.4	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Chromium	7.5	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Chromium	7.5	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Chromium	7.5	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Chromium	4.3	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
chrysene	432	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
chrysene	272	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
chrysene	195	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	J		=	
chrysene	131	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	J		=	
chrysene	107.85	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
chrysene	87.9	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
Chrysene	10.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
chrysene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
chrysene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Chrysene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Chrysene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Cobalt	6.9	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Cobalt	4.6	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Cobalt	3.5	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Cobalt	3.5	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Cobalt	3	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Cobalt	3	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Cobalt	2.9	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Cobalt	2.8	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Cobalt	2.75	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Cobalt	2.6	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Cobalt	2.4	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Cobalt	2.3	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Cobalt	1.9	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Cobalt	1.6	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Cobalt	1.5	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Cobalt	1.1	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Cobalt	1.1	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Cobalt	1.1	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Cobalt	1.08	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Cobalt	0.92	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Cobalt	0.89	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Cobalt	0.86	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Cobalt	0.73	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Copper	17.7	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Copper	14	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Copper	12.8	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Copper	12.1	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Copper	11.3	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Copper	10.8	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Copper	10.6	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Copper	10	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Copper	10	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Copper	9.8	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Copper	9.6	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Copper	9.4	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	

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RISK ASSESSMENT DATASET FOR SOIL
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Defense Supply Center Richmond
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Copper	9.1	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Copper	8.7	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Copper	8.5	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Copper	8.5	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Copper	7.7	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Copper	7.4	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Copper	7.15	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Copper	6.7	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Copper	6.2	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Copper	4.9	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Copper	4.3	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Copper	4.3	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Copper	4.1	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Copper	3.3	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Copper	3.2	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Copper	3.1	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Copper	2.6	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Copper	2.3	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Copper	1.7	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Dibenzo(a,h)anthracene	1.85	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		1.295	=	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
dibenzo(a,h)anthracene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	

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RISK ASSESSMENT DATASET FOR SOIL
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Dibenzo(a,h)anthracene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Dibenzofuran	2.9	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
dibenzofuran	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Dibenzofuran	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Dibenzofuran	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Dieldrin	0.001135	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.00199	=	
Dieldrin	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	4.1	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	3.9	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	3.8	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	3.9	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	3.85	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Dieldrin	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
Dieldrin	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00034	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00035	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00036	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00035	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00038	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00037	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00068	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00036	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00037	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00037	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00038	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00037	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00036	ND	
Dieldrin	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00038	ND	
Dieldrin	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00035	ND	
Endosulfan II	0.000825	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.001225	=	
Endosulfan II	0.00063	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg	P	0.00045	=	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	4.1	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	3.9	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	3.8	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	3.9	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	3.85	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
Endosulfan II	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00041	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00042	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.0002	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00042	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00045	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00045	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00045	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00043	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00044	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00044	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.00045	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00042	ND	
Endosulfan II	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00045	ND	
Endosulfan II	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00042	ND	
Endrin	0.0005	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg	P	0.00036	=	
endrin	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	4.1	ND	
endrin	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
endrin	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
endrin	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	3.9	ND	
endrin	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
endrin	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
endrin	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
endrin	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	3.8	ND	
endrin	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	3.9	ND	
endrin	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	3.85	ND	
endrin	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
endrin	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
endrin	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
endrin	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
endrin	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00033	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00034	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.00192	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00035	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00034	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00035	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00034	ND	
Endrin	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00036	ND	
Endrin	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.00034	ND	
Endrin ketone	0.0157	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	P	0.0015	=	
endrin ketone	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	4.1	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	4	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	4	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	3.9	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	4.2	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	3.9	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	4	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	3.8	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	3.9	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
endrin ketone	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	3.8	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	3.8	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	3.8	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	3.9	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	4	ND	
endrin ketone	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	3.9	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.0013	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.022	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.0015	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.0015	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.0015	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.0014	ND	
Endrin ketone	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.0015	ND	
Endrin ketone	0	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.0014	ND	
ethyl benzene	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	5.5	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	5.5	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	5.6	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	5.35	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	5.4	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	5.8	ND	
ethyl benzene	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
Ethylbenzene	0.002	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	J	0.006	=	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
Ethylbenzene	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
fluoranthene	579	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
fluoranthene	418	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
fluoranthene	365	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
fluoranthene	306	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg			=	
fluoranthene	155	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
fluoranthene	128	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
fluoranthene	102	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
Fluoranthene	19.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	
fluoranthene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
fluoranthene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Fluoranthene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Fluoranthene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Fluorene	4.8	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
Fluorene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Fluorene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Fluorene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Fluorene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
gamma-BHC	1.8	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	J		=	
gamma-BHC	1.425	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
gamma-BHC	1.2	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	J		=	
gamma-BHC	1.2	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	J		=	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
gamma-BHC	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
Heptachlor	0.001	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	P	0.00013	=	
Heptachlor	0.00085	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.00013	=	
Heptachlor	0.00079	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg	P	0.00013	=	
Heptachlor	0.00075	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg	P	0.00013	=	
Heptachlor	0.00073	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg	P	0.00013	=	
Heptachlor	0.00065	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg	P	0.00013	=	
Heptachlor	0.00062	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg	P	0.00013	=	
Heptachlor	0.0006	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg	P	0.00013	=	
Heptachlor	0.00044	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg	P	0.00013	=	

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Defense Supply Center Richmond
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Heptachlor	0.00039	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00013	=	
Heptachlor	0.00032	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg	P	0.00013	=	
Heptachlor	0.0002	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg	P	0.00013	=	
Heptachlor	0.00018	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg	P	0.00013	=	
Heptachlor	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
Heptachlor	0	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.00071	ND	
Heptachlor	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00013	ND	
Heptachlor	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00084	ND	
Heptachlor epoxide	0.034	SW8081A	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.00013	=	
Heptachlor epoxide	0.0013	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg	P	0.00013	=	
Heptachlor epoxide	0.00072	SW8081A	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg	P	0.00013	=	
Heptachlor epoxide	0.00062	SW8081A	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg	P	0.00013	=	
Heptachlor epoxide	0.00046	SW8081A	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	P	0.00013	=	
Heptachlor epoxide	0.00019	SW8081A	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg	P	0.00013	=	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
Heptachlor epoxide	0	SW8081A	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.00012	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.00012	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.00013	ND	

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RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Heptachlor epoxide	0	SW8081A	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.00012	ND	
Heptachlor epoxide	0	SW8081A	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.00013	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.00013	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.00013	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.00013	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.00013	ND	
Heptachlor epoxide	0	SW8081A	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.00013	ND	
indeno(1,2,3-cd)pyrene	263	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
indeno(1,2,3-cd)pyrene	102	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	J		=	
Indeno(1,2,3-cd)pyrene	3.85	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		2.595	=	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002		SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
indeno(1,2,3-cd)pyrene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Indeno(1,2,3-cd)pyrene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Iron	43500	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Iron	27900	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Iron	26800	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Iron	26300	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Iron	25600	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Iron	24900	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Iron	24500	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Iron	23300	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Iron	22900	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Iron	22500	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Iron	21700	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Iron	19950	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Iron	19750	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Iron	19700	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Iron	19600	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Iron	18800	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Iron	18400	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Iron	17800	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Iron	14900	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Iron	13700	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Iron	13500	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Iron	13000	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Iron	13000	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Iron	12800	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Iron	11900	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Iron	10800	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Iron	9920	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Iron	8730	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Iron	8560	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Iron	6580	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Iron	3090	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Lead	57.5	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Lead	51.7	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Lead	31.3	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Lead	28.6	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Lead	26.6	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Lead	25.9	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Lead	22.4	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Lead	22	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Lead	21.3	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Lead	16.65	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Lead	16	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Lead	12	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Lead	11.3	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Lead	11	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Lead	10.3	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Lead	10.1	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Lead	9.6	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Lead	9.55	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Lead	9.1	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Lead	9.1	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Lead	8.9	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Lead	8.5	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Lead	8.4	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	

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RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Lead	8.3	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Lead	7.2	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Lead	7	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Lead	6.6	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Lead	6.4	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Lead	6.1	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Lead	5.8	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Lead	4.4	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Manganese	275	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Manganese	117	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Manganese	105	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Manganese	94.9	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Manganese	92.35	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Manganese	92.2	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Manganese	75.5	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Manganese	68.7	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Manganese	67.1	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Manganese	59.1	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Manganese	58.7	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Manganese	58.4	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Manganese	47.8	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Manganese	43.85	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Manganese	42	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Manganese	37.6	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Manganese	35.1	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Manganese	28.9	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Manganese	27.2	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Manganese	23.9	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Manganese	16.3	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Manganese	10.7	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Manganese	9.2	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Manganese	9.1	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Manganese	3.4	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Manganese	2.9	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Manganese	2.3	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Manganese	1.5	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Manganese	1.3	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
methyl ethyl ketone	5.6	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
methyl ethyl ketone	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	11	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	11	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	11	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	11	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	11	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	12	ND	
methyl ethyl ketone	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	11	ND	
Naphthalene	3.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.385	=	
naphthalene	0	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	210	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	190	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	190	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
naphthalene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Naphthalene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Naphthalene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0 38	ND	
Nickel	10.3	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Nickel	10.2	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Nickel	8.9	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Nickel	7.9	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Nickel	7.8	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Nickel	7.8	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Nickel	7.5	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Nickel	7.2	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Nickel	7.1	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	

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RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
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Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Nickel	6.9	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Nickel	6.25	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Nickel	6.2	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Nickel	6.1	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Nickel	5.1	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Nickel	5	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Nickel	2.9	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Nickel	2.5	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Nickel	2.5	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Nickel	2.2	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Nickel	2.2	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Nickel	2	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Nickel	1.8	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Nickel	1.8	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Nickel	1.5	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Nickel	1.3	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Nickel	1.3	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Nickel	0.98	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Nickel	0.92	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Nickel	0.8	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Nickel	0.58	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Nickel	0.57	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.0088	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.0091	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.00915	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.0094	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.0091	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.0097	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.0096	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.0097	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.0094	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.0096	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.0095	ND	
PCB-1260	0	SW8081A	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.0097	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.0095	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.0092	ND	
PCB-1260	0	SW8082	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.0097	ND	
PCB-1260	0	SW8082	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.0091	ND	
pentachlorophenol	2.6	SW846 8081A	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg			=	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	2.1	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	2	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	2	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	2	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	2.1	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	1.9	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	2	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
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Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	1.9	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	2	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	1.9	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	1.9	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	1.9	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	2	ND	
pentachlorophenol	0	SW846 8081A	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	2	ND	
phenanthrene	273	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
phenanthrene	268	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg			=	
phenanthrene	98.1	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	J		=	
phenanthrene	79.8	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
Phenanthrene	15.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		10.195	=	
phenanthrene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
phenanthrene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Phenanthrene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Phenanthrene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
pyrene	808	SW846 8270C	NONE	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg			=	
pyrene	520	SW846 8270C	NONE	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg			=	
pyrene	320	SW846 8270C	NONE	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg			=	
pyrene	255	SW846 8270C	NONE	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg			=	
pyrene	137.5	SW846 8270C	NONE	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
pyrene	105	SW846 8270C	NONE	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	J		=	
pyrene	104	SW846 8270C	NONE	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
Pyrene	18.5	SW8270C	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg	E	0.385	=	

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RISK ASSESSMENT DATASET FOR SOIL
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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
pyrene	0	SW846 8270C	NONE	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	200	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	200	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	210	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	190	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	190	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	190	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	200	ND	
pyrene	0	SW846 8270C	NONE	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	200	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.37	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.38	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.4	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.41	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.41	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.4	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.39	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.41	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.4	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.4	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.39	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.38	ND	
Pyrene	0	SW8270C	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.41	ND	
Pyrene	0	SW8270C	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.38	ND	
Selenium	1.1	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Selenium	1	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Selenium	0.95	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Selenium	0.9	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Selenium	0.79	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Selenium	0.74	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Selenium	0.7	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Selenium	0.7	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Selenium	0.68	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Selenium	0.66	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Selenium	0.64	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Selenium	0.63	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Selenium	0.595	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Selenium	0.58	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.36	=	
Selenium	0	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg	U	0.6	ND	
Selenium	0	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg	U	0.59	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.29	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.34	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.38	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.38	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.38	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.31	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.35	ND	

TABLE A-4

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DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.38	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.33	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.29	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.31	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.32	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.31	ND	
Selenium	0	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.29	ND	
Selenium	0	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.28	ND	
Thallium	10.1	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Thallium	5.8	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Thallium	5.8	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Thallium	5.5	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Thallium	4.5	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Thallium	3.4	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Thallium	3.1	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Thallium	3.1	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Thallium	2.9	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Thallium	2.9	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Thallium	2.6	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Thallium	2.3	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Thallium	1.9	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Thallium	1.8	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Thallium	1.5	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Thallium	1.1	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Thallium	1	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Thallium	0.97	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Thallium	0.88	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Thallium	0.86	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Thallium	0.65	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Thallium	0.63	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Thallium	0.63	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Thallium	0.59	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Thallium	0.56	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Thallium	0.51	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Thallium	0	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg	U	0.6	ND	
Thallium	0	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg	U	0.56	ND	
Thallium	0	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg	U	0.56	ND	
Thallium	0	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg	U	0.59	ND	
toluene	2.025	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	J		=	
toluene	1.8	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	J		=	
toluene	1.6	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	J		=	
toluene	1.5	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	J		=	
toluene	1.5	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	J		=	
toluene	1.5	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	J		=	
toluene	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
toluene	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
toluene	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
Toluene	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
Trichloroethene	0.002	SW8260B	NONE	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg	J	0.006	=	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg		0.006	ND	
Trichloroethene	0	SW8260B	NONE	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg		0.006	ND	
trichloroethylene	0	SW846 8250B	NONE	2	2.5	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		ug/kg	U	6.1	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		ug/kg	U	5.5	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		ug/kg	U	5.9	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		ug/kg	U	6	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		ug/kg	U	6.2	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		ug/kg	U	6	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		ug/kg	U	5.5	ND	

TABLE A-4

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		ug/kg	U	5.6	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		ug/kg	U	6.2	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		ug/kg	U	5.35	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		ug/kg	U	5.3	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		ug/kg	U	5.4	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		ug/kg	U	5.9	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		ug/kg	U	5.8	ND	
trichloroethylene	0	SW846 8250B	NONE	1.25	1.75	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		ug/kg	U	5.4	ND	
Vanadium	54.4	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Vanadium	50.6	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Vanadium	50.3	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Vanadium	47.4	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Vanadium	46.9	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Vanadium	41.1	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Vanadium	40.3	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Vanadium	39.8	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Vanadium	38.3	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	
Vanadium	37.6	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Vanadium	36.5	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Vanadium	35.5	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Vanadium	34.6	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Vanadium	34.4	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Vanadium	33.6	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Vanadium	32.15	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Vanadium	30.7	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Vanadium	29.3	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Vanadium	28.4	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Vanadium	27.2	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Vanadium	24.8	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Vanadium	24.5	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Vanadium	24.4	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Vanadium	23.4	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Vanadium	22.9	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Vanadium	22.6	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Vanadium	20.1	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Vanadium	18.3	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Vanadium	16.7	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Vanadium	16.3	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	
Vanadium	15.5	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Zinc	59.2	SW846 3050B	TOTAL	0	3	SB12	10/16/2002		SO	02-OSA-SB12 (0-3)		mg/kg			=	
Zinc	45.6	SW846 3050B	TOTAL	0	3	SB1	10/15/2002		SO	02-OSA-SB1 (0-3)		mg/kg			=	
Zinc	38.8	SW846 3050B	TOTAL	0	3	SB3	10/15/2002		SO	02-OSA-SB3 (0-3)		mg/kg			=	
Zinc	35.2	SW846 3050B	TOTAL	0	3	SB2	10/15/2002		SO	02-OSA-SB2 (0-3)		mg/kg			=	
Zinc	25.5	SW846 3050B	TOTAL	0	3	SB6	10/15/2002		SO	02-OSA-SB6 (0-3)		mg/kg			=	
Zinc	24.6	SW6010B	TOTAL	0	3	OSA-SB-05	12/2/1998	NS1	SO	OSA-SB-05		mg/Kg			=	
Zinc	24.2	SW846 3050B	TOTAL	0	3	SB13	10/16/2002		SO	02-OSA-SB13 (0-3)		mg/kg			=	

RISK ASSESSMENT DATASET FOR SOIL
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	PARVAL	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	EXMCODE	UNITS	FLAG	REPLIMIT	PARVQ	LABDL
Zinc	23.7	SW846 3050B	TOTAL	0	3	SB14	10/16/2002		SO	02-OSA-SB14 (0-3)		mg/kg			=	
Zinc	23.5	SW846 3050B	TOTAL	0	3	SB5	10/15/2002		SO	02-OSA-SB5 (0-3)		mg/kg			=	
Zinc	22.4	SW846 3050B	TOTAL	0	3	SB4	10/15/2002	Ave	SO	02-OSA-SB4 (0-3)		mg/kg			=	
Zinc	22.2	SW846 3050B	TOTAL	0	3	SB11	10/16/2002		SO	02-OSA-SB11 (0-3)		mg/kg			=	
Zinc	20.9	SW846 3050B	TOTAL	0	3	SB15	10/16/2002		SO	02-OSA-SB15 (0-3)		mg/kg			=	
Zinc	18.4	SW846 3050B	TOTAL	0	3	SB7	10/15/2002		SO	02-OSA-SB7 (0-3)		mg/kg			=	
Zinc	17.6	SW846 3050B	TOTAL	0	3	SB10	10/15/2002		SO	02-OSA-SB10 (0-3)		mg/kg			=	
Zinc	15.5	SW846 3050B	TOTAL	0	3	SB8	10/15/2002		SO	02-OSA-SB8 (0-3)		mg/kg			=	
Zinc	15.4	SW846 3050B	TOTAL	0	3	SB9	10/15/2002		SO	02-OSA-SB9 (0-3)		mg/kg			=	
Zinc	15.1	SW6010B	TOTAL	0	3	OSA-SB-12	12/3/1998	NS1	SO	OSA-SB-12		mg/Kg			=	
Zinc	11.6	SW6010B	TOTAL	0	3	OSA-SB-06	12/2/1998	NS1	SO	OSA-SB-06		mg/Kg			=	
Zinc	10.8	SW6010B	TOTAL	0	3	OSA-SB-14	12/3/1998	NS1	SO	OSA-SB-14		mg/Kg			=	
Zinc	10.5	SW6010B	TOTAL	3	6	OSA-SB-04	12/2/1998	NS1	SO	OSA-SB-04		mg/Kg			=	
Zinc	9.6	SW6010B	TOTAL	3	6	OSA-SB-08	12/2/1998	NS1	SO	OSA-SB-08		mg/Kg			=	
Zinc	9.4	SW6010B	TOTAL	3	6	OSA-SB-13	12/3/1998	NS1	SO	OSA-SB-13		mg/Kg			=	
Zinc	9.2	SW6010B	TOTAL	3	6	OSA-SB-09	12/2/1998	NS1	SO	OSA-SB-09		mg/Kg			=	
Zinc	7.7	SW6010B	TOTAL	0	3	OSA-SB-16	12/3/1998	NS1	SO	OSA-SB-16		mg/Kg			=	
Zinc	7.6	SW6010B	TOTAL	3	6	OSA-SB-07	12/2/1998	NS1	SO	OSA-SB-07		mg/Kg			=	
Zinc	7.2	SW6010B	TOTAL	0	3	OSA-SB-03	12/2/1998	Ave	SO	OSA-SB-03		mg/Kg			=	
Zinc	5.3	SW6010B	TOTAL	3	6	OSA-SB-02	12/2/1998	NS1	SO	OSA-SB-02		mg/Kg			=	
Zinc	4.7	SW6010B	TOTAL	0	3	OSA-SB-01	12/2/1998	NS1	SO	OSA-SB-01		mg/Kg			=	
Zinc	4.1	SW6010B	TOTAL	0	3	OSA-SB-10	12/3/1998	NS1	SO	OSA-SB-10		mg/Kg			=	
Zinc	4	SW6010B	TOTAL	3	6	OSA-SB-15	12/3/1998	NS1	SO	OSA-SB-15		mg/Kg			=	
Zinc	2.9	SW6010B	TOTAL	3	6	OSA-SB-11	12/3/1998	NS1	SO	OSA-SB-11		mg/Kg			=	

PREPARED/DATE: LHO 09/08/05
CHECKED/DATE: WHO then

RISK ASSESSMENT DATASET FOR SOIL GAS
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DESCRIPT	ANMCODE	FLDFLT	SBD	SED	LOCATION	LOGDATE	SACODE	MATRIX	SAMPLEID	PARVAL	UNITS	PARVQ	REPLIMIT	LABDL	FLAG	LABFLAG
1,1,1-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1,1-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1,1-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1,1-Trichloroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,1,2,2-Tetrachloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1,2,2-Tetrachloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1,2,2-Tetrachloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1,2,2-Tetrachloroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,1,2-Trichloro-1,2,2-trifluoroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1,2-Trichloro-1,2,2-trifluoroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1,2-Trichloro-1,2,2-trifluoroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1,2-Trichloro-1,2,2-trifluoroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,1,2-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1,2-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1,2-Trichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1,2-Trichloroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,1-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1-Dichloroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,1-Dichloroethene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,1-Dichloroethene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,1-Dichloroethene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,1-Dichloroethene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2,4-Trichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,2,4-Trichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,2,4-Trichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,2,4-Trichlorobenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2,4-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0.046	mg/m3	TR				J
1,2,4-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0.048	mg/m3	TR			JQ	J
1,2,4-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0.094	mg/m3	=				
1,2,4-Trimethylbenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2-Dibromoethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,2-Dibromoethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,2-Dibromoethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,2-Dibromoethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,2-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,2-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,2-Dichlorobenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,2-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,2-Dichloroethane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,2-Dichloroethane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,2-Dichloropropane	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0 068			U
1,2-Dichloropropane	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,2-Dichloropropane	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,2-Dichloropropane	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,3,5-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,3,5-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,3,5-Trimethylbenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,3,5-Trimethylbenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,3-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,3-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,3-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,3-Dichlorobenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
1,4-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
1,4-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
1,4-Dichlorobenzene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
1,4-Dichlorobenzene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U
2-Chlorotoluene	MOD-TO14	NONE			BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068			U
2-Chlorotoluene	MOD-TO14	NONE			BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064			U
2-Chlorotoluene	MOD-TO14	NONE			BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067			U
2-Chlorotoluene	MOD-TO14	NONE			BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067			U

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4-Ethyltoluene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
4-Ethyltoluene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
4-Ethyltoluene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0.084	mg/m3	=		
4-Ethyltoluene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Benzene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Benzene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Benzene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Benzene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Bromodichloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Bromodichloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Bromodichloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Bromodichloromethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Bromoform	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Bromoform	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Bromoform	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Bromoform	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Bromomethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Bromomethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Bromomethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Bromomethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Carbon disulfide	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Carbon disulfide	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Carbon disulfide	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Carbon disulfide	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Carbon tetrachloride	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Carbon tetrachloride	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Carbon tetrachloride	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Carbon tetrachloride	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Chlorobenzene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Chlorobenzene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Chlorobenzene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Chlorobenzene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Chloroethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Chloroethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Chloroethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Chloroethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Chloroform	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Chloroform	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Chloroform	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Chloroform	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Chloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Chloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Chloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Chloromethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
cis-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
cis-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
cis-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
cis-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
cis-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
cis-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
cis-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
cis-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Dibromochloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Dibromochloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Dibromochloromethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Dibromochloromethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Dichlorodifluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Dichlorodifluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Dichlorodifluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Dichlorodifluoromethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Dichlorotetrafluoroethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Dichlorotetrafluoroethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Dichlorotetrafluoroethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Dichlorotetrafluoroethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Ethylbenzene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U

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Ethylbenzene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Ethylbenzene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Ethylbenzene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Hexachlorobutadiene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Hexachlorobutadiene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Hexachlorobutadiene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Hexachlorobutadiene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Hexane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Hexane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0.44	mg/m3	=		
Hexane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Hexane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0.15	mg/m3	=		
m,p-Xylenes	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.14	U
m,p-Xylenes	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.13	U
m,p-Xylenes	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.13	U
m,p-Xylenes	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.13	U
Methyl tert-butyl ether	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Methyl tert-butyl ether	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Methyl tert-butyl ether	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Methyl tert-butyl ether	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Methylene chloride	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Methylene chloride	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Methylene chloride	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Methylene chloride	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
o-Xylene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
o-Xylene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
o-Xylene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
o-Xylene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Styrene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Styrene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Styrene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Styrene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Tetrachloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Tetrachloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Tetrachloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Tetrachloroethene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Toluene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Toluene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Toluene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Toluene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
trans-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
trans-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
trans-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
trans-1,2-Dichloroethene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
trans-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
trans-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
trans-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
trans-1,3-Dichloropropene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
trans-1,4-Dichloro-2-butene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
trans-1,4-Dichloro-2-butene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
trans-1,4-Dichloro-2-butene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
trans-1,4-Dichloro-2-butene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Trichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Trichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Trichloroethene	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Trichloroethene	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Trichlorofluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Trichlorofluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Trichlorofluoromethane	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Trichlorofluoromethane	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U
Vinyl chloride	MOD-TO14	NONE	BLDG 232-SUMMA 1	4/21/2004	NS1	AIR	BLDG 232-SUMMA 1	0	mg/m3	ND	0.068	U
Vinyl chloride	MOD-TO14	NONE	BLDG 232-SUMMA 2	4/21/2004	NS1	AIR	BLDG 232-SUMMA 2	0	mg/m3	ND	0.064	U
Vinyl chloride	MOD-TO14	NONE	BLDG 232-SUMMA 3	4/21/2004	NS1	AIR	BLDG 232-SUMMA 3	0	mg/m3	ND	0.067	U
Vinyl chloride	MOD-TO14	NONE	BLDG 41-SUMMA	4/21/2004	NS1	AIR	BLDG 41-SUMMA	0	mg/m3	ND	0.067	U

CONCEPTUAL EXPOSURE MODEL (RAGS D FORMAT)
BASELINE HUMAN HEALTH RISK ASSESSMENT
OPERABLE UNIT 1
Defense Supply Center Richmond
Richmond, Virginia

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current[1,2,3]	Groundwater	Groundwater	Onsite Aquifer	Outdoor Industrial Worker[4]	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
		Air	Vapors in Ambient Air	Outdoor Industrial Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
	Surface Soil	Surface Soil	OU 1	Outdoor Industrial Worker	Adult	Ingestion Dermal	Quant	Incidental soil ingestion and dermal contact with soil are potentially complete exposure pathways for on-site workers.
		Air	Particulates	Outdoor Industrial Worker	Adult	Inhalation	Quant	Industrial workers may be exposed to contaminated site soils generated as fugitive dust during work activities.
	Subsurface Soil	Subsurface Soil	OU 1	Outdoor Industrial Worker	Adult	Ingestion Dermal	None	Current industrial workers are not expected to come into direct contact with subsurface soil.
		Air	Particulates	Outdoor Industrial Worker	Adult	Inhalation	None	Industrial workers may be exposed to contaminated site soils generated as fugitive dust during work activities.
			Vapors in Ambient Air	Outdoor Industrial Worker	Adult	Inhalation	None	VOCs may volatilize from any point in the soil column to the soil surface to ambient air, exposing human receptors, but pathway is insignificant.
			Vapors in Indoor Air	Outdoor Industrial Worker	Adult	Inhalation	None	The outdoor industrial worker is not exposed to air in an enclosed space.
Future	Groundwater	Groundwater	Onsite Aquifer	Outdoor Industrial Worker[4]	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Indoor Industrial Worker[4]	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Construction Worker	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
		Air	Vapors in Indoor Air	Indoor Industrial Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
			Vapors in Ambient Air	Outdoor Industrial Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Construction Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
		Groundwater	Offsite Aquifer	Indoor Industrial Worker	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Outdoor Industrial Worker	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Construction Worker	Adult	Ingestion Dermal	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
		Air	Vapors in Indoor Air	Indoor Industrial Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
			Vapors in Ambient Air	Outdoor Industrial Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
				Construction Worker	Adult	Inhalation	None	DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.

CONCEPTUAL EXPOSURE MODEL (RAGS D FORMAT)
BASELINE HUMAN HEALTH RISK ASSESSMENT
OPERABLE UNIT 1
Defense Supply Center Richmond
Richmond, Virginia

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future	Subsurface Soil[5]	Subsurface Soil	OU 1	Indoor Industrial Worker	Adult	Ingestion Dermal	None	Indoor industrial workers assumed to have vitually no exposure to outside soils.
				Outdoor Industrial Worker	Adult	Ingestion Dermal	Quant	Future construction activities may bring subsurface soil surface; allowing industrial worker exposure during daily work activities.
				Construction Worker	Adult	Ingestion Dermal	Quant	Future soil excavation may potentially expose construction workers to subsurface soil.
		Air	Particulates	Indoor Industrial Worker	Adult	Inhalation	None	Indoor industrial workers assumed to have vitually no exposure to outside soils.
				Outdoor Industrial Worker	Adult	Inhalation	Quant	Future on-site industrial workers may be exposed to fugitive dust generated from subsurface soil brought to the surface via future construction activities.
				Construction Worker	Adult	Inhalation	Quant	Construction workers may be exposed to contaminated site soils generated as fugitive dust during excavation activities.
			Vapors In Indoor Air	Indoor Industrial Worker	Adult	Inhalation	Quant	An industrial building may be constructed on-site in the future. VOCs in soil may volatilize through the soil column to indoor air.
			Vapors In Ambient Air	Outdoor Industrial Worker	Adult	Inhalation	None	Exposure to VOCs in ambient air is expected to be insignificant in comparison to exposure via vapor intrusion to indoor air.
				Construction Worker	Adult	Inhalation	None	VOCs may volatilize from any point in the soil column to the soil surface to ambient air, exposing human receptors, but pathway is insignificant.

(1) There are no current on-site construction workers.
(2) Institutional controls will remain in effect in perpetuity; thus precluding onsite residents.
(3) DSCR groundwater receptors and pathways will be addressed in a separate BRA for OU 6.
(4) Current industrial workers are outdoor workers. Future industrial workers are indoor/outdoor workers.
(5) It will be assumed that subsurface soil (0-12 feet bgs) may be brought to the surface and mixed with surface soil during future construction activities. Therefore, future subsurface soil exposure will include combined surface and subsurface soil fractions.

Table A-7: Comparison of Soil Trichloroethene and Chloroform to Soil Screening Levels Protective of Ambient Air Exposures

Equation Values for Inhalation of Volatiles

Volatilization Factor Parameter	Value	Soil Saturation Concentration Parameter	Value	Noncarcinogenic Parameter	Value	Carcinogenic Parameter	Value
Surface Area (acres)	0.5			Target Hazard Quotient (unitless)	1	Target Risk (unitless)	1.0E-6
City (climate zone)	Philadelphia(VIII)			Exposure Duration (yr)	30	Exposure Duration (yr)	30
Q/C (g/m^2-s per kg/m^3)	90.24			Exposure Frequency (day/yr)	350	Exposure Frequency (day/yr)	350
Fraction organic carbon (unitless)	0.002	Fraction organic carbon (unitless)	0.002			Average Lifetime (yr)	70
Dry soil bulk density (g/cm^3)	1.62	Dry soil bulk density (g/cm^3)	1.62				
Soil particle density (g/cm^3)	2.65	Soil particle density (g/cm^3)	2.65				
Water-filled soil porosity (L_{water}/L_{soil})	0.076	Water-filled soil porosity (L_{water}/L_{soil})	0.076				
Exposure interval (s)	9.5e08						

Soil Screening Levels for Inhalation of Volatiles (mg/kg)

Analyte	Cas Number	Inhalation RfC	Inhalation Unit Risk	Volatilization Factor	Soil Saturation Concentration	Noncarcinogenic	Carcinogenic
Trichloroethene	79016	4.0E-02 [v]	1.1E-04 [v]	1.9E+03	5.1E+02	8.1E+01	4.3E-02
Chloroform	67663		2.3E-05 [a]	1.6E+03	1.2E+03		1.7E-01

Taken from (http://rais.ornl.gov/epa/ssl1.shtml)

Analyte	Lowest Soil Screening Level (mg/kg)	Maximum Detected Concentration at OU1 (mg/kg)	Site Concentration Exceed SSL?
Trichloroethylene	0.043	0.002	No
Chloroform	0.17	0.002	No

TAB

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-10SO-Resample	2-Methylnaphthalene	12/20/2003	SW8270C	mg/kg	+	0 018999999	1
SS	CSMDPT-15SO	2-Methylnaphthalene	10/30/2003	SW8270C	mg/kg	+	0.100000001	1
SS	CSMDPT-6SO-Resample	2-Methylnaphthalene	1/12/2004	SW8270C	mg/kg	+	0.027000001	1
SS	CSMDPT-8SO-Resample	2-Methylnaphthalene	1/12/2004	SW8270C	mg/kg	+	0.044	1
SS	CSMDPT-9SO-Resample	2-Methylnaphthalene	1/10/2004	SW8270C	mg/kg	+	0.035	1
SS	CSMDPT-11SO-Resample	2-Methylnaphthalene	12/21/2003	SW8270C	mg/kg	+TR	0.0087	1
SS	CSMDPT-13SO	2-Methylnaphthalene	10/29/2003	SW8270C	mg/kg	+TR	0.048	1
SS	CSMDPT-12SO	2-Methylnaphthalene	10/22/2003	SW8270C	mg/kg	ND	0.041499998	1
SS	CSMDPT-14SO	2-Methylnaphthalene	10/29/2003	SW8270C	mg/kg	ND	0.041999999	1
SS	CSMDPT-17SO	2-Methylnaphthalene	10/30/2003	SW8270C	mg/kg	ND	0.037999999	1
SS	CSMDPT-3SO	2-Methylnaphthalene	10/27/2003	SW8270C	mg/kg	ND	0.007	1
SS	CSMDPT-5SO	2-Methylnaphthalene	10/21/2003	SW8270C	mg/kg	ND	0.0385	1
SS	CSMDPT-7SO	2-Methylnaphthalene	10/18/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	CSMDPT-7SO-Resample	2-Methylnaphthalene	12/20/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	SBBG-01	2-Methylnaphthalene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	2-Methylnaphthalene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	2-Methylnaphthalene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SS	CSMDPT-13SO	Acenaphthene	10/29/2003	SW8270C	mg/kg	+	0.540000021	1
SS	CSMDPT-3SO	Acenaphthene	10/27/2003	SW8270C	mg/kg	+	0.013	1
SS	CSMDPT-6SO-Resample	Acenaphthene	1/12/2004	SW8270C	mg/kg	+	0.043000001	1
SS	CSMDPT-7SO	Acenaphthene	10/18/2003	SW8270C	mg/kg	+	0.230000004	1
SS	CSMDPT-8SO-Resample	Acenaphthene	1/12/2004	SW8270C	mg/kg	+	0.027000001	1
SS	CSMDPT-14SO	Acenaphthene	10/29/2003	SW8270C	mg/kg	+TR	0.064999998	1
SS	CSMDPT-5SO	Acenaphthene	10/21/2003	SW8270C	mg/kg	+TR	0.057	1
SS	CSMDPT-7SO-Resample	Acenaphthene	12/20/2003	SW8270C	mg/kg	+TR	0.100000001	1
SS	CSMDPT-9SO-Resample	Acenaphthene	1/10/2004	SW8270C	mg/kg	+TR	0.0065	1
SS	CSMDPT-10SO-Resample	Acenaphthene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Acenaphthene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-12SO	Acenaphthene	10/22/2003	SW8270C	mg/kg	ND	0.041499998	1
SS	CSMDPT-15SO	Acenaphthene	10/30/2003	SW8270C	mg/kg	ND	0.037500001	1
SS	CSMDPT-17SO	Acenaphthene	10/30/2003	SW8270C	mg/kg	ND	0.037999999	1
SS	SBBG-01	Acenaphthene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Acenaphthene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Acenaphthene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SS	CSMDPT-15SO	Acenaphthylene	10/30/2003	SW8270C	mg/kg	+	0.079999998	1
SS	CSMDPT-3SO	Acenaphthylene	10/27/2003	SW8270C	mg/kg	+	0.008	1
SS	CSMDPT-10SO-Resample	Acenaphthylene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Acenaphthylene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-12SO	Acenaphthylene	10/22/2003	SW8270C	mg/kg	ND	0.041499998	1
SS	CSMDPT-13SO	Acenaphthylene	10/29/2003	SW8270C	mg/kg	ND	0.037500001	1
SS	CSMDPT-14SO	Acenaphthylene	10/29/2003	SW8270C	mg/kg	ND	0.041999999	1
SS	CSMDPT-17SO	Acenaphthylene	10/30/2003	SW8270C	mg/kg	ND	0.037999999	1
SS	CSMDPT-5SO	Acenaphthylene	10/21/2003	SW8270C	mg/kg	ND	0.0385	1
SS	CSMDPT-6SO-Resample	Acenaphthylene	1/12/2004	SW8270C	mg/kg	ND	0.0085	1
SS	CSMDPT-7SO	Acenaphthylene	10/18/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	CSMDPT-7SO-Resample	Acenaphthylene	12/20/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	CSMDPT-8SO-Resample	Acenaphthylene	1/12/2004	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-9SO-Resample	Acenaphthylene	1/10/2004	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Acenaphthylene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Acenaphthylene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Acenaphthylene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SS	CSMDPT-10SO-Resample	Aldrin	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Aldrin	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Aldrin	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Aldrin	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Aldrin	10/29/2003	SW8081A	mg/kg	ND	0.00211	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-15SO	Aldrin	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Aldrin	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Aldrin	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Aldrin	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Aldrin	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Aldrin	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Aldrin	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Aldrin	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Aldrin	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Aldrin	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Aldrin	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-15SO	alpha-BHC	10/30/2003	SW8081A	mg/kg	+	0.00481	1
SS	CSMDPT-10SO-Resample	alpha-BHC	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	alpha-BHC	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	alpha-BHC	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	alpha-BHC	10/29/2003	SW8081A	mg/kg	ND	0 00187	1
SS	CSMDPT-14SO	alpha-BHC	10/29/2003	SW8081A	mg/kg	ND	0 00211	1
SS	CSMDPT-17SO	alpha-BHC	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	alpha-BHC	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	alpha-BHC	1/12/2004	SW8081A	mg/kg	ND	0 00208	1
SS	CSMDPT-7SO	alpha-BHC	10/21/2003	SW8081A	mg/kg	ND	0 00185	1
SS	CSMDPT-7SO-Resample	alpha-BHC	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	alpha-BHC	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	alpha-BHC	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	alpha-BHC	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	alpha-BHC	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	alpha-BHC	6/24/1996	SW8081	mg/kg	ND	0.005	2
SB	CSMDPT-10SO	Aluminum	10/21/2003	SW6010B	mg/kg	+	20500	1
SB	CSMDPT-7SO	Aluminum	10/18/2003	SW6010B	mg/kg	+	16900	1
SB	CSMDPT-13SO	Aluminum	10/29/2003	SW6010B	mg/kg	+	16200	2
SB	CSMDPT-14SO	Aluminum	10/29/2003	SW6010B	mg/kg	+	15700	1
SB	CSMMW-3SO	Aluminum	12/3/2003	SW6010B	mg/kg	+	13800	1
SB	CSMDPT-8SO	Aluminum	10/18/2003	SW6010B	mg/kg	+	13400	1
SB	CSMDPT-12SO	Aluminum	10/22/2003	SW6010B	mg/kg	+	10600	1
SB	CSMDPT-17SO	Aluminum	10/30/2003	SW6010B	mg/kg	+	10300	1
SB	CSMDPT-5SO	Aluminum	10/20/2003	SW6010B	mg/kg	+	9550	1
SB	CSMDPT-11SO	Aluminum	10/17/2003	SW6010B	mg/kg	+	8290	1
SB	CSMDPT-6SO	Aluminum	10/19/2003	SW6010B	mg/kg	+	8250	1
SB	CSMDPT-3SO	Aluminum	10/27/2003	SW6010B	mg/kg	+	7110	1
SB	CSMMW-12SO	Aluminum	12/21/2003	SW6010B	mg/kg	+	4660	1
SB	CSMDPT-15SO	Aluminum	10/30/2003	SW6010B	mg/kg	+	4350	1
SB	CSMMW-11SO	Aluminum	12/20/2003	SW6010B	mg/kg	+	4000	2
SB	SBBG-01	Aluminum	6/19/1995	SW6010	mg/kg	+	3230	1
SB	CSMMW-7SO	Aluminum	12/10/2003	SW6010B	mg/kg	+	2990	1
SB	CSMDPT-9SO	Aluminum	10/16/2003	SW6010B	mg/kg	+	1290	1
SS	CSMDPT-10SO	Aluminum	10/21/2003	SW6010B	mg/kg	+	5490	1
SS	CSMDPT-11SO	Aluminum	10/17/2003	SW6010B	mg/kg	+	11300	1
SS	CSMDPT-12SO	Aluminum	10/22/2003	SW6010B	mg/kg	+	13400	1
SS	CSMDPT-13SO	Aluminum	10/29/2003	SW6010B	mg/kg	+	4430	1
SS	CSMDPT-14SO	Aluminum	10/29/2003	SW6010B	mg/kg	+	14200	1
SS	CSMDPT-15SO	Aluminum	10/30/2003	SW6010B	mg/kg	+	7490	1
SS	CSMDPT-17SO	Aluminum	10/30/2003	SW6010B	mg/kg	+	5710	1
SS	CSMDPT-3SO	Aluminum	10/27/2003	SW6010B	mg/kg	+	6550	1
SS	CSMDPT-5SO	Aluminum	10/21/2003	SW6010B	mg/kg	+	9610	1
SS	CSMDPT-6SO	Aluminum	10/21/2003	SW6010B	mg/kg	+	8630	1
SS	CSMDPT-7SO	Aluminum	10/18/2003	SW6010B	mg/kg	+	23000	1

TA[redacted]

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-7SO	Aluminum	10/21/2003	SW6010B	mg/kg	+	12800	1
SS	CSMDPT-8SO	Aluminum	10/18/2003	SW6010B	mg/kg	+	12300	1
SS	CSMDPT-9SO	Aluminum	10/16/2003	SW6010B	mg/kg	+	11400	1
SS	SBBG-01	Aluminum	6/19/1995	SW6010	mg/kg	+	2810	1
SS	SBBG-05	Aluminum	6/24/1996	SW6010	mg/kg	+	8390	1
SS	SBBG-07	Aluminum	6/24/1996	SW6010	mg/kg	+	3675	2
SS	CSMDPT-12SO	Anthracene	10/22/2003	SW8270C	mg/kg	+	0.189999998	1
SS	CSMDPT-13SO	Anthracene	10/29/2003	SW8270C	mg/kg	+	1.299999952	1
SS	CSMDPT-14SO	Anthracene	10/29/2003	SW8270C	mg/kg	+	0.180000007	1
SS	CSMDPT-3SO	Anthracene	10/27/2003	SW8270C	mg/kg	+	0.046999998	1
SS	CSMDPT-5SO	Anthracene	10/21/2003	SW8270C	mg/kg	+	0.109999999	1
SS	CSMDPT-6SO-Resample	Anthracene	1/12/2004	SW8270C	mg/kg	+	0.109999999	1
SS	CSMDPT-7SO	Anthracene	10/18/2003	SW8270C	mg/kg	+	0.49000001	1
SS	CSMDPT-7SO-Resample	Anthracene	12/20/2003	SW8270C	mg/kg	+	0.25999999	1
SS	CSMDPT-8SO-Resample	Anthracene	1/12/2004	SW8270C	mg/kg	+	0.066	1
SS	CSMDPT-17SO	Anthracene	10/30/2003	SW8270C	mg/kg	+TR	0.068000004	1
SS	CSMDPT-9SO-Resample	Anthracene	1/10/2004	SW8270C	mg/kg	+TR	0.014	1
SS	CSMDPT-10SO-Resample	Anthracene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Anthracene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-15SO	Anthracene	10/30/2003	SW8270C	mg/kg	ND	0.037500001	1
SS	SBBG-01	Anthracene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Anthracene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Anthracene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SB	CSMDPT-17SO	Antimony	10/30/2003	SW6010B	mg/kg	ND	4.349999905	1
SB	CSMDPT-14SO	Antimony	10/29/2003	SW6010B	mg/kg	ND	4.050000191	1
SB	CSMDPT-15SO	Antimony	10/30/2003	SW6010B	mg/kg	ND	3.434999943	1
SB	CSMDPT-10SO	Antimony	10/21/2003	SW6010B	mg/kg	ND	3.424999952	1
SB	CSMDPT-13SO	Antimony	10/29/2003	SW6010B	mg/kg	ND	3.164999962	2
SB	CSMMW-11SO	Antimony	12/20/2003	SW6010B	mg/kg	ND	3.080000043	2
SB	CSMDPT-8SO	Antimony	10/18/2003	SW6010B	mg/kg	ND	3.00999999	1
SB	CSMMW-12SO	Antimony	12/21/2003	SW6010B	mg/kg	ND	3.00999999	1
SB	CSMDPT-7SO	Antimony	10/18/2003	SW6010B	mg/kg	ND	2.974999905	1
SB	CSMDPT-12SO	Antimony	10/22/2003	SW6010B	mg/kg	ND	2.940000057	1
SB	CSMDPT-5SO	Antimony	10/20/2003	SW6010B	mg/kg	ND	2.940000057	1
SB	CSMMW-7SO	Antimony	12/10/2003	SW6010B	mg/kg	ND	2.940000057	1
SB	CSMMW-3SO	Antimony	12/3/2003	SW6010B	mg/kg	ND	2.904999971	1
SB	CSMDPT-11SO	Antimony	10/17/2003	SW6010B	mg/kg	ND	2.779999971	1
SB	CSMDPT-3SO	Antimony	10/27/2003	SW6010B	mg/kg	ND	2.779999971	1
SB	CSMDPT-6SO	Antimony	10/19/2003	SW6010B	mg/kg	ND	2.779999971	1
SB	CSMDPT-9SO	Antimony	10/16/2003	SW6010B	mg/kg	ND	2.150000095	1
SB	SBBG-01	Antimony	6/19/1995	SW6010	mg/kg	ND	0.159999996	1
SS	CSMDPT-10SO	Antimony	10/21/2003	SW6010B	mg/kg	ND	2.410000086	1
SS	CSMDPT-11SO	Antimony	10/17/2003	SW6010B	mg/kg	ND	2.839999914	1
SS	CSMDPT-12SO	Antimony	10/22/2003	SW6010B	mg/kg	ND	3.125	1
SS	CSMDPT-13SO	Antimony	10/29/2003	SW6010B	mg/kg	ND	2.809999943	1
SS	CSMDPT-14SO	Antimony	10/29/2003	SW6010B	mg/kg	ND	5.050000191	1
SS	CSMDPT-15SO	Antimony	10/30/2003	SW6010B	mg/kg	ND	3.50999999	1
SS	CSMDPT-17SO	Antimony	10/30/2003	SW6010B	mg/kg	ND	2.839999914	1
SS	CSMDPT-3SO	Antimony	10/27/2003	SW6010B	mg/kg	ND	2.714999914	1
SS	CSMDPT-5SO	Antimony	10/21/2003	SW6010B	mg/kg	ND	2.875	1
SS	CSMDPT-6SO	Antimony	10/21/2003	SW6010B	mg/kg	ND	2.940000057	1
SS	CSMDPT-7SO	Antimony	10/18/2003	SW6010B	mg/kg	ND	6.099999905	1
SS	CSMDPT-7SO	Antimony	10/21/2003	SW6010B	mg/kg	ND	2.779999971	1
SS	CSMDPT-8SO	Antimony	10/18/2003	SW6010B	mg/kg	ND	2.779999971	1
SS	CSMDPT-9SO	Antimony	10/16/2003	SW6010B	mg/kg	ND	2.779999971	1
SS	SBBG-05	Antimony	6/24/1996	SW6010	mg/kg	ND	1.149999976	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	SBBG-07	Antimony	6/24/1996	SW6010	mg/kg	ND	1.125	2
SB	CSMDPT-15SO	Arsenic	10/30/2003	SW7060A	mg/kg	+	1.970000029	1
SB	CSMDPT-10SO	Arsenic	10/21/2003	SW7060A	mg/kg	+	1.860000014	1
SB	CSMDPT-14SO	Arsenic	10/29/2003	SW7060A	mg/kg	+	1.840000033	1
SB	CSMMW-12SO	Arsenic	12/21/2003	SW7060A	mg/kg	+	1.460000038	1
SB	CSMDPT-13SO	Arsenic	10/29/2003	SW7060A	mg/kg	+	1.138000011	2
SB	SBBG-01	Arsenic	6/19/1995	SW7060	mg/kg	+	0.949999988	1
SB	CSMDPT-17SO	Arsenic	10/30/2003	SW7060A	mg/kg	+	0 836000025	1
SB	CSMMW-11SO	Arsenic	12/20/2003	SW7060A	mg/kg	+	0.547499985	2
SS	CSMDPT-12SO	Arsenic	10/22/2003	SW6010B	mg/kg	+	5.760000229	1
SS	CSMDPT-13SO	Arsenic	10/29/2003	SW7060A	mg/kg	+	1.590000033	1
SS	CSMDPT-14SO	Arsenic	10/29/2003	SW7060A	mg/kg	+	5.96999979	1
SS	CSMDPT-15SO	Arsenic	10/30/2003	SW7060A	mg/kg	+	2.109999895	1
SS	CSMDPT-17SO	Arsenic	10/30/2003	SW7060A	mg/kg	+	1.460000038	1
SS	CSMDPT-3SO	Arsenic	10/27/2003	SW7060A	mg/kg	+	0.896000028	1
SS	CSMDPT-5SO	Arsenic	10/21/2003	SW7060A	mg/kg	+	10.39999962	1
SS	CSMDPT-6SO	Arsenic	10/21/2003	SW7060A	mg/kg	+	10.5	1
SS	CSMDPT-7SO	Arsenic	10/18/2003	SW7060A	mg/kg	+	1.350000024	1
SS	CSMDPT-7SO	Arsenic	10/21/2003	SW7060A	mg/kg	+	2.130000114	1
SS	CSMDPT-8SO	Arsenic	10/18/2003	SW7060A	mg/kg	+	1.919999957	1
SS	SBBG-01	Arsenic	6/19/1995	SW7060	mg/kg	+	1.700000048	1
SS	SBBG-05	Arsenic	6/24/1996	SW7060	mg/kg	+	8.5	1
SS	SBBG-07	Arsenic	6/24/1996	SW7060	mg/kg	+	2.600000024	2
SB	CSMDPT-6SO	Arsenic	10/19/2003	SW7060A	mg/kg	+TR	0.999000013	1
SB	CSMDPT-12SO	Arsenic	10/22/2003	SW7060A	mg/kg	+TR	0.432999998	1
SB	CSMDPT-3SO	Arsenic	10/27/2003	SW7060A	mg/kg	+TR	0.389999986	1
SS	CSMDPT-10SO	Arsenic	10/21/2003	SW7060A	mg/kg	+TR	0.460999995	1
SS	CSMDPT-12SO	Arsenic	10/22/2003	SW7060A	mg/kg	+TR	0 460999995	1
SB	CSMDPT-12SO	Arsenic	10/22/2003	SW6010B	mg/kg	ND	1.174999952	1
SB	CSMDPT-11SO	Arsenic	10/17/2003	SW7060A	mg/kg	ND	0.814999998	1
SB	CSMDPT-8SO	Arsenic	10/18/2003	SW7060A	mg/kg	ND	0.595000029	1
SB	CSMDPT-7SO	Arsenic	10/18/2003	SW7060A	mg/kg	ND	0.584999979	1
SB	CSMMW-7SO	Arsenic	12/10/2003	SW7060A	mg/kg	ND	0.294	1
SB	CSMDPT-5SO	Arsenic	10/20/2003	SW7060A	mg/kg	ND	0.291000009	1
SB	CSMMW-3SO	Arsenic	12/3/2003	SW7060A	mg/kg	ND	0.284999996	1
SB	CSMDPT-9SO	Arsenic	10/16/2003	SW7060A	mg/kg	ND	0.268999994	1
SS	CSMDPT-11SO	Arsenic	10/17/2003	SW7060A	mg/kg	ND	0.845000029	1
SS	CSMDPT-9SO	Arsenic	10/16/2003	SW7060A	mg/kg	ND	0.277999997	1
SB	SBBG-01	Barium	6/19/1995	SW6010	mg/kg	+	42.40000153	1
SB	CSMDPT-12SO	Barium	10/22/2003	SW6010B	mg/kg	+	33.70000076	1
SB	CSMDPT-14SO	Barium	10/29/2003	SW6010B	mg/kg	+	31.5	1
SB	CSMMW-3SO	Barium	12/3/2003	SW6010B	mg/kg	+	30.29999924	1
SB	CSMDPT-13SO	Barium	10/29/2003	SW6010B	mg/kg	+	29.79999924	2
SB	CSMMW-12SO	Barium	12/21/2003	SW6010B	mg/kg	+	25.10000038	1
SB	CSMMW-11SO	Barium	12/20/2003	SW6010B	mg/kg	+	22	2
SB	CSMDPT-8SO	Barium	10/18/2003	SW6010B	mg/kg	+	21.5	1
SB	CSMDPT-7SO	Barium	10/18/2003	SW6010B	mg/kg	+	20.39999962	1
SB	CSMMW-7SO	Barium	12/10/2003	SW6010B	mg/kg	+	19.89999962	1
SB	CSMDPT-11SO	Barium	10/17/2003	SW6010B	mg/kg	+	19.29999924	1
SB	CSMDPT-5SO	Barium	10/20/2003	SW6010B	mg/kg	+	18.29999924	1
SB	CSMDPT-15SO	Barium	10/30/2003	SW6010B	mg/kg	+	17.89999962	1
SB	CSMDPT-6SO	Barium	10/19/2003	SW6010B	mg/kg	+	11.80000019	1
SB	CSMDPT-3SO	Barium	10/27/2003	SW6010B	mg/kg	+	11.69999981	1
SB	CSMDPT-9SO	Barium	10/16/2003	SW6010B	mg/kg	+	10	1
SB	CSMDPT-10SO	Barium	10/21/2003	SW6010B	mg/kg	+	9.869999886	1
SS	CSMDPT-10SO	Barium	10/21/2003	SW6010B	mg/kg	+	20.79999924	1

TAB

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-11SO	Barium	10/17/2003	SW6010B	mg/kg	+	26.10000038	1
SS	CSMDPT-12SO	Barium	10/22/2003	SW6010B	mg/kg	+	19.29999924	1
SS	CSMDPT-13SO	Barium	10/29/2003	SW6010B	mg/kg	+	66.5	1
SS	CSMDPT-14SO	Barium	10/29/2003	SW6010B	mg/kg	+	41.20000076	1
SS	CSMDPT-15SO	Barium	10/30/2003	SW6010B	mg/kg	+	38	1
SS	CSMDPT-17SO	Barium	10/30/2003	SW6010B	mg/kg	+	34.40000153	1
SS	CSMDPT-3SO	Barium	10/27/2003	SW6010B	mg/kg	+	14.60000038	1
SS	CSMDPT-5SO	Barium	10/21/2003	SW6010B	mg/kg	+	36.40000153	1
SS	CSMDPT-6SO	Barium	10/21/2003	SW6010B	mg/kg	+	69.90000153	1
SS	CSMDPT-7SO	Barium	10/18/2003	SW6010B	mg/kg	+	69.80000305	1
SS	CSMDPT-8SO	Barium	10/18/2003	SW6010B	mg/kg	+	41	1
SS	CSMDPT-9SO	Barium	10/16/2003	SW6010B	mg/kg	+	34.79999924	1
SS	SBBG-01	Barium	6/19/1995	SW6010	mg/kg	+	24.79999924	1
SS	SBBG-05	Barium	6/24/1996	SW6010	mg/kg	+	41	1
SS	SBBG-07	Barium	6/24/1996	SW6010	mg/kg	+	30	2
SB	CSMDPT-17SO	Barium	10/30/2003	SW6010B	mg/kg	+TR	8.600000381	1
SS	CSMDPT-12SO	Benzo(a)anthracene	10/22/2003	SW8270C	mg/kg	+	0.189999998	1
SS	CSMDPT-14SO	Benzo(a)anthracene	10/29/2003	SW8270C	mg/kg	+	0.529999971	1
SS	CSMDPT-15SO	Benzo(a)anthracene	10/30/2003	SW8270C	mg/kg	+	0.370000005	1
SS	CSMDPT-17SO	Benzo(a)anthracene	10/30/2003	SW8270C	mg/kg	+	0.25999999	1
SS	CSMDPT-3SO	Benzo(a)anthracene	10/27/2003	SW8270C	mg/kg	+	0.310000002	1
SS	CSMDPT-5SO	Benzo(a)anthracene	10/21/2003	SW8270C	mg/kg	+	0.449999988	1
SS	CSMDPT-6SO-Resample	Benzo(a)anthracene	1/12/2004	SW8270C	mg/kg	+	0.5	1
SS	CSMDPT-7SO	Benzo(a)anthracene	10/18/2003	SW8270C	mg/kg	+	1.899999976	1
SS	CSMDPT-7SO-Resample	Benzo(a)anthracene	12/20/2003	SW8270C	mg/kg	+	1.299999952	1
SS	CSMDPT-8SO-Resample	Benzo(a)anthracene	1/12/2004	SW8270C	mg/kg	+	0.180000007	1
SS	CSMDPT-9SO-Resample	Benzo(a)anthracene	1/10/2004	SW8270C	mg/kg	+	0.086999997	1
SS	SBBG-05	Benzo(a)anthracene	6/24/1996	SW8270	mg/kg	+	0.159999996	1
SS	SBBG-07	Benzo(a)anthracene	6/24/1996	SW8270	mg/kg	+	0.093499999	2
SS	CSMDPT-10SO-Resample	Benzo(a)anthracene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Benzo(a)anthracene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Benzo(a)anthracene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	CSMDPT-12SO	Benzo(a)pyrene	10/22/2003	SW8270C	mg/kg	+	0.170000002	1
SS	CSMDPT-13SO	Benzo(a)pyrene	10/29/2003	SW8270C	mg/kg	+	3.900000095	1
SS	CSMDPT-14SO	Benzo(a)pyrene	10/29/2003	SW8270C	mg/kg	+	0.5	1
SS	CSMDPT-15SO	Benzo(a)pyrene	10/30/2003	SW8270C	mg/kg	+	0.289999992	1
SS	CSMDPT-17SO	Benzo(a)pyrene	10/30/2003	SW8270C	mg/kg	+	0.25	1
SS	CSMDPT-3SO	Benzo(a)pyrene	10/27/2003	SW8270C	mg/kg	+	0.270000011	1
SS	CSMDPT-5SO	Benzo(a)pyrene	10/21/2003	SW8270C	mg/kg	+	0.419999987	1
SS	CSMDPT-6SO-Resample	Benzo(a)pyrene	1/12/2004	SW8270C	mg/kg	+	0.389999986	1
SS	CSMDPT-7SO	Benzo(a)pyrene	10/18/2003	SW8270C	mg/kg	+	1.399999976	1
SS	CSMDPT-7SO-Resample	Benzo(a)pyrene	12/20/2003	SW8270C	mg/kg	+	0.899999976	1
SS	CSMDPT-8SO-Resample	Benzo(a)pyrene	1/12/2004	SW8270C	mg/kg	+	0.129999995	1
SS	CSMDPT-9SO-Resample	Benzo(a)pyrene	1/10/2004	SW8270C	mg/kg	+	0.068000004	1
SS	SBBG-05	Benzo(a)pyrene	6/24/1996	SW8270	mg/kg	+	0.119999997	1
SS	SBBG-07	Benzo(a)pyrene	6/24/1996	SW8270	mg/kg	+	0.123	2
SS	CSMDPT-10SO-Resample	Benzo(a)pyrene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Benzo(a)pyrene	12/21/2003	SW8270C	mg/kg	ND	0 0075	1
SS	SBBG-01	Benzo(a)pyrene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	CSMDPT-12SO	Benzo(b)fluoranthene	10/22/2003	SW8270C	mg/kg	+	0.200000003	1
SS	CSMDPT-13SO	Benzo(b)fluoranthene	10/29/2003	SW8270C	mg/kg	+	4.099999905	1
SS	CSMDPT-14SO	Benzo(b)fluoranthene	10/29/2003	SW8270C	mg/kg	+	0.589999974	1
SS	CSMDPT-15SO	Benzo(b)fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.519999981	1
SS	CSMDPT-17SO	Benzo(b)fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.25999999	1
SS	CSMDPT-3SO	Benzo(b)fluoranthene	10/27/2003	SW8270C	mg/kg	+	0.430000007	1
SS	CSMDPT-5SO	Benzo(b)fluoranthene	10/21/2003	SW8270C	mg/kg	+	0.449999988	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-6SO-Resample	Benzo(b)fluoranthene	1/12/2004	SW8270C	mg/kg	+	0.439999998	1
SS	CSMDPT-7SO	Benzo(b)fluoranthene	10/18/2003	SW8270C	mg/kg	+	1.899999976	1
SS	CSMDPT-7SO-Resample	Benzo(b)fluoranthene	12/20/2003	SW8270C	mg/kg	+	1.299999952	1
SS	CSMDPT-8SO-Resample	Benzo(b)fluoranthene	1/12/2004	SW8270C	mg/kg	+	0.140000001	1
SS	CSMDPT-9SO-Resample	Benzo(b)fluoranthene	1/10/2004	SW8270C	mg/kg	+	0.082000002	1
SS	SBBG-05	Benzo(b)fluoranthene	6/24/1996	SW8270	mg/kg	+	0.209999993	1
SS	SBBG-07	Benzo(b)fluoranthene	6/24/1996	SW8270	mg/kg	+	0.145	2
SS	CSMDPT-10SO-Resample	Benzo(b)fluoranthene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Benzo(b)fluoranthene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Benzo(b)fluoranthene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	CSMDPT-12SO	Benzo(g,h,i)perylene	10/22/2003	SW8270C	mg/kg	+	0.109999999	1
SS	CSMDPT-13SO	Benzo(g,h,i)perylene	10/29/2003	SW8270C	mg/kg	+	1.200000048	1
SS	CSMDPT-14SO	Benzo(g,h,i)perylene	10/29/2003	SW8270C	mg/kg	+	0.219999999	1
SS	CSMDPT-15SO	Benzo(g,h,i)perylene	10/30/2003	SW8270C	mg/kg	+	0.159999996	1
SS	CSMDPT-17SO	Benzo(g,h,i)perylene	10/30/2003	SW8270C	mg/kg	+	0.097999997	1
SS	CSMDPT-3SO	Benzo(g,h,i)perylene	10/27/2003	SW8270C	mg/kg	+	0.180000007	1
SS	CSMDPT-5SO	Benzo(g,h,i)perylene	10/21/2003	SW8270C	mg/kg	+	0.230000004	1
SS	CSMDPT-6SO-Resample	Benzo(g,h,i)perylene	1/12/2004	SW8270C	mg/kg	+	0.230000004	1
SS	CSMDPT-7SO	Benzo(g,h,i)perylene	10/18/2003	SW8270C	mg/kg	+	0.560000002	1
SS	CSMDPT-7SO-Resample	Benzo(g,h,i)perylene	12/20/2003	SW8270C	mg/kg	+	0.340000004	1
SS	CSMDPT-8SO-Resample	Benzo(g,h,i)perylene	1/12/2004	SW8270C	mg/kg	+	0.083999999	1
SS	CSMDPT-9SO-Resample	Benzo(g,h,i)perylene	1/10/2004	SW8270C	mg/kg	+	0.046999998	1
SS	SBBG-05	Benzo(g,h,i)perylene	6/24/1996	SW8270	mg/kg	+	0.092	1
SS	SBBG-07	Benzo(g,h,i)perylene	6/24/1996	SW8270	mg/kg	+	0.1195	2
SS	CSMDPT-10SO-Resample	Benzo(g,h,i)perylene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Benzo(g,h,i)perylene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Benzo(g,h,i)perylene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	CSMDPT-12SO	Benzo(k)fluoranthene	10/22/2003	SW8270C	mg/kg	+	0.189999998	1
SS	CSMDPT-13SO	Benzo(k)fluoranthene	10/29/2003	SW8270C	mg/kg	+	4.400000095	1
SS	CSMDPT-14SO	Benzo(k)fluoranthene	10/29/2003	SW8270C	mg/kg	+	0.5	1
SS	CSMDPT-15SO	Benzo(k)fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.379999995	1
SS	CSMDPT-17SO	Benzo(k)fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.310000002	1
SS	CSMDPT-3SO	Benzo(k)fluoranthene	10/27/2003	SW8270C	mg/kg	+	0 25999999	1
SS	CSMDPT-5SO	Benzo(k)fluoranthene	10/21/2003	SW8270C	mg/kg	+	0.560000002	1
SS	CSMDPT-6SO-Resample	Benzo(k)fluoranthene	1/12/2004	SW8270C	mg/kg	+	0.370000005	1
SS	CSMDPT-7SO	Benzo(k)fluoranthene	10/18/2003	SW8270C	mg/kg	+	0.910000026	1
SS	CSMDPT-7SO-Resample	Benzo(k)fluoranthene	12/20/2003	SW8270C	mg/kg	+	0.660000026	1
SS	CSMDPT-8SO-Resample	Benzo(k)fluoranthene	1/12/2004	SW8270C	mg/kg	+	0.109999999	1
SS	CSMDPT-9SO-Resample	Benzo(k)fluoranthene	1/10/2004	SW8270C	mg/kg	+	0.059	1
SS	CSMDPT-10SO-Resample	Benzo(k)fluoranthene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Benzo(k)fluoranthene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Benzo(k)fluoranthene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Benzo(k)fluoranthene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Benzo(k)fluoranthene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SB	SBBG-01	Beryllium	6/19/1995	SW6010	mg/kg	+	0.119999997	1
SS	SBBG-01	Beryllium	6/19/1995	SW6010	mg/kg	+	0.159999996	1
SS	SBBG-05	Beryllium	6/24/1996	SW6010	mg/kg	+	0.264999986	1
SB	CSMDPT-7SO	Beryllium	10/18/2003	SW6010B	mg/kg	+TR	0.238000005	1
SB	CSMDPT-8SO	Beryllium	10/18/2003	SW6010B	mg/kg	+TR	0.234999999	1
SB	CSMDPT-3SO	Beryllium	10/27/2003	SW6010B	mg/kg	+TR	0.216999993	1
SB	CSMDPT-14SO	Beryllium	10/29/2003	SW6010B	mg/kg	+TR	0.200000003	1
SB	CSMDPT-17SO	Beryllium	10/30/2003	SW6010B	mg/kg	+TR	0.200000003	1
SB	CSMMW-12SO	Beryllium	12/21/2003	SW6010B	mg/kg	+TR	0.199000001	1
SB	CSMDPT-11SO	Beryllium	10/17/2003	SW6010B	mg/kg	+TR	0.188999996	1
SB	CSMMW-3SO	Beryllium	12/3/2003	SW6010B	mg/kg	+TR	0.144999996	1
SB	CSMDPT-6SO	Beryllium	10/19/2003	SW6010B	mg/kg	+TR	0.143999994	1

TAB

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMMW-11SO	Beryllium	12/20/2003	SW6010B	mg/kg	+TR	0.129500002	2
SB	CSMDPT-5SO	Beryllium	10/20/2003	SW6010B	mg/kg	+TR	0.105999999	1
SB	CSMDPT-9SO	Beryllium	10/16/2003	SW6010B	mg/kg	+TR	0.098899998	1
SB	CSMMW-7SO	Beryllium	12/10/2003	SW6010B	mg/kg	+TR	0.088200003	1
SB	CSMDPT-15SO	Beryllium	10/30/2003	SW6010B	mg/kg	+TR	0.087899998	1
SB	CSMDPT-12SO	Beryllium	10/22/2003	SW6010B	mg/kg	+TR	0.037599999	1
SS	CSMDPT-10SO	Beryllium	10/21/2003	SW6010B	mg/kg	+TR	0.111000001	1
SS	CSMDPT-11SO	Beryllium	10/17/2003	SW6010B	mg/kg	+TR	0.204999998	1
SS	CSMDPT-12SO	Beryllium	10/22/2003	SW6010B	mg/kg	+TR	0 039999999	1
SS	CSMDPT-13SO	Beryllium	10/29/2003	SW6010B	mg/kg	+TR	0.337000012	1
SS	CSMDPT-14SO	Beryllium	10/29/2003	SW6010B	mg/kg	+TR	0.159999996	1
SS	CSMDPT-15SO	Beryllium	10/30/2003	SW6010B	mg/kg	+TR	0.342999995	1
SS	CSMDPT-17SO	Beryllium	10/30/2003	SW6010B	mg/kg	+TR	0.222000003	1
SS	CSMDPT-3SO	Beryllium	10/27/2003	SW6010B	mg/kg	+TR	0.151999995	1
SS	CSMDPT-5SO	Beryllium	10/21/2003	SW6010B	mg/kg	+TR	0.298999995	1
SS	CSMDPT-6SO	Beryllium	10/21/2003	SW6010B	mg/kg	+TR	0.347000003	1
SS	CSMDPT-7SO	Beryllium	10/18/2003	SW6010B	mg/kg	+TR	0.43900001	1
SS	CSMDPT-7SO	Beryllium	10/21/2003	SW6010B	mg/kg	+TR	0.282999992	1
SS	CSMDPT-8SO	Beryllium	10/18/2003	SW6010B	mg/kg	+TR	0.277999997	1
SS	CSMDPT-9SO	Beryllium	10/16/2003	SW6010B	mg/kg	+TR	0.150000006	1
SB	CSMDPT-13SO	Beryllium	10/29/2003	SW6010B	mg/kg	ND	0.189999998	2
SS	SBBG-07	Beryllium	6/24/1996	SW6010	mg/kg	ND	0.037999999	2
SS	CSMDPT-12SO	Cadmium	10/22/2003	SW6010B	mg/kg	+	0.170000002	1
SS	CSMDPT-13SO	Cadmium	10/29/2003	SW6010B	mg/kg	+TR	0.112000003	1
SS	CSMDPT-15SO	Cadmium	10/30/2003	SW6010B	mg/kg	+TR	0 208000004	1
SB	CSMDPT-17SO	Cadmium	10/30/2003	SW6010B	mg/kg	ND	0.173999995	1
SB	CSMDPT-13SO	Cadmium	10/29/2003	SW6010B	mg/kg	ND	0.126500003	2
SB	CSMDPT-8SO	Cadmium	10/18/2003	SW6010B	mg/kg	ND	0.120499998	1
SB	CSMDPT-7SO	Cadmium	10/18/2003	SW6010B	mg/kg	ND	0.119000003	1
SB	CSMDPT-5SO	Cadmium	10/20/2003	SW6010B	mg/kg	ND	0.1175	1
SB	CSMDPT-11SO	Cadmium	10/17/2003	SW6010B	mg/kg	ND	0.111000001	1
SB	CSMDPT-3SO	Cadmium	10/27/2003	SW6010B	mg/kg	ND	0.111000001	1
SB	CSMDPT-6SO	Cadmium	10/19/2003	SW6010B	mg/kg	ND	0.111000001	1
SB	CSMDPT-15SO	Cadmium	10/30/2003	SW6010B	mg/kg	ND	0.109999999	1
SB	CSMDPT-10SO	Cadmium	10/21/2003	SW6010B	mg/kg	ND	0.068499997	1
SB	CSMMW-11SO	Cadmium	12/20/2003	SW6010B	mg/kg	ND	0.0615	2
SB	CSMDPT-12SO	Cadmium	10/22/2003	SW6010B	mg/kg	ND	0.061000001	1
SB	CSMMW-12SO	Cadmium	12/21/2003	SW6010B	mg/kg	ND	0.059999999	1
SB	CSMMW-7SO	Cadmium	12/10/2003	SW6010B	mg/kg	ND	0.059	1
SB	CSMMW-3SO	Cadmium	12/3/2003	SW6010B	mg/kg	ND	0.057999998	1
SB	SBBG-01	Cadmium	6/19/1995	SW6010	mg/kg	ND	0.055	1
SB	CSMDPT-9SO	Cadmium	10/16/2003	SW6010B	mg/kg	ND	0.054000001	1
SS	CSMDPT-10SO	Cadmium	10/21/2003	SW6010B	mg/kg	ND	0.059999999	1
SS	CSMDPT-11SO	Cadmium	10/17/2003	SW6010B	mg/kg	ND	0.113499999	1
SS	CSMDPT-14SO	Cadmium	10/29/2003	SW6010B	mg/kg	ND	0.252999991	1
SS	CSMDPT-17SO	Cadmium	10/30/2003	SW6010B	mg/kg	ND	0.113499999	1
SS	CSMDPT-3SO	Cadmium	10/27/2003	SW6010B	mg/kg	ND	0.108499996	1
SS	CSMDPT-5SO	Cadmium	10/21/2003	SW6010B	mg/kg	ND	0.115000002	1
SS	CSMDPT-6SO	Cadmium	10/21/2003	SW6010B	mg/kg	ND	0.1175	1
SS	CSMDPT-7SO	Cadmium	10/18/2003	SW6010B	mg/kg	ND	0 244000003	1
SS	CSMDPT-7SO	Cadmium	10/21/2003	SW6010B	mg/kg	ND	0.111000001	1
SS	CSMDPT-8SO	Cadmium	10/18/2003	SW6010B	mg/kg	ND	0.111000001	1
SS	CSMDPT-9SO	Cadmium	10/16/2003	SW6010B	mg/kg	ND	0.055500001	1
SS	SBBG-01	Cadmium	6/19/1995	SW6010	mg/kg	ND	0.055	1
SS	SBBG-05	Cadmium	6/24/1996	SW6010	mg/kg	ND	0.064999998	1
SS	SBBG-07	Cadmium	6/24/1996	SW6010	mg/kg	ND	0.064999998	2

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMMW-12SO	Calcium	12/21/2003	SW6010B	mg/kg	+	1100	1
SB	CSMDPT-11SO	Calcium	10/17/2003	SW6010B	mg/kg	+	998	1
SB	CSMDPT-10SO	Calcium	10/21/2003	SW6010B	mg/kg	+	596	1
SB	CSMMW-11SO	Calcium	12/20/2003	SW6010B	mg/kg	+	500	2
SB	CSMDPT-13SO	Calcium	10/29/2003	SW6010B	mg/kg	+	292.5	2
SB	CSMDPT-7SO	Calcium	10/18/2003	SW6010B	mg/kg	+	189	1
SB	CSMDPT-6SO	Calcium	10/19/2003	SW6010B	mg/kg	+	174	1
SB	SBBG-01	Calcium	6/19/1995	SW6010	mg/kg	+	135	1
SS	CSMDPT-10SO	Calcium	10/21/2003	SW6010B	mg/kg	+	1500	1
SS	CSMDPT-11SO	Calcium	10/17/2003	SW6010B	mg/kg	+	1000	1
SS	CSMDPT-13SO	Calcium	10/29/2003	SW6010B	mg/kg	+	288	1
SS	CSMDPT-14SO	Calcium	10/29/2003	SW6010B	mg/kg	+	1260	1
SS	CSMDPT-15SO	Calcium	10/30/2003	SW6010B	mg/kg	+	406	1
SS	CSMDPT-17SO	Calcium	10/30/2003	SW6010B	mg/kg	+	1170	1
SS	CSMDPT-3SO	Calcium	10/27/2003	SW6010B	mg/kg	+	315	1
SS	CSMDPT-5SO	Calcium	10/21/2003	SW6010B	mg/kg	+	1090	1
SS	CSMDPT-6SO	Calcium	10/21/2003	SW6010B	mg/kg	+	1000	1
SS	CSMDPT-7SO	Calcium	10/18/2003	SW6010B	mg/kg	+	1120	1
SS	CSMDPT-7SO	Calcium	10/21/2003	SW6010B	mg/kg	+	934	1
SS	CSMDPT-8SO	Calcium	10/18/2003	SW6010B	mg/kg	+	1420	1
SS	CSMDPT-9SO	Calcium	10/16/2003	SW6010B	mg/kg	+	1100	1
SS	SBBG-01	Calcium	6/19/1995	SW6010	mg/kg	+	249	1
SS	SBBG-05	Calcium	6/24/1996	SW6010	mg/kg	+	1010	1
SS	SBBG-07	Calcium	6/24/1996	SW6010	mg/kg	+	557.5	2
SB	CSMDPT-14SO	Calcium	10/29/2003	SW6010B	mg/kg	+TR	159	1
SB	CSMDPT-17SO	Calcium	10/30/2003	SW6010B	mg/kg	+TR	105	1
SB	CSMDPT-5SO	Calcium	10/20/2003	SW6010B	mg/kg	+TR	98.80000305	1
SB	CSMMW-7SO	Calcium	12/10/2003	SW6010B	mg/kg	+TR	94.90000153	1
SB	CSMDPT-8SO	Calcium	10/18/2003	SW6010B	mg/kg	+TR	75.30000305	1
SB	CSMDPT-15SO	Calcium	10/30/2003	SW6010B	mg/kg	+TR	63 5	1
SB	CSMDPT-9SO	Calcium	10/16/2003	SW6010B	mg/kg	+TR	62.20000076	1
SB	CSMDPT-12SO	Calcium	10/22/2003	SW6010B	mg/kg	+TR	44	1
SB	CSMMW-3SO	Calcium	12/3/2003	SW6010B	mg/kg	+TR	24.20000076	1
SB	CSMDPT-3SO	Calcium	10/27/2003	SW6010B	mg/kg	+TR	22.10000038	1
SS	CSMDPT-12SO	Calcium	10/22/2003	SW6010B	mg/kg	+TR	558	1
SB	CSMDPT-13SO	Chromium	10/29/2003	SW6010B	mg/kg	+	23.25	2
SB	CSMDPT-14SO	Chromium	10/29/2003	SW6010B	mg/kg	+	18.29999924	1
SB	CSMDPT-17SO	Chromium	10/30/2003	SW6010B	mg/kg	+	17.10000038	1
SB	CSMDPT-8SO	Chromium	10/18/2003	SW6010B	mg/kg	+	15.80000019	1
SB	CSMDPT-7SO	Chromium	10/18/2003	SW6010B	mg/kg	+	13.10000038	1
SB	CSMDPT-10SO	Chromium	10/21/2003	SW6010B	mg/kg	+	11.80000019	1
SB	CSMDPT-11SO	Chromium	10/17/2003	SW6010B	mg/kg	+	10.5	1
SB	CSMMW-12SO	Chromium	12/21/2003	SW6010B	mg/kg	+	9.960000038	1
SB	CSMDPT-6SO	Chromium	10/19/2003	SW6010B	mg/kg	+	8.970000267	1
SB	CSMMW-3SO	Chromium	12/3/2003	SW6010B	mg/kg	+	8.920000076	1
SB	CSMDPT-12SO	Chromium	10/22/2003	SW6010B	mg/kg	+	8.539999962	1
SB	CSMDPT-3SO	Chromium	10/27/2003	SW6010B	mg/kg	+	8.390000343	1
SB	CSMDPT-5SO	Chromium	10/20/2003	SW6010B	mg/kg	+	7.71999979	1
SB	CSMDPT-15SO	Chromium	10/30/2003	SW6010B	mg/kg	+	4.710000038	1
SB	SBBG-01	Chromium	6/19/1995	SW6010	mg/kg	+	4.599999905	1
SB	CSMMW-11SO	Chromium	12/20/2003	SW6010B	mg/kg	+	2.879999995	2
SB	CSMMW-7SO	Chromium	12/10/2003	SW6010B	mg/kg	+	1.940000057	1
SB	CSMDPT-9SO	Chromium	10/16/2003	SW6010B	mg/kg	+	1.480000019	1
SS	CSMDPT-10SO	Chromium	10/21/2003	SW6010B	mg/kg	+	5.320000172	1
SS	CSMDPT-11SO	Chromium	10/17/2003	SW6010B	mg/kg	+	14	1
SS	CSMDPT-12SO	Chromium	10/22/2003	SW6010B	mg/kg	+	24	1

TA[redacted]

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-13SO	Chromium	10/29/2003	SW6010B	mg/kg	+	9.159999847	1
SS	CSMDPT-14SO	Chromium	10/29/2003	SW6010B	mg/kg	+	19.10000038	1
SS	CSMDPT-15SO	Chromium	10/30/2003	SW6010B	mg/kg	+	13.60000038	1
SS	CSMDPT-17SO	Chromium	10/30/2003	SW6010B	mg/kg	+	8.710000038	1
SS	CSMDPT-3SO	Chromium	10/27/2003	SW6010B	mg/kg	+	9.729999542	1
SS	CSMDPT-5SO	Chromium	10/21/2003	SW6010B	mg/kg	+	14.19999981	1
SS	CSMDPT-6SO	Chromium	10/21/2003	SW6010B	mg/kg	+	14.30000019	1
SS	CSMDPT-7SO	Chromium	10/18/2003	SW6010B	mg/kg	+	35.59999847	1
SS	CSMDPT-7SO	Chromium	10/21/2003	SW6010B	mg/kg	+	21.89999962	1
SS	CSMDPT-8SO	Chromium	10/18/2003	SW6010B	mg/kg	+	14.60000038	1
SS	CSMDPT-9SO	Chromium	10/16/2003	SW6010B	mg/kg	+	8.430000305	1
SS	SBBG-01	Chromium	6/19/1995	SW6010	mg/kg	+	4	1
SS	SBBG-05	Chromium	6/24/1996	SW6010	mg/kg	+	11	1
SS	SBBG-07	Chromium	6/24/1996	SW6010	mg/kg	+	6.5	2
SS	CSMDPT-12SO	Chrysene	10/22/2003	SW8270C	mg/kg	+	0.189999998	1
SS	CSMDPT-13SO	Chrysene	10/29/2003	SW8270C	mg/kg	+	4	1
SS	CSMDPT-14SO	Chrysene	10/29/2003	SW8270C	mg/kg	+	0.589999974	1
SS	CSMDPT-15SO	Chrysene	10/30/2003	SW8270C	mg/kg	+	0.460000008	1
SS	CSMDPT-17SO	Chrysene	10/30/2003	SW8270C	mg/kg	+	0.289999992	1
SS	CSMDPT-3SO	Chrysene	10/27/2003	SW8270C	mg/kg	+	0.289999992	1
SS	CSMDPT-5SO	Chrysene	10/21/2003	SW8270C	mg/kg	+	0.479999989	1
SS	CSMDPT-6SO-Resample	Chrysene	1/12/2004	SW8270C	mg/kg	+	0.479999989	1
SS	CSMDPT-7SO	Chrysene	10/18/2003	SW8270C	mg/kg	+	1.399999976	1
SS	CSMDPT-7SO-Resample	Chrysene	12/20/2003	SW8270C	mg/kg	+	0.910000026	1
SS	CSMDPT-8SO-Resample	Chrysene	1/12/2004	SW8270C	mg/kg	+	0.150000006	1
SS	CSMDPT-9SO-Resample	Chrysene	1/10/2004	SW8270C	mg/kg	+	0.082999997	1
SS	SBBG-05	Chrysene	6/24/1996	SW8270	mg/kg	+	0.159999996	1
SS	SBBG-07	Chrysene	6/24/1996	SW8270	mg/kg	+	0.103	2
SS	CSMDPT-10SO-Resample	Chrysene	12/20/2003	SW8270C	mg/kg	+TR	0.0072	1
SS	CSMDPT-11SO-Resample	Chrysene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Chrysene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SB	CSMDPT-17SO	Cobalt	10/30/2003	SW6010B	mg/kg	+	2.799999952	1
SB	CSMDPT-3SO	Cobalt	10/27/2003	SW6010B	mg/kg	+	2.180000067	1
SB	CSMDPT-11SO	Cobalt	10/17/2003	SW6010B	mg/kg	+	1.549999952	1
SB	SBBG-01	Cobalt	6/19/1995	SW6010	mg/kg	+	1	1
SS	CSMDPT-11SO	Cobalt	10/17/2003	SW6010B	mg/kg	+	1.370000005	1
SS	CSMDPT-13SO	Cobalt	10/29/2003	SW6010B	mg/kg	+	1.620000005	1
SS	CSMDPT-15SO	Cobalt	10/30/2003	SW6010B	mg/kg	+	2.24000001	1
SS	CSMDPT-17SO	Cobalt	10/30/2003	SW6010B	mg/kg	+	1.220000029	1
SS	CSMDPT-5SO	Cobalt	10/21/2003	SW6010B	mg/kg	+	2.400000095	1
SS	CSMDPT-6SO	Cobalt	10/21/2003	SW6010B	mg/kg	+	1.679999948	1
SS	CSMDPT-7SO	Cobalt	10/21/2003	SW6010B	mg/kg	+	1.799999952	1
SS	CSMDPT-8SO	Cobalt	10/18/2003	SW6010B	mg/kg	+	1.75999999	1
SS	CSMDPT-9SO	Cobalt	10/16/2003	SW6010B	mg/kg	+	1.279999971	1
SS	SBBG-01	Cobalt	6/19/1995	SW6010	mg/kg	+	1.399999976	1
SS	SBBG-05	Cobalt	6/24/1996	SW6010	mg/kg	+	2.789999962	1
SS	SBBG-07	Cobalt	6/24/1996	SW6010	mg/kg	+	1.064999998	2
SB	CSMDPT-14SO	Cobalt	10/29/2003	SW6010B	mg/kg	+TR	1.5	1
SB	CSMMW-12SO	Cobalt	12/21/2003	SW6010B	mg/kg	+TR	1.149999976	1
SB	CSMDPT-7SO	Cobalt	10/18/2003	SW6010B	mg/kg	+TR	1.110000014	1
SB	CSMDPT-15SO	Cobalt	10/30/2003	SW6010B	mg/kg	+TR	0.779999971	1
SB	CSMDPT-8SO	Cobalt	10/18/2003	SW6010B	mg/kg	+TR	0.753000021	1
SB	CSMMW-3SO	Cobalt	12/3/2003	SW6010B	mg/kg	+TR	0.691999972	1
SB	CSMDPT-5SO	Cobalt	10/20/2003	SW6010B	mg/kg	+TR	0.564999998	1
SB	CSMDPT-10SO	Cobalt	10/21/2003	SW6010B	mg/kg	+TR	0.493000001	1
SB	CSMMW-7SO	Cobalt	12/10/2003	SW6010B	mg/kg	+TR	0.476000011	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-6SO	Cobalt	10/19/2003	SW6010B	mg/kg	+TR	0.411000013	1
SB	CSMDPT-12SO	Cobalt	10/22/2003	SW6010B	mg/kg	+TR	0 35800001	1
SB	CSMDPT-13SO	Cobalt	10/29/2003	SW6010B	mg/kg	+TR	0.311499998	2
SB	CSMMW-11SO	Cobalt	12/20/2003	SW6010B	mg/kg	+TR	0.269999996	2
SB	CSMDPT-9SO	Cobalt	10/16/2003	SW6010B	mg/kg	+TR	0.222000003	1
SS	CSMDPT-10SO	Cobalt	10/21/2003	SW6010B	mg/kg	+TR	0.42899999	1
SS	CSMDPT-12SO	Cobalt	10/22/2003	SW6010B	mg/kg	+TR	0.800000012	1
SS	CSMDPT-14SO	Cobalt	10/29/2003	SW6010B	mg/kg	+TR	1.5	1
SS	CSMDPT-3SO	Cobalt	10/27/2003	SW6010B	mg/kg	+TR	1.049999952	1
SS	CSMDPT-7SO	Cobalt	10/18/2003	SW6010B	mg/kg	+TR	1.899999976	1
SB	CSMDPT-3SO	Copper	10/27/2003	SW6010B	mg/kg	+	48.40000153	1
SB	CSMDPT-17SO	Copper	10/30/2003	SW6010B	mg/kg	+	44.59999847	1
SB	CSMDPT-8SO	Copper	10/18/2003	SW6010B	mg/kg	+	33.29999924	1
SB	CSMDPT-14SO	Copper	10/29/2003	SW6010B	mg/kg	+	16.89999962	1
SB	CSMDPT-11SO	Copper	10/17/2003	SW6010B	mg/kg	+	14 60000038	1
SB	CSMDPT-9SO	Copper	10/16/2003	SW6010B	mg/kg	+	13.80000019	1
SB	CSMDPT-7SO	Copper	10/18/2003	SW6010B	mg/kg	+	13.60000038	1
SB	CSMDPT-13SO	Copper	10/29/2003	SW6010B	mg/kg	+	10.24499989	2
SB	CSMDPT-6SO	Copper	10/19/2003	SW6010B	mg/kg	+	9.81000042	1
SB	CSMMW-12SO	Copper	12/21/2003	SW6010B	mg/kg	+	9.529999733	1
SB	CSMDPT-10SO	Copper	10/21/2003	SW6010B	mg/kg	+	8.840000153	1
SB	CSMMW-7SO	Copper	12/10/2003	SW6010B	mg/kg	+	7.510000229	1
SB	CSMDPT-12SO	Copper	10/22/2003	SW6010B	mg/kg	+	5.929999828	1
SB	CSMDPT-5SO	Copper	10/20/2003	SW6010B	mg/kg	+	4.71999979	1
SB	CSMMW-11SO	Copper	12/20/2003	SW6010B	mg/kg	+	4.485000014	2
SB	CSMMW-3SO	Copper	12/3/2003	SW6010B	mg/kg	+	3.50999999	1
SB	SBBG-01	Copper	6/19/1995	SW6010	mg/kg	+	1.5	1
SS	CSMDPT-10SO	Copper	10/21/2003	SW6010B	mg/kg	+	2.430000067	1
SS	CSMDPT-11SO	Copper	10/17/2003	SW6010B	mg/kg	+	4.739999771	1
SS	CSMDPT-12SO	Copper	10/22/2003	SW6010B	mg/kg	+	12.30000019	1
SS	CSMDPT-13SO	Copper	10/29/2003	SW6010B	mg/kg	+	6.920000076	1
SS	CSMDPT-14SO	Copper	10/29/2003	SW6010B	mg/kg	+	17.29999924	1
SS	CSMDPT-15SO	Copper	10/30/2003	SW6010B	mg/kg	+	11.10000038	1
SS	CSMDPT-17SO	Copper	10/30/2003	SW6010B	mg/kg	+	6 099999905	1
SS	CSMDPT-3SO	Copper	10/27/2003	SW6010B	mg/kg	+	2.630000114	1
SS	CSMDPT-5SO	Copper	10/21/2003	SW6010B	mg/kg	+	12.80000019	1
SS	CSMDPT-6SO	Copper	10/21/2003	SW6010B	mg/kg	+	33.09999847	1
SS	CSMDPT-7SO	Copper	10/18/2003	SW6010B	mg/kg	+	22.89999962	1
SS	CSMDPT-7SO	Copper	10/21/2003	SW6010B	mg/kg	+	14.89999962	1
SS	CSMDPT-8SO	Copper	10/18/2003	SW6010B	mg/kg	+	6.389999866	1
SS	CSMDPT-9SO	Copper	10/16/2003	SW6010B	mg/kg	+	3.099999905	1
SS	SBBG-01	Copper	6/19/1995	SW6010	mg/kg	+	5.199999809	1
SS	SBBG-05	Copper	6/24/1996	SW6010	mg/kg	+	4.199999809	1
SS	SBBG-07	Copper	6/24/1996	SW6010	mg/kg	+	5.200000048	2
SB	CSMDPT-15SO	Copper	10/30/2003	SW6010B	mg/kg	+TR	1.710000038	1
SS	CSMDPT-10SO-Resample	Delta-BHC	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Delta-BHC	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Delta-BHC	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Delta-BHC	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Delta-BHC	10/29/2003	SW8081A	mg/kg	ND	0 00211	1
SS	CSMDPT-15SO	Delta-BHC	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Delta-BHC	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Delta-BHC	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Delta-BHC	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Delta-BHC	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Delta-BHC	12/20/2003	SW8081A	mg/kg	ND	0.002035	1

TABLE 3-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-8SO-Resample	Delta-BHC	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Delta-BHC	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Delta-BHC	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Delta-BHC	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Delta-BHC	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-12SO	Dibenzo(a,h)anthracene	10/22/2003	SW8270C	mg/kg	+	0.200000003	1
SS	CSMDPT-13SO	Dibenzo(a,h)anthracene	10/29/2003	SW8270C	mg/kg	+	1.399999976	1
SS	CSMDPT-14SO	Dibenzo(a,h)anthracene	10/29/2003	SW8270C	mg/kg	+	0.150000006	1
SS	CSMDPT-15SO	Dibenzo(a,h)anthracene	10/30/2003	SW8270C	mg/kg	+	0.129999995	1
SS	CSMDPT-17SO	Dibenzo(a,h)anthracene	10/30/2003	SW8270C	mg/kg	+	0.098999999	1
SS	CSMDPT-3SO	Dibenzo(a,h)anthracene	10/27/2003	SW8270C	mg/kg	+	0.097000003	1
SS	CSMDPT-5SO	Dibenzo(a,h)anthracene	10/21/2003	SW8270C	mg/kg	+	0.150000006	1
SS	CSMDPT-6SO-Resample	Dibenzo(a,h)anthracene	1/12/2004	SW8270C	mg/kg	+	0.129999995	1
SS	CSMDPT-7SO	Dibenzo(a,h)anthracene	10/18/2003	SW8270C	mg/kg	+	0.379999995	1
SS	CSMDPT-7SO-Resample	Dibenzo(a,h)anthracene	12/20/2003	SW8270C	mg/kg	+	0.230000004	1
SS	CSMDPT-8SO-Resample	Dibenzo(a,h)anthracene	1/12/2004	SW8270C	mg/kg	+	0.050999999	1
SS	CSMDPT-9SO-Resample	Dibenzo(a,h)anthracene	1/10/2004	SW8270C	mg/kg	+	0.024	1
SS	CSMDPT-10SO-Resample	Dibenzo(a,h)anthracene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Dibenzo(a,h)anthracene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	SBBG-01	Dibenzo(a,h)anthracene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Dibenzo(a,h)anthracene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Dibenzo(a,h)anthracene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SS	CSMDPT-10SO-Resample	Dieldrin	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Dieldrin	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Dieldrin	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Dieldrin	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Dieldrin	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Dieldrin	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Dieldrin	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Dieldrin	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Dieldrin	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Dieldrin	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Dieldrin	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Dieldrin	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Dieldrin	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Dieldrin	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Dieldrin	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Dieldrin	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-10SO-Resample	Endosulfan I	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Endosulfan I	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Endosulfan I	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Endosulfan I	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Endosulfan I	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Endosulfan I	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Endosulfan I	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Endosulfan I	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Endosulfan I	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Endosulfan I	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Endosulfan I	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Endosulfan I	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Endosulfan I	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Endosulfan I	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Endosulfan I	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Endosulfan I	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-10SO-Resample	Endosulfan II	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Endosulfan II	12/21/2003	SW8081A	mg/kg	ND	0.001935	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-12SO	Endosulfan II	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Endosulfan II	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Endosulfan II	10/29/2003	SW8081A	mg/kg	ND	0 00211	1
SS	CSMDPT-15SO	Endosulfan II	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Endosulfan II	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Endosulfan II	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Endosulfan II	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Endosulfan II	10/21/2003	SW8081A	mg/kg	ND	0 00185	1
SS	CSMDPT-7SO-Resample	Endosulfan II	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Endosulfan II	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Endosulfan II	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Endosulfan II	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Endosulfan II	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Endosulfan II	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-10SO-Resample	Endosulfan sulfate	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Endosulfan sulfate	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Endosulfan sulfate	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Endosulfan sulfate	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Endosulfan sulfate	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Endosulfan sulfate	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Endosulfan sulfate	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Endosulfan sulfate	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Endosulfan sulfate	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Endosulfan sulfate	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Endosulfan sulfate	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Endosulfan sulfate	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Endosulfan sulfate	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Endosulfan sulfate	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Endosulfan sulfate	6/24/1996	SW8081	mg/kg	ND	0.0155	1
SS	SBBG-07	Endosulfan sulfate	6/24/1996	SW8081	mg/kg	ND	0.0155	2
SS	CSMDPT-10SO-Resample	Endrin	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Endrin	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Endrin	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Endrin	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Endrin	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Endrin	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Endrin	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Endrin	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Endrin	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Endrin	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Endrin	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Endrin	1/12/2004	SW8081A	mg/kg	ND	0 001915	1
SS	CSMDPT-9SO-Resample	Endrin	1/10/2004	SW8081A	mg/kg	ND	0 001935	1
SS	SBBG-01	Endrin	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Endrin	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Endrin	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-10SO-Resample	Fluoranthene	12/20/2003	SW8270C	mg/kg	+	0.016000001	1
SS	CSMDPT-11SO-Resample	Fluoranthene	12/21/2003	SW8270C	mg/kg	+	0.02	1
SS	CSMDPT-12SO	Fluoranthene	10/22/2003	SW8270C	mg/kg	+	0.159999996	1
SS	CSMDPT-14SO	Fluoranthene	10/29/2003	SW8270C	mg/kg	+	0.970000029	1
SS	CSMDPT-15SO	Fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.50999999	1
SS	CSMDPT-17SO	Fluoranthene	10/30/2003	SW8270C	mg/kg	+	0.479999989	1
SS	CSMDPT-3SO	Fluoranthene	10/27/2003	SW8270C	mg/kg	+	0.579999983	1
SS	CSMDPT-5SO	Fluoranthene	10/21/2003	SW8270C	mg/kg	+	0.689999998	1
SS	CSMDPT-6SO-Resample	Fluoranthene	1/12/2004	SW8270C	mg/kg	+	1.100000024	1
SS	CSMDPT-7SO	Fluoranthene	10/18/2003	SW8270C	mg/kg	+	3.299999952	1

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TAB B

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-7SO-Resample	Fluoranthene	12/20/2003	SW8270C	mg/kg	+	2.299999952	1
SS	CSMDPT-8SO-Resample	Fluoranthene	1/12/2004	SW8270C	mg/kg	+	0.370000005	1
SS	CSMDPT-9SO-Resample	Fluoranthene	1/10/2004	SW8270C	mg/kg	+	0.159999996	1
SS	SBBG-05	Fluoranthene	6/24/1996	SW8270	mg/kg	+	0.330000013	1
SS	SBBG-07	Fluoranthene	6/24/1996	SW8270	mg/kg	+	0.189999998	2
SS	SBBG-01	Fluoranthene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	CSMDPT-12SO	Fluorene	10/22/2003	SW8270C	mg/kg	+	0.100000001	1
SS	CSMDPT-13SO	Fluorene	10/29/2003	SW8270C	mg/kg	+	0.449999988	1
SS	CSMDPT-3SO	Fluorene	10/27/2003	SW8270C	mg/kg	+	0.013	1
SS	CSMDPT-6SO-Resample	Fluorene	1/12/2004	SW8270C	mg/kg	+	0.037999999	1
SS	CSMDPT-7SO	Fluorene	10/18/2003	SW8270C	mg/kg	+	0.219999999	1
SS	CSMDPT-8SO-Resample	Fluorene	1/12/2004	SW8270C	mg/kg	+	0.033	1
SS	CSMDPT-14SO	Fluorene	10/29/2003	SW8270C	mg/kg	+TR	0.052000001	1
SS	CSMDPT-5SO	Fluorene	10/21/2003	SW8270C	mg/kg	+TR	0.044	1
SS	CSMDPT-7SO-Resample	Fluorene	12/20/2003	SW8270C	mg/kg	+TR	0.092	1
SS	CSMDPT-9SO-Resample	Fluorene	1/10/2004	SW8270C	mg/kg	+TR	0.0058	1
SS	CSMDPT-10SO-Resample	Fluorene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Fluorene	12/21/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-15SO	Fluorene	10/30/2003	SW8270C	mg/kg	ND	0.037500001	1
SS	CSMDPT-17SO	Fluorene	10/30/2003	SW8270C	mg/kg	ND	0.037999999	1
SS	SBBG-01	Fluorene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Fluorene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SS	SBBG-07	Fluorene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SS	CSMDPT-10SO-Resample	Gamma-BHC (Lindane)	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Gamma-BHC (Lindane)	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Gamma-BHC (Lindane)	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Gamma-BHC (Lindane)	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Gamma-BHC (Lindane)	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Gamma-BHC (Lindane)	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Gamma-BHC (Lindane)	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Gamma-BHC (Lindane)	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Gamma-BHC (Lindane)	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Gamma-BHC (Lindane)	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Gamma-BHC (Lindane)	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Gamma-BHC (Lindane)	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Gamma-BHC (Lindane)	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Gamma-BHC (Lindane)	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Gamma-BHC (Lindane)	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Gamma-BHC (Lindane)	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-10SO-Resample	Heptachlor	12/20/2003	SW8081A	mg/kg	ND	0.000945	1
SS	CSMDPT-11SO-Resample	Heptachlor	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Heptachlor	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Heptachlor	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Heptachlor	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Heptachlor	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Heptachlor	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Heptachlor	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Heptachlor	1/12/2004	SW8081A	mg/kg	ND	0.00208	1
SS	CSMDPT-7SO	Heptachlor	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Heptachlor	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Heptachlor	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Heptachlor	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Heptachlor	6/19/1995	SW8080	mg/kg	ND	0.00095	1
SS	SBBG-05	Heptachlor	6/24/1996	SW8081	mg/kg	ND	0.005	1
SS	SBBG-07	Heptachlor	6/24/1996	SW8081	mg/kg	ND	0.005	2
SS	CSMDPT-12SO	Indeno(1,2,3-cd)pyrene	10/22/2003	SW8270C	mg/kg	+	0.180000007	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-13SO	Indeno(1,2,3-cd)pyrene	10/29/2003	SW8270C	mg/kg	+	2.299999952	1
SS	CSMDPT-14SO	Indeno(1,2,3-cd)pyrene	10/29/2003	SW8270C	mg/kg	+	0.270000011	1
SS	CSMDPT-15SO	Indeno(1,2,3-cd)pyrene	10/30/2003	SW8270C	mg/kg	+	0.239999995	1
SS	CSMDPT-17SO	Indeno(1,2,3-cd)pyrene	10/30/2003	SW8270C	mg/kg	+	0.159999996	1
SS	CSMDPT-3SO	Indeno(1,2,3-cd)pyrene	10/27/2003	SW8270C	mg/kg	+	0.189999998	1
SS	CSMDPT-5SO	Indeno(1,2,3-cd)pyrene	10/21/2003	SW8270C	mg/kg	+	0.25	1
SS	CSMDPT-6SO-Resample	Indeno(1,2,3-cd)pyrene	1/12/2004	SW8270C	mg/kg	+	0.25	1
SS	CSMDPT-7SO	Indeno(1,2,3-cd)pyrene	10/18/2003	SW8270C	mg/kg	+	0.709999979	1
SS	CSMDPT-7SO-Resample	Indeno(1,2,3-cd)pyrene	12/20/2003	SW8270C	mg/kg	+	0.430000007	1
SS	CSMDPT-8SO-Resample	Indeno(1,2,3-cd)pyrene	1/12/2004	SW8270C	mg/kg	+	0.096000001	1
SS	CSMDPT-9SO-Resample	Indeno(1,2,3-cd)pyrene	1/10/2004	SW8270C	mg/kg	+	0.046999998	1
SS	SBBG-05	Indeno(1,2,3-cd)pyrene	6/24/1996	SW8270	mg/kg	+	0.086000003	1
SS	CSMDPT-10SO-Resample	Indeno(1,2,3-cd)pyrene	12/20/2003	SW8270C	mg/kg	ND	0.0075	1
SS	CSMDPT-11SO-Resample	Indeno(1,2,3-cd)pyrene	12/21/2003	SW8270C	mg/kg	ND	0 0075	1
SS	SBBG-01	Indeno(1,2,3-cd)pyrene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-07	Indeno(1,2,3-cd)pyrene	6/24/1996	SW8270	mg/kg	ND	0.170000002	2
SB	CSMDPT-14SO	Iron	10/29/2003	SW6010B	mg/kg	+	35200	1
SB	CSMDPT-17SO	Iron	10/30/2003	SW6010B	mg/kg	+	35200	1
SB	CSMDPT-13SO	Iron	10/29/2003	SW6010B	mg/kg	+	23950	2
SB	CSMDPT-8SO	Iron	10/18/2003	SW6010B	mg/kg	+	17800	1
SB	CSMDPT-7SO	Iron	10/18/2003	SW6010B	mg/kg	+	15900	1
SB	CSMDPT-6SO	Iron	10/19/2003	SW6010B	mg/kg	+	12300	1
SB	CSMMW-12SO	Iron	12/21/2003	SW6010B	mg/kg	+	11400	1
SB	CSMDPT-11SO	Iron	10/17/2003	SW6010B	mg/kg	+	9560	1
SB	CSMDPT-3SO	Iron	10/27/2003	SW6010B	mg/kg	+	8270	1
SB	CSMDPT-15SO	Iron	10/30/2003	SW6010B	mg/kg	+	5080	1
SB	CSMMW-11SO	Iron	12/20/2003	SW6010B	mg/kg	+	4710	2
SB	SBBG-01	Iron	6/19/1995	SW6010	mg/kg	+	3470	1
SB	CSMMW-3SO	Iron	12/3/2003	SW6010B	mg/kg	+	2760	1
SB	CSMDPT-10SO	Iron	10/21/2003	SW6010B	mg/kg	+	2740	1
SB	CSMDPT-5SO	Iron	10/20/2003	SW6010B	mg/kg	+	2400	1
SB	CSMDPT-12SO	Iron	10/22/2003	SW6010B	mg/kg	+	1520	1
SB	CSMDPT-9SO	Iron	10/16/2003	SW6010B	mg/kg	+	1010	1
SB	CSMMW-7SO	Iron	12/10/2003	SW6010B	mg/kg	+	982	1
SS	CSMDPT-10SO	Iron	10/21/2003	SW6010B	mg/kg	+	4220	1
SS	CSMDPT-11SO	Iron	10/17/2003	SW6010B	mg/kg	+	13100	1
SS	CSMDPT-12SO	Iron	10/22/2003	SW6010B	mg/kg	+	34800	1
SS	CSMDPT-13SO	Iron	10/29/2003	SW6010B	mg/kg	+	5430	1
SS	CSMDPT-14SO	Iron	10/29/2003	SW6010B	mg/kg	+	35300	1
SS	CSMDPT-15SO	Iron	10/30/2003	SW6010B	mg/kg	+	19400	1
SS	CSMDPT-17SO	Iron	10/30/2003	SW6010B	mg/kg	+	8780	1
SS	CSMDPT-3SO	Iron	10/27/2003	SW6010B	mg/kg	+	9560	1
SS	CSMDPT-5SO	Iron	10/21/2003	SW6010B	mg/kg	+	14000	1
SS	CSMDPT-6SO	Iron	10/21/2003	SW6010B	mg/kg	+	13500	1
SS	CSMDPT-7SO	Iron	10/18/2003	SW6010B	mg/kg	+	42000	1
SS	CSMDPT-7SO	Iron	10/21/2003	SW6010B	mg/kg	+	23500	1
SS	CSMDPT-8SO	Iron	10/18/2003	SW6010B	mg/kg	+	16200	1
SS	CSMDPT-9SO	Iron	10/16/2003	SW6010B	mg/kg	+	5720	1
SS	SBBG-01	Iron	6/19/1995	SW6010	mg/kg	+	2700	1
SS	SBBG-05	Iron	6/24/1996	SW6010	mg/kg	+	11500	1
SS	SBBG-07	Iron	6/24/1996	SW6010	mg/kg	+	4800	2
SB	CSMDPT-14SO	Lead	10/29/2003	SW6010B	mg/kg	+	16.39999962	1
SB	CSMMW-3SO	Lead	12/3/2003	SW6010B	mg/kg	+	13.60000038	1
SB	CSMDPT-13SO	Lead	10/29/2003	SW6010B	mg/kg	+	13.5	2
SB	CSMDPT-8SO	Lead	10/18/2003	SW6010B	mg/kg	+	11.30000019	1
SB	CSMDPT-12SO	Lead	10/22/2003	SW6010B	mg/kg	+	9.409999847	1

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-7SO	Lead	10/18/2003	SW6010B	mg/kg	+	8.979999542	1
SB	CSMDPT-17SO	Lead	10/30/2003	SW6010B	mg/kg	+	8.619999886	1
SB	CSMDPT-11SO	Lead	10/17/2003	SW6010B	mg/kg	+	8.130000114	1
SB	CSMDPT-5SO	Lead	10/20/2003	SW6010B	mg/kg	+	8.130000114	1
SB	CSMMW-12SO	Lead	12/21/2003	SW6010B	mg/kg	+	7.460000038	1
SB	CSMDPT-15SO	Lead	10/30/2003	SW6010B	mg/kg	+	5.679999828	1
SB	CSMDPT-3SO	Lead	10/27/2003	SW6010B	mg/kg	+	4.940000057	1
SB	SBBG-01	Lead	6/19/1995	SW7421	mg/kg	+	4.5	1
SB	CSMDPT-10SO	Lead	10/21/2003	SW6010B	mg/kg	+	4.230000019	1
SB	CSMDPT-6SO	Lead	10/19/2003	SW6010B	mg/kg	+	3.900000095	1
SB	CSMMW-7SO	Lead	12/10/2003	SW6010B	mg/kg	+	3.74000001	1
SB	CSMDPT-9SO	Lead	10/16/2003	SW6010B	mg/kg	+	3.049999952	1
SB	CSMMW-11SO	Lead	12/20/2003	SW6010B	mg/kg	+	2.205000043	2
SS	CSMDPT-10SO	Lead	10/21/2003	SW6010B	mg/kg	+	5.389999866	1
SS	CSMDPT-11SO	Lead	10/17/2003	SW6010B	mg/kg	+	7.690000057	1
SS	CSMDPT-12SO	Lead	10/22/2003	SW6010B	mg/kg	+	12.10000038	1
SS	CSMDPT-13SO	Lead	10/29/2003	SW6010B	mg/kg	+	58.29999924	1
SS	CSMDPT-14SO	Lead	10/29/2003	SW6010B	mg/kg	+	17.10000038	1
SS	CSMDPT-15SO	Lead	10/30/2003	SW6010B	mg/kg	+	18.5	1
SS	CSMDPT-17SO	Lead	10/30/2003	SW6010B	mg/kg	+	46.90000153	1
SS	CSMDPT-3SO	Lead	10/27/2003	SW6010B	mg/kg	+	5.400000095	1
SS	CSMDPT-5SO	Lead	10/21/2003	SW6010B	mg/kg	+	58.20000076	1
SS	CSMDPT-6SO	Lead	10/21/2003	SW6010B	mg/kg	+	75	1
SS	CSMDPT-7SO	Lead	10/18/2003	SW6010B	mg/kg	+	24.20000076	1
SS	CSMDPT-7SO	Lead	10/21/2003	SW6010B	mg/kg	+	38.79999924	1
SS	CSMDPT-8SO	Lead	10/18/2003	SW6010B	mg/kg	+	21.39999962	1
SS	CSMDPT-9SO	Lead	10/16/2003	SW6010B	mg/kg	+	9.93999958	1
SS	SBBG-01	Lead	6/19/1995	SW7421	mg/kg	+	22.29999924	1
SS	SBBG-05	Lead	6/24/1996	SW7060	mg/kg	+	17.5	1
SS	SBBG-07	Lead	6/24/1996	SW7060	mg/kg	+	32.85000038	2
SB	CSMDPT-13SO	Magnesium	10/29/2003	SW6010B	mg/kg	+	331	2
SB	CSMMW-11SO	Magnesium	12/20/2003	SW6010B	mg/kg	+	281.5	2
SB	CSMDPT-8SO	Magnesium	10/18/2003	SW6010B	mg/kg	+	239	1
SB	CSMDPT-7SO	Magnesium	10/18/2003	SW6010B	mg/kg	+	238	1
SB	CSMDPT-11SO	Magnesium	10/17/2003	SW6010B	mg/kg	+	214	1
SB	CSMMW-3SO	Magnesium	12/3/2003	SW6010B	mg/kg	+	209	1
SB	CSMDPT-5SO	Magnesium	10/20/2003	SW6010B	mg/kg	+	172	1
SB	CSMMW-12SO	Magnesium	12/21/2003	SW6010B	mg/kg	+	166	1
SB	CSMDPT-3SO	Magnesium	10/27/2003	SW6010B	mg/kg	+	143	1
SB	CSMDPT-6SO	Magnesium	10/19/2003	SW6010B	mg/kg	+	134	1
SB	SBBG-01	Magnesium	6/19/1995	SW6010	mg/kg	+	91.80000305	1
SS	CSMDPT-10SO	Magnesium	10/21/2003	SW6010B	mg/kg	+	291	1
SS	CSMDPT-11SO	Magnesium	10/17/2003	SW6010B	mg/kg	+	405	1
SS	CSMDPT-13SO	Magnesium	10/29/2003	SW6010B	mg/kg	+	321	1
SS	CSMDPT-14SO	Magnesium	10/29/2003	SW6010B	mg/kg	+	684	1
SS	CSMDPT-15SO	Magnesium	10/30/2003	SW6010B	mg/kg	+	301	1
SS	CSMDPT-17SO	Magnesium	10/30/2003	SW6010B	mg/kg	+	447	1
SS	CSMDPT-5SO	Magnesium	10/21/2003	SW6010B	mg/kg	+	618	1
SS	CSMDPT-6SO	Magnesium	10/21/2003	SW6010B	mg/kg	+	406	1
SS	CSMDPT-7SO	Magnesium	10/18/2003	SW6010B	mg/kg	+	782	1
SS	CSMDPT-7SO	Magnesium	10/21/2003	SW6010B	mg/kg	+	515	1
SS	CSMDPT-8SO	Magnesium	10/18/2003	SW6010B	mg/kg	+	682	1
SS	CSMDPT-9SO	Magnesium	10/16/2003	SW6010B	mg/kg	+	377	1
SS	SBBG-01	Magnesium	6/19/1995	SW6010	mg/kg	+	135	1
SS	SBBG-05	Magnesium	6/24/1996	SW6010	mg/kg	+	624	1
SS	SBBG-07	Magnesium	6/24/1996	SW6010	mg/kg	+	272	2

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-14SO	Magnesium	10/29/2003	SW6010B	mg/kg	+TR	277	1
SB	CSMMW-7SO	Magnesium	12/10/2003	SW6010B	mg/kg	+TR	115	1
SB	CSMDPT-15SO	Magnesium	10/30/2003	SW6010B	mg/kg	+TR	114	1
SB	CSMDPT-17SO	Magnesium	10/30/2003	SW6010B	mg/kg	+TR	113	1
SB	CSMDPT-12SO	Magnesium	10/22/2003	SW6010B	mg/kg	+TR	107	1
SB	CSMDPT-9SO	Magnesium	10/16/2003	SW6010B	mg/kg	+TR	43.29999924	1
SS	CSMDPT-12SO	Magnesium	10/22/2003	SW6010B	mg/kg	+TR	214	1
SS	CSMDPT-3SO	Magnesium	10/27/2003	SW6010B	mg/kg	+TR	94.40000153	1
SB	CSMDPT-14SO	Manganese	10/29/2003	SW6010B	mg/kg	+	52.20000076	1
SB	CSMDPT-3SO	Manganese	10/27/2003	SW6010B	mg/kg	+	34.09999847	1
SB	CSMDPT-11SO	Manganese	10/17/2003	SW6010B	mg/kg	+	32.40000153	1
SB	CSMDPT-17SO	Manganese	10/30/2003	SW6010B	mg/kg	+	28.5	1
SB	SBBG-01	Manganese	6/19/1995	SW6010	mg/kg	+	25	1
SB	CSMDPT-8SO	Manganese	10/18/2003	SW6010B	mg/kg	+	14.10000038	1
SB	CSMDPT-15SO	Manganese	10/30/2003	SW6010B	mg/kg	+	13.80000019	1
SB	CSMDPT-7SO	Manganese	10/18/2003	SW6010B	mg/kg	+	11.60000038	1
SB	CSMMW-7SO	Manganese	12/10/2003	SW6010B	mg/kg	+	10.5	1
SB	CSMMW-3SO	Manganese	12/3/2003	SW6010B	mg/kg	+	9.850000381	1
SB	CSMDPT-5SO	Manganese	10/20/2003	SW6010B	mg/kg	+	8.789999962	1
SB	CSMDPT-9SO	Manganese	10/16/2003	SW6010B	mg/kg	+	5.380000114	1
SB	CSMDPT-13SO	Manganese	10/29/2003	SW6010B	mg/kg	+	5.304999828	2
SB	CSMDPT-6SO	Manganese	10/19/2003	SW6010B	mg/kg	+	4.309999943	1
SB	CSMDPT-10SO	Manganese	10/21/2003	SW6010B	mg/kg	+	3.440000057	1
SB	CSMMW-11SO	Manganese	12/20/2003	SW6010B	mg/kg	+	3 389999986	2
SB	CSMDPT-12SO	Manganese	10/22/2003	SW6010B	mg/kg	+	2.670000076	1
SS	CSMDPT-10SO	Manganese	10/21/2003	SW6010B	mg/kg	+	8 869999886	1
SS	CSMDPT-11SO	Manganese	10/17/2003	SW6010B	mg/kg	+	31.10000038	1
SS	CSMDPT-12SO	Manganese	10/22/2003	SW6010B	mg/kg	+	20.39999962	1
SS	CSMDPT-13SO	Manganese	10/29/2003	SW6010B	mg/kg	+	74.19999695	1
SS	CSMDPT-14SO	Manganese	10/29/2003	SW6010B	mg/kg	+	58 79999924	1
SS	CSMDPT-15SO	Manganese	10/30/2003	SW6010B	mg/kg	+	62.40000153	1
SS	CSMDPT-17SO	Manganese	10/30/2003	SW6010B	mg/kg	+	72.69999695	1
SS	CSMDPT-3SO	Manganese	10/27/2003	SW6010B	mg/kg	+	24.60000038	1
SS	CSMDPT-5SO	Manganese	10/21/2003	SW6010B	mg/kg	+	94.19999695	1
SS	CSMDPT-6SO	Manganese	10/21/2003	SW6010B	mg/kg	+	63	1
SS	CSMDPT-7SO	Manganese	10/18/2003	SW6010B	mg/kg	+	40.79999924	1
SS	CSMDPT-7SO	Manganese	10/21/2003	SW6010B	mg/kg	+	62.90000153	1
SS	CSMDPT-8SO	Manganese	10/18/2003	SW6010B	mg/kg	+	62 20000076	1
SS	CSMDPT-9SO	Manganese	10/16/2003	SW6010B	mg/kg	+	27.39999962	1
SS	SBBG-01	Manganese	6/19/1995	SW6010	mg/kg	+	77.30000305	1
SS	SBBG-05	Manganese	6/24/1996	SW6010	mg/kg	+	139	1
SS	SBBG-07	Manganese	6/24/1996	SW6010	mg/kg	+	53.19999886	2
SS	CSMDPT-6SO	Mercury	10/21/2003	SW7471A	mg/kg	+	0.129999995	1
SS	SBBG-01	Mercury	6/19/1995	SW7471	mg/kg	+	0.046999998	1
SS	SBBG-07	Mercury	6/24/1996	SW7470	mg/kg	+	0 046	2
SB	CSMDPT-13SO	Mercury	10/29/2003	SW7471A	mg/kg	+TR	0.045500002	2
SB	CSMDPT-12SO	Mercury	10/22/2003	SW7471A	mg/kg	+TR	0.030999999	1
SB	CSMDPT-14SO	Mercury	10/29/2003	SW7471A	mg/kg	+TR	0.022	1
SB	CSMDPT-11SO	Mercury	10/17/2003	SW7471A	mg/kg	+TR	0.015	1
SB	CSMMW-12SO	Mercury	12/21/2003	SW7471A	mg/kg	+TR	0.015	1
SB	CSMDPT-15SO	Mercury	10/30/2003	SW7471A	mg/kg	+TR	0.012	1
SB	CSMDPT-6SO	Mercury	10/19/2003	SW7471A	mg/kg	+TR	0.012	1
SB	CSMDPT-8SO	Mercury	10/18/2003	SW7471A	mg/kg	+TR	0.012	1
SB	CSMMW-3SO	Mercury	12/3/2003	SW7471A	mg/kg	+TR	0.012	1
SB	CSMDPT-7SO	Mercury	10/18/2003	SW7471A	mg/kg	+TR	0.011	1
SB	CSMMW-7SO	Mercury	12/10/2003	SW7471A	mg/kg	+TR	0.0096	1

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BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-17SO	Mercury	10/30/2003	SW7471A	mg/kg	+TR	0.0067	1
SB	CSMDPT-5SO	Mercury	10/20/2003	SW7471A	mg/kg	+TR	0.0054	1
SS	CSMDPT-11SO	Mercury	10/17/2003	SW7471A	mg/kg	+TR	0.023	1
SS	CSMDPT-12SO	Mercury	10/22/2003	SW7471A	mg/kg	+TR	0.037999999	1
SS	CSMDPT-13SO	Mercury	10/29/2003	SW7471A	mg/kg	+TR	0.026000001	1
SS	CSMDPT-14SO	Mercury	10/29/2003	SW7471A	mg/kg	+TR	0.027000001	1
SS	CSMDPT-15SO	Mercury	10/30/2003	SW7471A	mg/kg	+TR	0.032000002	1
SS	CSMDPT-17SO	Mercury	10/30/2003	SW7471A	mg/kg	+TR	0.043000001	1
SS	CSMDPT-5SO	Mercury	10/21/2003	SW7471A	mg/kg	+TR	0.044	1
SS	CSMDPT-7SO	Mercury	10/18/2003	SW7471A	mg/kg	+TR	0.064999998	1
SS	CSMDPT-7SO	Mercury	10/21/2003	SW7471A	mg/kg	+TR	0.028999999	1
SS	CSMDPT-9SO	Mercury	10/16/2003	SW7471A	mg/kg	+TR	0.054000001	1
SB	CSMDPT-10SO	Mercury	10/21/2003	SW7471A	mg/kg	ND	0.07	1
SB	CSMMW-11SO	Mercury	12/20/2003	SW7471A	mg/kg	ND	0.057499999	2
SB	CSMDPT-3SO	Mercury	10/27/2003	SW7471A	mg/kg	ND	0.055	1
SB	CSMDPT-9SO	Mercury	10/16/2003	SW7471A	mg/kg	ND	0.055	1
SB	SBBG-01	Mercury	6/19/1995	SW7471	mg/kg	ND	0.011	1
SS	CSMDPT-10SO	Mercury	10/21/2003	SW7471A	mg/kg	ND	0.059999999	1
SS	CSMDPT-3SO	Mercury	10/27/2003	SW7471A	mg/kg	ND	0.055	1
SS	SBBG-05	Mercury	6/24/1996	SW7470	mg/kg	ND	0.0145	1
SS	CSMDPT-10SO-Resample	Methoxychlor	12/20/2003	SW8081A	mg/kg	ND	0 000945	1
SS	CSMDPT-11SO-Resample	Methoxychlor	12/21/2003	SW8081A	mg/kg	ND	0.001935	1
SS	CSMDPT-12SO	Methoxychlor	10/22/2003	SW8081A	mg/kg	ND	0.002085	1
SS	CSMDPT-13SO	Methoxychlor	10/29/2003	SW8081A	mg/kg	ND	0.00187	1
SS	CSMDPT-14SO	Methoxychlor	10/29/2003	SW8081A	mg/kg	ND	0.00211	1
SS	CSMDPT-15SO	Methoxychlor	10/30/2003	SW8081A	mg/kg	ND	0.001875	1
SS	CSMDPT-17SO	Methoxychlor	10/30/2003	SW8081A	mg/kg	ND	0.00189	1
SS	CSMDPT-3SO	Methoxychlor	10/27/2003	SW8081A	mg/kg	ND	0.00181	1
SS	CSMDPT-6SO-Resample	Methoxychlor	1/12/2004	SW8081A	mg/kg	ND	0 00208	1
SS	CSMDPT-7SO	Methoxychlor	10/21/2003	SW8081A	mg/kg	ND	0.00185	1
SS	CSMDPT-7SO-Resample	Methoxychlor	12/20/2003	SW8081A	mg/kg	ND	0.002035	1
SS	CSMDPT-8SO-Resample	Methoxychlor	1/12/2004	SW8081A	mg/kg	ND	0.001915	1
SS	CSMDPT-9SO-Resample	Methoxychlor	1/10/2004	SW8081A	mg/kg	ND	0.001935	1
SS	SBBG-01	Methoxychlor	6/19/1995	SW8080	mg/kg	ND	0.0019	1
SS	SBBG-05	Methoxychlor	6/24/1996	SW8081	mg/kg	ND	0.026000001	1
SS	SBBG-07	Methoxychlor	6/24/1996	SW8081	mg/kg	ND	0.026000001	2
SB	CSMMW-11SO	Molybdenum	12/20/2003	SW6010B	mg/kg	+TR	3.25	2
SB	CSMDPT-14SO	Molybdenum	10/29/2003	SW6010B	mg/kg	+TR	1.549999952	1
SB	CSMDPT-13SO	Molybdenum	10/29/2003	SW6010B	mg/kg	+TR	1.050000012	2
SB	CSMMW-3SO	Molybdenum	12/3/2003	SW6010B	mg/kg	+TR	0.958000004	1
SB	CSMMW-12SO	Molybdenum	12/21/2003	SW6010B	mg/kg	+TR	0 925000012	1
SB	CSMDPT-17SO	Molybdenum	10/30/2003	SW6010B	mg/kg	+TR	0.782999992	1
SB	CSMDPT-3SO	Molybdenum	10/27/2003	SW6010B	mg/kg	+TR	0.693000019	1
SB	CSMDPT-8SO	Molybdenum	10/18/2003	SW6010B	mg/kg	+TR	0 684000015	1
SB	CSMDPT-12SO	Molybdenum	10/22/2003	SW6010B	mg/kg	+TR	0.574000001	1
SB	CSMDPT-11SO	Molybdenum	10/17/2003	SW6010B	mg/kg	+TR	0 507000029	1
SB	CSMDPT-7SO	Molybdenum	10/18/2003	SW6010B	mg/kg	+TR	0.495000005	1
SB	CSMDPT-5SO	Molybdenum	10/20/2003	SW6010B	mg/kg	+TR	0 395000011	1
SB	CSMDPT-6SO	Molybdenum	10/19/2003	SW6010B	mg/kg	+TR	0.389999986	1
SB	CSMDPT-15SO	Molybdenum	10/30/2003	SW6010B	mg/kg	+TR	0 289999992	1
SB	CSMDPT-9SO	Molybdenum	10/16/2003	SW6010B	mg/kg	+TR	0.257999986	1
SB	CSMMW-7SO	Molybdenum	12/10/2003	SW6010B	mg/kg	+TR	0 207000002	1
SB	CSMDPT-11SO-Resample	Naphthalene	12/21/2003	SW8270C	mg/kg	+	0.029999999	1
SB	CSMDPT-15SO	Naphthalene	10/30/2003	SW8270C	mg/kg	+	0.025	1
SS	CSMDPT-10SO-Resample	Naphthalene	12/20/2003	SW8270C	mg/kg	+	0.017999999	1
SS	CSMDPT-13SO	Naphthalene	10/29/2003	SW8270C	mg/kg	+	0.085000001	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-15SO	Naphthalene	10/30/2003	SW8270C	mg/kg	+	0.129999995	1
SS	CSMDPT-3SO	Naphthalene	10/27/2003	SW8270C	mg/kg	+	0 01	1
SS	CSMDPT-6SO-Resample	Naphthalene	1/12/2004	SW8270C	mg/kg	+	0.021	1
SS	CSMDPT-8SO-Resample	Naphthalene	1/12/2004	SW8270C	mg/kg	+	0.025	1
SS	CSMDPT-9SO-Resample	Naphthalene	1/10/2004	SW8270C	mg/kg	+	0.02	1
SS	SBBG-07	Naphthalene	8/24/1996	SW8270	mg/kg	+	0.105	2
SB	CSMDPT-6SO-Resample	Naphthalene	1/12/2004	SW8270C	mg/kg	+TR	0.013	1
SB	CSMMW-12SO	Naphthalene	12/21/2003	SW8260B	mg/kg	+TR	0 0011	1
SS	CSMDPT-11SO-Resample	Naphthalene	12/21/2003	SW8270C	mg/kg	+TR	0.0085	1
SS	CSMDPT-12SO	Naphthalene	10/22/2003	SW8260B	mg/kg	+TR	0.0012	1
SS	CSMDPT-13SO	Naphthalene	10/29/2003	SW8260B	mg/kg	+TR	0 0042	1
SS	CSMDPT-17SO	Naphthalene	10/30/2003	SW8270C	mg/kg	+TR	0.017999999	1
SB	SBBG-01	Naphthalene	6/19/1995	SW8270	mg/kg	ND	0.180000007	1
SB	CSMDPT-13SO	Naphthalene	10/29/2003	SW8270C	mg/kg	ND	0.0085	2
SB	CSMDPT-14SO-Resample	Naphthalene	1/10/2004	SW8270C	mg/kg	ND	0.0085	2
SB	CSMDPT-9SO-Resample	Naphthalene	1/10/2004	SW8270C	mg/kg	ND	0.0085	1
SB	CSMDPT-10SO-Resample	Naphthalene	12/20/2003	SW8270C	mg/kg	ND	0 008	1
SB	CSMDPT-5SO-Resample	Naphthalene	12/18/2003	SW8270C	mg/kg	ND	0.008	1
SB	CSMDPT-7SO	Naphthalene	10/18/2003	SW8270C	mg/kg	ND	0.008	1
SB	CSMDPT-8SO	Naphthalene	10/18/2003	SW8270C	mg/kg	ND	0 008	1
SB	CSMDPT-12SO-Resample	Naphthalene	1/10/2004	SW8270C	mg/kg	ND	0.0075	1
SB	CSMDPT-3SO	Naphthalene	10/27/2003	SW8270C	mg/kg	ND	0.0075	1
SB	CSMDPT-17SO-Resample	Naphthalene	12/15/2003	SW8270C	mg/kg	ND	0.0065	1
SB	CSMDPT-3SO	Naphthalene	10/27/2003	SW8260B	mg/kg	ND	0.0037	1
SB	CSMMW-11SO	Naphthalene	12/20/2003	SW8260B	mg/kg	ND	0.002825	2
SB	CSMDPT-13SO	Naphthalene	10/29/2003	SW8260B	mg/kg	ND	0.0027	2
SB	CSMDPT-15SO	Naphthalene	10/30/2003	SW8260B	mg/kg	ND	0.0027	1
SB	CSMDPT-8SO	Naphthalene	10/18/2003	SW8260B	mg/kg	ND	0.00265	1
SB	CSMMW-7SO	Naphthalene	12/10/2003	SW8260B	mg/kg	ND	0.0026	1
SB	CSMDPT-7SO	Naphthalene	10/18/2003	SW8260B	mg/kg	ND	0.0024	1
SB	CSMMW-3SO	Naphthalene	12/3/2003	SW8260B	mg/kg	ND	0.00225	1
SS	CSMDPT-12SO	Naphthalene	10/22/2003	SW8270C	mg/kg	ND	0.041499998	1
SS	CSMDPT-14SO	Naphthalene	10/29/2003	SW8260B	mg/kg	ND	0.00285	1
SS	CSMDPT-14SO	Naphthalene	10/29/2003	SW8270C	mg/kg	ND	0.041999999	1
SS	CSMDPT-15SO	Naphthalene	10/30/2003	SW8260B	mg/kg	ND	0.0026	1
SS	CSMDPT-17SO	Naphthalene	10/30/2003	SW8260B	mg/kg	ND	0.00325	1
SS	CSMDPT-3SO	Naphthalene	10/27/2003	SW8260B	mg/kg	ND	0.00275	1
SS	CSMDPT-5SO	Naphthalene	10/21/2003	SW8260B	mg/kg	ND	0.0024	1
SS	CSMDPT-5SO	Naphthalene	10/21/2003	SW8270C	mg/kg	ND	0 0385	1
SS	CSMDPT-7SO	Naphthalene	10/18/2003	SW8260B	mg/kg	ND	0.0028	1
SS	CSMDPT-7SO	Naphthalene	10/18/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	CSMDPT-7SO-Resample	Naphthalene	12/20/2003	SW8270C	mg/kg	ND	0.079999998	1
SS	SBBG-01	Naphthalene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-05	Naphthalene	6/24/1996	SW8270	mg/kg	ND	0.174999997	1
SB	CSMDPT-7SO	Nickel	10/18/2003	SW6010B	mg/kg	+	6.050000191	1
SB	CSMDPT-14SO	Nickel	10/29/2003	SW6010B	mg/kg	+	6	1
SB	CSMDPT-3SO	Nickel	10/27/2003	SW6010B	mg/kg	+	3.450000048	1
SB	CSMDPT-11SO	Nickel	10/17/2003	SW6010B	mg/kg	+	2.99000001	1
SB	CSMDPT-8SO	Nickel	10/18/2003	SW6010B	mg/kg	+	2.890000105	1
SB	CSMDPT-12SO	Nickel	10/22/2003	SW6010B	mg/kg	+	2.369999886	1
SB	CSMMW-12SO	Nickel	12/21/2003	SW6010B	mg/kg	+	2.25999999	1
SB	CSMDPT-13SO	Nickel	10/29/2003	SW6010B	mg/kg	+	2.245000005	2
SB	CSMDPT-10SO	Nickel	10/21/2003	SW6010B	mg/kg	+	2.170000076	1
SB	CSMDPT-17SO	Nickel	10/30/2003	SW6010B	mg/kg	+	2	1
SB	CSMDPT-5SO	Nickel	10/20/2003	SW6010B	mg/kg	+	1.850000024	1
SB	CSMMW-3SO	Nickel	12/3/2003	SW6010B	mg/kg	+	1.74000001	1

TAB B

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-6SO	Nickel	10/19/2003	SW6010B	mg/kg	+	1.620000005	1
SB	SBBG-01	Nickel	6/19/1995	SW6010	mg/kg	+	1.600000024	1
SS	CSMDPT-10SO	Nickel	10/21/2003	SW6010B	mg/kg	+	1.309999943	1
SS	CSMDPT-11SO	Nickel	10/17/2003	SW6010B	mg/kg	+	3.460000038	1
SS	CSMDPT-12SO	Nickel	10/22/2003	SW6010B	mg/kg	+	3.019999981	1
SS	CSMDPT-13SO	Nickel	10/29/2003	SW6010B	mg/kg	+	4.679999828	1
SS	CSMDPT-14SO	Nickel	10/29/2003	SW6010B	mg/kg	+	7.199999809	1
SS	CSMDPT-15SO	Nickel	10/30/2003	SW6010B	mg/kg	+	3.50999999	1
SS	CSMDPT-17SO	Nickel	10/30/2003	SW6010B	mg/kg	+	2.799999952	1
SS	CSMDPT-3SO	Nickel	10/27/2003	SW6010B	mg/kg	+	2.50999999	1
SS	CSMDPT-5SO	Nickel	10/21/2003	SW6010B	mg/kg	+	4.170000076	1
SS	CSMDPT-6SO	Nickel	10/21/2003	SW6010B	mg/kg	+	4.309999943	1
SS	CSMDPT-7SO	Nickel	10/18/2003	SW6010B	mg/kg	+	7.289999962	1
SS	CSMDPT-7SO	Nickel	10/21/2003	SW6010B	mg/kg	+	3.859999895	1
SS	CSMDPT-8SO	Nickel	10/18/2003	SW6010B	mg/kg	+	3.930000067	1
SS	CSMDPT-9SO	Nickel	10/16/2003	SW6010B	mg/kg	+	4.360000134	1
SS	SBBG-01	Nickel	6/19/1995	SW6010	mg/kg	+	2.299999952	1
SS	SBBG-05	Nickel	6/24/1996	SW6010	mg/kg	+	3.75999999	1
SS	SBBG-07	Nickel	6/24/1996	SW6010	mg/kg	+	1.694999993	2
SB	CSMDPT-15SO	Nickel	10/30/2003	SW6010B	mg/kg	+TR	0.934000015	1
SB	CSMMW-7SO	Nickel	12/10/2003	SW6010B	mg/kg	+TR	0.782000005	1
SB	CSMMW-11SO	Nickel	12/20/2003	SW6010B	mg/kg	+TR	0.612000018	2
SB	CSMDPT-9SO	Nickel	10/16/2003	SW6010B	mg/kg	+TR	0.335000008	1
SS	CSMDPT-10SO-Resample	Phenanthrene	12/20/2003	SW8270C	mg/kg	+	0.029999999	1
SS	CSMDPT-12SO	Phenanthrene	10/22/2003	SW8270C	mg/kg	+	0.159999996	1
SS	CSMDPT-13SO	Phenanthrene	10/29/2003	SW8270C	mg/kg	+	4.699999809	1
SS	CSMDPT-14SO	Phenanthrene	10/29/2003	SW8270C	mg/kg	+	0.660000026	1
SS	CSMDPT-15SO	Phenanthrene	10/30/2003	SW8270C	mg/kg	+	0.300000012	1
SS	CSMDPT-17SO	Phenanthrene	10/30/2003	SW8270C	mg/kg	+	0.330000013	1
SS	CSMDPT-3SO	Phenanthrene	10/27/2003	SW8270C	mg/kg	+	0.25999999	1
SS	CSMDPT-5SO	Phenanthrene	10/21/2003	SW8270C	mg/kg	+	0.49000001	1
SS	CSMDPT-6SO-Resample	Phenanthrene	1/12/2004	SW8270C	mg/kg	+	0.550000012	1
SS	CSMDPT-7SO	Phenanthrene	10/18/2003	SW8270C	mg/kg	+	2.200000048	1
SS	CSMDPT-7SO-Resample	Phenanthrene	12/20/2003	SW8270C	mg/kg	+	1.299999952	1
SS	CSMDPT-8SO-Resample	Phenanthrene	1/12/2004	SW8270C	mg/kg	+	0.300000012	1
SS	CSMDPT-9SO-Resample	Phenanthrene	1/10/2004	SW8270C	mg/kg	+	0.109999999	1
SS	SBBG-05	Phenanthrene	6/24/1996	SW8270	mg/kg	+	0.189999998	1
SS	SBBG-07	Phenanthrene	6/24/1996	SW8270	mg/kg	+	0.0845	2
SS	CSMDPT-11SO-Resample	Phenanthrene	12/21/2003	SW8270C	mg/kg	+TR	0.012	1
SS	SBBG-01	Phenanthrene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SB	SBBG-01	Potassium	6/19/1995	SW6010	mg/kg	+	164	1
SS	CSMDPT-7SO	Potassium	10/21/2003	SW6010B	mg/kg	+	571	1
SS	CSMDPT-8SO	Potassium	10/18/2003	SW6010B	mg/kg	+	592	1
SS	SBBG-01	Potassium	6/19/1995	SW6010	mg/kg	+	154	1
SS	SBBG-05	Potassium	6/24/1996	SW6010	mg/kg	+	785	1
SS	SBBG-07	Potassium	6/24/1996	SW6010	mg/kg	+	206.5	2
SB	CSMDPT-14SO	Potassium	10/29/2003	SW6010B	mg/kg	+TR	766	1
SB	CSMDPT-13SO	Potassium	10/29/2003	SW6010B	mg/kg	+TR	490	2
SB	CSMDPT-8SO	Potassium	10/18/2003	SW6010B	mg/kg	+TR	423	1
SB	CSMDPT-7SO	Potassium	10/18/2003	SW6010B	mg/kg	+TR	355	1
SB	CSMDPT-5SO	Potassium	10/20/2003	SW6010B	mg/kg	+TR	304	1
SB	CSMDPT-10SO	Potassium	10/21/2003	SW6010B	mg/kg	+TR	300	1
SB	CSMMW-3SO	Potassium	12/3/2003	SW6010B	mg/kg	+TR	287	1
SB	CSMDPT-17SO	Potassium	10/30/2003	SW6010B	mg/kg	+TR	262	1
SB	CSMDPT-11SO	Potassium	10/17/2003	SW6010B	mg/kg	+TR	240	1
SB	CSMDPT-12SO	Potassium	10/22/2003	SW6010B	mg/kg	+TR	216	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-3SO	Potassium	10/27/2003	SW6010B	mg/kg	+TR	215	1
SB	CSMDPT-6SO	Potassium	10/19/2003	SW6010B	mg/kg	+TR	181	1
SB	CSMMW-12SO	Potassium	12/21/2003	SW6010B	mg/kg	+TR	179	1
SB	CSMMW-7SO	Potassium	12/10/2003	SW6010B	mg/kg	+TR	142	1
SB	CSMDPT-15SO	Potassium	10/30/2003	SW6010B	mg/kg	+TR	137	1
SB	CSMMW-11SO	Potassium	12/20/2003	SW6010B	mg/kg	+TR	134.5	2
SB	CSMDPT-9SO	Potassium	10/16/2003	SW6010B	mg/kg	+TR	85.30000305	1
SS	CSMDPT-10SO	Potassium	10/21/2003	SW6010B	mg/kg	+TR	411	1
SS	CSMDPT-11SO	Potassium	10/17/2003	SW6010B	mg/kg	+TR	420	1
SS	CSMDPT-12SO	Potassium	10/22/2003	SW6010B	mg/kg	+TR	541	1
SS	CSMDPT-13SO	Potassium	10/29/2003	SW6010B	mg/kg	+TR	151	1
SS	CSMDPT-14SO	Potassium	10/29/2003	SW6010B	mg/kg	+TR	879	1
SS	CSMDPT-15SO	Potassium	10/30/2003	SW6010B	mg/kg	+TR	421	1
SS	CSMDPT-17SO	Potassium	10/30/2003	SW6010B	mg/kg	+TR	312	1
SS	CSMDPT-3SO	Potassium	10/27/2003	SW6010B	mg/kg	+TR	128	1
SS	CSMDPT-5SO	Potassium	10/21/2003	SW6010B	mg/kg	+TR	523	1
SS	CSMDPT-6SO	Potassium	10/21/2003	SW6010B	mg/kg	+TR	380	1
SS	CSMDPT-7SO	Potassium	10/18/2003	SW6010B	mg/kg	+TR	949	1
SS	CSMDPT-9SO	Potassium	10/16/2003	SW6010B	mg/kg	+TR	342	1
SS	CSMDPT-12SO	Pyrene	10/22/2003	SW8270C	mg/kg	+	0.180000007	1
SS	CSMDPT-13SO	Pyrene	10/29/2003	SW8270C	mg/kg	+	7 300000191	1
SS	CSMDPT-14SO	Pyrene	10/29/2003	SW8270C	mg/kg	+	0.639999986	1
SS	CSMDPT-15SO	Pyrene	10/30/2003	SW8270C	mg/kg	+	0.589999974	1
SS	CSMDPT-17SO	Pyrene	10/30/2003	SW8270C	mg/kg	+	0.479999989	1
SS	CSMDPT-3SO	Pyrene	10/27/2003	SW8270C	mg/kg	+	0.419999987	1
SS	CSMDPT-5SO	Pyrene	10/21/2003	SW8270C	mg/kg	+	0.930000007	1
SS	CSMDPT-6SO-Resample	Pyrene	1/12/2004	SW8270C	mg/kg	+	0.889999986	1
SS	CSMDPT-7SO	Pyrene	10/18/2003	SW8270C	mg/kg	+	2.400000095	1
SS	CSMDPT-7SO-Resample	Pyrene	12/20/2003	SW8270C	mg/kg	+	1 5	1
SS	CSMDPT-8SO-Resample	Pyrene	1/12/2004	SW8270C	mg/kg	+	0 310000002	1
SS	CSMDPT-9SO-Resample	Pyrene	1/10/2004	SW8270C	mg/kg	+	0.150000006	1
SS	SBBG-05	Pyrene	6/24/1996	SW8270	mg/kg	+	0.25	1
SS	SBBG-07	Pyrene	6/24/1996	SW8270	mg/kg	+	0.140000001	2
SS	CSMDPT-10SO-Resample	Pyrene	12/20/2003	SW8270C	mg/kg	+TR	0.011	1
SS	CSMDPT-11SO-Resample	Pyrene	12/21/2003	SW8270C	mg/kg	+TR	0.012	1
SS	SBBG-01	Pyrene	6/19/1995	SW8270	mg/kg	ND	0.185000002	1
SS	SBBG-01	Selenium	6/19/1995	SW7740	mg/kg	+	0.319999993	1
SS	SBBG-07	Selenium	6/24/1996	SW7740	mg/kg	+	0.375	2
SB	CSMMW-12SO	Selenium	12/21/2003	SW6010B	mg/kg	+TR	0 510999978	1
SB	CSMDPT-17SO	Selenium	10/30/2003	SW6010B	mg/kg	+TR	0 435000002	1
SB	CSMDPT-3SO	Selenium	10/27/2003	SW6010B	mg/kg	+TR	0.400000006	1
SB	CSMMW-11SO	Selenium	12/20/2003	SW6010B	mg/kg	+TR	0.306500003	2
SB	CSMDPT-12SO	Selenium	10/22/2003	SW6010B	mg/kg	+TR	0.282000005	1
SS	CSMDPT-15SO	Selenium	10/30/2003	SW6010B	mg/kg	+TR	0.197999999	1
SS	CSMDPT-17SO	Selenium	10/30/2003	SW6010B	mg/kg	+TR	0.317999989	1
SS	CSMDPT-3SO	Selenium	10/27/2003	SW6010B	mg/kg	+TR	0.30399999	1
SS	CSMDPT-6SO	Selenium	10/21/2003	SW6010B	mg/kg	+TR	0.319999993	1
SB	CSMDPT-10SO	Selenium	10/21/2003	SW6010B	mg/kg	ND	0.344999999	1
SB	CSMDPT-13SO	Selenium	10/29/2003	SW6010B	mg/kg	ND	0.319000006	2
SB	CSMDPT-14SO	Selenium	10/29/2003	SW6010B	mg/kg	ND	0.319000006	1
SB	CSMDPT-8SO	Selenium	10/18/2003	SW6010B	mg/kg	ND	0.303499997	1
SB	CSMDPT-7SO	Selenium	10/18/2003	SW6010B	mg/kg	ND	0.300000012	1
SB	CSMDPT-5SO	Selenium	10/20/2003	SW6010B	mg/kg	ND	0.296499997	1
SB	CSMMW-7SO	Selenium	12/10/2003	SW6010B	mg/kg	ND	0.296499997	1
SB	CSMMW-3SO	Selenium	12/3/2003	SW6010B	mg/kg	ND	0.293000013	1
SB	CSMDPT-11SO	Selenium	10/17/2003	SW6010B	mg/kg	ND	0.280000001	1

TAB B

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-6SO	Selenium	10/19/2003	SW6010B	mg/kg	ND	0.280000001	1
SB	CSMDPT-15SO	Selenium	10/30/2003	SW6010B	mg/kg	ND	0.27700001	1
SB	CSMDPT-9SO	Selenium	10/16/2003	SW6010B	mg/kg	ND	0.270999998	1
SB	SBBG-01	Selenium	6/19/1995	SW7740	mg/kg	ND	5.5E-05	1
SS	CSMDPT-10SO	Selenium	10/21/2003	SW6010B	mg/kg	ND	0.303499997	1
SS	CSMDPT-11SO	Selenium	10/17/2003	SW6010B	mg/kg	ND	0.286500007	1
SS	CSMDPT-12SO	Selenium	10/22/2003	SW6010B	mg/kg	ND	0.314999998	1
SS	CSMDPT-13SO	Selenium	10/29/2003	SW6010B	mg/kg	ND	0.282999992	1
SS	CSMDPT-14SO	Selenium	10/29/2003	SW6010B	mg/kg	ND	0.319000006	1
SS	CSMDPT-5SO	Selenium	10/21/2003	SW6010B	mg/kg	ND	0.289499998	1
SS	CSMDPT-7SO	Selenium	10/18/2003	SW6010B	mg/kg	ND	0.307500005	1
SS	CSMDPT-7SO	Selenium	10/21/2003	SW6010B	mg/kg	ND	0.280000001	1
SS	CSMDPT-8SO	Selenium	10/18/2003	SW6010B	mg/kg	ND	0.280000001	1
SS	CSMDPT-9SO	Selenium	10/16/2003	SW6010B	mg/kg	ND	0.280000001	1
SS	SBBG-07	Silver	6/24/1996	SW6010	mg/kg	+	1.24000001	2
SB	CSMDPT-14SO	Silver	10/29/2003	SW6010B	mg/kg	ND	1.014999986	1
SB	CSMDPT-17SO	Silver	10/30/2003	SW6010B	mg/kg	ND	0.870000005	1
SB	CSMDPT-10SO	Silver	10/21/2003	SW6010B	mg/kg	ND	0.685000002	1
SB	CSMDPT-15SO	Silver	10/30/2003	SW6010B	mg/kg	ND	0.685000002	1
SB	CSMDPT-13SO	Silver	10/29/2003	SW6010B	mg/kg	ND	0.632499993	2
SB	CSMMW-11SO	Silver	12/20/2003	SW6010B	mg/kg	ND	0.61500001	2
SB	CSMDPT-8SO	Silver	10/18/2003	SW6010B	mg/kg	ND	0.600000024	1
SB	CSMMW-12SO	Silver	12/21/2003	SW6010B	mg/kg	ND	0.600000024	1
SB	CSMDPT-7SO	Silver	10/18/2003	SW6010B	mg/kg	ND	0.595000029	1
SB	CSMDPT-12SO	Silver	10/22/2003	SW6010B	mg/kg	ND	0.589999974	1
SB	CSMDPT-5SO	Silver	10/20/2003	SW6010B	mg/kg	ND	0.589999974	1
SB	CSMMW-7SO	Silver	12/10/2003	SW6010B	mg/kg	ND	0.589999974	1
SB	CSMMW-3SO	Silver	12/3/2003	SW6010B	mg/kg	ND	0.579999983	1
SB	CSMDPT-11SO	Silver	10/17/2003	SW6010B	mg/kg	ND	0.555000007	1
SB	CSMDPT-3SO	Silver	10/27/2003	SW6010B	mg/kg	ND	0.555000007	1
SB	CSMDPT-6SO	Silver	10/19/2003	SW6010B	mg/kg	ND	0.555000007	1
SB	CSMDPT-9SO	Silver	10/16/2003	SW6010B	mg/kg	ND	0.430000007	1
SB	SBBG-01	Silver	6/19/1995	SW6010	mg/kg	ND	0.055	1
SS	CSMDPT-10SO	Silver	10/21/2003	SW6010B	mg/kg	ND	0.481999993	1
SS	CSMDPT-11SO	Silver	10/17/2003	SW6010B	mg/kg	ND	0.569999993	1
SS	CSMDPT-12SO	Silver	10/22/2003	SW6010B	mg/kg	ND	0.625	1
SS	CSMDPT-13SO	Silver	10/29/2003	SW6010B	mg/kg	ND	0.560000002	1
SS	CSMDPT-14SO	Silver	10/29/2003	SW6010B	mg/kg	ND	1.014999986	1
SS	CSMDPT-15SO	Silver	10/30/2003	SW6010B	mg/kg	ND	0.699999988	1
SS	CSMDPT-17SO	Silver	10/30/2003	SW6010B	mg/kg	ND	0.569999993	1
SS	CSMDPT-3SO	Silver	10/27/2003	SW6010B	mg/kg	ND	0.545000017	1
SS	CSMDPT-5SO	Silver	10/21/2003	SW6010B	mg/kg	ND	0.574999988	1
SS	CSMDPT-6SO	Silver	10/21/2003	SW6010B	mg/kg	ND	0.589999974	1
SS	CSMDPT-7SO	Silver	10/18/2003	SW6010B	mg/kg	ND	1.220000029	1
SS	CSMDPT-7SO	Silver	10/21/2003	SW6010B	mg/kg	ND	0.555000007	1
SS	CSMDPT-8SO	Silver	10/18/2003	SW6010B	mg/kg	ND	0.555000007	1
SS	CSMDPT-9SO	Silver	10/16/2003	SW6010B	mg/kg	ND	0.555000007	1
SS	SBBG-01	Silver	6/19/1995	SW6010	mg/kg	ND	0.055	1
SS	SBBG-05	Silver	6/24/1996	SW6010	mg/kg	ND	0.230000004	1
SB	SBBG-01	Sodium	6/19/1995	SW6010	mg/kg	+	57.40000153	1
SS	SBBG-01	Sodium	6/19/1995	SW6010	mg/kg	+	35.90000153	1
SB	CSMDPT-17SO	Sodium	10/30/2003	SW6010B	mg/kg	+TR	558	1
SB	CSMDPT-10SO	Sodium	10/21/2003	SW6010B	mg/kg	+TR	170	1
SB	CSMDPT-11SO	Sodium	10/17/2003	SW6010B	mg/kg	+TR	153	1
SB	CSMDPT-7SO	Sodium	10/18/2003	SW6010B	mg/kg	+TR	148	1
SB	CSMMW-11SO	Sodium	12/20/2003	SW6010B	mg/kg	+TR	144.5	2

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SB	CSMDPT-13SO	Sodium	10/29/2003	SW6010B	mg/kg	+TR	144	2
SB	CSMDPT-5SO	Sodium	10/20/2003	SW6010B	mg/kg	+TR	142	1
SB	CSMDPT-6SO	Sodium	10/19/2003	SW6010B	mg/kg	+TR	138	1
SB	CSMDPT-12SO	Sodium	10/22/2003	SW6010B	mg/kg	+TR	137	1
SB	CSMDPT-15SO	Sodium	10/30/2003	SW6010B	mg/kg	+TR	131	1
SB	CSMDPT-8SO	Sodium	10/18/2003	SW6010B	mg/kg	+TR	127	1
SB	CSMMW-7SO	Sodium	12/10/2003	SW6010B	mg/kg	+TR	71 09999847	1
SB	CSMMW-12SO	Sodium	12/21/2003	SW6010B	mg/kg	+TR	44.5	1
SS	CSMDPT-10SO	Sodium	10/21/2003	SW6010B	mg/kg	+TR	111	1
SS	CSMDPT-11SO	Sodium	10/17/2003	SW6010B	mg/kg	+TR	125	1
SS	CSMDPT-12SO	Sodium	10/22/2003	SW6010B	mg/kg	+TR	671	1
SS	CSMDPT-13SO	Sodium	10/29/2003	SW6010B	mg/kg	+TR	121	1
SS	CSMDPT-14SO	Sodium	10/29/2003	SW6010B	mg/kg	+TR	763	1
SS	CSMDPT-15SO	Sodium	10/30/2003	SW6010B	mg/kg	+TR	134	1
SS	CSMDPT-17SO	Sodium	10/30/2003	SW6010B	mg/kg	+TR	122	1
SS	CSMDPT-5SO	Sodium	10/21/2003	SW6010B	mg/kg	+TR	142	1
SS	CSMDPT-6SO	Sodium	10/21/2003	SW6010B	mg/kg	+TR	149	1
SS	CSMDPT-7SO	Sodium	10/18/2003	SW6010B	mg/kg	+TR	278	1
SS	CSMDPT-7SO	Sodium	10/21/2003	SW6010B	mg/kg	+TR	135	1
SS	CSMDPT-8SO	Sodium	10/18/2003	SW6010B	mg/kg	+TR	146	1
SB	CSMMW-3SO	Sodium	12/3/2003	SW6010B	mg/kg	ND	290.5	1
SB	CSMDPT-3SO	Sodium	10/27/2003	SW6010B	mg/kg	ND	278	1
SB	CSMDPT-9SO	Sodium	10/16/2003	SW6010B	mg/kg	ND	269	1
SS	CSMDPT-3SO	Sodium	10/27/2003	SW6010B	mg/kg	ND	271.5	1
SS	CSMDPT-9SO	Sodium	10/16/2003	SW6010B	mg/kg	ND	278	1
SS	SBBG-05	Sodium	8/24/1996	SW6010	mg/kg	ND	16.5	1
SS	SBBG-07	Sodium	6/24/1996	SW6010	mg/kg	ND	16.5	2
SS	CSMDPT-5SO	Thallium	10/21/2003	SW7841	mg/kg	+TR	1.970000029	1
SB	CSMDPT-12SO	Thallium	10/22/2003	SW6010B	mg/kg	ND	1.174999952	1
SB	CSMDPT-10SO	Thallium	10/21/2003	SW7841	mg/kg	ND	0.332500011	1
SB	CSMDPT-14SO	Thallium	10/29/2003	SW7841	mg/kg	ND	0.316500008	1
SB	CSMDPT-13SO	Thallium	10/29/2003	SW7841	mg/kg	ND	0.316499993	2
SB	CSMMW-11SO	Thallium	12/20/2003	SW7841	mg/kg	ND	0 304250002	2
SB	CSMMW-12SO	Thallium	12/21/2003	SW7841	mg/kg	ND	0.300999999	1
SB	CSMDPT-8SO	Thallium	10/18/2003	SW7841	mg/kg	ND	0.298000008	1
SB	CSMMW-7SO	Thallium	12/10/2003	SW7841	mg/kg	ND	0.294	1
SB	CSMDPT-7SO	Thallium	10/18/2003	SW7841	mg/kg	ND	0.291999996	1
SB	CSMDPT-5SO	Thallium	10/20/2003	SW7841	mg/kg	ND	0.291000009	1
SB	CSMDPT-12SO	Thallium	10/22/2003	SW7841	mg/kg	ND	0.28549999	1
SB	CSMMW-3SO	Thallium	12/3/2003	SW7841	mg/kg	ND	0.284999996	1
SB	CSMDPT-11SO	Thallium	10/17/2003	SW7841	mg/kg	ND	0.272500008	1
SB	CSMDPT-6SO	Thallium	10/19/2003	SW7841	mg/kg	ND	0.269499987	1
SB	CSMDPT-9SO	Thallium	10/16/2003	SW7841	mg/kg	ND	0.268999994	1
SB	CSMDPT-15SO	Thallium	10/30/2003	SW7841	mg/kg	ND	0.263999999	1
SB	CSMDPT-17SO	Thallium	10/30/2003	SW7841	mg/kg	ND	0.261500001	1
SB	CSMDPT-3SO	Thallium	10/27/2003	SW7841	mg/kg	ND	0.25	1
SB	SBBG-01	Thallium	6/19/1995	SW6010	mg/kg	ND	0.159999996	1
SS	CSMDPT-10SO	Thallium	10/21/2003	SW7841	mg/kg	ND	0.292499989	1
SS	CSMDPT-11SO	Thallium	10/17/2003	SW7841	mg/kg	ND	0.281500012	1
SS	CSMDPT-12SO	Thallium	10/22/2003	SW7841	mg/kg	ND	0.3125	1
SS	CSMDPT-13SO	Thallium	10/29/2003	SW7841	mg/kg	ND	0.280999988	1
SS	CSMDPT-14SO	Thallium	10/29/2003	SW7841	mg/kg	ND	0 316500008	1
SS	CSMDPT-15SO	Thallium	10/30/2003	SW7841	mg/kg	ND	0.270000011	1
SS	CSMDPT-17SO	Thallium	10/30/2003	SW7841	mg/kg	ND	0.284000009	1
SS	CSMDPT-3SO	Thallium	10/27/2003	SW7841	mg/kg	ND	0.247500002	1
SS	CSMDPT-6SO	Thallium	10/21/2003	SW7841	mg/kg	ND	0.291000009	1

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-7SO	Thallium	10/18/2003	SW7841	mg/kg	ND	0.298999995	1
SS	CSMDPT-7SO	Thallium	10/21/2003	SW7841	mg/kg	ND	0.275000006	1
SS	CSMDPT-8SO	Thallium	10/18/2003	SW7841	mg/kg	ND	0.26699999	1
SS	CSMDPT-9SO	Thallium	10/16/2003	SW7841	mg/kg	ND	0.277999997	1
SS	SBBG-01	Thallium	6/19/1995	SW6010	mg/kg	ND	0.165000007	1
SS	SBBG-05	Thallium	6/24/1996	SW7841	mg/kg	ND	6E-05	1
SS	SBBG-07	Thallium	6/24/1996	SW7841	mg/kg	ND	6E-05	2
SB	CSMDPT-9SO-Resample	Toxaphene	1/10/2004	SW8081A	mg/kg	ND	0.085500002	1
SB	CSMDPT-14SO	Toxaphene	10/29/2003	SW8081A	mg/kg	ND	0.0845	1
SB	CSMDPT-13SO	Toxaphene	10/29/2003	SW8081A	mg/kg	ND	0.084249999	2
SB	CSMDPT-12SO	Toxaphene	10/22/2003	SW8081A	mg/kg	ND	0.078500003	1
SB	CSMDPT-7SO-Resample	Toxaphene	12/20/2003	SW8081A	mg/kg	ND	0.078500003	1
SB	CSMDPT-8SO-Resample	Toxaphene	1/20/2004	SW8081A	mg/kg	ND	0.078500003	1
SB	CSMDPT-6SO-Resample	Toxaphene	1/12/2004	SW8081A	mg/kg	ND	0.075999998	1
SB	CSMDPT-3SO	Toxaphene	10/27/2003	SW8081A	mg/kg	ND	0.074000001	1
SB	CSMDPT-15SO	Toxaphene	10/30/2003	SW8081A	mg/kg	ND	0.072999999	1
SB	CSMDPT-11SO-Resample	Toxaphene	12/21/2003	SW8081A	mg/kg	ND	0.072499998	1
SB	CSMDPT-17SO	Toxaphene	10/30/2003	SW8081A	mg/kg	ND	0.072499998	1
SB	CSMDPT-5SO-Resample	Toxaphene	12/18/2003	SW8081A	mg/kg	ND	0.040150002	1
SB	CSMDPT-10SO-Resample	Toxaphene	12/20/2003	SW8081A	mg/kg	ND	0.03915	5
SB	SBBG-01	Toxaphene	6/19/1995	SW8080	mg/kg	ND	0.035999998	1
SS	CSMDPT-10SO-Resample	Toxaphene	12/20/2003	SW8081A	mg/kg	ND	0.03785	1
SS	CSMDPT-11SO-Resample	Toxaphene	12/21/2003	SW8081A	mg/kg	ND	0.077500001	1
SS	CSMDPT-12SO	Toxaphene	10/22/2003	SW8081A	mg/kg	ND	0.083499998	1
SS	CSMDPT-13SO	Toxaphene	10/29/2003	SW8081A	mg/kg	ND	0.075000003	1
SS	CSMDPT-14SO	Toxaphene	10/29/2003	SW8081A	mg/kg	ND	0.0845	1
SS	CSMDPT-15SO	Toxaphene	10/30/2003	SW8081A	mg/kg	ND	0.075000003	1
SS	CSMDPT-17SO	Toxaphene	10/30/2003	SW8081A	mg/kg	ND	0.075499997	1
SS	CSMDPT-3SO	Toxaphene	10/27/2003	SW8081A	mg/kg	ND	0.072499998	1
SS	CSMDPT-6SO-Resample	Toxaphene	1/12/2004	SW8081A	mg/kg	ND	0.082999997	1
SS	CSMDPT-7SO	Toxaphene	10/21/2003	SW8081A	mg/kg	ND	0.074000001	1
SS	CSMDPT-7SO-Resample	Toxaphene	12/20/2003	SW8081A	mg/kg	ND	0.081500001	1
SS	CSMDPT-8SO-Resample	Toxaphene	1/12/2004	SW8081A	mg/kg	ND	0.076499999	1
SS	CSMDPT-9SO-Resample	Toxaphene	1/10/2004	SW8081A	mg/kg	ND	0.077500001	1
SS	SBBG-01	Toxaphene	6/19/1995	SW8080	mg/kg	ND	0.037	1
SS	SBBG-05	Toxaphene	6/24/1996	SW8081	mg/kg	ND	1.049999952	1
SS	SBBG-07	Toxaphene	6/24/1996	SW8081	mg/kg	ND	1.049999952	2
SB	CSMDPT-13SO	Vanadium	10/29/2003	SW6010B	mg/kg	+	63.69999886	2
SB	CSMDPT-10SO	Vanadium	10/21/2003	SW6010B	mg/kg	+	53	1
SB	CSMDPT-14SO	Vanadium	10/29/2003	SW6010B	mg/kg	+	40.40000153	1
SB	CSMDPT-8SO	Vanadium	10/18/2003	SW6010B	mg/kg	+	35.09999847	1
SB	CSMDPT-7SO	Vanadium	10/18/2003	SW6010B	mg/kg	+	31	1
SB	CSMDPT-17SO	Vanadium	10/30/2003	SW6010B	mg/kg	+	27.10000038	1
SB	CSMDPT-12SO	Vanadium	10/22/2003	SW6010B	mg/kg	+	20.79999924	1
SB	CSMMW-3SO	Vanadium	12/3/2003	SW6010B	mg/kg	+	19.10000038	1
SB	CSMMW-12SO	Vanadium	12/21/2003	SW6010B	mg/kg	+	17.60000038	1
SB	CSMDPT-11SO	Vanadium	10/17/2003	SW6010B	mg/kg	+	16.39999962	1
SB	CSMDPT-5SO	Vanadium	10/20/2003	SW6010B	mg/kg	+	15.30000019	1
SB	CSMDPT-3SO	Vanadium	10/27/2003	SW6010B	mg/kg	+	14.19999981	1
SB	CSMDPT-15SO	Vanadium	10/30/2003	SW6010B	mg/kg	+	11.5	1
SB	CSMDPT-6SO	Vanadium	10/19/2003	SW6010B	mg/kg	+	9.520000458	1
SB	SBBG-01	Vanadium	6/19/1995	SW6010	mg/kg	+	8.800000191	1
SB	CSMMW-11SO	Vanadium	12/20/2003	SW6010B	mg/kg	+	4.8349998	2
SB	CSMMW-7SO	Vanadium	12/10/2003	SW6010B	mg/kg	+	3.049999952	1
SB	CSMDPT-9SO	Vanadium	10/16/2003	SW6010B	mg/kg	+	2.319999933	1
SS	CSMDPT-10SO	Vanadium	10/21/2003	SW6010B	mg/kg	+	8.319999695	1

TABLE A-8

BACKGROUND SOIL DATA
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

group	LOCATION	pref_name	LOGDATENEW	ANMCODE	UNITS	MinOfPARVQ	AvgOfSTAT_VALUE	CountOfSTAT_VALUE
SS	CSMDPT-11SO	Vanadium	10/17/2003	SW6010B	mg/kg	+	24.10000038	1
SS	CSMDPT-12SO	Vanadium	10/22/2003	SW6010B	mg/kg	+	47.5	1
SS	CSMDPT-13SO	Vanadium	10/29/2003	SW6010B	mg/kg	+	25.70000076	1
SS	CSMDPT-14SO	Vanadium	10/29/2003	SW6010B	mg/kg	+	41.40000153	1
SS	CSMDPT-15SO	Vanadium	10/30/2003	SW6010B	mg/kg	+	27.39999962	1
SS	CSMDPT-17SO	Vanadium	10/30/2003	SW6010B	mg/kg	+	22.20000076	1
SS	CSMDPT-3SO	Vanadium	10/27/2003	SW6010B	mg/kg	+	14.10000038	1
SS	CSMDPT-5SO	Vanadium	10/21/2003	SW6010B	mg/kg	+	25 39999962	1
SS	CSMDPT-6SO	Vanadium	10/21/2003	SW6010B	mg/kg	+	27 60000038	1
SS	CSMDPT-7SO	Vanadium	10/18/2003	SW6010B	mg/kg	+	69.90000153	1
SS	CSMDPT-7SO	Vanadium	10/21/2003	SW6010B	mg/kg	+	40 29999924	1
SS	CSMDPT-8SO	Vanadium	10/18/2003	SW6010B	mg/kg	+	29.5	1
SS	CSMDPT-9SO	Vanadium	10/16/2003	SW6010B	mg/kg	+	7.670000076	1
SS	SBBG-01	Vanadium	6/19/1995	SW6010	mg/kg	+	13.60000038	1
SS	SBBG-05	Vanadium	6/24/1996	SW6010	mg/kg	+	22.29999924	1
SS	SBBG-07	Vanadium	6/24/1996	SW6010	mg/kg	+	12	2
SB	CSMDPT-8SO	Zinc	10/18/2003	SW6010B	mg/kg	+	42.09999847	1
SB	CSMDPT-17SO	Zinc	10/30/2003	SW6010B	mg/kg	+	34.90000153	1
SB	CSMDPT-3SO	Zinc	10/27/2003	SW6010B	mg/kg	+	32.20000076	1
SB	CSMDPT-14SO	Zinc	10/29/2003	SW6010B	mg/kg	+	26.5	1
SB	CSMDPT-7SO	Zinc	10/18/2003	SW6010B	mg/kg	+	20.79999924	1
SB	CSMDPT-11SO	Zinc	10/17/2003	SW6010B	mg/kg	+	15.60000038	1
SB	CSMDPT-6SO	Zinc	10/19/2003	SW6010B	mg/kg	+	11.10000038	1
SB	CSMDPT-9SO	Zinc	10/16/2003	SW6010B	mg/kg	+	10.5	1
SB	CSMDPT-13SO	Zinc	10/29/2003	SW6010B	mg/kg	+	9.140000343	2
SB	CSMMW-12SO	Zinc	12/21/2003	SW6010B	mg/kg	+	9.069999695	1
SB	CSMMW-3SO	Zinc	12/3/2003	SW6010B	mg/kg	+	8.93999958	1
SB	CSMDPT-5SO	Zinc	10/20/2003	SW6010B	mg/kg	+	8 899999619	1
SB	CSMMW-7SO	Zinc	12/10/2003	SW6010B	mg/kg	+	8.210000038	1
SB	CSMDPT-10SO	Zinc	10/21/2003	SW6010B	mg/kg	+	7.309999943	1
SB	CSMDPT-12SO	Zinc	10/22/2003	SW6010B	mg/kg	+	5.400000095	1
SB	SBBG-01	Zinc	6/19/1995	SW6010	mg/kg	+	5.400000095	1
SB	CSMDPT-15SO	Zinc	10/30/2003	SW6010B	mg/kg	+	4.480000019	1
SB	CSMMW-11SO	Zinc	12/20/2003	SW6010B	mg/kg	+	3.360000014	2
SS	CSMDPT-10SO	Zinc	10/21/2003	SW6010B	mg/kg	+	6.96999979	1
SS	CSMDPT-11SO	Zinc	10/17/2003	SW6010B	mg/kg	+	10.30000019	1
SS	CSMDPT-12SO	Zinc	10/22/2003	SW6010B	mg/kg	+	12.30000019	1
SS	CSMDPT-13SO	Zinc	10/29/2003	SW6010B	mg/kg	+	49.79999924	1
SS	CSMDPT-14SO	Zinc	10/29/2003	SW6010B	mg/kg	+	29.39999962	1
SS	CSMDPT-15SO	Zinc	10/30/2003	SW6010B	mg/kg	+	31.20000076	1
SS	CSMDPT-17SO	Zinc	10/30/2003	SW6010B	mg/kg	+	26.60000038	1
SS	CSMDPT-3SO	Zinc	10/27/2003	SW6010B	mg/kg	+	6.940000057	1
SS	CSMDPT-5SO	Zinc	10/21/2003	SW6010B	mg/kg	+	52.70000076	1
SS	CSMDPT-6SO	Zinc	10/21/2003	SW6010B	mg/kg	+	70.5	1
SS	CSMDPT-7SO	Zinc	10/18/2003	SW6010B	mg/kg	+	32.20000076	1
SS	CSMDPT-7SO	Zinc	10/21/2003	SW6010B	mg/kg	+	86	1
SS	CSMDPT-8SO	Zinc	10/18/2003	SW6010B	mg/kg	+	19.29999924	1
SS	CSMDPT-9SO	Zinc	10/16/2003	SW6010B	mg/kg	+	14.5	1
SS	SBBG-01	Zinc	6/19/1995	SW6010	mg/kg	+	18.29999924	1
SS	SBBG-05	Zinc	6/24/1996	SW6010	mg/kg	+	33	1
SS	SBBG-07	Zinc	6/24/1996	SW6010	mg/kg	+	21	2

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TABLE A-9-1
ProUCL INPUT FILES FOR SITE SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Test Value (mg/kg)

Raw Data

1,1-Dichloroethane	2-methyl naphthalene	4,4'-DDD	4,4'-DDE	4,4'-DDT	Acenaphthene
0.002	0.105	**0.0021**	**0.0063**	**0.0475**	**6.1**
0.003	0.1	**0.001375**	**0.0063**	**0.0126**	0.185
0.003	0.1	0.000175	**0.0038**	**0.0119**	0.19
0.003	0.1	0.00018	**0.0038**	**0.009**	0.205
0.003	0.105	0.000195	**0.001**	**0.006**	0.205
0.003	0.095	0.00019	0.00012	**0.0058**	0.2
0.003	0.1	0.000195	0.000125	**0.0049**	0.19
0.003	0.095	0.00017	0.000135	**0.0047**	0.19
0.00275	0.1	0.00018	0.00013	**0.0039**	0.105
0.00295	0.095	0.002	0.000135	**0.002**	0.1
0.003	0.095	0.002	0.000125	0.000115	0.1
0.0031	0.095	0.00195	0.000125	0.00012	0.1
0.003	0.1	0.0021	0.002	0.00012	0.105
0.00275	0.1	0.00195	0.002	0.000125	0.095
0.0028	0.1	0.002	0.0021	0.000125	0.1
0.0031	**1.2**	0.0019	0.00195	0.000125	0.095
0.002675	0.185	0.00195	0.002	0.00012	0.1
0.00265	0.19	0.001925	0.001925	0.00012	0.095
0.0027	0.205	0.0019	0.0019	0.002	0.095
0.00295	0.205	0.0019	0.0019	0.0021	0.095
0.0029	0.2	0.00195	0.00195	0.00195	0.1
0.0027	0.19	0.002	0.002	0.00195	0.1
0.00305	0.19	0.00195	0.00195	0.002	0.1

LN Data

1,1-Dichloroethane	2-methyl naphthalene	4,4'-DDD	4,4'-DDE	4,4'-DDT	Acenaphthene
-6.214608098	-2.253794929	-6.165818	-5.067206	-3.047026	1.808288771
-5.80914299	-2.302585093	-6.589302	-5.067206	-4.374058	-1.687399454
-5.80914299	-2.302585093	-8.650725	-5.572754	-4.431217	-1.660731207
-5.80914299	-2.302585093	-8.622554	-5.572754	-4.710531	-1.5847453
-5.80914299	-2.253794929	-8.542511	-6.907755	-5.115996	-1.5847453
-5.80914299	-2.353878387	-8.568486	-9.028019	-5.149897	-1.609437912
-5.80914299	-2.302585093	-8.542511	-8.987197	-5.31852	-1.660731207
-5.80914299	-2.353878387	-8.679712	-8.910236	-5.360193	-1.660731207
-5.896154367	-2.302585093	-8.622554	-8.947976	-5.546779	-2.253794929
-5.825950109	-2.353878387	-6.214608	-8.910236	-6.214608	-2.302585093
-5.80914299	-2.353878387	-6.214608	-8.987197	-9.070578	-2.302585093
-5.776353167	-2.353878387	-6.239926	-8.987197	-9.028019	-2.302585093
-5.80914299	-2.302585093	-6.165818	-6.214608	-9.028019	-2.253794929
-5.896154367	-2.302585093	-6.239926	-6.214608	-8.987197	-2.353878387
-5.878135862	-2.302585093	-6.214608	-6.165818	-8.987197	-2.302585093
-5.776353167	0.182321557	-6.265901	-6.239926	-8.987197	-2.353878387
-5.923805899	-1.687399454	-6.239926	-6.214608	-9.028019	-2.302585093
-5.933195639	-1.660731207	-6.252829	-6.252829	-9.028019	-2.353878387
-5.914503506	-1.5847453	-6.265901	-6.265901	-6.214608	-2.353878387
-5.825950109	-1.5847453	-6.265901	-6.265901	-6.165818	-2.353878387
-5.843044542	-1.609437912	-6.239926	-6.239926	-6.239926	-2.302585093
-5.914503506	-1.660731207	-6.214608	-6.214608	-6.239926	-2.302585093
-5.792613688	-1.660731207	-6.239926	-6.239926	-6.214608	-2.302585093

TABLE A-9-1
ProUCL INPUT FILES FOR SITE SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Acetone	Aldrin	alphachlordane	Aluminum	Anthracene	Antimony	aroclor 1260	As	Ba
0.061	0.00095	0.00105	**20200**	**3.8**	**1.3**	**0.0411**	**132**	**114**
0.021	0.000065	0.001	**18900**	0.185	0.3	**0.0261**	**39.5**	**110**
0.016	0.00007	0.001	**18800**	0.19	0.28	**0.0218**	**39.2**	**80.1**
0.0055	0.000075	0.001	**17400**	0.205	0.295	**0.0178**	**24.3**	**73.6**
0.006	0.00007	0.00105	**16900**	0.205	0.29	**0.0137**	**8.75**	**68.5**
0.006	0.000075	0.00095	**16500**	0.2	0.25	0.01	**7.9**	**65**
0.006	0.00007	0.001	**16400**	0.19	0.285	0.01	**7.8**	**64.9**
0.006	0.00007	0.00095	**15800**	0.19	0.25	0.0105	**5**	**63.7**
0.0893	0.00105	0.001	**15600**	0.105	0.295	0.095	**4.8**	**50.5**
0.0355	0.001	0.00095	**15350**	0.1	0.2775	0.01	**4.7**	**48.4**
0.0351	0.001	0.00095	**15200**	0.1	0.28	0.0095	**4.6**	**44.5**
0.0347	0.001	0.00095	**14800**	0.1	0.28	0.0095	**4.5**	**37.7**
0.0347	0.00105	0.001	**13900**	0.105	0.295	0.01	**4.4**	**37.2**
	0.00095	0.001	**13900**	0.095	0.29	0.01	**4.4**	**30.9**
	0.001	0.001	**12100**	0.1	0.285	0.01	**4**	**30.2**
	0.00095	**0.017**	**9345**	0.095		0.0044	**3.2**	**29.6**
	0.001	0.000055	**9330**	0.1		0.004575	**3.2**	**26.8**
	0.00095	0.000055	**9230**	0.095		0.00455	**2.95**	**26.7**
	0.00095	0.00006	**9150**	0.095		0.00485	**2.8**	**26.6**
	0.00095	0.00006	**8410**	0.095		0.0048	**2.6**	**22.2**
	0.001	0.00006	**8080**	0.1		0.00485	**2.2**	**19.3**
	0.001	0.000055	**6150**	0.1		0.0046	**1.2**	**18.5**
	0.001	0.000055	**5280**	0.1		0.00455		**14**

Acetone	Aldrin	alphachlordane	Aluminum	Anthracene	Antimony	aroclor 1260	As	Ba
-2.796881	-6.959049	-6.858965115	9.913438	1.33500107	0.262364	-3.19174716	4.882802	4.736198
-3.863233	-9.641123	-6.907755279	9.846917	-1.68739945	-1.203973	-3.64581996	3.676301	4.70048
-4.135167	-9.567015	-6.907755279	9.841612	-1.66073121	-1.272966	-3.82584531	3.668677	4.383276
-5.203007	-9.498022	-6.907755279	9.764225	-1.5847453	-1.22078	-4.02855682	3.190476	4.298645
-5.115996	-9.567015	-6.858965115	9.735069	-1.5847453	-1.237874	-4.29035945	2.169054	4.226834
-5.115996	-9.498022	-6.959048573	9.711116	-1.60943791	-1.386294	-4.60517019	2.066863	4.174387
-5.115996	-9.567015	-6.907755279	9.705037	-1.66073121	-1.255266	-4.60517019	2.054124	4.172848
-5.115996	-9.567015	-6.959048573	9.667765	-1.66073121	-1.386294	-4.55638002	1.609438	4.154185
-2.415754	-6.858965	-6.907755279	9.655026	-2.25379493	-1.22078	-2.35387839	1.568616	3.921973
-3.338223	-6.907755	-6.959048573	9.638871	-2.30258509	-1.281934	-4.60517019	1.547563	3.8795
-3.349554	-6.907755	-6.959048573	9.629051	-2.30258509	-1.272966	-4.65646348	1.526056	3.795489
-3.361016	-6.907755	-6.959048573	9.602382	-2.30258509	-1.272966	-4.65646348	1.504077	3.62966
-3.361016	-6.858965	-6.907755279	9.539644	-2.25379493	-1.22078	-4.60517019	1.481605	3.616309
	-6.959049	-6.907755279	9.539644	-2.35387839	-1.237874	-4.60517019	1.481605	3.430756
	-6.907755	-6.907755279	9.400961	-2.30258509	-1.255266	-4.60517019	1.386294	3.407842
	-6.959049	-4.074541935	9.142597	-2.35387839		-5.42615074	1.163151	3.387774
	-6.907755	-9.808177373	9.14099	-2.30258509		-5.38714858	1.163151	3.288402
	-6.959049	-9.808177373	9.130214	-2.35387839		-5.39262805	1.081805	3.284664
	-6.959049	-9.721165996	9.121509	-2.35387839		-5.32877657	1.029619	3.280911
	-6.959049	-9.721165996	9.037177	-2.35387839		-5.33913936	0.955511	3.100092
	-6.907755	-9.721165996	8.997147	-2.30258509		-5.32877657	0.788457	2.960105
	-6.907755	-9.808177373	8.724207	-2.30258509		-5.38169898	0.182322	2.917771
	-6.907755	-9.808177373	8.571681	-2.30258509		-5.39262805		2.639057

TABLE A-9-1
ProUCL INPUT FILES FOR SITE SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Bnz	BaA	BaP	BbF	BghiP	BkF	beta-BHC	BEHP	Carbazole
0.002	**0.37**	**0.364**	**0.927**	**0.233**	**0.271**	**0.00035**	0.105	**3.5**
0.003	**0.232**	**0.299**	**0.546**	**3.8**	**0.246**	**0.00024**	0.1	0.185
0.003	**0.139**	**0.16**	**0.307**	0.185	**0.176**	0.000255	0.1	0.19
0.003	**0.0926**	**0.0987**	**0.147**	0.19	**7.8**	0.000045	0.1	0.205
0.003	**0.0923**	**0.07645**	**0.131**	0.205	0.185	0.000045	0.105	0.205
0.003	**10.5**	**0.0696**	**0.1305**	0.205	0.19	0.000045	0.095	0.2
0.003	0.185	**0.0591**	**0.123**	0.2	0.205	0.000045	0.1	0.19
0.003	0.19	**9.6**	**0.099**	0.19	0.205	0.000045	0.095	0.19
0.00275	0.205	0.185	**9.7**	0.19	0.2	0.00105	0.1	0.105
0.00295	0.205	0.19	0.185	0.1	0.19	0.001	0.095	0.1
0.003	0.2	0.205	0.19	0.1	0.19	0.001	0.095	0.1
0.0031	0.19	0.205	0.205	0.1	0.1	0.001	0.095	0.1
0.003	0.19	0.2	0.205	0.105	0.1	0.00105	0.1	0.105
0.00275	0.1	0.19	0.2	0.095	0.105	0.00095	0.1	0.095
0.0028	0.1	0.19	0.19	0.1	0.095	0.001	0.1	0.1
0.0031	0.105	0.1	0.19	0.095	0.1	0.00095	**0.12**	0.095
0.002675	0.1	0.1	0.1	0.1	0.095	0.001	0.185	0.1
0.00265	0.095	0.105	0.1	0.095	0.095	0.00095	0.1925	0.095
0.0027	0.095	0.095	0.105	0.095	0.095	0.00095	0.19	0.095
0.00295	0.095	0.095	0.095	0.095	0.095	0.00095	0.205	0.095
0.0029	0.1	0.095	0.095	0.1	0.1	0.001	0.205	0.1
0.0027	0.1	0.1	0.1	0.1	0.1	0.001	0.2	0.1
0.00305	0.1	0.1	0.1	0.1	0.1	0.001	0.19	0.1

Bnz	BaA	BaP	BbF	BghiP	BkF	beta-BHC	BEHP	Carbazole
-6.214608	-0.994252	-1.010601	-0.075802	-1.456717	-1.305636	-7.957577	-2.253795	1.252763
-5.809143	-1.461018	-1.207312	-0.605136	1.335001	-1.402424	-8.334872	-2.302585	-1.687399
-5.809143	-1.973281	-1.832581	-1.180908	-1.687399	-1.737271	-8.274247	-2.302585	-1.660731
-5.809143	-2.379466	-2.31567	-1.917323	-1.660731	2.054124	-10.00885	-2.302585	-1.584745
-5.809143	-2.382711	-2.571118	-2.032558	-1.584745	-1.687399	-10.00885	-2.253795	-1.584745
-5.809143	2.351375	-2.664991	-2.036382	-1.584745	-1.660731	-10.00885	-2.353878	-1.609438
-5.809143	-1.687399	-2.828524	-2.095571	-1.609438	-1.584745	-10.00885	-2.302585	-1.660731
-5.809143	-1.660731	2.261763	-2.312635	-1.660731	-1.584745	-10.00885	-2.353878	-1.660731
-5.896154	-1.584745	-1.687399	2.272126	-1.660731	-1.609438	-6.858965	-2.302585	-2.253795
-5.82595	-1.584745	-1.660731	-1.687399	-2.302585	-1.660731	-6.907755	-2.353878	-2.302585
-5.809143	-1.609438	-1.584745	-1.660731	-2.302585	-1.660731	-6.907755	-2.353878	-2.302585
-5.776353	-1.660731	-1.584745	-1.584745	-2.302585	-2.302585	-6.907755	-2.353878	-2.302585
-5.809143	-1.660731	-1.609438	-1.584745	-2.253795	-2.302585	-6.858965	-2.302585	-2.253795
-5.896154	-2.302585	-1.660731	-1.609438	-2.353878	-2.253795	-6.959049	-2.302585	-2.353878
-5.878136	-2.302585	-1.660731	-1.660731	-2.302585	-2.353878	-6.907755	-2.302585	-2.302585
-5.776353	-2.253795	-2.302585	-1.660731	-2.353878	-2.302585	-6.959049	-2.120264	-2.353878
-5.923806	-2.302585	-2.302585	-2.302585	-2.302585	-2.353878	-6.907755	-1.687399	-2.302585
-5.933196	-2.353878	-2.253795	-2.302585	-2.353878	-2.353878	-6.959049	-1.647659	-2.353878
-5.914504	-2.353878	-2.353878	-2.253795	-2.353878	-2.353878	-6.959049	-1.660731	-2.353878
-5.82595	-2.353878	-2.353878	-2.353878	-2.353878	-2.353878	-6.959049	-1.584745	-2.353878
-5.843045	-2.302585	-2.353878	-2.353878	-2.302585	-2.302585	-6.907755	-1.584745	-2.302585
-5.914504	-2.302585	-2.302585	-2.302585	-2.302585	-2.302585	-6.907755	-1.609438	-2.302585
-5.792614	-2.302585	-2.302585	-2.302585	-2.302585	-2.302585	-6.907755	-1.660731	-2.302585

TABLE A-9-1
ProUCL INPUT FILES FOR SITE SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
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Chloroform	Cr	Chry	Co	Cu	DahA	dibenzofuran	Dieldrin	Endosulfan II
0.002	**32.6**	**0.432**	**6.9**	**17.7**	**1.85**	**2.9**	**0.001135**	**0.000825**
0.003	**26.8**	**0.272**	**4.6**	**14**	0.185	0.185	0.00017	0.000205
0.003	**24.9**	**0.195**	**3.5**	**12.8**	0.19	0.19	0.000175	0.00021
0.003	**24.8**	**0.131**	**3.5**	**12.1**	0.205	0.205	0.00019	0.000225
0.003	**24.1**	**0.10785**	**3**	**11.3**	0.205	0.205	0.000185	0.00022
0.003	**23.5**	**0.0879**	**3**	**10.8**	0.2	0.2	0.00019	0.000225
0.003	**20.95**	**10.5**	**2.9**	**10.6**	0.19	0.19	0.00018	0.00021
0.003	**20.6**	0.185	**2.8**	**10**	0.19	0.19	0.000175	0.00021
0.00275	**19.7**	0.19	**2.75**	**10**	0.105	0.105	0.00205	0.00205
0.00295	**19.6**	0.205	**2.6**	**9.8**	0.1	0.1	0.002	0.002
0.003	**19.3**	0.205	**2.4**	**9.6**	0.1	0.1	0.002	0.002
0.0031	**19**	0.2	**2.3**	**9.4**	0.1	0.1	0.00195	0.00195
0.003	**18.5**	0.19	**1.9**	**9.1**	0.105	0.105	0.0021	0.0021
0.00275	**17.8**	0.19	**1.6**	**8.7**	0.095	0.095	0.00195	0.00195
0.0028	**17**	0.1	**1.5**	**8.5**	0.1	0.1	0.002	0.002
0.0031	**16.7**	0.1	**1.1**	**8.5**	0.095	0.095	0.0019	0.0019
0.002675	**16.3**	0.105	**1.1**	**7.4**	0.1	0.1	0.00195	0.00195
0.00265	**15.9**	0.1	**1.08**	**7.15**	0.095	0.095	0.001925	0.001925
0.0027	**15.6**	0.095	**0.89**	**6.7**	0.095	0.095	0.0019	0.0019
0.00295	**13.7**	0.095	**1**	**4.3**	0.095	0.095	0.0019	0.0019
0.0029	**9.7**	0.095		**4.1**	0.1	0.1	0.00195	0.00195
0.0027	**9.2**	0.1		**3.3**	0.1	0.1	0.002	0.002
0.00305	**7.5**	0.1		**2.6**	0.1	0.1	0.00195	0.00195

Chloroform	Cr	Chry	Co	Cu	DahA	dibenzofuran	Dieldrin	Endosulfan II
-6.214608	3.484312	-0.83933	1.931521	2.873565	0.615186	1.064710737	-6.781123	-7.1001272
-5.809143	3.288402	-1.301953	1.526056	2.639057	-1.687399	-1.68739945	-8.679712	-8.4925006
-5.809143	3.214868	-1.634756	1.252763	2.549445	-1.660731	-1.66073121	-8.650725	-8.468403
-5.809143	3.210844	-2.032558	1.252763	2.493205	-1.584745	-1.5847453	-8.568486	-8.3994102
-5.809143	3.182212	-2.227014	1.098612	2.424803	-1.584745	-1.5847453	-8.595155	-8.421883
-5.809143	3.157	-2.431555	1.098612	2.379546	-1.609438	-1.60943791	-8.568486	-8.3994102
-5.809143	3.042139	2.351375	1.064711	2.360854	-1.660731	-1.66073121	-8.622554	-8.468403
-5.809143	3.025291	-1.687399	1.029619	2.302585	-1.660731	-1.66073121	-8.650725	-8.468403
-5.896154	2.980619	-1.660731	1.011601	2.302585	-2.253795	-2.25379493	-6.189915	-6.1899155
-5.82595	2.97553	-1.584745	0.955511	2.282382	-2.302585	-2.30258509	-6.214608	-6.2146081
-5.809143	2.960105	-1.584745	0.875469	2.261763	-2.302585	-2.30258509	-6.214608	-6.2146081
-5.776353	2.944439	-1.609438	0.832909	2.24071	-2.302585	-2.30258509	-6.239926	-6.2399259
-5.809143	2.917771	-1.660731	0.641854	2.208274	-2.253795	-2.25379493	-6.165818	-6.1658179
-5.896154	2.879198	-1.660731	0.470004	2.163323	-2.353878	-2.35387839	-6.239926	-6.2399259
-5.878136	2.833213	-2.302585	0.405465	2.140066	-2.302585	-2.30258509	-6.214608	-6.2146081
-5.776353	2.815409	-2.302585	0.09531	2.140066	-2.353878	-2.35387839	-6.265901	-6.2659014
-5.923806	2.791165	-2.253795	0.09531	2.00148	-2.302585	-2.30258509	-6.239926	-6.2399259
-5.933196	2.766319	-2.302585	0.076961	1.967112	-2.353878	-2.35387839	-6.252829	-6.2528293
-5.914504	2.747271	-2.353878	-0.116534	1.902108	-2.353878	-2.35387839	-6.265901	-6.2659014
-5.82595	2.617396	-2.353878	0	1.458615	-2.353878	-2.35387839	-6.265901	-6.2659014
-5.843045	2.272126	-2.353878		1.410987	-2.302585	-2.30258509	-6.239926	-6.2399259
-5.914504	2.219203	-2.302585		1.193922	-2.302585	-2.30258509	-6.214608	-6.2146081
-5.792614	2.014903	-2.302585		0.955511	-2.302585	-2.30258509	-6.239926	-6.2399259

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Endrin	Endrin ketone	Ethylbenzene	fluoranthene	fluorene	gamma-BHC	Heptachlor
0.0005	**0.0157**	**0.002**	**0.579**	**4.8**	**0.0018**	**0.001**
0.000165	0.00065	0.003	**0.418**	0.185	**0.001425**	**0.00085**
0.00096	0.0007	0.003	**0.365**	0.19	**0.0012**	**0.00079**
0.00017	0.00075	0.003	**0.306**	0.205	**0.0012**	**0.00075**
0.00018	0.0007	0.003	**0.155**	0.205	0.001	**0.00065**
0.00018	0.00075	0.003	**0.128**	0.2	0.001	**0.00039**
0.00017	0.0007	0.003	**0.102**	0.19	0.001	**0.00032**
0.00017	0.0007	0.003	**19.5**	0.19	0.00095	0.000355
0.00205	0.00205	0.00275	0.185	0.105	0.001	0.00105
0.002	0.002	0.00295	0.19	0.1	0.001	0.001
0.002	0.002	0.003	0.205	0.1	0.00095	0.001
0.00195	0.00195	0.0031	0.205	0.1	0.00095	0.001
0.0021	0.0021	0.003	0.2	0.105	0.001	0.00105
0.00195	0.00195	0.00275	0.19	0.095	0.001	0.00095
0.002	0.002	0.0028	0.19	0.1	0.001	0.001
0.0019	0.0019	0.0031	0.1	0.095		0.00095
0.00195	0.00195	0.002675	0.1	0.1		0.001
0.001925	0.0019	0.00265	0.105	0.095		0.00095
0.0019	0.0019	0.0027	0.095	0.095		0.00095
0.0019	0.0019	0.00295	0.095	0.095		0.00095
0.00195	0.00195	0.0029	0.095	0.1		0.001
0.002	0.002	0.0027	0.1	0.1		0.001
0.00195	0.00195	0.00305	0.1	0.1		0.001

Endrin	Endrin ketone	Ethylbenzene	fluoranthene	fluorene	gamma-BHC	Heptachlor
-7.600902	-4.154094567	-6.214608098	-0.546452801	1.568616	-6.319968614	-6.90775528
-8.709565	-7.338538195	-5.80914299	-0.872273846	-1.687399	-6.553583465	-7.07027421
-6.948577	-7.264430223	-5.80914299	-1.007857925	-1.660731	-6.725433722	-7.14347761
-8.679712	-7.195437351	-5.80914299	-1.184170177	-1.584745	-6.725433722	-7.19543735
-8.622554	-7.264430223	-5.80914299	-1.864330162	-1.584745	-6.907755279	-7.3385382
-8.622554	-7.195437351	-5.80914299	-2.055725015	-1.609438	-6.907755279	-7.84936382
-8.679712	-7.264430223	-5.80914299	-2.282782466	-1.660731	-6.907755279	-8.04718956
-8.679712	-7.264430223	-5.80914299	2.970414466	-1.660731	-6.959048573	-7.94339277
-6.189915	-6.189915486	-5.896154367	-1.687399454	-2.253795	-6.907755279	-6.85896511
-6.214608	-6.214608098	-5.825950109	-1.660731207	-2.302585	-6.907755279	-6.90775528
-6.214608	-6.214608098	-5.80914299	-1.5847453	-2.302585	-6.959048573	-6.90775528
-6.239926	-6.239925906	-5.776353167	-1.5847453	-2.302585	-6.959048573	-6.90775528
-6.165818	-6.165817934	-5.80914299	-1.609437912	-2.253795	-6.907755279	-6.85896511
-6.239926	-6.239925906	-5.896154367	-1.660731207	-2.353878	-6.907755279	-6.95904857
-6.214608	-6.214608098	-5.878135862	-1.660731207	-2.302585	-6.907755279	-6.90775528
-6.265901	-6.265901393	-5.776353167	-2.302585093	-2.353878		-6.95904857
-6.239926	-6.239925906	-5.923805899	-2.302585093	-2.302585		-6.90775528
-6.252829	-6.265901393	-5.933195639	-2.253794929	-2.353878		-6.95904857
-6.265901	-6.265901393	-5.914503506	-2.353878387	-2.353878		-6.95904857
-6.265901	-6.265901393	-5.825950109	-2.353878387	-2.353878		-6.95904857
-6.239926	-6.239925906	-5.843044542	-2.353878387	-2.302585		-6.90775528
-6.214608	-6.214608098	-5.914503506	-2.302585093	-2.302585		-6.90775528
-6.239926	-6.239925906	-5.792613688	-2.302585093	-2.302585		-6.90775528

TABLE A-9-1
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Heptachlor epoxide	IcdP	Fe	Pb	MEK	Mn	naphthalene	Ni
0.034	**0.263**	**43500**	**57.5**	**0.0056**	**275**	**3.5**	**10.3**
0.0013	**0.102**	**27900**	**51.7**	0.0055	**117**	0.185	**10.2**
0.00072	**3.85**	**26800**	**31.3**	0.006	**105**	0.19	**8.9**
0.00046	0.185	**26300**	**28.6**	0.006	**94.9**	0.205	**7.9**
0.00019	0.19	**25600**	**26.6**	0.006	**92.35**	0.205	**7.8**
0.00006	0.205	**24900**	**25.9**	0.006	**92.2**	0.2	**7.8**
0.00006	0.205	**24500**	**22.4**	0.0055	**75.5**	0.19	**7.5**
0.000065	0.2	**22900**	**22**	0.0055	**68.7**	0.19	**7.2**
0.00105	0.19	**22500**	**21.3**	0.006	**67.1**	0.105	**7.1**
0.001	0.19	**21700**	**16.65**	0.0055	**59.1**	0.1	**6.9**
0.001	0.1	**19950**	**16**	0.0055	**58.7**	0.1	**6.25**
0.001	0.1	**19750**	**12**	0.006	**58.4**	0.1	**6.2**
0.00105	0.105	**19700**	**11.3**	0.006	**47.8**	0.105	**6.1**
0.00095	0.095	**19600**	**11**	0.0055	**43.85**	0.095	**5.1**
0.001	0.1	**18800**	**10.3**	0.006	**35.1**	0.1	**5**
0.00095	0.095	**18400**	**10.1**		**28.9**	0.095	**2.9**
0.001	0.1	**17800**	**9.6**		**27.2**	0.1	**2.5**
0.00095	0.095	**13700**	**9.55**		**23.9**	0.095	**2.2**
0.00095	0.095	**13500**	**9.1**		**16.3**	0.095	**1.8**
0.00095	0.095	**13000**	**9.1**		**10.7**	0.095	**1.3**
0.001	0.1	**12800**	**8.4**		**2.3**	0.1	**1.3**
0.001	0.1	**11900**	**6.6**		**1.5**	0.1	**0.98**
0.001	0.1	**8560**	**6.4**			0.1	**0.92**

Heptachlor epoxide	IcdP	Fe	Pb	MEK	Mn	naphthalene	Ni
-3.381394754	-1.335601	10.68052	4.051785	-5.184989	5.616771	1.252762968	2.332144
-6.645391015	-2.282782	10.23638	3.945458	-5.203007	4.762174	-1.68739945	2.322388
-7.236259346	1.348073	10.19616	3.443618	-5.115996	4.65396	-1.66073121	2.186051
-7.684284068	-1.687399	10.17732	3.353407	-5.115996	4.552824	-1.5847453	2.066863
-8.568486486	-1.660731	10.15035	3.280911	-5.115996	4.525586	-1.5847453	2.054124
-9.721165996	-1.584745	10.12262	3.254243	-5.115996	4.52396	-1.60943791	2.054124
-9.721165996	-1.584745	10.10643	3.109061	-5.203007	4.324133	-1.66073121	2.014903
-9.641123288	-1.609438	10.03889	3.091042	-5.203007	4.229749	-1.66073121	1.974081
-6.858965115	-1.660731	10.02127	3.058707	-5.115996	4.206184	-2.25379493	1.960095
-6.907755279	-1.660731	9.985068	2.81241	-5.203007	4.079231	-2.30258509	1.931521
-6.907755279	-2.302585	9.900984	2.772589	-5.203007	4.07244	-2.30258509	1.832581
-6.907755279	-2.302585	9.890909	2.484907	-5.115996	4.067316	-2.30258509	1.824549
-6.858965115	-2.253795	9.888374	2.424803	-5.115996	3.867026	-2.25379493	1.808289
-6.959048573	-2.353878	9.883285	2.397895	-5.203007	3.780775	-2.35387839	1.629241
-6.907755279	-2.302585	9.841612	2.332144	-5.115996	3.558201	-2.30258509	1.609438
-6.959048573	-2.353878	9.820106	2.312535		3.363842	-2.35387839	1.064711
-6.907755279	-2.302585	9.786954	2.261763		3.303217	-2.30258509	0.916291
-6.959048573	-2.353878	9.525151	2.256541		3.173878	-2.35387839	0.788457
-6.959048573	-2.353878	9.510445	2.208274		2.791165	-2.35387839	0.587787
-6.959048573	-2.353878	9.472705	2.208274		2.370244	-2.35387839	0.262364
-6.907755279	-2.302585	9.4572	2.128232		0.832909	-2.30258509	0.262364
-6.907755279	-2.302585	9.384294	1.88707		0.405465	-2.30258509	-0.020203
-6.907755279	-2.302585	9.054855	1.856298			-2.30258509	-0.083382

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Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

PCP	phen	pyr	Se	Tl	Tol	TCE	V	Zn
0.0026	**0.273**	**0.808**	**1.1**	**10.1**	0.003	**0.002**	**54.4**	**59.2**
0.00105	**0.268**	**0.52**	**1**	**5.8**	0.003	0.003	**50.6**	**45.6**
0.001	**0.0981**	**0.32**	**0.95**	**5.8**	0.003	0.003	**50.3**	**38.8**
0.001	**0.0798**	**0.255**	**0.9**	**4.5**	0.003	0.003	**47.4**	**35.2**
0.001	**15.5**	**0.1375**	**0.79**	**3.4**	0.003	0.003	**46.9**	**25.5**
0.00105	0.185	**0.105**	**0.74**	**2.9**	0.003	0.003	**41.1**	**24.6**
0.00095	0.19	**0.104**	**0.7**	**2.9**	0.003	0.003	**40.3**	**24.2**
0.001	0.205	**18.5**	**0.7**	**1.9**	0.003	0.003	**39.8**	**23.7**
0.00095	0.205	0.185	**0.68**	**1.1**	**0.002025**	0.00275	**38.3**	**23.5**
0.001	0.2	0.19	**0.66**	**1**	**0.0018**	0.00295	**37.6**	**22.4**
0.00095	0.19	0.205	**0.64**	**0.97**	**0.0016**	0.003	**36.5**	**22.2**
0.00095	0.19	0.205	**0.63**	**0.88**	**0.0015**	0.0031	**35.5**	**20.9**
0.00095	0.1	0.2	**0.595**	**0.86**	**0.0015**	0.003	**34.6**	**18.4**
0.001	0.1	0.19	**0.58**	**0.65**	**0.0015**	0.00275	**34.4**	**17.6**
0.001	0.1	0.19	0.145	**0.63**	0.00295	0.0028	**33.6**	**15.5**
	0.105	0.1	0.19	**0.63**	0.003	0.0031	**32.15**	**15.4**
	0.1	0.1	0.19	**0.59**	0.0031	0.002675	**30.7**	**15.1**
	0.095	0.105	0.165	**0.56**	0.003	0.00265	**29.3**	**11.6**
	0.095	0.095	0.155	**0.51**	0.0031	0.0027	**28.4**	**10.8**
	0.095	0.095	0.155	0.3	0.00265	0.00295	**27.2**	**7.7**
	0.1	0.095	0.14	0.28	0.00295	0.0029	**20.1**	**7.2**
	0.1	0.1	0.3	0.28	0.0027	0.0027	**18.3**	**4.7**
	0.1	0.1	0.295	0.295	0.00305	0.00305	**15.5**	**4.1**

PCP	phen	pyr	Se	Tl	Tol	TCE	V	Zn
-5.952244	-1.298283	-0.213193	0.09531	2.312535	-5.809143	-6.214608	3.996364	4.080922
-6.858965	-1.316768	-0.653926	0	1.757858	-5.809143	-5.809143	3.923952	3.819908
-6.907755	-2.321768	-1.139434	-0.051293	1.757858	-5.809143	-5.809143	3.918005	3.65842
-6.907755	-2.528232	-1.366492	-0.105361	1.504077	-5.809143	-5.809143	3.858622	3.561046
-6.907755	2.74084	-1.984131	-0.235722	1.223775	-5.809143	-5.809143	3.848018	3.238678
-6.858965	-1.687399	-2.253795	-0.301105	1.064711	-5.809143	-5.809143	3.716008	3.202746
-6.959049	-1.660731	-2.263364	-0.356675	1.064711	-5.809143	-5.809143	3.696351	3.186353
-6.907755	-1.584745	2.917771	-0.356675	0.641854	-5.809143	-5.809143	3.683867	3.165475
-6.959049	-1.584745	-1.687399	-0.385662	0.09531	-6.202186	-5.896154	3.64545	3.157
-6.907755	-1.609438	-1.660731	-0.415515	0	-6.319969	-5.82595	3.627004	3.109061
-6.959049	-1.660731	-1.584745	-0.446287	-0.030459	-6.437752	-5.809143	3.597312	3.100092
-6.959049	-1.660731	-1.584745	-0.462035	-0.127833	-6.50229	-5.776353	3.569533	3.039749
-6.959049	-2.302585	-1.609438	-0.519194	-0.150823	-6.50229	-5.809143	3.543854	2.912351
-6.907755	-2.302585	-1.660731	-0.544727	-0.430783	-6.50229	-5.896154	3.538057	2.867899
-6.907755	-2.302585	-1.660731	-1.931022	-0.462035	-5.82595	-5.878136	3.514526	2.74084
	-2.253795	-2.302585	-1.660731	-0.462035	-5.809143	-5.776353	3.470412	2.734368
	-2.302585	-2.302585	-1.660731	-0.527633	-5.776353	-5.923806	3.424263	2.714695
	-2.353878	-2.253795	-1.80181	-0.579818	-5.809143	-5.933196	3.377588	2.451005
	-2.353878	-2.353878	-1.86433	-0.673345	-5.776353	-5.914504	3.346389	2.379546
	-2.353878	-2.353878	-1.86433	-1.203973	-5.933196	-5.82595	3.303217	2.04122
	-2.302585	-2.353878	-1.966113	-1.272966	-5.82595	-5.843045	3.00072	1.974081
	-2.302585	-2.302585	-1.203973	-1.272966	-5.914504	-5.914504	2.906901	1.547563
	-2.302585	-2.302585	-1.22078	-1.22078	-5.792614	-5.792614	2.74084	1.410987

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
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Raw Data Test Value (mg/kg)

1,1-Dichloroethane	2-methyl naphthalene	4,4'-DDD	4,4'-DDE	4,4'-DDT	Acenaphthene	Acetone	Aldrin	alphachlordane
0.002	0.105	**0.0021**	**0.0063**	**0.0475**	**6.1**	**0.061**	0.00095	0.00105
0.003	0.1	**0.001375**	**0.0063**	**0.0126**	0.185	**0.021**	0.000065	0.001
0.003	0.1	0.000175	**0.0038**	**0.0119**	0.19	**0.016**	0.00007	0.001
0.003	0.1	0.00018	**0.0038**	**0.009**	0.205	0.0055	0.000075	0.001
0.003	0.105	0.000195	**0.001**	**0.006**	0.205	0.006	0.00007	0.00105
0.003	0.095	0.00019	0.00012	**0.0058**	0.2	0.006	0.000075	0.00095
0.003	0.1	0.000195	0.000125	**0.0049**	0.19	0.006	0.00007	0.001
0.003	0.095	0.00017	0.000135	**0.0047**	0.19	0.006	0.00007	0.00095
0.00275	0.1	0.00018	0.00013	**0.0039**	0.105	**0.0893**	0.00105	0.001
0.00295	0.095	0.002	0.000135	**0.002**	0.1	**0.0355**	0.001	0.00095
0.003	0.095	0.002	0.000125	0.000115	0.1	**0.0351**	0.001	0.00095
0.0031	0.095	0.00195	0.000125	0.00012	0.1	**0.0347**	0.001	0.00095
0.003	0.1	0.0021	0.002	0.00012	0.105	**0.0347**	0.00105	0.001
0.00275	0.1	0.00195	0.002	0.000125	0.095	0.0055	**0.00095**	0.001
0.0028	0.1	0.002	0.0021	0.000125	0.1	0.036	0.001	0.001
0.0031	**1.2**	0.0019	0.00195	0.000125	0.095	0.006	0.00095	**0.017**
0.002675	0.185	0.00195	0.002	0.00012	0.1	0.006	0.001	0.000055
0.00265	0.19	0.001925	0.001925	0.00012	0.095	0.006	0.00095	0.000055
0.0027	0.205	0.0019	0.0019	0.002	0.095	0.006	0.00095	0.00006
0.00295	0.205	0.0019	0.0019	0.0021	0.095	0.006	0.00095	0.00006
0.0029	0.2	0.00195	0.00195	0.00195	0.1	0.006	0.001	0.00006
0.0027	0.19	0.002	0.002	0.00195	0.1		0.001	0.000055
0.00305	0.19	0.00195	0.00195	0.002	0.1		0.001	0.000055
0.003	0.19	0.00018	0.000125	0.00012	0.19		0.00007	0.000055
0.003	0.2	0.000185	0.00013	0.000125	0.2		0.00007	0.00006
0.003	0.205	0.000195	0.00013	0.000125	0.205		0.00007	0.00006
0.003	0.2	0.000195	0.000135	0.00013	0.2		0.000075	0.00006
0.003	0.195	0.000185	0.00013	0.000125	0.195		0.00007	0.00006
0.003	0.2	0.00019	0.00013	0.000125	0.2		0.00007	0.00006
0.003	0.195	0.00019	0.00013	0.000125	0.195		0.00007	0.00006
0.003	0.205	0.000195	0.000135	0.00013	0.205		0.000075	**0.00029**

TABLE A-9-2
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OPERABLE UNIT 1
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LN data

1,1-Dichloroethane	2-methyl naphthalene	4,4'-DDD	4,4'-DDE	4,4'-DDT	Acenaphthene	Acetone	Aldrin	alphachlordane
-6.214608098	-2.253794929	-6.165818	-5.067206	-3.047026	1.808288771	-2.796881	-6.959049	-6.858965115
-5.80914299	-2.302585093	-6.589302	-5.067206	-4.374058	-1.687399454	-3.863233	-9.641123	-6.907755279
-5.80914299	-2.302585093	-8.650725	-5.572754	-4.431217	-1.660731207	-4.135167	-9.567015	-6.907755279
-5.80914299	-2.302585093	-8.622554	-5.572754	-4.710531	-1.5847453	-5.203007	-9.498022	-6.907755279
-5.80914299	-2.253794929	-8.542511	-6.907755	-5.115996	-1.5847453	-5.115996	-9.567015	-6.858965115
-5.80914299	-2.353878387	-8.568486	-9.028019	-5.149897	-1.609437912	-5.115996	-9.498022	-6.959048573
-5.80914299	-2.302585093	-8.542511	-8.987197	-5.31852	-1.660731207	-5.115996	-9.567015	-6.907755279
-5.80914299	-2.353878387	-8.679712	-8.910236	-5.360193	-1.660731207	-5.115996	-9.567015	-6.959048573
-5.896154367	-2.302585093	-8.622554	-8.947976	-5.546779	-2.253794929	-2.415754	-6.858965	-6.907755279
-5.825950109	-2.353878387	-6.214608	-8.910236	-6.214608	-2.302585093	-3.338223	-6.907755	-6.959048573
-5.80914299	-2.353878387	-6.214608	-8.987197	-9.070578	-2.302585093	-3.349554	-6.907755	-6.959048573
-5.776353167	-2.353878387	-6.239926	-8.987197	-9.028019	-2.302585093	-3.361016	-6.907755	-6.959048573
-5.80914299	-2.302585093	-6.165818	-6.214608	-9.028019	-2.253794929	-3.361016	-6.858965	-6.907755279
-5.896154367	-2.302585093	-6.239926	-6.214608	-8.987197	-2.353878387	-5.203007	-6.959049	-6.907755279
-5.878135862	-2.302585093	-6.214608	-6.165818	-8.987197	-2.302585093	-3.324236	-6.907755	-6.907755279
-5.776353167	0.182321557	-6.265901	-6.239926	-8.987197	-2.353878387	-5.115996	-6.959049	-4.074541935
-5.923805899	-1.687399454	-6.239926	-6.214608	-9.028019	-2.302585093	-5.115996	-6.907755	-9.808177373
-5.933195639	-1.660731207	-6.252829	-6.252829	-9.028019	-2.353878387	-5.115996	-6.959049	-9.808177373
-5.914503506	-1.5847453	-6.265901	-6.265901	-6.214608	-2.353878387	-5.115996	-6.959049	-9.721165996
-5.825950109	-1.5847453	-6.265901	-6.265901	-6.165818	-2.353878387	-5.115996	-6.959049	-9.721165996
-5.843044542	-1.609437912	-6.239926	-6.239926	-6.239926	-2.302585093	-5.115996	-6.907755	-9.721165996
-5.914503506	-1.660731207	-6.214608	-6.214608	-6.239926	-2.302585093		-6.907755	-9.808177373
-5.792613688	-1.660731207	-6.239926	-6.239926	-6.214608	-2.302585093		-6.907755	-9.808177373
-5.80914299	-1.660731207	-8.622554	-8.987197	-9.028019	-1.660731207		-9.567015	-9.808177373
-5.80914299	-1.609437912	-8.595155	-8.947976	-8.987197	-1.609437912		-9.567015	-9.721165996
-5.80914299	-1.5847453	-8.542511	-8.947976	-8.987197	-1.5847453		-9.567015	-9.721165996
-5.80914299	-1.609437912	-8.542511	-8.910236	-8.947976	-1.609437912		-9.498022	-9.721165996
-5.80914299	-1.63475572	-8.595155	-8.947976	-8.987197	-1.63475572		-9.567015	-9.721165996
-5.80914299	-1.609437912	-8.568486	-8.947976	-8.987197	-1.609437912		-9.567015	-9.721165996
-5.80914299	-1.63475572	-8.568486	-8.947976	-8.987197	-1.63475572		-9.567015	-9.721165996
-5.80914299	-1.5847453	-8.542511	-8.910236	-8.947976	-1.5847453		-9.498022	-8.145629635

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OPERABLE UNIT 1
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Aluminum	Anthracene	Antimony	aroclor 1260	As	Ba	Bnz	BaA	BaP	BbF	BghiP	BkF
20200	**3.8**	**1.3**	**0.0411**	**132**	**114**	**0.002**	**0.37**	**0.364**	**0.927**	**0.233**	**0.271**
18900	0.185	0.3	**0.0261**	**39.5**	**110**	0.003	**0.232**	**0.299**	**0.546**	**3.8**	**0.246**
18800	0.19	0.28	**0.0218**	**39.2**	**80.1**	0.003	**0.139**	**0.16**	**0.307**	0.185	**0.176**
17400	0.205	0.295	**0.0178**	**24.3**	**73.6**	0.003	**0.0926**	**0.0987**	**0.147**	0.19	**7.8**
16900	0.205	0.29	**0.0137**	**8.75**	**68.5**	0.003	**0.0923**	**0.07645**	**0.131**	0.205	0.185
16500	0.2	0.25	0.01	**7.9**	**65**	0.003	**10.5**	**0.0696**	**0.1305**	0.205	0.19
16400	0.19	0.285	0.01	**7.8**	**64.9**	0.003	0.185	**0.0591**	**0.123**	0.2	0.205
15800	0.19	0.25	0.0105	**5**	**63.7**	0.003	0.19	**9.6**	**0.099**	0.19	0.205
15600	0.105	0.295	0.095	**4.8**	**50.5**	0.00275	0.205	0.185	**9.7**	0.19	0.2
15350	0.1	0.2775	0.01	**4.7**	**48.4**	0.00295	0.205	0.19	0.185	0.1	0.19
15200	0.1	0.28	0.0095	**4.6**	**44.5**	0.003	0.2	0.205	0.19	0.1	0.19
14800	0.1	0.28	0.0095	**4.5**	**37.7**	0.0031	0.19	0.205	0.205	0.1	0.1
13900	0.105	0.295	0.01	**4.4**	**37.2**	0.003	0.19	0.2	0.205	0.105	0.1
13900	0.095	0.29	0.01	**4.4**	**30.9**	0.00275	0.1	0.19	0.2	0.095	0.105
12100	0.1	0.285	0.01	**4**	**30.2**	0.0028	0.1	0.19	0.19	0.1	0.095
9345	0.095	0.055	0.0044	**3.2**	**29.6**	0.0031	0.105	0.1	0.19	0.095	0.1
9330	0.1		0.004575	**3.2**	**26.8**	0.002675	0.1	0.1	0.1	0.1	0.095
9230	0.095		0.00455	**2.95**	**26.7**	0.00265	0.095	0.105	0.1	0.095	0.095
9150	0.095		0.00485	**2.8**	**26.6**	0.0027	0.095	0.095	0.105	0.095	0.095
8410	0.095		0.0048	**2.6**	**22.2**	0.00295	0.095	0.095	0.095	0.095	0.095
8080	0.1		0.00485	**2.2**	**19.3**	0.0029	0.1	0.095	0.095	0.1	0.1
6150	0.1		0.0046	**1.2**	**18.5**	0.0027	0.1	0.1	0.1	0.1	0.1
5280	0.1		0.00455	**5**	**14**	0.00305	0.1	0.1	0.1	0.1	0.1
8480	0.19		0.00455	**2.1**	**31.9**	0.003	0.19	0.19	0.19	0.19	0.19
8050	0.2		0.0047	**2**	**30.3**	0.003	0.2	0.2	0.2	0.2	0.2
7510	0.205		0.0048	**1.8**	**22.7**	0.003	0.205	0.205	0.205	0.205	0.205
6920	0.2		0.00485	**1.6**	**18.2**	0.003	0.2	0.2	0.2	0.2	0.2
6560	0.195		0.0047	**1.3**	**17**	0.003	0.195	0.195	0.195	0.195	0.195
6210	0.2		0.00475		**16.9**	0.003	0.2	0.2	0.2	0.2	0.2
4760	0.195		0.00475		**14.5**	0.003	0.195	0.195	0.195	0.195	0.195
3670	0.205		0.00485		**13.7**	0.003	0.205	0.205	0.205	0.205	0.205

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OPERABLE UNIT 1
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Aluminum	Anthracene	Antimony	aroclor 1260	As	Ba	Bnz	BaA	BaP	BbF	BghiP	BkF
9.913438	1.335001067	0.262364	-3.191747157	4.882802	4.736198	-6.214608	-0.994252	-1.010601	-0.075802	-1.456717	-1.305636
9.846917	-1.68739945	-1.203973	-3.645819965	3.676301	4.70048	-5.809143	-1.461018	-1.207312	-0.605136	1.335001	-1.402424
9.841612	-1.66073121	-1.272966	-3.825845309	3.668677	4.383276	-5.809143	-1.973281	-1.832581	-1.180908	-1.687399	-1.737271
9.764225	-1.5847453	-1.22078	-4.028556822	3.190476	4.298645	-5.809143	-2.379466	-2.31567	-1.917323	-1.660731	2.054124
9.735069	-1.5847453	-1.237874	-4.290359446	2.169054	4.226834	-5.809143	-2.382711	-2.571118	-2.032558	-1.584745	-1.687399
9.711116	-1.60943791	-1.386294	-4.605170186	2.066863	4.174387	-5.809143	2.351375	-2.664991	-2.036382	-1.584745	-1.660731
9.705037	-1.66073121	-1.255266	-4.605170186	2.054124	4.172848	-5.809143	-1.687399	-2.828524	-2.095571	-1.609438	-1.584745
9.667765	-1.66073121	-1.386294	-4.556380022	1.609438	4.154185	-5.809143	-1.660731	2.261763	-2.312635	-1.660731	-1.584745
9.655026	-2.25379493	-1.22078	-2.353878387	1.568616	3.921973	-5.896154	-1.584745	-1.687399	2.272126	-1.660731	-1.609438
9.638871	-2.30258509	-1.281934	-4.605170186	1.547563	3.8795	-5.82595	-1.584745	-1.660731	-1.687399	-2.302585	-1.660731
9.629051	-2.30258509	-1.272966	-4.65646348	1.526056	3.795489	-5.809143	-1.609438	-1.584745	-1.660731	-2.302585	-1.660731
9.602382	-2.30258509	-1.272966	-4.65646348	1.504077	3.62966	-5.776353	-1.660731	-1.584745	-1.584745	-2.302585	-2.302585
9.539644	-2.25379493	-1.22078	-4.605170186	1.481605	3.616309	-5.809143	-1.660731	-1.609438	-1.584745	-2.253795	-2.302585
9.539644	-2.35387839	-1.237874	-4.605170186	1.481605	3.430756	-5.896154	-2.302585	-1.660731	-1.609438	-2.353878	-2.253795
9.400961	-2.30258509	-1.255266	-4.605170186	1.386294	3.407842	-5.878136	-2.302585	-1.660731	-1.660731	-2.302585	-2.353878
9.142597	-2.35387839	-2.900422	-5.426150738	1.163151	3.387774	-5.776353	-2.253795	-2.302585	-1.660731	-2.353878	-2.302585
9.14099	-2.30258509		-5.38714858	1.163151	3.288402	-5.923806	-2.302585	-2.302585	-2.302585	-2.302585	-2.353878
9.130214	-2.35387839		-5.392628046	1.081805	3.284664	-5.933196	-2.353878	-2.253795	-2.302585	-2.353878	-2.353878
9.121509	-2.35387839		-5.328776574	1.029619	3.280911	-5.914504	-2.353878	-2.353878	-2.253795	-2.353878	-2.353878
9.037177	-2.35387839		-5.339139361	0.955511	3.100092	-5.82595	-2.353878	-2.353878	-2.353878	-2.353878	-2.353878
8.997147	-2.30258509		-5.328776574	0.788457	2.960105	-5.843045	-2.302585	-2.353878	-2.353878	-2.302585	-2.302585
8.724207	-2.30258509		-5.381698975	0.182322	2.917771	-5.914504	-2.302585	-2.302585	-2.302585	-2.302585	-2.302585
8.571681	-2.30258509		-5.392628046	1.609438	2.639057	-5.792614	-2.302585	-2.302585	-2.302585	-2.302585	-2.302585
9.045466	-1.66073121		-5.392628046	0.741937	3.462606	-5.809143	-1.660731	-1.660731	-1.660731	-1.660731	-1.660731
8.993427	-1.60943791		-5.36019277	0.693147	3.411148	-5.809143	-1.609438	-1.609438	-1.609438	-1.609438	-1.609438
8.923991	-1.5847453		-5.339139361	0.587787	3.122365	-5.809143	-1.584745	-1.584745	-1.584745	-1.584745	-1.584745
8.842171	-1.60943791		-5.328776574	0.470004	2.901422	-5.809143	-1.609438	-1.609438	-1.609438	-1.609438	-1.609438
8.788746	-1.63475572		-5.36019277	0.262364	2.833213	-5.809143	-1.634756	-1.634756	-1.634756	-1.634756	-1.634756
8.733916	-1.60943791		-5.349610661		2.827314	-5.809143	-1.609438	-1.609438	-1.609438	-1.609438	-1.609438
8.468003	-1.63475572		-5.349610661		2.674149	-5.809143	-1.634756	-1.634756	-1.634756	-1.634756	-1.634756
8.207947	-1.5847453		-5.328776574		2.617396	-5.809143	-1.584745	-1.584745	-1.584745	-1.584745	-1.584745

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
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Defense Supply Center Richmond
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beta-BHC	BEHP	Carbazole	Chloroform	Cr	Chry	Co	Cu	DahA	dibenzofuran	Dieldrin	Endosulfan II
0.00035	0.105	**3.5**	**0.002**	**32.6**	**0.432**	**6.9**	**17.7**	**1.85**	**2.9**	**0.001135**	**0.000825**
0.00024	0.1	0.185	0.003	**26.8**	**0.272**	**4.6**	**14**	0.185	0.185	0.00017	0.000205
0.000255	0.1	0.19	0.003	**24.9**	**0.195**	**3.5**	**12.8**	0.19	0.19	0.000175	0.00021
0.000045	0.1	0.205	0.003	**24.8**	**0.131**	**3.5**	**12.1**	0.205	0.205	0.00019	0.000225
0.000045	0.105	0.205	0.003	**24.1**	**0.10785**	**3**	**11.3**	0.205	0.205	0.000185	0.00022
0.000045	0.095	0.2	0.003	**23.5**	**0.0879**	**3**	**10.8**	0.2	0.2	0.00019	0.000225
0.000045	0.1	0.19	0.003	**20.95**	**10.5**	**2.9**	**10.6**	0.19	0.19	0.00018	0.00021
0.000045	0.095	0.19	0.003	**20.6**	0.185	**2.8**	**10**	0.19	0.19	0.000175	0.00021
0.00105	0.1	0.105	0.00275	**19.7**	0.19	**2.75**	**10**	0.105	0.105	0.00205	0.00205
0.001	0.095	0.1	0.00295	**19.6**	0.205	**2.6**	**9.8**	0.1	0.1	0.002	0.002
0.001	0.095	0.1	0.003	**19.3**	0.205	**2.4**	**9.6**	0.1	0.1	0.002	0.002
0.001	0.095	0.1	0.0031	**19**	0.2	**2.3**	**9.4**	0.1	0.1	0.00195	0.00195
0.00105	0.1	0.105	0.003	**18.5**	0.19	**1.9**	**9.1**	0.105	0.105	0.0021	0.0021
0.00095	0.1	0.095	0.00275	**17.8**	0.19	**1.6**	**8.7**	0.095	0.095	0.00195	0.00195
0.001	0.1	0.1	0.0028	**17**	0.1	**1.5**	**8.5**	0.1	0.1	0.002	0.002
0.00095	**0.12**	0.095	0.0031	**16.7**	0.1	**1.1**	**8.5**	0.095	0.095	0.0019	0.0019
0.001	0.185	0.1	0.002675	**16.3**	0.105	**1.1**	**7.4**	0.1	0.1	0.00195	0.00195
0.00095	0.1925	0.095	0.00265	**15.9**	0.1	**1.08**	**7.15**	0.095	0.095	0.001925	0.001925
0.00095	0.19	0.095	0.0027	**15.6**	0.095	**0.89**	**6.7**	0.095	0.095	0.0019	0.0019
0.00095	0.205	0.095	0.00295	**13.7**	0.095	**0.86**	**4.3**	0.095	0.095	0.0019	0.0019
0.001	0.205	0.1	0.0029	**9.7**	0.095	**1.1**	**4.1**	0.1	0.1	0.00195	0.00195
0.001	0.2	0.1	0.0027	**9.2**	0.1	**0.92**	**3.3**	0.1	0.1	0.002	0.002
0.001	0.19	0.1	0.00305	**7.5**	0.1	**0.73**	**2.6**	0.1	0.1	0.00195	0.00195
0.00041	**1.5**	0.19	0.003	**15.3**	0.19		**7.7**	0.19	0.19	0.000175	**0.00063**
0.000045	**0.086**	0.2	0.003	**13**	0.2		**6.2**	0.2	0.2	0.00018	0.00021
0.000045	0.19	0.205	0.003	**10.7**	0.205		**4.9**	0.205	0.205	0.000185	0.0001
0.000045	0.2	0.2	0.003	**8.7**	0.2		**4.3**	0.2	0.2	0.00034	0.000225
0.000045	0.205	0.195	0.003	**8.4**	0.195		**3.2**	0.195	0.195	0.00018	0.000225
0.000075	0.2	0.2	0.003	**7.5**	0.2		**3.1**	0.2	0.2	0.000185	0.000215
0.000045	0.195	0.195	0.003	**7.5**	0.195		**2.3**	0.195	0.195	0.000185	0.00022
0.000045	0.205	0.205	0.003	**4.3**	0.205		**1.7**	0.205	0.205	0.00019	0.000225

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
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beta-BHC	BEHP	Carbazole	Chloroform	Cr	Chry	Co	Cu	DahA	dibenzofuran	Dieldrin	Endosulfan II
-7.957577	-2.253795	1.252763	-6.214608	3.484312	-0.83933	1.931521	2.873565	0.615186	1.06471074	-6.781123	-7.100127172
-8.334872	-2.302585	-1.687399	-5.809143	3.288402	-1.301953	1.526056	2.639057	-1.687399	-1.68739945	-8.679712	-8.492500579
-8.274247	-2.302585	-1.660731	-5.809143	3.214868	-1.634756	1.252763	2.549445	-1.660731	-1.66073121	-8.650725	-8.468403027
-10.00885	-2.302585	-1.584745	-5.809143	3.210844	-2.032558	1.252763	2.493205	-1.584745	-1.5847453	-8.568486	-8.399410156
-10.00885	-2.253795	-1.584745	-5.809143	3.182212	-2.227014	1.098612	2.424803	-1.584745	-1.5847453	-8.595155	-8.421883012
-10.00885	-2.353878	-1.609438	-5.809143	3.157	-2.431555	1.098612	2.379546	-1.609438	-1.60943791	-8.568486	-8.399410156
-10.00885	-2.302585	-1.660731	-5.809143	3.042139	2.351375	1.064711	2.360854	-1.660731	-1.66073121	-8.622554	-8.468403027
-10.00885	-2.353878	-1.660731	-5.809143	3.025291	-1.687399	1.029619	2.302585	-1.660731	-1.66073121	-8.650725	-8.468403027
-6.858965	-2.302585	-2.253795	-5.896154	2.980619	-1.660731	1.011601	2.302585	-2.253795	-2.25379493	-6.189915	-6.189915486
-6.907755	-2.353878	-2.302585	-5.82595	2.97553	-1.584745	0.955511	2.282382	-2.302585	-2.30258509	-6.214608	-6.214608098
-6.907755	-2.353878	-2.302585	-5.809143	2.960105	-1.584745	0.875469	2.261763	-2.302585	-2.30258509	-6.214608	-6.214608098
-6.907755	-2.353878	-2.302585	-5.776353	2.944439	-1.609438	0.832909	2.24071	-2.302585	-2.30258509	-6.239926	-6.239925906
-6.858965	-2.302585	-2.253795	-5.809143	2.917771	-1.660731	0.641854	2.208274	-2.253795	-2.25379493	-6.165818	-6.165817934
-6.959049	-2.302585	-2.353878	-5.896154	2.879198	-1.660731	0.470004	2.163323	-2.353878	-2.35387839	-6.239926	-6.239925906
-6.907755	-2.302585	-2.302585	-5.878136	2.833213	-2.302585	0.405465	2.140066	-2.302585	-2.30258509	-6.214608	-6.214608098
-6.959049	-2.120264	-2.353878	-5.776353	2.815409	-2.302585	0.09531	2.140066	-2.353878	-2.35387839	-6.265901	-6.265901393
-6.907755	-1.687399	-2.302585	-5.923806	2.791165	-2.253795	0.09531	2.00148	-2.302585	-2.30258509	-6.239926	-6.239925906
-6.959049	-1.647659	-2.353878	-5.933196	2.766319	-2.302585	0.076961	1.967112	-2.353878	-2.35387839	-6.252829	-6.252829311
-6.959049	-1.660731	-2.353878	-5.914504	2.747271	-2.353878	-0.116534	1.902108	-2.353878	-2.35387839	-6.265901	-6.265901393
-6.959049	-1.584745	-2.353878	-5.82595	2.617396	-2.353878	-0.150823	1.458615	-2.353878	-2.35387839	-6.265901	-6.265901393
-6.907755	-1.584745	-2.302585	-5.843045	2.272126	-2.353878	0.09531	1.410987	-2.302585	-2.30258509	-6.239926	-6.239925906
-6.907755	-1.609438	-2.302585	-5.914504	2.219203	-2.302585	-0.083382	1.193922	-2.302585	-2.30258509	-6.214608	-6.214608098
-6.907755	-1.660731	-2.302585	-5.792614	2.014903	-2.302585	-0.314711	0.955511	-2.302585	-2.30258509	-6.239926	-6.239925906
-7.799353	0.405465	-1.660731	-5.809143	2.727853	-1.660731		2.04122	-1.660731	-1.66073121	-8.650725	-7.369790739
-10.00885	-2.453408	-1.609438	-5.809143	2.564949	-1.609438		1.824549	-1.609438	-1.60943791	-8.622554	-8.468403027
-10.00885	-1.660731	-1.584745	-5.809143	2.370244	-1.584745		1.589235	-1.584745	-1.5847453	-8.595155	-9.210340372
-10.00885	-1.609438	-1.609438	-5.809143	2.163323	-1.609438		1.458615	-1.609438	-1.60943791	-7.986565	-8.399410156
-10.00885	-1.584745	-1.634756	-5.809143	2.128232	-1.634756		1.163151	-1.634756	-1.63475572	-8.622554	-8.399410156
-9.498022	-1.609438	-1.609438	-5.809143	2.014903	-1.609438		1.131402	-1.609438	-1.60943791	-8.595155	-8.44487253
-10.00885	-1.634756	-1.634756	-5.809143	2.014903	-1.634756		0.832909	-1.634756	-1.63475572	-8.595155	-8.421883012
-10.00885	-1.584745	-1.584745	-5.809143	1.458615	-1.584745		0.530628	-1.584745	-1.5847453	-8.568486	-8.399410156

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OPERABLE UNIT 1
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Endrin	Endrin ketone	Ethylbenzene	fluoranthene	fluorene	gamma-BHC	Heptachlor	Heptachlor epoxide	IcdP	Fe	Pb
0.0005	**0.0157**	**0.002**	**0.579**	**4.8**	**0.0018**	**0.001**	**0.034**	**0.263**	**43500**	**57.5**
0.000165	0.00065	0.003	**0.418**	0.185	**0.001425**	**0.00085**	**0.0013**	**0.102**	**27900**	**51.7**
0.00096	0.0007	0.003	**0.365**	0.19	**0.0012**	**0.00079**	**0.00072**	**3.85**	**26800**	**31.3**
0.00017	0.00075	0.003	**0.306**	0.205	**0.0012**	**0.00075**	**0.00046**	0.185	**26300**	**28.6**
0.00018	0.0007	0.003	**0.155**	0.205	0.001	**0.00065**	**0.00019**	0.19	**25600**	**26.6**
0.00018	0.00075	0.003	**0.128**	0.2	0.001	**0.00039**	0.00006	0.205	**24900**	**25.9**
0.00017	0.0007	0.003	**0.102**	0.19	0.001	**0.00032**	0.00006	0.205	**24500**	**22.4**
0.00017	0.0007	0.003	**19.5**	0.19	0.00095	0.000355	0.000065	0.2	**22900**	**22**
0.00205	0.00205	0.00275	0.185	0.105	0.001	0.00105	0.00105	0.19	**22500**	**21.3**
0.002	0.002	0.00295	0.19	0.1	0.001	0.001	0.001	0.19	**21700**	**16.65**
0.002	0.002	0.003	0.205	0.1	0.00095	0.001	0.001	0.1	**19950**	**16**
0.00195	0.00195	0.0031	0.205	0.1	0.00095	0.001	0.001	0.1	**19750**	**12**
0.0021	0.0021	0.003	0.2	0.105	0.001	0.00105	0.00105	0.105	**19700**	**11.3**
0.00195	0.00195	0.00275	0.19	0.095	0.001	0.00095	0.00095	0.095	**19600**	**11**
0.002	0.002	0.0028	0.19	0.1	0.001	0.001	0.001	0.1	**18800**	**10.3**
0.0019	0.0019	0.0031	0.1	0.095		0.00095	0.00095	0.095	**18400**	**10.1**
0.00195	0.00195	0.002675	0.1	0.1		0.001	0.001	0.1	**17800**	**9.6**
0.001925	0.0019	0.00265	0.105	0.095		0.00095	0.00095	0.095	**13700**	**9.55**
0.0019	0.0019	0.0027	0.095	0.095		0.00095	0.00095	0.095	**13500**	**9.1**
0.0019	0.0019	0.00295	0.095	0.095		0.00095	0.00095	0.095	**13000**	**9.1**
0.00195	0.00195	0.0029	0.095	0.1		0.001	0.001	0.1	**12800**	**8.4**
0.002	0.002	0.0027	0.1	0.1		0.001	0.001	0.1	**11900**	**6.6**
0.00195	0.00195	0.00305	0.1	0.1		0.001	0.001	0.1	**8560**	**6.4**
0.00017	0.011	0.003	0.19	0.19		**0.00073**	**0.00062**	0.19	**23300**	**8.9**
0.000175	0.0007	0.003	0.2	0.2		**0.00062**	0.00006	0.2	**14900**	**8.5**
0.00018	0.0007	0.003	0.205	0.205		**0.0006**	0.000065	0.205	**13000**	**8.3**
0.00018	0.00075	0.003	0.2	0.2		**0.00044**	0.000065	0.2	**10800**	**7.2**
0.000175	0.0007	0.003	0.195	0.195		**0.0002**	0.000065	0.195	**9920**	**7**
0.00018	0.0007	0.003	0.2	0.2		**0.00018**	0.000065	0.2	**8730**	**6.1**
0.00018	0.0007	0.003	0.195	0.195		0.000065	0.000065	0.195	**6580**	**5.8**
0.00018	0.00075	0.003	0.205	0.205		0.00042	0.000065	0.205	**3090**	**4.4**

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Endrin	Endrin ketone	Ethylbenzene	fluoranthene	fluorene	gamma-BHC	Heptachlor	Heptachlor epoxide	IcdP	Fe	Pb
-7.600902	-4.154094567	-6.2146081	-0.5464528	1.568616	-6.31996861	-6.9077553	-3.381394754	-1.335601	10.68052	4.051785
-8.709565	-7.338538195	-5.80914299	-0.87227385	-1.687399	-6.55358347	-7.0702742	-6.645391015	-2.282782	10.23638	3.945458
-6.948577	-7.264430223	-5.80914299	-1.00785793	-1.660731	-6.72543372	-7.1434776	-7.236259346	1.348073	10.19616	3.443618
-8.679712	-7.195437351	-5.80914299	-1.18417018	-1.584745	-6.72543372	-7.1954374	-7.684284068	-1.687399	10.17732	3.353407
-8.622554	-7.264430223	-5.80914299	-1.86433016	-1.584745	-6.90775528	-7.3385382	-8.568486486	-1.660731	10.15035	3.280911
-8.622554	-7.195437351	-5.80914299	-2.05572502	-1.609438	-6.90775528	-7.8493638	-9.721165996	-1.584745	10.12262	3.254243
-8.679712	-7.264430223	-5.80914299	-2.28278247	-1.660731	-6.90775528	-8.0471896	-9.721165996	-1.584745	10.10643	3.109061
-8.679712	-7.264430223	-5.80914299	2.97041447	-1.660731	-6.95904857	-7.9433928	-9.641123288	-1.609438	10.03889	3.091042
-6.189915	-6.189915486	-5.89615437	-1.68739945	-2.253795	-6.90775528	-6.8589651	-6.858965115	-1.660731	10.02127	3.058707
-6.214608	-6.214608098	-5.82595011	-1.66073121	-2.302585	-6.90775528	-6.9077553	-6.907755279	-1.660731	9.985068	2.81241
-6.214608	-6.214608098	-5.80914299	-1.5847453	-2.302585	-6.95904857	-6.9077553	-6.907755279	-2.302585	9.900984	2.772589
-6.239926	-6.239925906	-5.77635317	-1.5847453	-2.302585	-6.95904857	-6.9077553	-6.907755279	-2.302585	9.890909	2.484907
-6.165818	-6.165817934	-5.80914299	-1.60943791	-2.253795	-6.90775528	-6.8589651	-6.858965115	-2.253795	9.888374	2.424803
-6.239926	-6.239925906	-5.89615437	-1.66073121	-2.353878	-6.90775528	-6.9590486	-6.959048573	-2.353878	9.883285	2.397895
-6.214608	-6.214608098	-5.87813586	-1.66073121	-2.302585	-6.90775528	-6.9077553	-6.907755279	-2.302585	9.841612	2.332144
-6.265901	-6.265901393	-5.77635317	-2.30258509	-2.353878		-6.9590486	-6.959048573	-2.353878	9.820106	2.312535
-6.239926	-6.239925906	-5.9238059	-2.30258509	-2.302585		-6.9077553	-6.907755279	-2.302585	9.786954	2.261763
-6.252829	-6.265901393	-5.93319564	-2.25379493	-2.353878		-6.9590486	-6.959048573	-2.353878	9.525151	2.256541
-6.265901	-6.265901393	-5.91450351	-2.35387839	-2.353878		-6.9590486	-6.959048573	-2.353878	9.510445	2.208274
-6.265901	-6.265901393	-5.82595011	-2.35387839	-2.353878		-6.9590486	-6.959048573	-2.353878	9.472705	2.208274
-6.239926	-6.239925906	-5.84304454	-2.35387839	-2.302585		-6.9077553	-6.907755279	-2.302585	9.4572	2.128232
-6.214608	-6.214608098	-5.91450351	-2.30258509	-2.302585		-6.9077553	-6.907755279	-2.302585	9.384294	1.88707
-6.239926	-6.239925906	-5.79261369	-2.30258509	-2.302585		-6.9077553	-6.907755279	-2.302585	9.054855	1.856298
-8.679712	-4.509860006	-5.80914299	-1.66073121	-1.660731		-7.222466	-7.38579108	-1.660731	10.05621	2.186051
-8.650725	-7.264430223	-5.80914299	-1.60943791	-1.609438		-7.3857911	-9.721165996	-1.609438	9.609116	2.140066
-8.622554	-7.264430223	-5.80914299	-1.5847453	-1.584745		-7.4185809	-9.641123288	-1.584745	9.472705	2.116256
-8.622554	-7.195437351	-5.80914299	-1.60943791	-1.609438		-7.7287358	-9.641123288	-1.609438	9.287301	1.974081
-8.650725	-7.264430223	-5.80914299	-1.63475572	-1.634756		-8.5171932	-9.641123288	-1.634756	9.202308	1.94591
-8.622554	-7.264430223	-5.80914299	-1.60943791	-1.609438		-8.6225537	-9.641123288	-1.609438	9.074521	1.808289
-8.622554	-7.264430223	-5.80914299	-1.63475572	-1.634756		-9.6411233	-9.641123288	-1.634756	8.79179	1.757858
-8.622554	-7.195437351	-5.80914299	-1.5847453	-1.584745		-7.7752558	-9.641123288	-1.584745	8.035926	1.481605

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

MEK	Mn	naphthalene	Ni	PCP	phen	pyr	Se	Tl	Tol	TCE	V	Zn
0.0056	**275**	**3.5**	**10.3**	**0.0026**	**0.273**	**0.808**	**1.1**	**10.1**	0.003	**0.002**	**54.4**	**59.2**
0.0055	**117**	0.185	**10.2**	0.00105	**0.268**	**0.52**	**1**	**5.8**	0.003	0.003	**50.6**	**45.6**
0.006	**105**	0.19	**8.9**	0.001	**0.0981**	**0.32**	**0.95**	**5.8**	0.003	0.003	**50.3**	**38.8**
0.006	**94.9**	0.205	**7.9**	0.001	**0.0798**	**0.255**	**0.9**	**4.5**	0.003	0.003	**47.4**	**35.2**
0.006	**92.35**	0.205	**7.8**	0.001	**15.5**	**0.1375**	**0.79**	**3.4**	0.003	0.003	**46.9**	**25.5**
0.006	**92.2**	0.2	**7.8**	0.00105	0.185	**0.105**	**0.74**	**2.9**	0.003	0.003	**41.1**	**24.6**
0.0055	**75.5**	0.19	**7.5**	0.00095	0.19	**0.104**	**0.7**	**2.9**	0.003	0.003	**40.3**	**24.2**
0.0055	**68.7**	0.19	**7.2**	0.001	0.205	**18.5**	**0.7**	**1.9**	0.003	0.003	**39.8**	**23.7**
0.006	**67.1**	0.105	**7.1**	0.00095	0.205	0.185	**0.68**	**1.1**	**0.002025**	0.00275	**38.3**	**23.5**
0.0055	**59.1**	0.1	**6.9**	0.001	0.2	0.19	**0.66**	**1**	**0.0018**	0.00295	**37.6**	**22.4**
0.0055	**58.7**	0.1	**6.25**	0.00095	0.19	0.205	**0.64**	**0.97**	**0.0016**	0.003	**36.5**	**22.2**
0.006	**58.4**	0.1	**6.2**	0.00095	0.19	0.205	**0.63**	**0.88**	**0.0015**	0.0031	**35.5**	**20.9**
0.006	**47.8**	0.105	**6.1**	0.00095	0.1	0.2	**0.595**	**0.86**	**0.0015**	0.003	**34.6**	**18.4**
0.0055	**43.85**	0.095	**5.1**	0.001	0.1	0.19	**0.58**	**0.65**	**0.0015**	0.00275	**34.4**	**17.6**
0.006	**35.1**	0.1	**5**	0.001	0.1	0.19	0.145	**0.63**	0.00295	0.0028	**33.6**	**15.5**
	28.9	0.095	**2.9**		0.105	0.1	0.19	**0.63**	0.003	0.0031	**32.15**	**15.4**
	27.2	0.1	**2.5**		0.1	0.1	0.19	**0.59**	0.0031	0.002675	**30.7**	**15.1**
	23.9	0.095	**2.2**		0.095	0.105	0.165	**0.56**	0.003	0.00265	**29.3**	**11.6**
	16.3	0.095	**1.8**		0.095	0.095	0.155	**0.51**	0.0031	0.0027	**28.4**	**10.8**
	10.7	0.095	**1.3**		0.095	0.095	0.155	0.3	0.00265	0.00295	**27.2**	**7.7**
	2.3	0.1	**1.3**		0.1	0.095	0.14	0.28	0.00295	0.0029	**20.1**	**7.2**
	1.5	0.1	**0.98**		0.1	0.1	0.3	0.28	0.0027	0.0027	**18.3**	**4.7**
	42	0.1	**0.92**		0.1	0.1	0.295	0.295	0.00305	0.00305	**15.5**	**4.1**
	37.6	0.19	**2.5**		0.19	0.19	0.17	**5.5**	0.003	0.003	**24.8**	**10.5**
	9.2	0.2	**2.2**		0.2	0.2	0.19	**3.1**	0.003	0.003	**24.5**	**9.6**
	9.1	0.205	**2**		0.205	0.205	0.155	**3.1**	0.003	0.003	**24.4**	**9.4**
	3.4	0.2	**1.8**		0.2	0.2	0.175	**2.6**	0.003	0.003	**23.4**	**9.2**
	2.9	0.195	**1.5**		0.195	0.195	0.19	**2.3**	0.003	0.003	**22.9**	**7.6**
	1.3	0.2	**0.8**		0.2	0.2	0.145	**1.8**	0.003	0.003	**22.6**	**5.3**
		0.195	**0.58**		0.195	0.195	0.16	**1.5**	0.003	0.003	**16.7**	**4**
		0.205	**0.57**		0.205	0.205	0.145		0.003	0.003	**16.3**	**2.9**

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

TABLE A-9-2
ProUCL INPUT FILES FOR SITE SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

MEK	Mn	naphthalene	Ni	PCP	phen	pyr	Se	Tl	Tol	TCE	V	Zn
-5.184989	5.616771	1.25276297	2.332144	-5.952244	-1.298283	-0.213193	0.09531	2.312535	-5.809143	-6.214608	3.996364	4.080922
-5.203007	4.762174	-1.68739945	2.322388	-6.858965	-1.316768	-0.653926	0	1.757858	-5.809143	-5.809143	3.923952	3.819908
-5.115996	4.65396	-1.66073121	2.186051	-6.907755	-2.321768	-1.139434	-0.051293	1.757858	-5.809143	-5.809143	3.918005	3.65842
-5.115996	4.552824	-1.5847453	2.066863	-6.907755	-2.528232	-1.366492	-0.105361	1.504077	-5.809143	-5.809143	3.858622	3.561046
-5.115996	4.525586	-1.5847453	2.054124	-6.907755	2.74084	-1.984131	-0.235722	1.223775	-5.809143	-5.809143	3.848018	3.238678
-5.115996	4.52396	-1.60943791	2.054124	-6.858965	-1.687399	-2.253795	-0.301105	1.064711	-5.809143	-5.809143	3.716008	3.202746
-5.203007	4.324133	-1.66073121	2.014903	-6.959049	-1.660731	-2.263364	-0.356675	1.064711	-5.809143	-5.809143	3.696351	3.186353
-5.203007	4.229749	-1.66073121	1.974081	-6.907755	-1.584745	2.917771	-0.356675	0.641854	-5.809143	-5.809143	3.683867	3.165475
-5.115996	4.206184	-2.25379493	1.960095	-6.959049	-1.584745	-1.687399	-0.385662	0.09531	-6.202186	-5.896154	3.64545	3.157
-5.203007	4.079231	-2.30258509	1.931521	-6.907755	-1.609438	-1.660731	-0.415515	0	-6.319969	-5.82595	3.627004	3.109061
-5.203007	4.07244	-2.30258509	1.832581	-6.959049	-1.660731	-1.584745	-0.446287	-0.030459	-6.437752	-5.809143	3.597312	3.100092
-5.115996	4.067316	-2.30258509	1.824549	-6.959049	-1.660731	-1.584745	-0.462035	-0.127833	-6.50229	-5.776353	3.569533	3.039749
-5.115996	3.867026	-2.25379493	1.808289	-6.959049	-2.302585	-1.609438	-0.519194	-0.150823	-6.50229	-5.809143	3.543854	2.912351
-5.203007	3.780775	-2.35387839	1.629241	-6.907755	-2.302585	-1.660731	-0.544727	-0.430783	-6.50229	-5.896154	3.538057	2.867899
-5.115996	3.558201	-2.30258509	1.609438	-6.907755	-2.302585	-1.660731	-1.931022	-0.462035	-5.82595	-5.878136	3.514526	2.74084
	3.363842	-2.35387839	1.064711		-2.253795	-2.302585	-1.660731	-0.462035	-5.809143	-5.776353	3.470412	2.734368
	3.303217	-2.30258509	0.916291		-2.302585	-2.302585	-1.660731	-0.527633	-5.776353	-5.923806	3.424263	2.714695
	3.173878	-2.35387839	0.788457		-2.353878	-2.253795	-1.80181	-0.579818	-5.809143	-5.933196	3.377588	2.451005
	2.791165	-2.35387839	0.587787		-2.353878	-2.353878	-1.86433	-0.673345	-5.776353	-5.914504	3.346389	2.379546
	2.370244	-2.35387839	0.262364		-2.353878	-2.353878	-1.86433	-1.203973	-5.933196	-5.82595	3.303217	2.04122
	0.832909	-2.30258509	0.262364		-2.302585	-2.353878	-1.966113	-1.272966	-5.82595	-5.843045	3.00072	1.974081
	0.405465	-2.30258509	-0.020203		-2.302585	-2.302585	-1.203973	-1.272966	-5.914504	-5.914504	2.906901	1.547563
	3.73767	-2.30258509	-0.083382		-2.302585	-2.302585	-1.22078	-1.22078	-5.792614	-5.792614	2.74084	1.410987
	3.627004	-1.66073121	0.916291		-1.660731	-1.660731	-1.771957	1.704748	-5.809143	-5.809143	3.210844	2.351375
	2.219203	-1.60943791	0.788457		-1.609438	-1.609438	-1.660731	1.131402	-5.809143	-5.809143	3.198673	2.261763
	2.208274	-1.5847453	0.693147		-1.584745	-1.584745	-1.86433	1.131402	-5.809143	-5.809143	3.194583	2.24071
	1.223775	-1.60943791	0.587787		-1.609438	-1.609438	-1.742969	0.955511	-5.809143	-5.809143	3.152736	2.219203
	1.064711	-1.63475572	0.405465		-1.634756	-1.634756	-1.660731	0.832909	-5.809143	-5.809143	3.131137	2.028148
	0.262364	-1.60943791	-0.223144		-1.609438	-1.609438	-1.931022	0.587787	-5.809143	-5.809143	3.11795	1.667707
		-1.63475572	-0.544727		-1.634756	-1.634756	-1.832581	0.405465	-5.809143	-5.809143	2.815409	1.386294
		-1.5847453	-0.562119		-1.584745	-1.584745	-1.931022		-5.809143	-5.809143	2.791165	1.064711

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Background Value (mg/kg)

Raw Data

2-methyl naphthalene	Acenaphthene	Acenaphthylene	Aldrin	alpha-BHC	Al	Anthracene
0.018999999	**0.540000021**	**0.079999998**	0.000945	**0.00481**	**5490**	**0.19**
0.100000001	**0.013**	**0.008**	0.001935	0.000945	**11300**	**1.29999995**
0.027000001	**0.043000001**	0.0075	0.002085	0.001935	**13400**	**0.18000001**
0.044	**0.230000004**	0.0075	0.00187	0.002085	**4430**	**0.047**
0.035	**0.027000001**	0.041499998	0.00211	0.00187	**14200**	**0.11**
0.0087	**0.064999998**	0.037500001	0.001875	0.00211	**7490**	**0.11**
0.048	**0.057**	0.041999999	0.00189	0.00189	**5710**	**0.49000001**
0.041499998	**0.100000001**	0.037999999	0.00181	0.00181	**6550**	**0.25999999**
0.041999999	**0.0065**	0.0385	0.00208	0.00208	**9610**	**0.066**
0.037999999	0.0075	0.0085	0.00185	0.00185	**8630**	**0.068**
0.007	0.0075	0.079999998	0.002035	0.002035	**23000**	**0.014**
0.0385	0.041499998	0.079999998	0.001915	0.001915	**12800**	0.0075
0.079999998	0.037500001	0.0075	0.001935	0.001935	**12300**	0.0075
0.079999998	0.037999999	0.0075	0.00095	0.00095	**11400**	0.0375
0.185000002	0.185000002	0.185000002	0.005	0.005	**2810**	0.185
0.174999997	0.174999997	0.174999997	0.005	0.005	**8390**	0.175
0.170000002	0.170000002	0.170000002			**3675**	0.17

LN Data

2-methyl naphthalene	Acenaphthene	Acenaphthylene	Aldrin	alpha-BHC	Al	Anthracene
-3.963316332	-0.6161861	-2.525728667	-6.964326	-5.33705823	8.610684	-1.66073122
-3.611918387	-3.146555129	-4.892852281	-6.172986	-6.24764798	9.50301	-1.71479839
-3.12356565	-1.469675952	-4.892852281	-6.281817	-6.1729864	8.396155	-3.05760771
-3.352407213	-3.611918387	-3.18206189	-6.161067	-6.28181683	9.560997	-2.20727492
-4.744432239	-2.733368046	-3.283414306	-6.279147	-6.16106733	8.921324	-2.20727492
-3.036554259	-2.864704011	-3.170085674	-6.271178	-6.27117847	8.649974	-0.71334987
-3.18206189	-2.302585078	-3.270169151	-6.314428	-6.31442841	8.78722	-1.34707368
-3.170085674	-5.035953081	-3.257097043	-6.175387	-6.17538738	9.17056	-2.71810054
-3.270169151	-4.892852281	-4.767689061	-6.29257	-6.29256964	9.063	-2.68824752
-4.961845099	-4.892852281	-2.525728667	-6.19726	-6.19725951	10.04325	-4.26869792
-3.257097043	-3.18206189	-2.525728667	-6.258038	-6.25803764	9.4572	-4.89285228
-2.525728667	-3.283414306	-4.892852281	-6.247648	-6.24764798	9.417355	-4.89285228
-2.525728667	-3.270169151	-4.892852281	-6.959049	-6.95904856	9.341369	-3.28341431
-1.687399441	-1.687399441	-1.687399441	-5.298317	-5.29831739	7.94094	-1.68739944
-1.742969322	-1.742969322	-1.742969322	-5.298317	-5.29831739	9.034796	-1.74296932
-1.771956831	-1.771956831	-1.771956831	#NUM!	#NUM!	8.209308	-1.77195683

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Antimony	Arsenic	Barium	BaA	BaP	BbF	BghiP	BkF	Be
2.41	5.76	20.8	0.19	0.17	0.2	0.11	0.19	0.16
2.84	1.59	26.1	0.53	3.9	4.1	1.2	4.4	0.265
3.125	5.97	19.3	0.37	0.5	0.59	0.22	0.5	0.111
2.81	2.11	66.5	0.26	0.29	0.52	0.16	0.38	0.205
5.05	1.46	41.2	0.31	0.25	0.26	0.098	0.31	0.04
3.51	0.896	38	0.45	0.27	0.43	0.18	0.26	0.337
2.84	10.4	34.4	0.5	0.42	0.45	0.23	0.56	0.16
2.715	10.5	14.6	1.9	0.39	0.44	0.23	0.37	0.343
2.875	1.35	36.4	1.3	1.4	1.9	0.56	0.91	0.222
2.94	2.13	69.9	0.18	0.9	1.3	0.34	0.66	0.152
6.1	1.92	69.8	0.087	0.13	0.14	0.084	0.11	0.299
2.78	1.7	41	0.16	0.068	0.082	0.047	0.059	0.347
2.78	8.5	34.8	0.0935	0.12	0.21	0.092	0.0075	0.439
2.78	2.6	24.8	0.0075	0.123	0.145	0.1195	0.0075	0.283
1.15	0.461	41	0.0075	0.0075	0.0075	0.0075	0.185	0.278
1.125	0.461	30	0.185	0.0075	0.0075	0.0075	0.175	0.15
	0.845			0.185	0.185	0.185	0.17	0.038
	0.278							

Antimony	Arsenic	Barium	BaA	BaP	BbF	BghiP	BkF	Be
0.879627	1.750938	3.034953	-1.660731	-1.771957	-1.609438	-2.207275	-1.660731	-1.832581
1.139434	1.786747	2.960105	-0.994252	-0.693147	-0.527633	-1.514128	-0.693147	-2.198225
1.033184	0.746688	4.197202	-1.347074	-1.237874	-0.653927	-1.832581	-0.967584	-1.584745
1.619388	0.378436	3.718438	-1.171183	-1.386294	-1.347074	-2.322788	-1.171183	-3.218876
1.255616	-0.109815	3.637586	-0.798508	-1.309333	-0.84397	-1.714798	-1.347074	-1.087672
1.043804	2.341806	3.538057	-0.693147	-0.867501	-0.798508	-1.469676	-0.579818	-1.832581
0.998792	2.351375	2.681022	0.641854	-0.941609	-0.820981	-1.469676	-0.994252	-1.070025
1.056053	0.300105	3.594569	0.262364	0.336472	0.641854	-0.579818	-0.094311	-1.505078
1.07841	0.756122	4.247066	-1.714798	-0.105361	0.262364	-1.07881	-0.415515	-1.883875
1.808289	0.652325	4.245634	-2.441847	-2.040221	-1.966113	-2.476938	-2.207275	-1.207312
1.022451	0.530628	3.713572	-1.832581	-2.688248	-2.501036	-3.057608	-2.830218	-1.05843
1.022451	2.140066	3.549617	-2.369794	-2.120264	-1.560648	-2.385967	-4.892852	-0.823256
1.022451	0.955511	3.210844	-4.892852	-2.095571	-1.931022	-2.124439	-4.892852	-1.262308
0.139762	-0.774357	3.713572	-4.892852	-4.892852	-4.892852	-4.892852	-1.687399	-1.280134
0.117783	-0.774357	3.401197	-1.687399	-4.892852	-4.892852	-4.892852	-1.742969	-1.89712
#NUM!	-0.168419	#NUM!	#NUM!	-1.687399	-1.687399	-1.687399	-1.771957	-3.270169
	-1.280134							

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Cd	Ca	Cr	Chry	Co	Cu	Delta-BHC	DahA	Dieldrin
0.17	**1500**	**5.32**	**0.19**	**1.37**	**2.43**	0.000945	**0.2**	0.000945
0.112	**1000**	**14**	**4**	**1.62**	**4.74**	0.001935	**1.4**	0.001935
0.208	**288**	**24**	**0.59**	**2.24**	**12.3**	0.002085	**0.15**	0.002085
0.06	**1260**	**9.16**	**0.46**	**1.22**	**6.92**	0.00187	**0.13**	0.00187
0.1135	**406**	**19.1**	**0.29**	**2.4**	**17.3**	0.00211	**0.099**	0.00211
0.253	**1170**	**13.6**	**0.29**	**1.68**	**11.1**	0.001875	**0.097**	0.001875
0.1135	**315**	**8.71**	**0.48**	**1.8**	**6.1**	0.00189	**0.15**	0.00189
0.1085	**1090**	**9.73**	**0.48**	**1.76**	**2.63**	0.00181	**0.13**	0.00181
0.115	**1000**	**14.2**	**1.4**	**1.28**	**12.8**	0.00208	**0.38**	0.00208
0.1175	**1120**	**14.3**	**0.91**	**1.4**	**33.1**	0.00185	**0.23**	0.00185
0.244	**934**	**35.6**	**0.15**	**2.79**	**22.9**	0.002035	**0.051**	0.002035
0.111	**1420**	**21.9**	**0.083**	**1.065**	**14.9**	0.001915	**0.024**	0.001915
0.111	**1100**	**14.6**	**0.16**	**0.429**	**6.39**	0.001935	0.0075	0.001935
0.0555	**249**	**8.43**	**0.103**	**0.8**	**3.1**	0.00095	0.0075	0.00095
0.055	**1010**	**4**	**0.0072**	**1.5**	**5.2**	0.005	0.185	0.005
0.065	**557.5**	**11**	0.0075	**1.05**	**4.2**	0.005	0.175	0.005
0.065	**558**	**6.5**	0.185	**1.9**	**5.2**		0.17	

Cd	Ca	Cr	Chry	Co	Cu	Delta-BHC	DahA	Dieldrin
-1.771957	7.31322	1.671473	-1.660731	0.314811	0.887891	-6.964326	-1.609438	-6.964326
-1.570217	5.66296	3.178054	-0.527633	0.806476	2.509599	-6.172986	-1.89712	-6.172986
-2.813411	7.138867	2.214846	-0.776529	0.198851	1.934416	-6.281817	-2.040221	-6.281817
-2.175952	6.006353	2.949688	-1.237874	0.875469	2.850706	-6.161067	-2.312635	-6.161067
-1.374366	7.064759	2.61007	-1.237874	0.518794	2.406945	-6.279147	-2.333044	-6.279147
-2.175952	5.752573	2.164472	-0.733969	0.587787	1.808289	-6.271178	-1.89712	-6.271178
-2.221005	6.993933	2.275214	-0.733969	0.565314	0.966984	-6.314428	-2.040221	-6.314428
-2.162823	6.907755	2.653242	0.336472	0.24686	2.549445	-6.175387	-0.967584	-6.175387
-2.141317	7.021084	2.66026	-0.094311	0.336472	3.499533	-6.29257	-1.469676	-6.29257
-1.410587	6.839476	3.572346	-1.89712	1.026042	3.131137	-6.19726	-2.97593	-6.19726
-2.198225	7.258412	3.086487	-2.488915	0.062975	2.701361	-6.258038	-3.729701	-6.258038
-2.198225	7.003065	2.681022	-1.832581	-0.846298	1.854734	-6.247648	-4.892852	-6.247648
-2.891372	5.517453	2.131797	-2.273026	-0.223144	1.131402	-6.959049	-4.892852	-6.959049
-2.900422	6.917706	1.386294	-4.933674	0.405465	1.648659	-5.298317	-1.687399	-5.298317
-2.733368	6.323463	2.397895	-4.892852	0.04879	1.435084	-5.298317	-1.742969	-5.298317
-2.733368	6.324359	1.871802	-1.687399	0.641854	1.648659	#NUM!	-1.771957	#NUM!

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Fluoranthe	Fluorene	Gamma-BHC (	Heptachlor
0.000945	0.000945	0.000945	0.000945	**0.016**	**0.1**	0.000945	0.000945
0.001935	0.001935	0.001935	0.001935	**0.02**	**0.45**	0.001935	0.001935
0.002085	0.002085	0.002085	0.002085	**0.16**	**0.013**	0.002085	0.002085
0.00187	0.00187	0.00187	0.00187	**0.97**	**0.038**	0.00187	0.00187
0.00211	0.00211	0.00211	0.00211	**0.51**	**0.22**	0.00211	0.00211
0.001875	0.001875	0.001875	0.001875	**0.48**	**0.033**	0.001875	0.001875
0.00189	0.00189	0.00189	0.00189	**0.58**	**0.052**	0.00189	0.00189
0.00181	0.00181	0.00181	0.00181	**0.69**	**0.044**	0.00181	0.00181
0.00208	0.00208	0.00208	0.00208	**1.1**	**0.092**	0.00208	0.00208
0.00185	0.00185	0.00185	0.00185	**3.3**	**0.0058**	0.00185	0.00185
0.002035	0.002035	0.002035	0.002035	**2.3**	0.0075	0.002035	0.002035
0.001915	0.001915	0.001915	0.001915	**0.37**	0.0075	0.001915	0.001915
0.001935	0.001935	0.001935	0.001935	**0.16**	0.0375	0.001935	0.001935
0.00095	0.00095	0.00095	0.00095	**0.33**	0.038	0.00095	0.00095
0.005	0.005	0.0155	0.005	**0.19**	0.185	0.005	0.005
0.005	0.005	0.0155	0.005	0.185	0.175	0.005	0.005
					0.17		

Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Fluoranthe	Fluorene	Gamma-BHC (	Heptachlor
-6.96432565	-6.96432565	-6.964325654	-6.964326	-4.135167	-2.302585	-6.964325654	-6.9643257
-6.1729864	-6.1729864	-6.172986403	-6.172986	-1.832581	-4.342806	-6.172986403	-6.1729864
-6.28181683	-6.28181683	-6.281816829	-6.281817	-0.030459	-3.270169	-6.281816829	-6.2818168
-6.16106733	-6.16106733	-6.161067331	-6.161067	-0.673345	-1.514128	-6.161067331	-6.1610673
-6.27914664	-6.27914664	-6.279146642	-6.279147	-0.733969	-3.411248	-6.279146642	-6.2791466
-6.27117847	-6.27117847	-6.271178473	-6.271178	-0.544727	-2.956512	-6.271178473	-6.2711785
-6.31442841	-6.31442841	-6.314428409	-6.314428	-0.371064	-3.123566	-6.314428409	-6.3144284
-6.17538738	-6.17538738	-6.175387383	-6.175387	0.09531	-2.385967	-6.175387383	-6.1753874
-6.29256964	-6.29256964	-6.29256964	-6.29257	1.193922	-5.149897	-6.29256964	-6.2925696
-6.19725951	-6.19725951	-6.197259511	-6.19726	0.832909	-4.892852	-6.197259511	-6.1972595
-6.25803764	-6.25803764	-6.258037641	-6.258038	-0.994252	-4.892852	-6.258037641	-6.2580376
-6.24764798	-6.24764798	-6.247647979	-6.247648	-1.832581	-3.283414	-6.247647979	-6.247648
-6.95904856	-6.95904856	-6.959048557	-6.959049	-1.108663	-3.270169	-6.959048557	-6.9590486
-5.29831739	-5.29831739	-4.166915271	-5.298317	-1.660731	-1.687399	-5.298317389	-5.2983174
-5.29831739	-5.29831739	-4.166915271	-5.298317	-1.687399	-1.742969	-5.298317389	-5.2983174
#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	-1.771957	#NUM!	#NUM!

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Icd123P	Fe	Pb	Mg	Mn	Hg	Methoxychlor	naphthalene	Ni
0.18	**4220**	**5.39**	**291**	**8.87**	**0.13**	0.000945	**0.017999999**	**1.31**
2.3	**13100**	**7.69**	**405**	**31.1**	**0.047**	0.001935	**0.085000001**	**3.46**
0.27	**34800**	**12.1**	**321**	**20.4**	**0.046**	0.002085	**0.129999995**	**3.02**
0.24	**5430**	**58.3**	**684**	**74.2**	**0.023**	0.00187	**0.01**	**4.68**
0.16	**35300**	**17.1**	**301**	**58.8**	**0.038**	0.00211	**0.021**	**7.2**
0.19	**19400**	**18.5**	**447**	**62.4**	**0.026**	0.001875	**0.025**	**3.51**
0.25	**8780**	**46.9**	**618**	**72.7**	**0.027**	0.00189	**0.02**	**2.8**
0.25	**9560**	**5.4**	**406**	**24.6**	**0.032**	0.00181	**0.105**	**2.51**
0.71	**14000**	**58.2**	**782**	**94.2**	**0.043**	0.00208	**0.0085**	**4.17**
0.43	**13500**	**75**	**515**	**63**	**0.044**	0.00185	**0.0012**	**4.31**
0.096	**42000**	**24.2**	**682**	**40.8**	**0.065**	0.002035	**0.0042**	**7.29**
0.047	**23500**	**38.8**	**377**	**62.9**	**0.029**	0.001915	**0.017999999**	**3.86**
0.086	**16200**	**21.4**	**135**	**62.2**	**0.054**	0.001935	0.041499998	**3.93**
0.0075	**5720**	**9.94**	**624**	**27.4**	0.06	0.0019	0.00285	**4.36**
0.0075	**2700**	**22.3**	**272**	**77.3**	0.055	0.026000001	0.041999999	**2.3**
0.185	**11500**	**17.5**	**214**	**139**	0.0145	0.026000001	0.0026	**3.76**
0.17	**4800**	**32.85**	**94.4**	**53.2**			0.00325	**1.695**
							0.00275	
							0.0024	
							0.0385	
							0.0028	
							0.079999998	
							0.079999998	
							0.185000002	
							0.174999997	

Icd123P	Fe	Pb	Mg	Mn	Hg	Methoxychlor	naphthalene	Ni
-1.714798	8.34759	1.684545	5.673323	2.182675	-2.040221	-6.964325654	-4.01738356	0.270027
-1.309333	10.45737	2.493205	5.771441	3.015535	-3.079114	-6.172986403	-2.46510401	1.105257
-1.427116	8.599694	4.065602	6.527958	4.306764	-3.772261	-6.281816829	-2.04022087	1.543298
-1.832581	10.47164	2.839078	5.70711	4.074142	-3.270169	-6.161067331	-4.60517021	1.974081
-1.660731	9.873028	2.917771	6.102559	4.133565	-3.649659	-6.279146642	-3.86323285	1.255616
-1.386294	9.080232	3.848018	6.426488	4.286341	-3.611918	-6.271178473	-3.68887944	1.029619
-1.386294	9.165343	1.686399	6.006353	3.202746	-3.442019	-6.314428409	-3.91202303	0.920283
-0.34249	9.546813	4.063885	6.661855	4.54542	-3.146555	-6.175387383	-2.25379492	1.427916
-0.84397	9.510445	4.317488	6.244167	4.143135	-3.123566	-6.29256964	-4.76768906	1.460938
-2.343407	10.64542	3.186353	6.52503	3.708682	-2.733368	-6.197259511	-6.72543367	1.986504
-3.057608	10.06476	3.65842	5.932245	4.141546	-3.540459	-6.258037641	-5.47267079	1.350667
-2.453408	9.692767	3.063391	4.905275	4.130355	-2.918771	-6.247647979	-4.01738356	1.368639
-4.892852	8.651724	2.296567	6.43615	3.310543	-2.813411	-6.265901376	-3.18206189	1.472472
-4.892852	7.901007	3.104587	5.605802	4.347694	-2.900422	-3.64965872	-5.86043627	0.832909
-1.687399	9.350102	2.862201	5.365976	4.934474	-4.233607	-3.64965872	-3.17008567	1.324419
-1.771957	8.476371	3.491952	4.547541	3.974058	#NUM!	#NUM!	-5.95224383	0.527683
							-5.72910026	
							-5.89615437	
							-6.03228649	
							-3.25709704	
							-5.8781359	
							-2.52572867	
							-2.52572867	
							-1.68739944	
							-1.74296932	

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Phen	K	Pyr	Se	Ag	Na	Tl	Toxaphene	V
0.03	**571**	**0.18**	**0.32**	**1.24**	**35.9**	**1.97**	0.03785	**8.32**
0.16	**592**	**7.3**	**0.375**	0.482	**111**	0.2925	0.077500001	**24.1**
4.7	**154**	**0.64**	**0.198**	0.57	**125**	0.2815	0.083499998	**47.5**
0.66	**785**	**0.59**	**0.318**	0.625	**671**	0.3125	0.075000003	**25.7**
0.3	**206.5**	**0.48**	**0.304**	0.56	**121**	0.281	0.0845	**41.4**
0.33	**411**	**0.42**	**0.32**	1.015	**763**	0.3165	0.075000003	**27.4**
0.26	**420**	**0.93**	0.3035	0.7	**134**	0.27	0.075499997	**22.2**
0.49	**541**	**0.89**	0.2865	0.57	**122**	0.284	0.072499998	**14.1**
0.55	**151**	**2.4**	0.315	0.545	**142**	0.2475	0.082999997	**25.4**
2.2	**879**	**1.5**	0.283	0.575	**149**	0.291	0.074000001	**27.6**
1.3	**421**	**0.31**	0.319	0.59	**278**	0.299	0.081500001	**69.9**
0.3	**312**	**0.15**	0.2895	1.22	**135**	0.275	0.076499999	**40.3**
0.11	**128**	**0.25**	0.3075	0.555	**146**	0.267	0.077500001	**29.5**
0.19	**523**	**0.14**	0.28	0.555	271.5	0.278	0.037	**7.67**
0.0845	**380**	**0.011**	0.28	0.555	278	0.165	1.049999952	**13.6**
0.012	**949**	**0.012**	0.28	0.055	16.5	6E-05	1.049999952	**22.3**
0.185	**342**	0.185		0.23	16.5	6E-05		**12**

Phen	K	Pyr	Se	Ag	Na	Tl	Toxaphene	V
-3.506558	6.347389	-1.714798	-1.139434	0.215111	3.580737	0.678034	-3.2741243	2.118662
1.547562	5.036953	-0.446287	-1.619488	-0.562119	4.828314	-1.267623	-2.48290867	3.86073
-0.415515	6.665684	-0.527633	-1.145704	-0.470004	6.508769	-1.163151	-2.59026713	3.246491
-1.203973	5.3303	-0.733969	-1.190728	-0.579818	4.795791	-1.269401	-2.47100375	3.723281
-1.108663	6.018593	-0.867501	-1.139434	0.014889	6.637258	-1.150432	-2.59026713	3.310543
-1.347074	6.040255	-0.072571	-1.192374	-0.356675	4.89784	-1.309333	-2.58362267	3.100092
-0.71335	6.293419	-0.116534	-1.250017	-0.562119	4.804021	-1.258781	-2.62416875	2.646175
-0.597837	5.01728	0.875469	-1.155183	-0.606969	4.955827	-1.396345	-2.48891471	3.234749
0.788457	6.778785	0.405465	-1.262308	-0.553385	5.003946	-1.234432	-2.60369017	3.317816
0.262364	6.042633	-1.171183	-1.142564	-0.527633	5.627621	-1.207312	-2.50715224	4.247066
-1.203973	5.743003	-1.89712	-1.2396	0.198851	4.905275	-1.290984	-2.57046456	3.696351
-2.207275	4.85203	-1.386294	-1.17928	-0.588787	4.983607	-1.320507	-2.55747733	3.38439
-1.660731	6.259581	-1.966113	-1.272966	-0.588787	5.603962	-1.280134	-3.29683735	2.037317
-2.471004	5.940171	-4.50986	-1.272966	-0.588787	5.627621	-1.80181	0.048790119	2.61007
-4.422849	6.855409	-4.422849	-1.272966	-2.900422	2.80336	-9.721166	0.048790119	3.104587
-1.687399	5.834811	-1.687399	#NUM!	-1.469676	2.80336	-9.721166	#NUM!	2.484907

TABLE A-9-3
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 3 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Zn
6.97
10.3
12.3
49.8
29.4
31.2
26.6
6.94
52.7
70.5
32.2
86
19.3
14.5
18.3
33
21

Zn
1.941615
2.509599
3.908015
3.380995
3.440418
3.280911
1.937302
3.964615
4.255613
3.471966
4.454347
2.960105
2.674149
2.906901
3.496508
3.044522

TABLE A-9-4
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Background Value (mg/kg) Raw Data	2-methyl naphthalene	Acenaphthene	Acenaphthylene	Aldrin	alpha-BHC	Al	Anthracene	Antimony	Arsenic	Barium	BaA	BaP	BbF	BghiP	BkF	Be	Cd
	0.018999999	0.540000021	0.079999998	0.000945	0.00481	20500	0.189999998	4.35	1.97	42.4	0.19	0.17	0.2	0.11	0.19	0.12	0.17
	0.100000001	0.013	0.008	0.001935	0 000945	16900	1.299999952	4.05	1.86	33.7	0.53	3.9	4.1	1.2	4.4	0.16	0.112
	0.027000001	0.043000001	0.0075	0.002085	0.001935	16200	0.180000007	3.435	1.84	31.5	0.37	0.5	0.59	0.22	0.5	0.265	0.208
	0.044	0.230000004	0.0075	0.00187	0 002085	15700	0.046999998	3.425	1.46	30.3	0.26	0.29	0.52	0.16	0.38	0.238	0.174
	0.035	0.027000001	0.041499998	0.00211	0 00187	13800	0.109999999	3.165	1.138	29.8	0.31	0.25	0.26	0.098	0.31	0.235	0.1265
	0.0087	0.064999998	0.037500001	0.001875	0.00211	13400	0.109999999	3.08	0.95	25.1	0.45	0.27	0.43	0.18	0.26	0.217	0.1205
	0.048	0.057	0.041999999	0.00189	0.00189	10600	0.49000001	3.01	0.836	22	0.5	0.42	0.45	0.23	0.56	0.2	0.119
	0.041499998	0.100000001	0.037999999	0.00181	0.00181	10300	0.25999999	3.01	0.5475	21.5	1.9	0.39	0.44	0.23	0.37	0.2	0.1175
	0 041999999	0.0065	0.0385	0.00208	0 00208	9550	0.066	2.975	5.76	20.4	1.3	1.4	1.9	0.56	0.91	0.199	0.111
	0.037999999	0.0075	0 0085	0.00185	0.00185	8290	0.068000004	2.94	1.59	19.9	0.18	0.9	1.3	0.34	0.66	0.189	0.111
	0.007	0.0075	0.079999998	0.002035	0 002035	8250	0.014	2.94	5.97	19.3	0.087	0.13	0.14	0.084	0.11	0.145	0.111
	0.0385	0.041499998	0.079999998	0.001915	0.001915	7110	0.0075	2.94	2.11	18.3	0.16	0.068	0.082	0.047	0.059	0.144	0.11
	0.079999998	0.037500001	0.0075	0.001935	0 001935	4660	0.0075	2.905	1.46	17.9	0.0935	0.12	0.21	0.092	0.0075	0.1295	0.0685
	0 079999998	0.037999999	0.0075	0.00095	0 00095	4350	0.037500001	2.78	0.896	11.8	0.0075	0.123	0.145	0.1195	0.0075	0.106	0 0615
	0 185000002	0.185000002	0.185000002	0.005	0.005	4000	0.185000002	2.78	10.4	11.7	0.0075	0.0075	0.0075	0.0075	0.185	0.0989	0 061
	0 174999997	0.174999997	0.174999997	0.005	0 005	3230	0.174999997	2.78	10.5	10	0.185	0.0075	0.0075	0.0075	0.175	0.0882	0 06
	0.170000002	0.170000002	0.170000002			2990	0.170000002	2.15	1.35	9.87		0.185	0.185	0.185	0.17	0.0879	0.059
						1290		0.16	2.13	20.8						0.0376	0.058
						5490		2 41	1.92	26.1						0.111	0.055
						11300		2.84	1.7	19.3						0.205	0.054
						13400		3 125	8.5	66.5						0.04	0.06
						4430		2.81	2.6	41.2						0.337	0.1135
						14200		5 05	0.999	38						0.16	0.253
						7490		3 51	0.433	34.4						0.343	0.1135
						5710		2.84	0.39	14.6						0.222	0.1085
						6550		2.715	0.461	36.4						0.152	0.115
						9610		2.875	0.461	69.9						0.299	0.1175
						8630		2.94	1.175	69.8						0.347	0.244
						23000		6.1	0.815	41						0.439	0.111
						12800		2.78	0.595	34.8						0.283	0.111
						12300		2.78	0.585	24.8						0.278	0.0555
						11400		2.78	0.294	41						0.15	0.055
						2810		1.15	0.291	30						0.19	0.065
						8390		1.125	0 285	8.6						0.038	0.065
						3675			0.269								
									0.845								
									0.278								

TABLE B-4
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

LN Data

2-methyl naphthalene	Acenaphthene	Acenaphthylene	Aldrin	alpha-BHC	Al	Anthracene	Antimony	Arsenic	Barium	BaA	BaP	BbF	BghiP	BkF	Be	Cd
-3.963316332	-0.6161861	-2.525728667	-6.96433	-5 3370582	9.92818	-1.660731219	1.470176	0.678034	3.747148	-1.66073	-1.77196	-1.60944	-2.20727	-1.66073	-2.12026	-1.77196
-2.302585078	-4.342805901	-4.82831369	-6.24765	-6.9643257	9.735069	0.262364228	1.398717	0.620576	3.517498	-0.63488	1.360977	1.410987	0.182322	1.481605	-1.83258	-2.18926
-3.611918387	-3.146555129	-4.892852281	-6.17299	-6 247648	9.692767	-1.714798388	1.234017	0.609766	3.449988	-0.99425	-0.69315	-0.52763	-1.51413	-0.69315	-1.32803	-1.57022
-3.12356565	-1.469675952	-4.892852281	-6.28182	-6.1729864	9.661416	-3.057607712	1.231101	0.378436	3.411148	-1.34707	-1.23787	-0.65393	-1.83258	-0.96758	-1.43548	-1.7487
-3 352407213	-3.611918387	-3.18206189	-6.16107	-6.2818168	9 532424	-2.207274919	1.152153	0.129272	3.394508	-1.17118	-1.38629	-1.34707	-2.32279	-1.17118	-1.44817	-2.06751
-4.744432239	-2.733368046	-3.283414306	-6.27915	-6.1610673	9.50301	-2.207274919	1.12493	-0.05129	3.222868	-0.79851	-1.30933	-0.84397	-1.7148	-1.34707	-1.52786	-2.11611
-3.036554259	-2.864704011	-3.170085674	-6.27118	-6.2711785	9.268609	-0.713349868	1.10194	-0.17913	3.091042	-0.69315	-0.8675	-0.79851	-1.46968	-0.57982	-1.60944	-2.12863
-3.18206189	-2.302585078	-3.270169151	-6.31443	-6.3144284	9.239899	-1.347073685	1.10194	-0.60239	3.068053	0.641854	-0.94161	-0.82098	-1.46968	-0.99425	-1.60944	-2.14132
-3.170085674	-5.035953081	-3.257097043	-6.17539	-6.1753874	9.164296	-2.718100542	1.090244	1.750938	3.015535	0.262364	0.336472	0.641854	-0.57982	-0.09431	-1.61445	-2.19823
-3 270169151	-4 892852281	-4.767689061	-6.29257	-6.2925696	9.022805	-2.688247519	1.07841	0.463734	2.99072	-1.7148	-0.10536	0.262364	-1.07881	-0.41552	-1.66601	-2.19823
-4.961845099	-4 892852281	-2.525728667	-6 19726	-6.1972595	9.017968	-4.268697919	1.07841	1.786747	2.960105	-2.44185	-2.04022	-1.96611	-2.47694	-2.20727	-1.93102	-2.19823
-3.257097043	-3.18206189	-2.525728667	-6.25804	-6.2580376	8.869258	-4.892852281	1.07841	0.746688	2.906901	-1.83258	-2.68825	-2.50104	-3.05761	-2.83022	-1.93794	-2.20727
-2.525728667	-3.283414306	-4 892852281	-6 24765	-6.247648	8.446771	-4 892852281	1.066433	0.378436	2.884801	-2.36979	-2.12026	-1.56065	-2.38597	-4.89285	-2.04407	-2.68092
-2.525728667	-3.270169151	-4.892852281	-6 95905	-6.9590486	8.377931	-3 283414306	1.022451	-0.10981	2.4681	-4.89285	-2.09557	-1.93102	-2.12444	-4.89285	-2.24432	-2.78872
-1 687399441	-1.687399441	-1.687399441	-5 29832	-5 2983174	8.29405	-1.687399441	1.022451	2.341806	2.459589	-4.89285	-4.89285	-4.89285	-4.89285	-1.6874	-2.31365	-2.79688
-1.742969322	-1.742969322	-1.742969322	-5.29832	-5.2983174	8 080237	-1.742969322	1.022451	2.351375	2.302585	-4.89285	-4.89285	-4.89285	-4.89285	-1.74297	-2.42815	-2.81341
-1.771956831	-1.771956831	-1.771956831			8 003029	-1.771956831	0.765468	0.300105	2.2895	-1.6874	-1.6874	-1.6874	-1.6874	-1.77196	-2.43156	-2.83022
					7.162397		-1.83258	0.756122	3.034953						-3.28075	-2.84731
					8.610684		0.879627	0.652325	3.261935						-2.19823	-2.90042
					9.332558		1.043804	0.530628	2.960105						-1.58475	-2.91877
					9.50301		1.139434	2.140066	4.197202						-3 21688	-2.81341
					8.396155		1.033184	0.955511	3.718438						-1.08767	-2.17595
					9.560997		1.619388	-0.001	3.637586						-1.83258	-1.37437
					8.921324		1.255616	-0.83702	3.538057						-1.07002	-2.17595
					8.649974		1.043804	-0.94161	2.681022						-1.50508	-2.22101
					8.78722		0.998792	-0.77436	3.594569						-1.88387	-2.16282
					9.17056		1.056053	-0.77436	4 247066						-1.20731	-2.14132
					9.063		1.07841	0.161268	4.245634						-1.05843	-1.41059
					10 04325		1.808289	-0.20457	3.713572						-0.82326	-2.19823
					9.4572		1.022451	-0.51919	3.549617						-1.26231	-2.19823
					9.417355		1.022451	-0.53614	3.210844						-1.28013	-2.89137
					9.341369		1.022451	-1.22418	3.713572						-1.89712	-2.90042
					7.94094		0.139762	-1.23443	3.401197						-1.66073	-2.73337
					9.034796		0.117783	-1.25527	2.151762						-3.27017	-2.73337
					8.209308			-1.31304								
					#NUM!			-0.16842								
								-1.28013								

TABLE 4.9-4
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Ca	Cr	Chry	Co	Cu	Delta-BHC	DahA	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Fluoranthene	Fluorene	ıma-BHC (Lind	Heptachlor	Icd123P	Fe
1100	23.25	0.19	2.8	48.4	0.000945	0.2	0.000945	0.000945	0.000945	0.000945	0.000945	0.016000001	0.1	0.000945	0.000945	0.18	35200
998	18.3	4	2.18	44.6	0.001935	1.4	0.001935	0.001935	0.001935	0.001935	0.001935	0.02	0.45	0.001935	0.001935	2.3	35200
596	17.1	0.59	1.55	33.3	0.002085	0.15	0.002085	0.002085	0.002085	0.002085	0.002085	0.159999996	0.013	0 002085	0.002085	0.27	23950
500	15.8	0.46	1	16.9	0.00187	0.13	0.00187	0.00187	0.00187	0.00187	0.00187	0.970000029	0.038	0.00187	0.00187	0.24	17800
292.5	13.1	0.29	1.37	14.6	0 00211	0.099	0.00211	0.00211	0.00211	0.00211	0.00211	0.50999999	0.22	0.00211	0.00211	0.16	15900
189	11.8	0.29	1.62	13.8	0.001875	0.097	0.001875	0.001875	0.001875	0.001875	0.001875	0.479999989	0.033	0.001875	0.001875	0.19	12300
174	10.5	0.48	2.24	13.6	0.00189	0.15	0.00189	0.00189	0.00189	0.00189	0.00189	0.579999983	0.052	0.00189	0.00189	0.25	11400
135	9.96	0.48	1.22	10.245	0.00181	0.13	0.00181	0.00181	0.00181	0.00181	0.00181	0.689999998	0.044	0.00181	0.00181	0.25	9560
1500	8.97	1.4	2.4	9.81	0.00208	0.38	0.00208	0.00208	0.00208	0.00208	0.00208	1.100000024	0.092	0.00208	0.00208	0.71	8270
1000	8.92	0.91	1.68	9.53	0.00185	0.23	0.00185	0.00185	0.00185	0.00185	0.00185	3.299999952	0.0058	0.00185	0.00185	0.43	5080
288	8.54	0.15	1.8	8.84	0.002035	0.051	0.002035	0 002035	0.002035	0.002035	0.002035	2.299999952	0.0075	0.002035	0.002035	0.096	4710
1260	8.39	0.083	1.76	7.51	0.001915	0.024	0.001915	0 001915	0.001915	0.001915	0.001915	0.370000005	0.0075	0.001915	0.001915	0.047	3470
406	7.72	0.16	1.28	5.93	0.001935	0.0075	0.001935	0.001935	0.001935	0.001935	0.001935	0.159999996	0.0375	0.001935	0.001935	0.086	2760
1170	4.71	0.103	1.4	4.72	0.00095	0 0075	0.00095	0.00095	0 00095	0.00095	0.00095	0.330000013	0.038	0.00095	0.00095	0.0075	2740
315	4.6	0.0072	2.79	4.485	0.005	0.185	0.005	0.005	0.005	0.0155	0.005	0.189999998	0.185	0.005	0.005	0 0075	2400
1090	2.88	0 0075	1.065	3.51	0.005	0.175	0.005	0.005	0.005	0.0155	0.005	0.185000002	0.175	0.005	0.005	0.185	1520
1000	1.94	0.185	1.5	1.5		0.17							0.17			0.17	1010
1120	1.48		1.15	2.43													962
934	5.32		1.11	4.74													4220
1420	14		0.78	12.3													13100
1100	24		0.753	6.92													34800
249	9.16		0.692	17.3													5430
1010	19.1		0.565	11.1													35300
557.5	13.6		0.493	6.1													19400
159	8.71		0.476	2.63													8780
105	9.73		0.411	12.8													9560
98.8	14.2		0.358	33.1													14000
94.9	14.3		0.3115	22.9													13500
75.3	35.6		0.27	14.9													42000
63.5	21.9		0.222	6.39													23500
62.2	14.6		0.429	3.1													16200
44	8.43		0.8	5.2													5720
24.2	4		1.5	4.2													2700
22.1	11		1.05	5.2													11500
558	6.5		1.9	1.71													4800

TABLE 9-4
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Ca	Cr	Chry	Co	Cu	Delta-BHC	DahA	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Fluoranthene	Fluorene	ıma-BHC (Lind	Heptachlor	Icd123P	Fe
7.003065	3.146305	-1.66073	1.029619	3.8795	-6.964326	-1.60944	-6.96433	-6 964325654	-6.964325654	-6.964325654	-6.96433	-4.13516651	-2.30259	-6 96432565	-6.964326	-1.7148	10.4688
6.905753	2.906901	1.386294	0.779325	3.797734	-6.247648	0.336472	-6.24765	-6 247647979	-6.247647979	-6.247647979	-6.24765	-3.91202303	-0.79851	-6.24764798	-6.247648	0.832909	10.4688
6.390241	2.839078	-0.52763	0.438255	3 505557	-6.172986	-1.89712	-6.17299	-6.172986403	-6.172986403	-6.172986403	-6.17299	-1.83258149	-4 34281	-6.1729864	-6.172986	-1.30933	10.08372
6.214608	2.76001	-0.77653	0	2.827314	-6 281817	-2.04022	-6.28182	-6.281816829	-6.281816829	-6.281816829	-6.28182	-0.03045918	-3.27017	-6.28181683	-6.281817	-1.42712	9.786954
5.678465	2.572612	-1.23787	0.314811	2.681022	-6.161067	-2.31264	-6.16107	-6.161067331	-6.161067331	-6.161067331	-6.16107	-0.67334457	-1.51413	-6 16106733	-6.161067	-1 83258	9 674074
5.241747	2.4681	-1.23787	0.482426	2.624669	-6.279147	-2.33304	-6 27915	-6.279146642	-6.279146642	-6.279146642	-6.27915	-0.7339692	-3.41125	-6.27914664	-6.279147	-1.66073	9.417355
5.159055	2.351375	-0.73397	0.806476	2.61007	-6.271178	-1.89712	-6.27118	-6.271178473	-6.271178473	-6.271178473	-6.27118	-0.5447272	-2.95651	-6.27117847	-6.271178	-1.38629	9 341369
4.905275	2.298577	-0.73397	0.198851	2.32679	-6.314428	-2.04022	-6.31443	-6.314428409	-6.314428409	-6.314428409	-6.31443	-0.37106368	-3.12357	-6.31442841	-6.314428	-1.38629	9.165343
7.31322	2.193886	0.336472	0.875469	2.283402	-6.175387	-0.96758	-6.17539	-6.175387383	-6.175387383	-6.175387383	-6.17539	0.095310201	-2.38597	-6.17538738	-6.175387	-0.34249	9.02039
6.907755	2.188296	-0.09431	0.518794	2.254445	-6.29257	-1.46968	-6.29257	-6.29256964	-6.29256964	-6.29256964	-6.29257	1.193922454	-5.1499	-6.29256964	-6.29257	-0.84397	8.533067
5.66296	2.144761	-1.89712	0.587787	2.179287	-6.19726	-2.97593	-6.19726	-6.197259511	-6.197259511	-6.197259511	-6.19726	0.832909102	-4.89285	-6.19725951	-6.19726	-2.34341	8.457443
7.138867	2.127041	-2.48891	0.565314	2.016235	-6.258038	-3.7297	-6.25804	-6.258037641	-6.258037641	-6.258037641	-6.25804	-0 99425226	-4.89285	-6.25803764	-6.258038	-3.05761	8.15191
6.006353	2.043814	-1.83258	0.24686	1.780024	-6.247648	-4.89285	-6.24765	-6.247647979	-6.247647979	-6.247647979	-6 24765	-1.83258149	-3.28341	-6.24764798	-6.247648	-2.45341	7.922986
7.064759	1.549688	-2.27303	0.336472	1.551809	-6.959049	-4 89285	-6.95905	-6.959048557	-6.959048557	-6.959048557	-6.95905	-1.10866258	-3.27017	-6.95904856	-6.959049	-4.89285	7.915713
5.752573	1.526056	-4.93367	1.026042	1.500738	-5.298317	-1.6874	-5.29832	-5.298317389	-5.298317389	-4.166915271	-5.29832	-1 66073122	-1.6874	-5.29831739	-5.298317	-4.89285	7.783224
6.993933	1.05779	-4.89285	0.062975	1 255616	-5.298317	-1.74297	-5 29832	-5.298317389	-5.298317389	-4.166915271	-5.29832	-1.68739944	-1.74297	-5.29831739	-5.298317	-1.6874	7.326466
6 907755	0.662688	-1.6874	0.405465	0.405465		-1 77196							-1.77196			-1.77196	6.917706
7.021084	0.392042		0.139762	0.887891													6.869014
6.839476	1.671473		0.10436	1.556037													8.34759
7.258412	2.639057		-0.24846	2.509599													9.480368
7.003065	3.178054		-0.28369	1.934416													10.45737
5.517453	2.214846		-0 36817	2.850706													8.599694
6.917706	2.949688		-0.57093	2.406945													10.47164
6.323463	2.61007		-0.70725	1 808289													9.873028
5.068904	2.164472		-0.74234	0 966984													9.080232
4.65396	2 275214		-0.88916	2 549445													9.165343
4.593098	2.653242		-1.02722	3.499533													9.546813
4.552824	2.66026		-1.16636	3.131137													9 510445
4.32148	3.572346		-1.30933	2.701361													10.64542
4.15104	3.086487		-1.50508	1.854734													10.08476
4.130355	2.681022		-0.8463	1.131402													9.692767
3.78419	2.131797		-0 22314	1.648659													8.651724
3.186353	1.386294		0.405465	1.435084													7.901007
3.095578	2.397895		0.04879	1.648659													9.350102
6.324359	1 871802		0.641854	0.536493													8.476371

TABLE 9-4
ProUCL INPUT FILES FOR BACKGROUND SOIL: 0 - 6 FOOT DEPTH
OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Pb	Mg	Mn	Hg	Methoxychlor	Molybdenum	naphthalene	Ni	Phen	K	Pyr	Se	Ag	Na	Tl	Toxaphene	V	Zn
16.4	331	52.2	0.13	0.000945	3.25	0.029999999	6.05	0.03	164	0.18	0.32	1.24	57.4	1.97	0.0855	63.7	42.1
13.6	281.5	34.1	0.047	0.001935	1.549999952	0.025	6	0.16	571	7.3	0.375	1.015	35.9	1.175	0.0845	53	34.9
13.5	239	32.4	0.046	0.002085	1.050000012	0.017999999	3.45	4.7	592	0.64	0.511	0.87	558	0.3325	0.08425	40.4	32.2
11.3	238	28.5	0.0455	0.00187	0.958000004	0.085000001	2.99	0.66	154	0.59	0.435	0.685	170	0.3165	0.0785	35.1	26.5
9.41	214	25	0.031	0.00211	0.925000012	0.129999995	2.89	0.3	785	0.48	0.4	0.685	153	0.3165	0.0785	31	20.8
8.98	209	14.1	0.022	0.001875	0.782999992	0.01	2.37	0.33	206.5	0.42	0.3065	0.6325	148	0.30425	0 0785	27.1	15.6
8.62	172	13.8	0.015	0.00189	0.693000019	0.021	2.26	0.26	766	0.93	0.282	0.615	144.5	0.301	0.076	20.8	11.1
8.13	166	11.6	0.015	0.00181	0.684000015	0.025	2.245	0.49	490	0.89	0.198	0.6	144	0.298	0.074	19.1	10.5
8.13	143	10.5	0.012	0.00208	0.574000001	0.02	2.17	0.55	423	2.4	0.318	0.6	142	0.294	0.073	17.6	9.14
7.46	134	9.85	0.012	0.00185	0.507000029	0.105	2	2.2	355	1.5	0.304	0.595	138	0.292	0.0725	16.4	9.07
5.68	91.8	8.79	0.012	0.002035	0.495000005	0.013	1.85	1.3	304	0.31	0.32	0.59	137	0.291	0.0725	15.3	8.94
4.94	291	5.38	0.012	0.001915	0.395000011	0.0011	1.74	0.3	300	0.15	0.345	0.59	131	0.2855	0.04015	14.2	8.9
4.5	405	5.305	0.011	0.001935	0.389999986	0.0085	1.62	0.11	287	0.25	0 319	0.59	127	0.285	0.03915	11.5	8.21
4.23	321	4.31	0.0096	0.0019	0.289999992	0.0012	1.6	0.19	262	0.14	0.319	0.58	71.1	0.2725	0.036	9.52	7.31
3.9	684	3.44	0.0067	0 026000001	0.257999986	0.0042	1.31	0.0845	240	0.011	0.3035	0.555	44.5	0.2695	0.03785	8.8	5.4
3.74	301	3.39	0.0054	0.026000001	0.207000002	0.017999999	3.46	0.012	216	0.012	0.3	0.555	111	0.269	0 0775	4.835	5.4
3.05	447	2.67	0.023			0.180000007	3.02	0.185	215	0.185	0 2965	0.555	125	0.264	0.0835	3.05	4.48
2.205	618	8.87	0.038			0.0085	4.68		181		0.2965	0.43	671	0.2615	0.075	2.32	3.36
5.39	406	31.1	0.026			0 0085	7.2		179		0.293	0.055	121	0.25	0.0845	8.32	6.97
7.69	782	20.4	0.027			0.0085	3.51		142		0.28	0.482	763	0.16	0.075	24.1	10.3
12.1	515	74.2	0.032			0.008	2.8		137		0.28	0.57	134	0.2925	0.0755	47.5	12.3
58.3	682	58.8	0.043			0.008	2.51		134.5		0.277	0.625	122	0.2815	0.0725	25.7	49.8
17.1	377	62.4	0.044			0.008	4.17		85.3		0.271	0.56	142	0.3125	0.083	41.4	29.4
18.5	135	72.7	0.065			0.008	4.31		411		5.5E-05	1.015	149	0.281	0.074	27.4	31.2
46.9	624	24.6	0.029			0.0075	7.29		420		0.3035	0.7	278	0.3165	0.0815	22.2	26.6
5.4	272	94.2	0.054			0.0075	3.86		541		0.2865	0.57	135	0.27	0.0765	14.1	6.94
58.2	277	63	0.07			0.0065	3.93		151		0.315	0.545	146	0 284	0.0775	25.4	52.7
75	115	40.8	0.0575			0.0037	4.36		879		0.283	0.575	290.5	0.2475	0.037	27.6	70.5
24.2	114	62.9	0.055			0.002825	2.3		421		0.319	0.59	278	0.291	1.04999995	69.9	32.2
38.8	113	62.2	0.055			0.0027	3.76		312		0.2895	1.22	269	0.299	1.04999995	40.3	86
21.4	107	27.4	0.011			0.0027	1.695		128		0.3075	0.555	271.5	0.275		29.5	19.3
9.94	43.3	77.3	0.06			0.00265	0.934		523		0.28	0.555	278	0.267		7.67	14.5
22.3	214	139	0.055			0.0026	0.782		380		0.28	0.555	16.5	0.278		13.6	18.3
17.5	94.4	53.2	0.0145			0.0024	0.612		949		0.28	0.055	16 5	0.165		22.3	33
32.85						0.00225	0.335		342			0.23		6E-05		12	21
						0.041499998								6E-05			
						0.00285											
						0.041999999											
						0.0026											
						0.00325											
						0.00275											
						0.0024											
						0.0385											
						0.0028											
						0.079999998											
						0.079999998											
						0.185000002											
						0.174999997											

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OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

Pb	Mg	Mn	Hg	Methoxychlor	Molybdenum	naphthalene	Ni	Phen	K	Pyr	Se	Ag	Na	Tl	Toxaphene	V	Zn
2.797281	5.802118	3.955083	-2.04022	-6 964325654	1.178654996	-3.50655792	1.800058	-3.50656	5.099866	-1.7148	-1.13943	0.215111	4.050044	0.678034	-2.45923888	4.154185	3.740048
2.61007	5.640132	3.529297	-3.05761	-6.247647979	0.4382549	-3.688879439	1.791759	-1.83258	6.347389	1.987874	-0.98083	0.014889	3.580737	0.161268	-2.47100375	3.970292	3.552487
2.60269	5.476464	3.478158	-3.07911	-6 172986403	0.048790176	-4.017383564	1.238374	1.547562	6.383507	-0.44629	-0.67139	-0.13926	6.324359	-1.10112	-2.47396672	3.69883	3.471966
2.424803	5.472271	3.349904	-3 09004	-6.281816829	-0.0429075	-2.465104012	1.095273	-0.41552	5.036953	-0 52763	-0.83241	-0.37834	5.135798	-1.15043	-2.54465662	3.558201	3.277145
2 241773	5.365976	3.218876	-3.47377	-6.161067331	-0.07796153	-2.040220865	1.061257	-1.20397	6.665684	-0.73397	-0.91629	-0.37834	5.030438	-1.15043	-2 54465662	3.433987	3.034953
2.195	5.342334	2.646175	-3 81671	-6.279146642	-0.24462259	-4 605170208	0.86289	-1.10866	5.3303	-0.8675	-1.18254	-0.45808	4.997212	-1.18991	-2 54465662	3.299534	2.747271
2.154085	5.147494	2.624669	-4.19971	-6 271178473	-0.36672525	-3.863232855	0.815365	-1.34707	6.641182	-0.07257	-1.26585	-0.48613	4.97328	-1.20065	-2.57702197	3.034953	2.406945
2.095561	5.111988	2.451005	-4.19971	-6.314428409	-0.37979734	-3.688879439	0.808706	-0.71335	6.194405	-0.11653	-1.61949	-0.51083	4.969813	-1.21066	-2.60369017	2.949688	2.351375
2.095561	4.962845	2.351375	-4.42285	-6 175387383	-0.55512588	-3.912023028	0.774727	-0.59784	6.047372	0.875469	-1.1457	-0.51083	4.955827	-1.22418	-2.61729585	2.867899	2.21266
2.009555	4.89784	2.287471	-4 42285	-6.29256964	-0.67924422	-2.253794925	0.693147	0.788457	5.872118	0.405465	-1.19073	-0.51919	4.927254	-1.231	-2.62416875	2.797281	2.204972
1.736951	4.519612	2.173615	-4.42285	-6.197259511	-0.70319751	-4.342805901	0.615186	0.262364	5.717028	-1.17118	-1.13943	-0.52763	4.919981	-1.23443	-2.62416875	2.727853	2.190536
1.597365	5.673323	1.682688	-4.42285	-6.258037641	-0.92886949	-6 812445105	0.553885	-1.20397	5.703782	-1.89712	-1.06421	-0.52763	4.875197	-1.25351	-3.2151328	2.653242	2.186051
1.504077	6.003887	1.66865	-4.50986	-6 247647979	-0.94160858	-4.767689061	0.482426	-2.20727	5.659482	-1.38629	-1.14256	-0.52763	4.844187	-1 25527	-3.24035487	2.442347	2.105353
1.442202	5.771441	1 460938	-4.64599	-6.265901376	-1.23787438	-6.725433675	0.470004	-1.66073	5.568345	-1.96611	-1.14256	-0.54473	4.264087	-1.30012	-3.32423638	2.253395	1.989243
1.360977	6 527958	1.235471	-5.00565	-3.64965872	-1.35479575	-5.472670789	0.270027	-2.471	5.480639	-4.50986	-1.19237	-0.58879	3.795489	-1.31119	-3.2741243	2.174752	1.686399
1.319086	5.70711	1.22083	-5.22136	-3.64965872	-1.57503647	-4.017383564	1.241269	-4.42285	5.375278	-4.42285	-1.20397	-0.58879	4.70953	-1.31304	-2.55747733	1.575881	1.686399
1.115142	6.102559	0.982079	-3.77226			-1.714798388	1.105257	-1 6874	5.370638	-1.6874	-1.21571	-0 58879	4.828314	-1.33181	-2.48290867	1.115142	1.499623
0.790728	6.426488	2.182675	-3.27017			-4.767689061	1.543298		5.198497		-1.21571	-0.84397	6.508769	-1.34132	-2.59026713	0.841567	1.211941
1.684545	6.006353	3.437208	-3.64966			-4.767689061	1.974081		5.187386		-1.22758	-2.90042	4.795791	-1 38629	-2.47100375	2.118662	1.941615
2.039921	6.661855	3.015535	-3.61192			-4.767689061	1.255616		4.955827		-1.27297	-0.72981	6.637258	-1.83258	-2.59026713	3.182212	2.332144
2 493205	6.244167	4.306764	-3.44202			-4.82831369	1.029619		4.919981		-1.27297	-0.56212	4.89784	-1 22929	-2.58362267	3.86073	2.509599
4.065602	6.52503	4.074142	-3.14656			-4.82831369	0.920283		4.901564		-1.28374	-0.47	4.804021	-1 26762	-2.62416875	3.246491	3.908015
2.839078	5.932245	4.133565	-3.12357			-4 82831369	1.427916		4.446174		-1.30564	-0.57982	4 955827	-1.16315	-2.48891471	3.723281	3.380995
2.917771	4.905275	4.286341	-2.73337			-4.82831369	1.460938		6.018593		-9.80818	0.014889	5.003946	-1.2694	-2.60369017	3.310543	3 440418
3.848018	6 43615	3.202746	-3.54046			-4.892852281	1.986504		6.040255		-1.19237	-0.35667	5.627621	-1.15043	-2.50715224	3.100092	3.280911
1.686399	5.605802	4.54542	-2.91877			-4.892852281	1.350667		6.293419		-1.25002	-0.56212	4.905275	-1.30933	-2.57046456	2.646175	1.937302
4.063885	5 624018	4.143135	-2 65926			-5.035953081	1.368639		5 01728		-1.15518	-0 60697	4 983607	-1.25878	-2.55747733	3.234749	3.964615
4.317488	4 744932	3.708682	-2 85597			-5.599422459	1.472472		6.778785		-1.26231	-0.55339	5 671604	-1.39634	-3.29683735	3.317816	4.255613
3.186353	4 736198	4.141546	-2.90042			-5.869246924	0.832909		6 042633		-1.14256	-0 52763	5.627621	-1.23443	0.04879012	4.247066	3 471966
3.65842	4.727388	4.130355	-2 90042			-5 91450348	1.324419		5.743003		-1.2396	0.198851	5.594711	-1.20731	0.04879012	3.696351	4.454347
3.063391	4.672829	3.310543	-4 50986			-5.91450348	0.527683		4.85203		-1.17928	-0.58879	5.603962	-1.29098		3.38439	2 960105
2 296567	3.768153	4.347694	-2.81341			-5.933195668	-0.06828		6.259581		-1.27297	-0.58879	5.627621	-1.32051		2.037317	2.674149
3.104587	5.365976	4.934474	-2.90042			-5.952243831	-0.2459		5.940171		-1.27297	-0.58879	2.80336	-1.28013		2.61007	2.906901
2.862201	4.547541	3.974058	-4.23361			-6 032286494	-0.49102		6.855409		-1.27297	-2.90042	2.80336	-1.80181		3.104587	3.496508
3 491952						-6.096825106	-1.09362		5 834811			-1.46968		-9.72117		2.484907	3.044522
						-3.18206189								-9.72117			
						-5.860436268											
						-3.170085674											
						-5 952243831											
						-5.729100262											
						-5.896154373											
						-6.032286494											
						-3.257097043											
						-5.878135897											
						-2.525728667											
						-2.525728667											
						-1.687399441											
						-1.742969322											

APPENDIX B
INDIVIDUAL NONPARAMETRIC COMPARISONS TO BACKGROUND

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Table 1-1
Gehan Test Result for Arsenic in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Dummy Flag	Loc	Index	d	e	Rank	NON	N	n	m	$a(R_i)$	$a(R_i)^2$	$d_i \times a(R_i)$
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc														
5.76			B	*132*			S	0.277999997	U	B	1	0	1	2	2	40	22	18	-38	1444	0
1.59			B	*39.5*			S	0.460999995		B	0	1	1	3	2	40	22	18	-36	1296	0
5.97			B	*39.2*			S	0.460999995		B	0	2	1	4	2	40	22	18	-34	1156	0
2.11			B	*24.3*			S	0.845000029	U	B	1	2	2	3	2	40	22	18	-36	1296	0
1.46			B	*8.75*			S	0.896000028		B	0	3	2	5	2	40	22	18	-31	961	0
0.896			B	*7.9*			S	*1.2*		S	0	4	2	6	2	40	22	18	-29	841	-29
10.4			B	*7.8*			S	1.350000024		B	0	5	2	7	2	40	22	18	-27	729	0
10.5			B	*5*			S	1.460000038		B	0	6	2	8	2	40	22	18	-25	625	0
1.35			B	*4.8*			S	1.590000033		B	0	7	2	9	2	40	22	18	-23	529	0
2.13			B	*4.7*			S	1.700000048		B	0	8	2	10	2	40	22	18	-21	441	0
1.92			B	*4.6*			S	1.919999957		B	0	9	2	11	2	40	22	18	-19	361	0
1.7			B	*4.5*			S	2.109999895		B	0	10	2	12	2	40	22	18	-17	289	0
8.5			B	*4.4*			S	2.130000114		B	0	11	2	13	2	40	22	18	-15	225	0
2.6			B	*4.4*			S	*2.2*		S	0	12	2	14	2	40	22	18	-13	169	-13
0.461			B	*4*			S	*2.6*		S	0	13	2	15	2	40	22	18	-11	121	-11
0.461			B	*3.2*			S	2.600000024		B	0	14	2	16	2	40	22	18	-9	81	0
0.845	U	U	B	*3.2*			S	*2.8*		S	0	15	2	17	2	40	22	18	-7	49	-7
0.278	U	U	B	*2.95*			S	*2.95*		S	0	16	2	18	2	40	22	18	-5	25	-5
				2.8			S	*3.2*		S	0	17	2	19	2	40	22	18	-3	9	-3
				2.6			S	*3.2*		S	0	18	2	20	2	40	22	18	-1	1	-1
				2.2			S	*4*		S	0	19	2	21	2	40	22	18	1	1	1
				1.2			S	*4.4*		S	0	20	2	22	2	40	22	18	3	9	3
								4.4		S	0	21	2	23	2	40	22	18	5	25	5
								4.5		S	0	22	2	24	2	40	22	18	7	49	7
								4.6		S	0	23	2	25	2	40	22	18	9	81	9
								4.7		S	0	24	2	26	2	40	22	18	11	121	11
								4.8		S	0	25	2	27	2	40	22	18	13	169	13
								5		S	0	26	2	28	2	40	22	18	15	225	15
								5.760000229		B	0	27	2	29	2	40	22	18	17	289	0
								5.96999979		B	0	28	2	30	2	40	22	18	19	361	0
								7.8		S	0	29	2	31	2	40	22	18	21	441	21
								7.9		S	0	30	2	32	2	40	22	18	23	529	23
								8.5		B	0	31	2	33	2	40	22	18	25	625	0
								8.75		S	0	32	2	34	2	40	22	18	27	729	27
								10.39999962		B	0	33	2	35	2	40	22	18	29	841	0
								10.5		B	0	34	2	36	2	40	22	18	31	961	0
								24.3		S	0	35	2	37	2	40	22	18	33	1089	33
								39.2		S	0	36	2	38	2	40	22	18	35	1225	35
								39.5		S	0	37	2	39	2	40	22	18	37	1369	37
								132		S	0	24	2	26	2	40	22	18	11	121	11

ONE-TAILED TEST:		
$\Sigma [d_i \times a(R_i)] =$	182	
$\Sigma ([a(R_i)]^2) =$	19908	
$Z =$	2 5602	
Critical Z =	1.645	alpha = 0.05
S > B?	YES	
p-value	0.005	

Table 1-2
Gehan Test Result for Selenium in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Dummy Flag	Loc	Index	d	e	Rank	NON	N	n	m	$a(R_i)$	$a(R_i)^2$	$d_i \times a(R_i)$
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc														
0.32			B	*1.1*			S	0.14	U	S	1	0	1	10	19	39	23	16	-20	400	-20
0.375			B	*1*			S	0.145	U	S	1	0	2	10	19	39	23	16	-20	400	-20
0.198			B	*0.95*			S	0.155	U	S	1	0	3	10	19	39	23	16	-20	400	-20
0.318			B	*0.9*			S	0.155	U	S	1	0	4	10	19	39	23	16	-20	400	-20
0.304			B	*0.79*			S	0.165	U	S	1	0	5	10	19	39	23	16	-20	400	-20
0.32			B	*0.74*			S	0.19	U	S	1	0	6	10	19	39	23	16	-20	400	-20
0.303	U	U	B	*0.7*			S	0.19	U	S	1	0	7	10	19	39	23	16	-20	400	-20
0.287	U	U	B	*0.7*			S	0.197999999		B	0	1	7	14	19	39	23	16	-12	144	0
0.315	U	U	B	*0.68*			S	0.280000001	U	B	1	1	8	11	19	39	23	16	-19	361	0
0.283	U	U	B	*0.66*			S	0.280000001	U	B	1	1	9	11	19	39	23	16	-19	361	0
0.319	U	U	B	*0.64*			S	0.280000001	U	B	1	1	10	11	19	39	23	16	-19	361	0
0.289	U	U	B	*0.63*			S	0.282999992	U	B	1	1	11	11	19	39	23	16	-19	361	0
0.308	U	U	B	*0.6*			S	0.286500007	U	B	1	1	12	11	19	39	23	16	-19	361	0
0.28	U	U	B	*0.58*			S	0.289499998	U	B	1	1	13	11	19	39	23	16	-19	361	0
0.28	U	U	B	0.145	U	U	S	0.295	U	S	1	1	14	11	19	39	23	16	-19	361	-19
0.28	U	U	B	0.19	U	U	S	0.3	U	S	1	1	15	11	19	39	23	16	-19	361	-19
				0.19	U	U	S	0.303499997	U	B	1	1	16	11	19	39	23	16	-19	361	0
				0.165	U	U	S	0.30399999		B	0	2	16	20	19	39	23	16	-1	1	0
				0.155	U	U	S	0.307500005	U	B	1	2	17	11	19	39	23	16	-18	324	0
				0.155	U	U	S	0.314999998	U	B	1	2	18	11	19	39	23	16	-18	324	0
				0.14	U	U	S	0.317999989		B	0	3	18	22	19	39	23	16	3	9	0
				0.3	U	U	S	0.319000006	U	B	1	3	19	12	19	39	23	16	-17	289	0
				0.295	U	U	S	0.319999993		B	0	4	19	23	19	39	23	16	6	36	0
								0.319999993		B	0	5	19	24	19	39	23	16	8	64	0
								0.375		B	0	6	19	25	19	39	23	16	10	100	0
								0.58		S	0	7	19	26	19	39	23	16	12	144	12
								0.595		S	0	8	19	27	19	39	23	16	14	196	14
								0.63		S	0	9	19	28	19	39	23	16	16	256	16
								0.64		S	0	10	19	29	19	39	23	16	18	324	18
								0.66		S	0	11	19	30	19	39	23	16	20	400	20
								0.68		S	0	12	19	31	19	39	23	16	22	484	22
								0.7		S	0	13	19	32	19	39	23	16	24	576	24
								0.7		S	0	14	19	33	19	39	23	16	26	676	26
								0.74		S	0	15	19	34	19	39	23	16	28	784	28
								0.79		S	0	16	19	35	19	39	23	16	30	900	30
								0.9		S	0	17	19	36	19	39	23	16	32	1024	32
								0.95		S	0	18	19	37	19	39	23	16	34	1156	34
								1		S	0	19	19	38	19	39	23	16	36	1296	36
								1.1		S	0	7	19	26	19	39	23	16	12	144	12

ONE-TAILED TEST:

$\Sigma [d_i \times a(R_i)] =$	146	
$\Sigma ([a(R_i)]^2) =$	15700	
$Z =$	2.3383	
Critical Z =	1.645	alpha = 0.05
S > B?	YES	
p-value	0.010	

T[illegible]-3
Gehan Test Result for Arsenic in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Dummy Flag	Loc	Index	d	e	Rank	NON	N	n	m	$a(R_i)$	$a(R_i)^2$	$d_i \times a(R_i)$
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc														
1.97			B	132			S	0.26899999	U	B	1	0	1	6	10	65	28	37	-55	3025	0
1.86			B	39.5			S	0.278	U	B	1	0	2	6	10	65	28	37	-55	3025	0
1.84			B	39.2			S	0.285	U	B	1	0	3	6	10	65	28	37	-55	3025	0
1.48			B	24.3			S	0.29100001	U	B	1	0	4	6	10	65	28	37	-55	3025	0
1.138			B	8.75			S	0.294	U	B	1	0	5	6	10	65	28	37	-55	3025	0
0.95			B	7.9			S	0.38999999		B	0	1	5	9	10	65	28	37	-49	2401	0
0.838			B	7.8			S	0.433		B	0	2	5	10	10	65	28	37	-47	2209	0
0.547			B	5			S	0.461		B	0	3	5	11	10	65	28	37	-45	2025	0
5.76			B	4.8			S	0.461		B	0	4	5	12	10	65	28	37	-43	1849	0
1.59			B	4.7			S	0.54749998		B	0	5	5	13	10	65	28	37	-41	1681	0
5.97			B	4.6			S	0.58499998	U	B	1	5	6	8	10	65	28	37	-50	2500	0
2.11			B	4.5			S	0.59500003	U	B	1	5	7	8	10	65	28	37	-50	2500	0
1.46			B	4.4			S	0.615	U	B	1	5	8	8	10	65	28	37	-50	2500	0
0.896			B	4.4			S	0.63600003		B	0	6	8	15	10	65	28	37	-36	1296	0
10.4			B	4			S	0.64500003	U	B	1	6	9	9	10	65	28	37	-49	2401	0
10.5			B	3.2			S	0.69800003		B	0	7	9	17	10	65	28	37	-33	1089	0
1.35			B	3.2			S	0.94999999		B	0	8	9	18	10	65	28	37	-31	961	0
2.13			B	2.95			S	0.99999001		B	0	9	9	19	10	65	28	37	-29	841	0
1.92			B	2.8			S	1.13800001		B	0	10	9	20	10	65	28	37	-27	729	0
1.7			B	2.6			S	1.17499995	U	B	1	10	10	11	10	65	28	37	-45	2025	0
8.5			B	2.2			S	1.2		S	0	11	10	21	10	65	28	37	-24	576	-24
2.6			B	1.2			S	1.3		S	0	12	10	22	10	65	28	37	-22	484	-22
0.999			B	5			S	1.35000002		B	0	13	10	23	10	65	28	37	-20	400	0
0.433			B	2.1			S	1.46000004		B	0	14	10	24	10	65	28	37	-18	324	0
0.39			B	2			S	1.46000004		B	0	15	10	25	10	65	28	37	-16	256	0
0.461			B	1.8			S	1.59000003		B	0	16	10	26	10	65	28	37	-14	196	0
0.461			B	1.6			S	1.6		S	0	17	10	27	10	65	28	37	-12	144	-12
1.175	U	U	B	1.3			S	1.70000005		B	0	18	10	28	10	65	28	37	-10	100	0
0.815	U	U	B					1.8		S	0	19	10	29	10	65	28	37	-8	64	-8
0.595	U	U	B					1.84000003		B	0	20	10	30	10	65	28	37	-6	36	0
0.585	U	U	B					1.86000001		B	0	21	10	31	10	65	28	37	-4	16	0
0.294	U	U	B					1.91999996		B	0	22	10	32	10	65	28	37	-2	4	0
0.291	U	U	B					1.97000003		B	0	23	10	33	10	65	28	37	0	0	0
0.285	U	U	B					2		S	0	24	10	34	10	65	28	37	2	4	2
0.269	U	U	B					2.1		S	0	25	10	35	10	65	28	37	4	16	4
0.845	U	U	B					2.1099999		B	0	26	10	36	10	65	28	37	6	36	0
0.278	U	U	B					2.13000011		B	0	27	10	37	10	65	28	37	8	64	0
								2.2		S	0	28	10	38	10	65	28	37	10	100	10
								2.6		S	0	29	10	39	10	65	28	37	12	144	12
								2.60000002		B	0	30	10	40	10	65	28	37	14	196	0
								2.8		S	0	31	10	41	10	65	28	37	16	256	16
								2.95		S	0	32	10	42	10	65	28	37	18	324	18
								3.2		S	0	33	10	43	10	65	28	37	20	400	20
								3.2		S	0	34	10	44	10	65	28	37	22	484	22
								4		S	0	35	10	45	10	65	28	37	24	576	24
								4.4		S	0	36	10	46	10	65	28	37	26	676	26
								4.4		S	0	37	10	47	10	65	28	37	28	784	28
								4.5		S	0	38	10	48	10	65	28	37	30	900	30
								4.6		S	0	39	10	49	10	65	28	37	32	1024	32
								4.7		S	0	40	10	50	10	65	28	37	34	1156	34
								4.8		S	0	41	10	51	10	65	28	37	36	1296	36
								5		S	0	42	10	52	10	65	28	37	38	1444	38
								5		S	0	43	10	53	10	65	28	37	40	1600	40
								5.76000023		B	0	44	10	54	10	65	28	37	42	1764	0
								5.98999979		B	0	45	10	55	10	65	28	37	44	1936	0
								7.8		S	0	46	10	56	10	65	28	37	46	2116	46
								7.9		S	0	47	10	57	10	65	28	37	48	2304	48
								8.5		B	0	48	10	58	10	65	28	37	50	2500	0
								8.75		S	0	49	10	59	10	65	28	37	52	2704	52
								10.3999996		B	0	50	10	60	10	65	28	37	54	2916	0
								10.5		B	0	51	10	61	10	65	28	37	56	3136	0
								24.3		S	0	52	10	62	10	65	28	37	58	3364	58
								39.2		S	0	53	10	63	10	65	28	37	60	3600	60
								39.5		S	0	54	10	64	10	65	28	37	62	3844	62
								132		S	0	55	10	65	10	65	28	37	64	4096	64

ONE-TAILED TEST:		
$\Sigma\{d_i \times a(R_i)\}$ =	716	
$\Sigma([a(R_i)]^2)$ =	90492	
Z =	4.7695	
Critical Z =	1.645	alpha = 0.05
S > B?	YES	
p-value	0.000	

Table 2-1

Wilcoxon Rank Sum Test Result for Arsenic in Surface Soil

Human Health Baseline Risk Assessment

Defense Supply Center Richmond

Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
5.76			B	*132*			S	*0.278*	B	1	1	0.278	B	1
1.59			B	*39.5*			S	0.461	B	2	2.5	0.461	B	2.5
5.97			B	*39.2*			S	0.461	B	2	2.5	0.461	B	2.5
2.11			B	*24.3*			S	*0.845*	B	4	4	0.84500003	B	4
1.46			B	*8.75*			S	*0.896*	B	5	5	0.89600003	B	5
0.896			B	*7.9*			S	*1.2*	S	6	6	*1.2*	S	6
10.4			B	*7.8*			S	1.350	B	7	7	1.35000002	B	7
10.5			B	*5*			S	1.460	B	8	8	1.46000004	B	8
1.35			B	*4.8*			S	*1.590*	B	9	9	1.59000003	B	9
2.13			B	*4.7*			S	*1.700*	B	10	10	1.70000005	B	10
1.92			B	*4.6*			S	*1.920*	B	11	11	1.91999996	B	11
1.7			B	*4.5*			S	*2.110*	B	12	12	2.1099999	B	12
8.5			B	*4.4*			S	*2.130*	B	13	13	2.13000011	B	13
2.6			B	*4.4*			S	*2.2*	S	14	14	*2.2*	S	14
0.461			B	*4*			S	*2.6*	S	15	15	*2.6*	S	15
0.461			B	*3.2*			S	*2.600*	B	16	16	2.60000002	B	16
0.845	U	U	B	*3.2*			S	*2.8*	S	17	17	*2.8*	S	17
0.278	U	U	B	*2.95*			S	*2.95*	S	18	18	*2.95*	S	18
				2.8			S	*3.2*	S	19	19.5	*3.2*	S	19.5
				2.6			S	*3.2*	S	19	19.5	*3.2*	S	19.5
				2.2			S	*4*	S	21	21	*4*	S	21
				1.2			S	*4.4*	S	22	22.5	*4.4*	S	22.5
								4.4	S	22	22.5	*4.4*	S	22.5
								4.5	S	24	24	*4.5*	S	24
								4.6	S	25	25	*4.6*	S	25
								4.7	S	26	26	*4.7*	S	26
								4.8	S	27	27	*4.8*	S	27
								5	S	28	28	*5*	S	28
								5.760	B	29	29	5.76000023	B	29
								5.970	B	30	30	5.96999979	B	30
								7.8	S	31	31	*7.8*	S	31
								7.9	S	32	32	*7.9*	S	32
								8.500	B	33	33	8.5	B	33
								8.75	S	34	34	*8.75*	S	34
								10.400	B	35	35	10.3999996	B	35
								10.500	B	36	36	10.5	B	36
								24.3	S	37	37	*24.3*	S	37
								39.2	S	38	38	*39.2*	S	38
								39.5	S	39	39	*39.5*	S	39
								132	S	40	40	*132*	S	40

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	105
# tie groups	3
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	2
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	40.988
Denominator	36.778
Zscore	2.855
n_1 =	22
n_2 =	18
m=	40
Critical Z =	1.645
S > B?	YES
p-value	0.002

Table 2-2

Wilcoxon Rank Sum Test Result for Copper in Surface Soil

Human Health Baseline Risk Assessment

Defense Supply Center Richmond

Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
2.43			B	*17.7*			S	2.43000007	B	1	1	2.43000007	B	1
4.74			B	*14*			S	*2.6*	S	2	2	2.6	S	2
12.3			B	*12.8*			S	2.63000011	B	3	3	2.63000011	B	3
6.92			B	*12.1*			S	3.0999999	B	4	4	3.0999999	B	4
17.3			B	*11.3*			S	*3.3*	S	5	5	3.3	S	5
11.1			B	*10.8*			S	*4.1*	S	6	6	*4.1*	S	6
6.1			B	*10.6*			S	4.19999981	B	7	7	4.19999981	B	7
2.63			B	*10*			S	*4.3*	S	8	8	4.3	S	8
12.8			B	*10*			S	4.73999977	B	9	9	4.73999977	B	9
33.1			B	*9.8*			S	5.19999981	B	10	10	5.19999981	B	10
22.9			B	*9.6*			S	5.20000005	B	11	11	5.20000005	B	11
14.9			B	*9.4*			S	6.0999999	B	12	12	6.0999999	B	12
6.39			B	*9.1*			S	6.38999987	B	13	13	6.38999987	B	13
3.1			B	*8.7*			S	*6.7*	S	14	14	*6.7*	S	14
5.2			B	*8.5*			S	6.92000008	B	15	15	*6.92000008*	B	15
4.2			B	*8.5*			S	*7.15*	S	16	16	7.15	S	16
5.2			B	*7.4*			S	*7.4*	S	17	17	*7.4*	S	17
				7.15			S	*8.5*	S	18	18.5	*8.5*	S	18.5
				6.7			S	*8.5*	S	18	18.5	*8.5*	S	18.5
				4.3			S	*8.7*	S	20	20	*8.7*	S	20
				4.1			S	*9.1*	S	21	21	*9.1*	S	21
				3.3			S	*9.4*	S	22	22	*9.4*	S	22
				2.6			S	*9.6*	S	23	23	*9.6*	S	23
								9.8	S	24	24	*9.8*	S	24
								10	S	25	25.5	*10*	S	25.5
								10	S	25	25.5	*10*	S	25.5
								10.6	S	27	27	*10.6*	S	27
								10.8	S	28	28	*10.8*	S	28
								11.1000004	B	29	29	11.1000004	B	29
								11.3	S	30	30	11.3	S	30
								12.1	S	31	31	*12.1*	S	31
								12.3000002	B	32	32	*12.3000002*	B	32
								12.8	S	33	33	12.8	S	33
								12.8000002	B	34	34	*12.8000002*	B	34
								14	S	35	35	14	S	35
								14.8999996	B	36	36	14.8999996	B	36
								17.2999992	B	37	37	*17.2999992*	B	37
								17.7	S	38	38	*17.7*	S	38
								22.8999996	B	39	39	*22.8999996*	B	39
								33.0999985	B	40	40	*33.0999985*	B	40

From Gilbert 1987 (w/ ties)

TEST VALUES:	
Numerator	16.5
# tie groups	2
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	40.992
Denominator	36.547
Zscore	0.451
n_1 =	23
n_2 =	17
m=	40
Critical Z =	1.645
S > B?	NO
p-value	0.326

Table 2-3
Wilcoxon Rank Sum Test Result for Manganese in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
8.87			B	275			S	1.5	S	1	1	2.43000007	B	1
31.1			B	117			S	2.3	S	2	2	2.6	S	2
20.4			B	105			S	8.86999989	B	3	3	2.63000011	B	3
74.2			B	94.9			S	10.7	S	4	4	3.0999999	B	4
58.8			B	92.35			S	16.3	S	5	5	3.3	S	5
62.4			B	92.2			S	20.3999996	B	6	6	4.1	S	6
72.7			B	75.5			S	23.9	S	7	7	4.19999981	B	7
24.6			B	68.7			S	24.6000004	B	8	8	4.3	S	8
94.2			B	67.1			S	27.2	S	9	9	4.73999977	B	9
63			B	59.1			S	27.3999996	B	10	10	5.19999981	B	10
40.8			B	58.7			S	28.9	S	11	11	5.20000005	B	11
62.9			B	58.4			S	31.1000004	B	12	12	6.0999999	B	12
62.2			B	47.8			S	35.1	S	13	13	6.38999987	B	13
27.4			B	43.85			S	40.7999992	B	14	14	6.7	S	14
77.3			B	35.1			S	43.85	S	15	15	6.92000008	B	15
139			B	28.9			S	47.8	S	16	16	7.15	S	16
53.2			B	27.2			S	53.1999989	B	17	17	7.4	S	17
				23.9			S	58.4	S	18	18	8.5	S	18.5
				16.3			S	58.7	S	19	19	8.5	S	18.5
				10.7			S	58.7999992	B	20	20	8.7	S	20
				2.3			S	59.1	S	21	21	9.1	S	21
				1.5			S	62.2000008	B	22	22	9.4	S	22
								62.4000015	B	23	23	9.6	S	23
								62.9000015	B	24	24	9.8	S	24
								63	B	25	25	10	S	25.5
								67.1	S	26	26	10	S	25.5
								68.7	S	27	27	10.6	S	27
								72.6999969	B	28	28	10.8	S	28
								74.1999969	B	29	29	11.1000004	B	29
								75.5	S	30	30	11.3	S	30
								77.3000031	B	31	31	12.1	S	31
								92.2	S	32	32	12.3000002	B	32
								92.35	S	33	33	12.8	S	33
								94.1999969	B	34	34	12.8000002	B	34
								94.9	S	35	35	14	S	35
								105	S	36	36	14.8999996	B	36
								117	S	37	37	17.2999992	B	37
								139	B	38	38	17.7	S	38
								275	S	39	39	22.8999996	B	39

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	48
# tie groups	0
# ties in grp 1	0
# ties in grp 2	0
# ties in grp 3	
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	40.000
Denominator	35.308
Zscore	1.359
n_1 =	22
n_2 =	17
m=	39
Critical Z =	1.645
S > B?	NO
p-value	0.087

Table B2-4
Wilcoxon Rank Sum Test Result for Selenium in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
0.32			B	*1.1*			S	*0.14*	S	1	1	2.43000007	B	1
0.375			B	*1*			S	*0.145*	S	2	2	2.6	S	2
0.198			B	*0.95*			S	*0.155*	S	3	3.5	2.63000011	B	3
0.318			B	*0.9*			S	*0.155*	S	3	3.5	3.0999999	B	4
0.304			B	*0.79*			S	*0.165*	S	5	5	3.3	S	5
0.32			B	*0.74*			S	*0.19*	S	6	6.5	*4.1*	S	6
0.3035	U	U	B	*0.7*			S	*0.19*	S	6	6.5	4.19999981	B	7
0.2865	U	U	B	*0.7*			S	0.198	B	8	8	4.3	S	8
0.315	U	U	B	*0.68*			S	0.28	B	9	10	4.73999977	B	9
0.283	U	U	B	*0.66*			S	0.28	B	9	10	5.19999981	B	10
0.319	U	U	B	*0.64*			S	0.28	B	9	10	5.20000005	B	11
0.2895	U	U	B	*0.63*			S	0.28299999	B	12	12	6.0999999	B	12
0.3075	U	U	B	*0.595*			S	0.28650001	B	13	13	6.38999987	B	13
0.28	U	U	B	*0.58*			S	0.2895	B	14	14	*6.7*	S	14
0.28	U	U	B	*0.145*	U	U	S	*0.295*	S	15	15	*6.92000008*	B	15
0.28	U	U	B	*0.19*	U	U	S	*0.3*	S	16	16	7.15	S	16
				0.19	U	U	S	0.3035	B	17	17	*7.4*	S	17
				0.165	U	U	S	0.30399999	B	18	18	*8.5*	S	18.5
				0.155	U	U	S	0.3075	B	19	19	*8.5*	S	18.5
				0.155	U	U	S	0.315	B	20	20	*8.7*	S	20
				0.14	U	U	S	0.31799999	B	21	21	*9.1*	S	21
				0.3	U	U	S	0.31900001	B	22	22	*9.4*	S	22
				0.295	U	U	S	0.31999999	B	23	23.5	*9.6*	S	23
								0.31999999	B	23	23.5	*9.8*	S	24
								0.375	B	25	25	*10*	S	25.5
								0.58	S	26	26	*10*	S	25.5
								0.595	S	27	27	*10.6*	S	27
								0.63	S	28	28	*10.8*	S	28
								0.64	S	29	29	11.1000004	B	29
								0.66	S	30	30	11.3	S	30
								0.68	S	31	31	*12.1*	S	31
								0.7	S	32	32.5	*12.3000002*	B	32
								0.7	S	32	32.5	12.8	S	33
								0.74	S	34	34	*12.8000002*	B	34
								0.79	S	35	35	14	S	35
								0.9	S	36	36	14.8999996	B	36
								0.95	S	37	37	*17.2999992*	B	37
								1	S	38	38	*17.7*	S	38
								1.1	S	39	39	*22.8999996*	B	39

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	28
# tie groups	5
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	3
# ties in grp 4	2
# ties in grp 5	2
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	39.968
Denominator	35.010
Zscore	0.800
n_1 =	23
n_2 =	16
m=	39
Critical Z =	1.645
S > B?	NO
p-value	0.212

Table B2-5
Wilcoxon Rank Sum Test Result for Copper In Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
48.4			B	17.7			S	1.50	B	1	1	1.50	B	1
44.6			B	14			S	1.70	S	2	2	1.70	S	2
33.3			B	12.8			S	1.71	B	3	3	1.71	B	3
16.9			B	12.1			S	2.30	S	4	4	2.30	S	4
14.6			B	11.3			S	2.43	B	5	5	2.43	B	5
13.8			B	10.8			S	2.60	S	6	6	2.60	S	6
13.6			B	10.6			S	2.63	B	7	7	2.63	B	7
10.245			B	10			S	3.10	B	8	8	3.10	B	8
9.81			B	10			S	3.10	S	9	9	3.10	S	9
9.53			B	9.8			S	3.20	S	10	10	3.20	S	10
8.84			B	9.6			S	3.30	S	11	11	3.30	S	11
7.51			B	9.4			S	3.51	B	12	12	3.51	B	12
5.93			B	9.1			S	4.10	S	13	13	4.10	S	13
4.72			B	8.7			S	4.20	B	14	14	4.20	B	14
4.485			B	8.5			S	4.30	S	15	15	4.30	S	15
3.51			B	8.5			S	4.30	S	15	15	4.30	S	15
1.5			B	7.4			S	4.49	B	17	17	4.49	B	17
2.43			B	7.15			S	4.72	B	18	18	4.72	B	18
4.74			B	6.7			S	4.74	B	19	19	4.74	B	19
12.3			B	4.3			S	4.90	S	20	20	4.90	S	20
6.92			B	4.1			S	5.20	B	21	21	5.20	B	21
17.3			B	3.3			S	5.20	B	22	22	5.20	B	22
11.1			B	2.6			S	5.93	B	23	23	5.93	B	23
6.1			B	7.7			S	6.10	B	24	24	6.10	B	24
2.63			B	6.2			S	6.20	S	25	25	6.20	S	25
12.8			B	4.9			S	6.39	B	26	26	6.39	B	26
33.1			B	4.3			S	6.70	S	27	27	6 70	S	27
22.9			B	3.2			S	6.92	B	28	28	6 92	B	28
14.9			B	3.1			S	7.15	S	29	29	7.15	S	29
6.39			B	2.3			S	7.40	S	30	30	7.40	S	30
3.1			B	1.7			S	7.51	B	31	31	7.51	B	31
5.2			B					7.70	S	32	32	7.70	S	32
4.2			B					8.50	S	33	33.5	8.50	S	33.5
5.2			B					8.50	S	33	33.5	8.50	S	33.5
1.71			B					8.70	S	35	35	8.70	S	35
								8.84	B	36	36	8.84	B	36
								9.10	S	37	37	9.10	S	37
								9.40	S	38	38	9.40	S	38
								9.53	B	39	39	9 53	B	39
								9.60	S	40	40	9 60	S	40
								9.80	S	41	41	9.80	S	41
								9.81	B	42	42	9.81	B	42
								10.00	S	43	43 5	10.00	S	43.5
								10 00	S	43	43.5	10.00	S	43.5
								10.24	B	45	45	10.24	B	45
								10.60	S	46	46	10 60	S	46
								10 80	S	47	47	10.80	S	47
								11.10	B	48	48	11.10	B	48
								11.30	S	49	49	11.30	S	49
								12.10	S	50	50	12.10	S	50
								12.30	B	51	51	12.30	B	51
								12.80	S	52	52	12.80	S	52
								12.80	B	53	53	12.80	B	53
								13.60	B	54	54	13.60	B	54
								13.80	B	55	55	13.80	B	55
								14.00	S	56	56	14.00	S	56
								14.60	B	57	57	14.60	B	57
								14.90	B	58	58	14 90	B	58
								16.90	B	59	59	16.90	B	59
								17.30	B	60	60	17.30	B	60
								17.70	S	61	61	17.70	S	61
								22 90	B	62	62	22.90	B	62
								33.10	B	63	63	33.10	B	63
								33.30	B	64	64	33 30	B	64
								44.60	B	65	65	44.60	B	65
								48.40	B	66	66	48 40	B	66

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	-84.5
# tie groups	2
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	66.997
Denominator	77.831
Zscore	-1.086
n_1 =	31
n_2 =	35
m=	66
Critical Z =	1.645
S > B?	NO
p-value	0.861

Table B2-6
Wilcoxon Rank Sum Test Result for Iron in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined				Ordered, Combined		
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc	Data Set	Loc	Prelim Rank	Final Rank	Data Set	Loc	Final Rank
35200			B	43500			S	962	B	1	1	962	B	1
35200			B	27900			S	1010	B	2	2	1010	B	2
23950			B	26800			S	1520	B	3	3	1520	B	3
17800			B	26300			S	2400	B	4	4	2400	B	4
15900			B	25600			S	2700	B	5	5	2700	B	5
12300			B	24900			S	2740	B	6	6	*2740*	*B*	6
11400			B	24500			S	2760	B	7	7	2760	B	7
9560			B	22900			S	3090	S	8	8	3090	S	8
8270			B	22500			S	3470	B	9	9	3470	B	9
5080			B	21700			S	4220	B	10	10	4220	B	10
4710			B	19950			S	4710	B	11	11	4710	B	11
3470			B	19750			S	4800	B	12	12	4800	B	12
2760			B	19700			S	5080	B	13	13	5080	B	13
2740			B	19600			S	5430	B	14	14	*5430*	*B*	14
2400			B	18800			S	5720	B	15	15	*5720*	*B*	15
1520			B	18400			S	6580	S	16	16	6580	S	16
1010			B	17800			S	8270	B	17	17	*8270*	*B*	17
962			B	13700			S	8560	S	18	18	*8560*	*S*	18
4220			B	13500			S	8730	S	19	19	*8730*	*S*	19
13100			B	13000			S	8780	B	20	20	*8780*	*B*	20
34800			B	12800			S	9560	B	21	21.5	*9560*	*B*	21.5
5430			B	11900			S	9560	B	21	21.5	*9560*	*B*	21.5
35300			B	8560			S	9920	S	23	23	*9920*	*S*	23
19400			B	23300			S	10800	S	24	24	*10800*	*S*	24
8780			B	14900			S	11400	B	25	25	*11400*	*B*	25
9560			B	13000			S	11500	B	26	26	*11500*	*B*	26
14000			B	10800			S	11900	S	27	27	*11900*	*S*	27
13500			B	9920			S	12300	B	28	28	*12300*	*B*	28
42000			B	8730			S	12800	S	29	29	12800	S	29
23500			B	6580			S	13000	S	30	30.5	13000	S	30.5
16200			B	3090			S	13000	S	30	30.5	*13000*	*S*	30.5
5720			B					13100	B	32	32	*13100*	*B*	32
2700			B					13500	B	33	33.5	13500	B	33.5
11500			B					13500	S	33	33.5	*13500*	*S*	33.5
4800			B					13700	S	35	35	13700	S	35
								14000	B	36	36	14000	B	36
								14900	S	37	37	*14900*	*S*	37
								15900	B	38	38	*15900*	*B*	38
								16200	B	39	39	*16200*	*B*	39
								17800	B	40	40.5	*17800*	*B*	40.5
								17800	S	40	40.5	*17800*	*S*	40.5
								18400	S	42	42	*18400*	*S*	42
								18800	S	43	43	*18800*	*S*	43
								19400	B	44	44	*19400*	*B*	44
								19600	S	45	45	*19600*	*S*	45
								19700	S	46	46	*19700*	*S*	46
								19750	S	47	47	*19750*	*S*	47
								19950	S	48	48	*19950*	*S*	48
								21700	S	49	49	*21700*	*S*	49
								22500	S	50	50	*22500*	*S*	50
								22900	S	51	51	*22900*	*S*	51
								23300	S	52	52	*23300*	*S*	52
								23500	B	53	53	*23500*	*B*	53
								23950	B	54	54	*23950*	*B*	54
								24500	S	55	55	*24500*	*S*	55
								24900	S	56	56	*24900*	*S*	56
								25600	S	57	57	*25600*	*S*	57
								26300	S	58	58	*26300*	*S*	58
								26800	S	59	59	*26800*	*S*	59
								27900	S	60	60	*27900*	*S*	60
								34800	B	61	61	*34800*	*B*	61
								35200	B	62	62.5	*35200*	*B*	62.5
								35200	B	62	62.5	*35200*	*B*	62.5
								35300	B	64	64	*35300*	*B*	64
								42000	B	65	65	*42000*	*B*	65
								43500	S	66	66	*43500*	*S*	66

From Gilbert 1987 (w/ ties)

TEST VALUES:	
Numerator	216.5
# tie groups	5
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	2
# ties in grp 4	2
# ties in grp 5	2
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	66.993
Denominator	77.829
Zscore	2.782
n_1 =	31
n_2 =	35
m=	66
Critical Z =	1.645
S > B?	YES
p-value	0.003

Table B2-7
Wilcoxon Rank Sum Test Result for Lead in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set	Loc	Prelim Rank	Final Rank	Ordered, Combined Data Set	Loc	Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc							
16.4			B	57.5			S	2.21	B	1	1	2.21	B	1
13.6			B	51.7			S	3.05	B	2	2	3.05	B	2
13.5			B	31.3			S	3.74	B	3	3	3.74	B	3
11.3			B	28.6			S	3.90	B	4	4	3.90	B	4
9.41			B	26.6			S	4.23	B	5	5	4.23	B	5
8.98			B	25.9			S	4.40	S	6	6	4.40	S	6
8.62			B	22.4			S	4.50	B	7	7	4.50	B	7
8.13			B	22			S	4.94	B	8	8	4.94	B	8
8.13			B	21.3			S	5.39	B	9	9	5.39	B	9
7.46			B	16.65			S	5.40	B	10	10	5.40	B	10
5.68			B	16			S	5.68	B	11	11	5.68	B	11
4.94			B	12			S	5.80	S	12	12	5.80	S	12
4.5			B	11.3			S	6.10	S	13	13	6.10	S	13
4.23			B	11			S	6.40	S	14	14	6.40	S	14
3.9			B	10.3			S	6.60	S	15	15	6.60	S	15
3.74			B	10.1			S	7.00	S	16	16	7.00	S	16
3.05			B	9.6			S	7.20	S	17	17	7.20	S	17
2.205			B	9.55			S	7.46	B	18	18	7.46	B	18
5.39			B	9.1			S	7.69	B	19	19	7.69	B	19
7.69			B	9.1			S	8.13	B	20	20.5	8.13	B	20.5
12.1			B	8.4			S	8.13	B	20	20.5	8.13	B	20.5
58.3			B	6.6			S	8.30	S	22	22	8.30	S	22
17.1			B	6.4			S	8.40	S	23	23	8.40	S	23
18.5			B	8.9			S	8.50	S	24	24	8.50	S	24
46.9			B	8.5			S	8.62	B	25	25	8.62	B	25
5.4			B	8.3			S	8.90	S	26	26	8.90	S	26
58.2			B	7.2			S	8.98	B	27	27	8.98	B	27
75			B	7			S	9.10	S	28	28.5	9.10	S	28.5
24.2			B	6.1			S	9.10	S	28	28.5	9.10	S	28.5
38.8			B	5.8			S	9.41	B	30	30	9.41	B	30
21.4			B	4.4			S	9.55	S	31	31	9.55	S	31
9.94			B					9.60	S	32	32	9.60	S	32
22.3			B					9.94	B	33	33	9.94	B	33
17.5			B					10.10	S	34	34	10.10	S	34
32.85			B					10.30	S	35	35	10.30	S	35
								11.00	S	36	36	11.00	S	36
								11.30	S	37	37	11.30	S	37
								11.30	B	38	38	11.30	B	38
								12.00	S	39	39	12.00	S	39
								12.10	B	40	40	12.10	B	40
								13.50	B	41	41	13.50	B	41
								13.60	B	42	42	13.60	B	42
								16.00	S	43	43	16.00	S	43
								16.40	B	44	44	16.40	B	44
								16.65	S	45	45	16.65	S	45
								17.10	B	46	46	17.10	B	46
								17.50	B	47	47	17.50	B	47
								18.50	B	48	48	18.50	B	48
								21.30	S	49	49	21.30	S	49
								21.40	B	50	50	21.40	B	50
								22.00	S	51	51	22.00	S	51
								22.30	B	52	52	22.30	B	52
								22.40	S	53	53	22.40	S	53
								24.20	B	54	54	24.20	B	54
								25.90	S	55	55	25.90	S	55
								26.60	S	56	56	26.60	S	56
								28.60	S	57	57	28.60	S	57
								31.30	S	58	58	31.30	S	58
								32.85	B	59	59	32.85	B	59
								38.80	B	60	60	38.80	B	60
								46.90	B	61	61	46.90	B	61
								51.70	S	62	62	51.70	S	62
								57.50	S	63	63	57.50	S	63
								58.20	B	64	64	58.20	B	64
								58.30	B	65	65	58.30	B	65
								75.00	B	66	66	75.00	B	66

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	42.5
# tie groups	2
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	66.997
Denominator	77.831
Zscore	0.546
n_1 =	31
n_2 =	35
m=	66
Critical Z =	1.645
S > B?	NO
p-value	0.293

Table B2-8
Wilcoxon Rank Sum Test Result for Manganese in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set		Prelim Rank	Final Rank	Ordered, Combined Data Set		Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc		Loc				Loc	
52.2			B	275			S	1.30	S	1	1	2.21	B	1
34.1			B	117			S	1.50	S	2	2	3.05	B	2
32.4			B	105			S	2.30	S	3	3	3.74	B	3
28.5			B	94.9			S	2.67	B	4	4	3.90	B	4
25			B	92.35			S	2.90	S	5	5	4.23	B	5
14.1			B	92.2			S	3.39	B	6	6	4.40	S	6
13.8			B	75.5			S	3 40	S	7	7	4.50	B	7
11.6			B	68.7			S	3.44	B	8	8	4 94	B	8
10.5			B	67.1			S	4.31	B	9	9	5.39	B	9
9.85			B	59.1			S	5.30	B	10	10	5.40	B	10
8.79			B	58.7			S	5.38	B	11	11	5.68	B	11
5.38			B	58.4			S	8.79	B	12	12	5.80	S	12
5.305			B	47.8			S	8.87	B	13	13	6.10	S	13
4.31			B	43.85			S	9.10	S	14	14	6.40	S	14
3.44			B	35.1			S	9.20	S	15	15	6.60	S	15
3.39			B	28.9			S	9.85	B	16	16	7.00	S	16
2.67			B	27.2			S	10.50	B	17	17	7.20	S	17
8.87			B	23.9			S	10.70	S	18	18	7.46	B	18
31.1			B	16.3			S	11.60	B	19	19	7.69	B	19
20.4			B	10.7			S	13.80	B	20	20	8.13	B	20.5
74.2			B	2.3			S	14.10	B	21	21	8.13	B	20.5
58.8			B	1.5			S	16.30	S	22	22	8.30	S	22
62.4			B	42			S	20.40	B	23	23	8 40	S	23
72.7			B	37.6			S	23.90	S	24	24	8.50	S	24
24.6			B	9.2			S	24.60	B	25	25	8.62	B	25
94.2			B	9.1			S	25.00	B	26	26	8.90	S	26
63			B	3.4			S	27.20	S	27	27	8.98	B	27
40.8			B	2.9			S	27.40	B	28	28	9.10	S	28 5
62.9			B	1.3			S	28.50	B	29	29	9.10	S	28.5
62.2			B					28.90	S	30	30	9.41	B	30
27.4			B					31.10	B	31	31	9.55	S	31
77.3			B					32.40	B	32	32	9.60	S	32
139			B					34.10	B	33	33	9.94	B	33
53.2			B					35.10	S	34	34	10.10	S	34
								37.60	S	35	35	10.30	S	35
								40.80	B	36	36	11.00	S	36
								42.00	S	37	37	11.30	S	37
								43.85	S	38	38	11.30	B	38
								47.80	S	39	39	12.00	S	39
								52.20	B	40	40	12.10	B	40
								53.20	B	41	41	13.50	B	41
								58.40	S	42	42	13.60	B	42
								58.70	S	43	43	16.00	S	43
								58.80	B	44	44	16.40	B	44
								59.10	S	45	45	16.65	S	45
								62.20	B	46	46	17.10	B	46
								62 40	B	47	47	17 50	B	47
								62.90	B	48	48	18.50	B	48
								63.00	B	49	49	21.30	S	49
								67.10	S	50	50	21.40	B	50
								68.70	S	51	51	22.00	S	51
								72.70	B	52	52	22.30	B	52
								74.20	B	53	53	22.40	S	53
								75.50	S	54	54	24 20	B	54
								77.30	B	55	55	25.90	S	55
								92.20	S	56	56	26.60	S	56
								92.35	S	57	57	28.60	S	57
								94.20	B	58	58	31.30	S	58
								94.90	S	59	59	32.85	B	59
								105.00	S	60	60	38.80	B	60
								117.00	S	61	61	46.90	B	61
								139.00	B	62	62	58 30	B	65
								275.00	S	63	63	75.00	B	66

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	28
# tie groups	2
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	
# ties in grp 4	
# ties in grp 5	
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	63.997
Denominator	72.515
Zscore	0.386
n_1 =	29
n_2 =	34
m=	63
Critical Z =	1.645
S > B?	NO
p-value	0.350

Table B2-9
Wilcoxon Rank Sum Test Result for Nickel in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Background				Cleanup Area				Ordered, Combined Data Set		Prelim Rank	Final Rank	Ordered, Combined Data Set		Final Rank
Data	Lab Flag	Val Flag	Loc	Data	Lab Flag	Val Flag	Loc		Loc				Loc	
6.05			B	10.3			S	0.34	B	1	1	0.34	B	1
6			B	10.2			S	0.57	S	2	2	0.57	S	2
3.45			B	8.9			S	0.58	S	3	3	0.58	S	3
2.99			B	7.9			S	0.61	B	4	4	0.61	B	4
2.89			B	7.8			S	0.78	B	5	5	0.78	B	5
2.37			B	7.6			S	0.8	S	6	6	0.80	S	6
2.26			B	7.5			S	0.92	S	7	7	0.92	S	7
2.245			B	7.2			S	0.93	B	8	8	0.93	B	8
2.17			B	7.1			S	0.98	S	9	9	0.98	S	9
2			B	6.9			S	1.3	S	10	10.5	1.30	S	10.5
1.85			B	6.25			S	1.3	S	10	10.5	1.30	S	10.5
1.74			B	6.2			S	1.31	B	12	12	1.31	B	12
1.62			B	6.1			S	1.5	S	13	13	1.50	S	13
1.6			B	5.1			S	1.60	B	14	14	1.60	B	14
1.31			B	5			S	1.62	B	15	15	1.62	B	15
3.46			B	2.9			S	1.69	B	16	16	1.69	B	16
3.02			B	2.5			S	1.74	B	17	17	1.74	B	17
4.68			B	2.2			S	1.8	S	18	18	1.80	S	18
7.2			B	1.8			S	1.8	S	18	18	1.80	S	18
3.51			B	1.3			S	1.85	B	20	20	1.85	B	20
2.8			B	1.3			S	2	S	21	21.5	2.00	S	21.5
2.51			B	0.98			S	2.00	B	21	21.5	2.00	B	21.5
4.17			B	0.92			S	2.17	B	23	23	2.17	B	23
4.31			B	2.5			S	2.2	S	24	24.5	2.20	S	24.5
7.29			B	2.2			S	2.2	S	24	24.5	2.20	S	24.5
3.86			B	2			S	2.25	B	26	26	2.25	B	26
3.93			B	1.8			S	2.26	B	27	27	2.26	B	27
4.36			B	1.5			S	2.30	B	28	28	2.30	B	28
2.3			B	0.8			S	2.37	B	29	29	2.37	B	29
3.76			B	0.58			S	2.5	S	30	30.5	2.50	S	30.5
1.695			B	0.57			S	2.5	S	30	30.5	2.50	S	30.5
0.934			B					2.51	B	32	32	2.51	B	32
0.782			B					2.80	B	33	33	2.80	B	33
0.612			B					2.89	B	34	34	2.89	B	34
0.335			B					2.9	S	35	35	2.90	S	35
								2.99	B	36	36	2.99	B	36
								3.02	B	37	37	3.02	B	37
								3.45	B	38	38	3.45	B	38
								3.46	B	39	39	3.46	B	39
								3.51	B	40	40	3.51	B	40
								3.76	B	41	41	3.76	B	41
								3.86	B	42	42	3.86	B	42
								3.93	B	43	43	3.93	B	43
								4.17	B	44	44	4.17	B	44
								4.31	B	45	45	4.31	B	45
								4.36	B	46	46	4.36	B	46
								4.68	B	47	47	4.68	B	47
								5	S	48	48	5.00	S	48
								5.1	S	49	49	5.10	S	49
								6.00	B	50	50	6.00	B	50
								6.05	B	51	51	6.05	B	51
								6.1	S	52	52	6.10	S	52
								6.2	S	53	53	6.20	S	53
								6.25	S	54	54	6.25	S	54
								6.9	S	55	55	6.90	S	55
								7.1	S	56	56	7.10	S	56
								7.20	B	57	57	7.20	B	57
								7.2	S	58	58	7.20	S	58
								7.29	B	59	59	7.29	B	59
								7.5	S	60	60	7.50	S	60
								7.8	S	61	61.5	7.80	S	61.5
								7.8	S	61	61.5	7.80	S	61.5
								7.9	S	63	63	7.90	S	63
								8.9	S	64	64	8.90	S	64
								10.2	S	65	65	10.20	S	65
								10.3	S	66	66	10.30	S	66

From Gilbert 1987 (w/ ties)	
TEST VALUES:	
Numerator	91
# tie groups	5
# ties in grp 1	2
# ties in grp 2	2
# ties in grp 3	2
# ties in grp 4	2
# ties in grp 5	2
# ties in grp 6	
# ties in grp 7	
# ties in grp 8	
parenthesis	66.993
Denominator	77.829
Zscore	1.169
n_1 =	31
n_2 =	35
m=	66
Critical Z =	1.645
S > B?	NO
p-value	0.121

Table B3-1
Quantile Test Result for 2-Methylnaphthalene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Reiton Version 1.3 12/1/2001

CDC ID #	
Name	2-methylnaphthalene
Units	mg/kg

INPUT
OUTPUT
Historical Data

Background Sample
Clean Up Area Sample

m =	17	# measurements in Background (< 100)
n =	22	# measurements in Clean Up Area (< 100)
r =	3	Table A.3 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	3	Table A.3 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect | 11 % chance of a ND

20 % chance of a Detect in B | 86 % chance of a Detect in C
10 % chance of a ND in B | 14 % chance of a ND in C

ND more likely than Detect

MIN Value =	0.007	ND	ND Rule	1* value	NON =	22

1

Accept Ho (Site = Bkg) | Note: Ha is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag					17	22	IF MIN is DETECT, (R1, e=0, ELSE (R=0, e=1						Sort by CALC RANK (descending)			B			C			r	k	C	
SORT all by Value Ascending																									
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	S	S	T	Counter
1	B	0.007	U	U	1	0	ND	1	0.0035	0	1	16.5	40	C	1.2	40				1.2	40		1	1	1	1
2	B	0.0087	--	--	1	0	Detect	0	0.0087	1	1	17.5	27	B	0.1	33	0.1	33					2	2		2
3	B	0.019	--	--	1	0	Detect	0	0.019	2	1	18.5	11	B	0.048	34.5	0.048	34.5					3	3		3
4	B	0.027	--	--	1	0	Detect	0	0.027	3	1	19.5	10	B	0.244	23.5	0.244	23.5					4	4		4
5	B	0.035	--	--	1	0	Detect	0	0.035	4	1	20.5	5	B	0.255	20.5	0.255	20.5					5	5		5
6	B	0.038	U	U	1	0	ND	1	0.019	4	2	18.5	28	C	0.0525	28				0.0525	28	+				6
7	B	0.0385	U	U	1	0	ND	1	0.01925	4	3	18.5	29	C	0.0525	28				0.0525	28	+				7
8	B	0.0415	U	U	1	0	ND	1	0.02075	4	4	18.5	30	B	0.085	29	0.085	29	+							8
9	B	0.042	U	U	1	0	ND	1	0.021	4	5	18.5	31	B	0.0875	30	0.0875	30	+							9
10	B	0.044	--	--	1	0	Detect	0	0.044	5	5	23.5	32	C	0.0925	26				0.0925	27	+				10
11	B	0.048	--	--	1	0	Detect	0	0.048	6	5	24.5	33	B	0.0929	25	0.0929	25	+							11
12	B	0.05	U	U	1	0	ND	1	0.04	6	6	18.5	34	C	0.095	31				0.095	30	+				12
13	B	0.06	U	U	1	0	ND	1	0.04	6	7	18.5	35	C	0.095	31				0.095	30	+				13
14	C	0.095	U	U	0	1	ND	1	0.0475	6	8	18.5	36	C	0.095	31				0.095	30	+				14
15	C	0.095	U	U	0	1	ND	1	0.0475	6	9	18.5	37	C	0.1	35				0.1	35	+				15
16	C	0.095	U	U	0	1	ND	1	0.0475	6	10	18.5	38	C	0.1025	37				0.1025	36	+				16
17	C	0.095	U	U	0	1	ND	1	0.0475	6	11	18.5	39	C	0.1025	37				0.1025	36	+				17
18	C	0.095	U	U	0	1	ND	1	0.0475	6	12	18.5	4	B	0.027	19.5	0.027	19.5								18
19	C	0.1	U	U	0	1	ND	1	0.05	6	13	18.5	12	B	0.04	22.5	0.04	22.5	+							19
20	C	0.1	U	U	0	1	ND	1	0.05	6	14	18.5	13	B	0.04	22.5	0.04	22.5	+							20
21	C	0.1	U	U	0	1	ND	1	0.05	6	15	18.5	14	C	0.0475	18.5				0.0475	18.5	+				21
22	C	0.1	U	U	0	1	ND	1	0.05	6	16	18.5	15	C	0.0475	18.5				0.0475	18.5	+				22
23	C	0.1	U	U	0	1	ND	1	0.05	6	17	18.5	16	C	0.0475	18.5				0.0475	18.5	+				23
24	C	0.1	U	U	0	1	ND	1	0.05	6	18	18.5	17	C	0.0475	18.5				0.0475	18.5	+				24
25	C	0.1	U	U	0	1	ND	1	0.05	6	19	18.5	18	C	0.0475	18.5				0.0475	18.5	+				25
26	C	0.1	U	U	0	1	ND	1	0.05	6	20	18.5	19	C	0.05	19.5				0.05	19.5	+				26
27	B	0.1	--	--	1	0	Detect	0	0.1	7	20	32	20	C	0.05	19.5				0.05	19.5	+				27
28	C	0.105	U	U	0	1	ND	1	0.0525	7	21	20	21	C	0.05	19.5				0.05	19.5	+				28
29	C	0.105	U	U	0	1	ND	1	0.0525	7	22	20	22	C	0.05	19.5				0.05	19.5	+				29
30	B	0.17	U	U	1	0	ND	1	0.085	7	23	20	23	C	0.05	19.5				0.05	19.5	+				30
31	B	0.175	U	U	1	0	ND	1	0.0875	7	24	20	24	C	0.05	19.5				0.05	19.5	+				31
32	C	0.185	U	U	0	1	ND	1	0.0925	7	25	20	25	C	0.05	19.5				0.05	19.5	+				32
33	B	0.185	U	U	1	0	ND	1	0.0925	7	26	20	26	C	0.05	19.5				0.05	19.5	+				33
34	C	0.19	U	U	0	1	ND	1	0.095	7	27	20	3	B	0.019	18.5	0.019	18.5								34
35	C	0.19	U	U	0	1	ND	1	0.095	7	28	20	6	B	0.019	18.5	0.019	18.5	+							35
36	C	0.19	U	U	0	1	ND	1	0.095	7	29	20	7	B	0.01925	18.5	0.01925	18.5	+							36
37	C	0.2	U	U	0	1	ND	1	0.1	7	30	20	8	B	0.02075	18.5	0.02075	18.5	+							37
38	C	0.205	U	U	0	1	ND	1	0.1025	7	31	20	9	B	0.021	18.5	0.021	18.5	+							38
39	C	0.205	U	U	0	1	ND	1	0.1025	7	32	20	2	B	0.0585	17.5	0.0585	17.5	+							39
40	C	1.2	--	--	0	1	Detect	0	1.2	8	32	40	1	B	0.0635	16.5	0.0635	16.5	+							40

Table B3-2
Quantile Test Result for Acenaphthene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
K.S. Rentz Version 1.3 12/1997

COC ID #	
Name	acenaphth
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	3	Table A,B = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	3	Table A,B = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.179	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

65 % chance of a Detect	11 % chance of a ND
50 % chance of a Detect in B	86 % chance of a Detect in C
15 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.0073 ND

ND Rule: 1/2 value
1/2

NCIN = 17

Accept Ho (Site < Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.179

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	MDn1 Detect = 0	Data	d	e	Calculated Rank
1	B	0.0073	U	U	1	0	ND	1	0.00375	0	1	19
2	B	0.0073	U	U	1	0	ND	1	0.00375	0	2	19
3	B	0.0073	U	U	1	0	ND	1	0.00375	0	3	19
4	B	0.0073	U	U	1	0	ND	1	0.00375	0	4	19
5	B	0.068	–	–	1	0	Detect	0	0.009	1	4	21.5
6	B	0.0085	U	U	1	0	ND	1	0.00425	1	5	19.5
7	B	0.0375	U	U	1	0	ND	1	0.01875	1	6	19.5
8	B	0.038	U	U	1	0	ND	1	0.019	1	7	19.5
9	B	0.0385	U	U	1	0	ND	1	0.01925	1	8	19.5
10	B	0.0415	U	U	1	0	ND	1	0.02075	1	9	19.5
11	B	0.042	U	U	1	0	ND	1	0.021	1	10	19.5
12	B	0.06	–	–	1	0	Detect	0	0.06	2	10	25.5
13	B	0.08	U	U	1	0	ND	1	0.04	2	11	25
14	B	0.08	U	U	1	0	ND	1	0.04	2	12	25
15	C	0.095	U	U	0	1	ND	1	0.0475	2	13	25
16	C	0.095	U	U	0	1	ND	1	0.0475	2	14	25
17	C	0.095	U	U	0	1	ND	1	0.0475	2	15	25
18	C	0.095	U	U	0	1	ND	1	0.0475	2	16	25
19	C	0.095	U	U	0	1	ND	1	0.0475	2	17	25
20	C	0.1	U	U	0	1	ND	1	0.05	2	18	25
21	C	0.1	U	U	0	1	ND	1	0.05	2	19	25
22	C	0.1	U	U	0	1	ND	1	0.05	2	20	25
23	C	0.1	U	U	0	1	ND	1	0.05	2	21	25
24	C	0.1	U	U	0	1	ND	1	0.05	2	22	25
25	C	0.1	U	U	0	1	ND	1	0.05	2	23	25
26	C	0.1	U	U	0	1	ND	1	0.05	2	24	25
27	C	0.1	U	U	0	1	ND	1	0.05	2	25	25
28	C	0.105	U	U	0	1	ND	1	0.0525	2	26	25
29	C	0.105	U	U	0	1	ND	1	0.0525	2	27	25
30	B	0.17	U	U	1	0	ND	1	0.085	2	28	25
31	B	0.175	U	U	1	0	ND	1	0.0875	2	29	25
32	C	0.185	U	U	0	1	ND	1	0.0925	2	30	25
33	B	0.185	U	U	1	0	ND	1	0.0925	2	31	25
34	C	0.19	U	U	0	1	ND	1	0.095	2	32	25
35	C	0.19	U	U	0	1	ND	1	0.095	2	33	25
36	C	0.19	U	U	0	1	ND	1	0.095	2	34	25
37	C	0.2	U	U	0	1	ND	1	0.1	2	35	25
38	C	0.205	U	U	0	1	ND	1	0.1025	2	36	25
39	C	0.205	U	U	0	1	ND	1	0.1025	2	37	25
40	C	0.1	–	–	0	1	Detect	0	0.1	3	37	40

IF MIN is DETECT, d=1 and, ELSE d=0, e=1

Index	Source (B or C)	Data	CALC RANK
1	C	0.1	40
2	B	0.08	28.5
3	B	0.068	21.5
4	B	0.04	29
5	B	0.04	29
6	C	0.0475	29
7	C	0.0475	29
8	C	0.0475	29
9	C	0.0475	29
10	C	0.0475	29
11	C	0.05	29
12	C	0.05	29
13	C	0.05	29
14	C	0.05	29
15	C	0.05	29
16	C	0.05	29
17	C	0.05	29
18	C	0.05	29
19	C	0.0525	29
20	C	0.0525	29
21	B	0.085	29
22	B	0.0875	29
23	C	0.0925	29
24	B	0.0925	29
25	C	0.095	29
26	C	0.095	29
27	C	0.095	29
28	C	0.1	29
29	C	0.1025	29
30	C	0.1025	29
31	B	0.00425	19.5
32	B	0.01875	19.5
33	B	0.019	19.5
34	B	0.01925	19.5
35	B	0.02075	19.5
36	B	0.021	19.5
37	B	0.0073	19
38	B	0.00375	19
39	B	0.00375	19
40	B	0.00375	19

Index	Data	Rank	W
1	0.1	40	
2	0.08	28.5	
3	0.068	21.5	
4	0.04	29	
5	0.04	29	
6	0.0475	29	
7	0.0475	29	
8	0.0475	29	
9	0.0475	29	
10	0.0475	29	
11	0.05	29	
12	0.05	29	
13	0.05	29	
14	0.05	29	
15	0.05	29	
16	0.05	29	
17	0.05	29	
18	0.05	29	
19	0.0525	29	
20	0.0525	29	
21	0.085	29	
22	0.0875	29	
23	0.0925	29	
24	0.0925	29	
25	0.095	29	
26	0.095	29	
27	0.095	29	
28	0.1	29	
29	0.1025	29	
30	0.1025	29	
31	0.00425	19.5	
32	0.01875	19.5	
33	0.019	19.5	
34	0.01925	19.5	
35	0.02075	19.5	
36	0.021	19.5	
37	0.0073	19	
38	0.00375	19	
39	0.00375	19	
40	0.00375	19	

Index	Data	Rank	W
1	0.1	40	
2	0.08	28.5	
3	0.068	21.5	
4	0.04	29	
5	0.04	29	
6	0.0475	29	
7	0.0475	29	
8	0.0475	29	
9	0.0475	29	
10	0.0475	29	
11	0.05	29	
12	0.05	29	
13	0.05	29	
14	0.05	29	
15	0.05	29	
16	0.05	29	
17	0.05	29	
18	0.05	29	
19	0.0525	29	
20	0.0525	29	
21	0.085	29	
22	0.0875	29	
23	0.0925	29	
24	0.0925	29	
25	0.095	29	
26	0.095	29	
27	0.095	29	
28	0.1	29	
29	0.1025	29	
30	0.1025	29	
31	0.00425	19.5	
32	0.01875	19.5	
33	0.019	19.5	
34	0.01925	19.5	
35	0.02075	19.5	
36	0.021	19.5	
37	0.0073	19	
38	0.00375	19	
39	0.00375	19	
40	0.00375	19	

r	k	c
1	1	1
2	2	2
3	3	3

Counter
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Table 2-3
Quantile Test Result for Anthracene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Rocha Version 1.2 12/19/01

CDC ID #	
Name	anthracene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	9	Table A.6 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	8	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

84 % chance of a Detect	11 % chance of a ND
96 % chance of a Detect in B	86 % chance of a Detect in C
16 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0073 ND

ND Rule: 1* value = 1

NON = 20

Accept Ho (Site = Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

m = 17 n = 23

IF MIN is DETECT, r, (r-1, and), ELSE (r=9, and=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect=0	Data	r	a	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B: Data	B: Rank	B: ND	C: Data	C: Rank	C: ND	r	k	C	Counter
1	B	0.0073	U	U	1	0	ND	1	0.00375	9	1	14.5	40	C	3.8	40				3.8	40		1	1	1	1
2	B	0.0073	U	U	1	0	ND	1	0.00375	9	2	14.5	39	D	1.29999995	39	0.4000000	38					2	2		2
3	B	0.014	–	–	1	0	Detect	0	0.014	7	2	10	38	B	0.40000001	38	0.2500000	37					3	3		3
4	B	0.0073	U	U	1	0	ND	1	0.01875	9	3	18	37	B	0.25000000	37	0.2500000	37					4	4		4
5	B	0.047	–	–	1	0	Detect	0	0.047	3	3	17.5	36	D	0.19	36	0.19	36					5	5		5
6	B	0.060	–	–	1	0	Detect	0	0.060	3	4	16.5	27	D	0.16000001	21	0.1600000	21								6
7	B	0.058	–	–	1	0	Detect	0	0.058	4	5	15.5	24	B	0.11	29	0.11	29								7
8	C	0.060	U	U	0	1	ND	1	0.0475	4	6	15.5	23	B	0.11	28	0.11	28								8
9	C	0.060	U	U	0	1	ND	1	0.0475	4	7	15.5	7	B	0.058	15.5	0.058	15.5								9
10	C	0.055	U	U	0	1	ND	1	0.0475	4	8	15.5	6	B	0.058	15.5	0.058	15.5								10
11	C	0.055	U	U	0	1	ND	1	0.0475	4	9	15.5	31	C	0.055	15.5				0.055	15.5	+				11
12	C	0.055	U	U	0	1	ND	1	0.0475	4	10	15.5	32	C	0.055	15.5				0.055	15.5	+				12
13	C	0.1	U	U	0	1	ND	1	0.05	4	11	15.5	33	C	0.055	15.5				0.055	15.5	+				13
14	C	0.1	U	U	0	1	ND	1	0.05	4	12	15.5	34	C	0.1	15.5				0.1	15.5	+				14
15	C	0.1	U	U	0	1	ND	1	0.05	4	13	15.5	35	C	0.1025	15.5				0.1025	15.5	+				15
16	C	0.1	U	U	0	1	ND	1	0.05	4	14	15.5	26	C	0.1025	15.5				0.1025	15.5	+				16
17	C	0.1	U	U	0	1	ND	1	0.05	4	15	15.5	29	C	0.0925	15				0.0925	15	+				17
18	C	0.1	U	U	0	1	ND	1	0.05	4	16	15.5	25	B	0.0529	15	0.1025	15	+							18
19	C	0.1	U	U	0	1	ND	1	0.05	4	17	15.5	1	B	0.047	17.5	0.047	17.5								19
20	C	0.1	U	U	0	1	ND	1	0.05	4	18	14.5	22	B	0.043	17.5	0.043	17.5	+							20
21	C	0.105	U	U	0	1	ND	1	0.0525	4	19	15.5	28	B	0.0575	17.5	0.0575	17.5	+							21
22	C	0.105	U	U	0	1	ND	1	0.0525	4	20	15.5	8	C	0.0475	15.5				0.0475	15.5	+				22
23	B	0.11	–	–	1	0	Detect	0	0.11	5	19	29	9	C	0.0475	15.5				0.0475	15.5	+				23
24	B	0.11	–	–	1	0	Detect	0	0.11	5	19	29	10	C	0.0475	15.5				0.0475	15.5	+				24
25	B	0.17	U	U	1	0	ND	1	0.085	5	19	17.5	11	C	0.0475	15.5				0.0475	15.5	+				25
26	B	0.170	U	U	1	0	ND	1	0.0875	5	20	17.5	12	C	0.0475	15.5				0.0475	15.5	+				26
27	B	0.18000001	–	–	1	0	Detect	0	0.18000001	7	20	21	13	C	0.05	15.5				0.05	15.5	+				27
28	C	0.185	U	U	0	1	ND	1	0.0925	7	21	18	14	C	0.05	15.5				0.05	15.5	+				28
29	B	0.185	U	U	1	0	ND	1	0.0925	7	22	18	15	C	0.05	15.5				0.05	15.5	+				29
30	B	0.19	–	–	1	0	Detect	0	0.19	8	22	22	16	C	0.05	15.5				0.05	15.5	+				30
31	C	0.19	U	U	0	1	ND	1	0.095	8	23	18.5	17	C	0.05	15.5				0.05	15.5	+				31
32	C	0.19	U	U	0	1	ND	1	0.095	8	24	18.5	18	C	0.05	15.5				0.05	15.5	+				32
33	C	0.19	U	U	0	1	ND	1	0.095	8	25	18.5	19	C	0.05	15.5				0.05	15.5	+				33
34	C	0.2	U	U	0	1	ND	1	0.1	8	26	18.5	20	C	0.05	15.5				0.05	15.5	+				34
35	C	0.205	U	U	0	1	ND	1	0.1025	8	27	18.5	21	C	0.0525	15.5				0.0525	15.5	+				35
36	C	0.205	U	U	0	1	ND	1	0.1025	8	28	18.5	22	C	0.0525	15.5				0.0525	15.5	+				36
37	B	0.25999999	–	–	1	0	Detect	0	0.25999999	9	28	27	3	B	0.014	15	0.014	15								37
38	B	0.40000001	–	–	1	0	Detect	0	0.40000001	10	28	28	4	B	0.01875	15	0.018750	15	+							38
39	B	1.29999995	–	–	1	0	Detect	0	1.29999995	11	28	29	1	B	0.00375	14.5	0.003750	14.5	+							39
40	C	3.8	–	–	0	1	Detect	0	3.8	12	28	40	2	B	0.00375	14.5	0.003750	14.5	+							40

Table B-4
Quantile Test Result for Benzo(a)anthracene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/1997

COC ID #	
Name	Benzo(a)anthracene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Sampling
Clean Up Area Sampling

m =	15	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.6 = # of largest measurements in m+n that must be examined (r < n+n < 200)
k =	5	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.058	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
29 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.0075 ND

ND Rule: "1" value = 1

NCIN = 20

Accept Ho (Site = Bkg) Reject Ho (Site > Bkg)

α = 0.058

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	If MIN is DETECT, d=1, else d=0	Data	d	e	Calculated Rank	Index	Sort by CALC RANK descending: Source (B or C)	Data	CALC RANK	B: Data	B: Klank	B: ND	C: Data	C: Rlank	C: ND	i	k	c	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	10.5	19	C	10.5	39				10.5	39		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	10.5	38	B	1.800000095	38	1.800000095	23					2	2		2
3	B	0.087	--	--	1	0	Detect	0	0.087	1	2	12	37	B	1.299999952	37	1.299999952	22					3	3		3
4	C	0.0923	--	--	0	1	Detect	0	0.0923	2	2	13	36	B	0.524999997	36	0.524999997	21					4	4		4
5	C	0.0929	--	--	0	1	Detect	0	0.0929	3	2	14	35	B	0.5	35	0.5	20					5	5		5
6	B	0.0938	--	--	1	0	Detect	0	0.0938	4	2	15	34	B	0.449999988	34	0.449999988	19								6
7	C	0.095	U	U	0	1	ND	1	0.0475	4	3	12.5	33	B	0.37	33	0.37	18								7
8	C	0.095	U	U	0	1	ND	1	0.0475	4	4	12.5	32	C	0.37	32				0.37	10					8
9	C	0.095	U	U	0	1	ND	1	0.0475	4	5	12.5	31	B	0.31	31	0.31	17								9
10	C	0.1	U	U	0	1	ND	1	0.05	4	6	12.5	30	B	0.259999996	30	0.259999996	16								10
11	C	0.1	U	U	0	1	ND	1	0.05	4	7	12.5	29	C	0.232	29				0.232	29					11
12	C	0.1	U	U	0	1	ND	1	0.05	4	8	12.5	28	B	0.19	28	0.19	15								12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	12.5	27	B	0.180000001	27	0.180000001	14								13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	12.5	26	B	0.16	26	0.16	13								14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	12.5	25	C	0.139	25				0.139	28					15
16	C	0.105	U	U	0	1	ND	1	0.0525	4	12	12.5	24	B	0.0938	24	0.0938	11								16
17	C	0.139	--	--	0	1	Detect	0	0.139	5	12	21	23	C	0.095	14.5				0.095	14.5	=				17
18	B	0.16	--	--	1	0	Detect	0	0.16	6	12	22	22	C	0.095	14.5				0.095	14.5	=				18
19	B	0.180000011	--	--	1	0	Detect	0	0.180000011	7	12	23	21	C	0.095	14.5				0.095	14.5	=				19
20	C	0.183	U	U	0	1	ND	1	0.0923	7	13	14	20	C	0.1	14.5				0.1	14.5	=				20
21	B	0.183	U	U	1	0	ND	1	0.0923	7	14	14	27	C	0.1025	14.5				0.1025	14.5	=				21
22	B	0.19	--	--	1	0	Detect	0	0.19	8	14	25	28	C	0.1025	14.5				0.1025	14.5	=				22
23	C	0.19	U	U	0	1	ND	1	0.095	8	15	14.5	3	C	0.0938	14				0.0938	14					23
24	C	0.19	U	U	0	1	ND	1	0.095	8	16	14.5	29	C	0.0925	14				0.0925	16	=				24
25	C	0.19	U	U	0	1	ND	1	0.095	8	17	14.5	31	B	0.0925	14	0.0925	10	=							25
26	C	0.2	U	U	0	1	ND	1	0.1	8	18	14.5	4	C	0.0923	13				0.0923	13					26
27	C	0.205	U	U	0	1	ND	1	0.1025	8	19	14.5	7	C	0.0475	12.5				0.0475	12.5	=				27
28	C	0.205	U	U	0	1	ND	1	0.1025	8	20	14.5	8	C	0.0475	12.5				0.0475	12.5	=				28
29	C	0.232	--	--	0	1	Detect	0	0.232	9	20	29	9	C	0.0475	12.5				0.0475	12.5	=				29
30	B	0.259999996	--	--	1	0	Detect	0	0.259999996	10	20	30	10	C	0.05	12.5				0.05	12.5	=				30
31	B	0.31	--	--	1	0	Detect	0	0.31	11	20	31	11	C	0.05	12.5				0.05	12.5	=				31
32	C	0.37	--	--	0	1	Detect	0	0.37	12	20	32	12	C	0.05	12.5				0.05	12.5	=				32
33	B	0.37	--	--	1	0	Detect	0	0.37	13	20	33	13	C	0.05	12.5				0.05	12.5	=				33
34	B	0.449999988	--	--	1	0	Detect	0	0.449999988	14	20	34	14	C	0.05	12.5				0.05	12.5	=				34
35	B	0.5	--	--	1	0	Detect	0	0.5	15	20	35	15	C	0.05	12.5				0.05	12.5	=				35
36	B	0.524999997	--	--	1	0	Detect	0	0.524999997	16	20	36	16	C	0.0525	12.5				0.0525	12.5	=				36
37	B	1.299999952	--	--	1	0	Detect	0	1.299999952	17	20	37	3	B	0.087	12	0.087	9								37
38	B	1.800000095	--	--	1	0	Detect	0	1.800000095	18	20	38	1	B	0.00375	10.5	0.00375	1	=							38
39	C	10.5	--	--	0	1	Detect	0	10.5	19	20	39	2	B	0.00375	10.5	0.00375	2	=							39
40												0	5	B	0.00375	14.5	0.00375	5	=							40

Quantile Test Result for Benzo(a)pyrene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Radius Version 1.3 12/1999

COC ID #	
Name	Benzo(a)pyrene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	5	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then see the modified (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
50 % chance of a Detect in B	86 % chance of a Detect in C
15 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0075 ND

ND Rule = 1 * value

NON = 18

Accept Ho (Site = Bkg) Note: Ho is 1-half (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	23		IF MIN is DETECT, d=1, e=0, ELSE d=0, e=1					Sort by CALC RANK descending				B			C			r	k	C
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	NP	Data	Rank	NP	5	5	1	Counter
1	B	0.0075	U	U	1	0	ND	1	0.0075	0	1	9.5	40	C	0.6	40				0.6	40		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.0075	0	2	9.5	39	B	3.9000001	39	3.9000001	39					2	2		2
3	C	0.0091	--	--	0	1	Detect	0	0.0091	1	2	11	38	B	1.3999999	38	1.3999999	38					3	3		3
4	B	0.008	--	--	1	0	Detect	0	0.008	2	2	12	37	B	0.8000000	37	0.8000000	37					4	4		4
5	C	0.0096	--	--	0	1	Detect	0	0.0096	3	2	13	36	B	0.6	36	0.6	36					5	5		5
6	C	0.07545	--	--	0	1	Detect	0	0.07545	4	2	14	35	B	0.4100000	35	0.4100000	35								6
7	C	0.095	U	U	0	1	ND	1	0.0475	4	3	11.5	34	B	0.3499999	34	0.3499999	34								7
8	C	0.095	U	U	0	1	ND	1	0.0475	4	4	11.5	33	C	0.364	33				0.364	33					8
9	C	0.095	U	U	0	1	ND	1	0.0475	4	5	11.5	32	C	0.297	32				0.297	32					9
10	C	0.0987	--	--	0	1	Detect	0	0.0987	5	5	16.5	31	B	0.2999999	31	0.2999999	31								10
11	C	0.1	U	U	0	1	ND	1	0.05	5	6	12	30	B	0.2799999	30	0.2799999	30								11
12	C	0.1	U	U	0	1	ND	1	0.05	5	7	12	29	B	0.25	29	0.25	29								12
13	C	0.1	U	U	0	1	ND	1	0.05	5	8	12	28	B	0.17	24	0.17	24								13
14	C	0.1	U	U	0	1	ND	1	0.05	5	9	12	10	C	0.16	23				0.16	23					14
15	C	0.105	U	U	0	1	ND	1	0.0525	5	10	12	18	B	0.13	23	0.13	23								15
16	B	0.12	--	--	1	0	Detect	0	0.12	6	10	20	17	B	0.123	21	0.123	21								16
17	B	0.123	--	--	1	0	Detect	0	0.123	7	10	21	16	B	0.12	20	0.12	20								17
18	B	0.13	--	--	1	0	Detect	0	0.13	8	10	22	10	C	0.0987	16.5				0.0987	16.5					18
19	C	0.16	--	--	0	1	Detect	0	0.16	8	10	23	21	C	0.0525	14.5				0.0525	14.5	*				19
20	B	0.17	--	--	1	0	Detect	0	0.17	10	10	24	22	B	0.2025	14.5	0.0525	14.5	*							20
21	C	0.189	U	U	0	1	ND	1	0.0525	10	11	14.5	23	C	0.095	14.5				0.095	14.5	*				21
22	B	0.189	U	U	1	0	ND	1	0.0525	10	12	14.5	24	C	0.095	14.5				0.095	14.5	*				22
23	C	0.19	U	U	0	1	ND	1	0.095	10	12	14.5	25	C	0.095	14.5				0.095	14.5	*				23
24	C	0.19	U	U	0	1	ND	1	0.095	10	13	14.5	26	C	0.1	14.5				0.1	14.5	*				24
25	C	0.19	U	U	0	1	ND	1	0.095	10	14	14.5	27	C	0.1025	14.5				0.1025	14.5	*				25
26	C	0.2	U	U	0	1	ND	1	0.1	10	15	14.5	28	C	0.1025	14.5				0.1025	14.5	*				26
27	C	0.295	U	U	0	1	ND	1	0.1025	10	16	14.5	8	C	0.07545	14				0.07545	14					27
28	C	0.305	U	U	0	1	ND	1	0.1025	10	17	14.5	5	C	0.0699	13				0.0699	13					28
29	B	0.25	--	--	1	0	Detect	0	0.25	11	17	23	4	B	0.058	12	0.058	12								29
30	B	0.27000001	--	--	1	0	Detect	0	0.27000001	12	17	30	11	C	0.05	12				0.05	12	*				30
31	B	0.28000000	--	--	1	0	Detect	0	0.28000000	13	17	31	12	C	0.05	12				0.05	12	*				31
32	C	0.299	--	--	0	1	Detect	0	0.299	14	17	32	13	C	0.05	12				0.05	12	*				32
33	C	0.364	--	--	0	1	Detect	0	0.364	15	17	33	14	C	0.05	12				0.05	12	*				33
34	B	0.34999999	--	--	1	0	Detect	0	0.34999999	16	17	34	15	C	0.0525	13				0.0525	13	*				34
35	B	0.41000000	--	--	1	0	Detect	0	0.41000000	17	17	35	7	C	0.0475	11.5				0.0475	11.5	*				35
36	B	0.5	--	--	1	0	Detect	0	0.5	18	17	36	8	C	0.0475	11.5				0.0475	11.5	*				36
37	B	0.80000000	--	--	1	0	Detect	0	0.80000000	19	17	37	9	C	0.0475	11.5				0.0475	11.5	*				37
38	B	1.39999998	--	--	1	0	Detect	0	1.39999998	20	17	38	3	C	0.0091	11				0.0091	11					38
39	B	3.9000001	--	--	1	0	Detect	0	3.9000001	21	17	39	1	B	0.00375	9.5	0.00375	9.5	*							39
40	C	9.6	--	--	0	1	Detect	0	9.6	22	17	40	2	B	0.00375	9.5	0.00375	9.5	*							40

T[illegible]
Quantile Test Result for Benzo(b)fluoranthene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.N. Rethe Version 1.2 12/10/01

COC ID #
Name: benzo(b)fluoranthene
Units: mg/kg

INPUT
OUTPUT
Test/workbook

Background Data
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	22	# measurements in Clean Up Area (< 100)
r =	1	Table A.6 = # of largest measurements to one that must be examined (r < n/m < 200)
k =	1	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	89 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.0075 ND

ND Rule: 1* value
1

NON = 17

Accept Ho (Site = Bkg) Note: Ha is 1-tail (site > bkg)
α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

IF MIN is DETECT, dif=1, prR, ELSE dif=0, a=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	17 m	22 n	ND	ND=1 Detect =0	Data	dif	a	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B' Data	B' Rank	B' W	C' Data	C' Rank	C' W	r	k	C	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	1	40	C	0.7	40				0.7	40		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	2	39	B	4.0999999	39	4.0999999	22					2	2		2
3	B	0.062	--	--	1	0	Detect	0	0.062	1	3	3.5	38	B	1.8999999	38	1.8999999	21					3	3		3
4	C	0.065	U	U	0	1	ND	1	0.0475	1	3	3.5	37	B	1.2999999	37	1.2999999	20					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	1	4	5.5	36	C	0.927	36				0.927	39		5	5	1	5
6	C	0.099	--	--	0	1	Detect	0	0.099	1	5	12.5	35	B	0.28999997	35	0.28999997	19								6
7	C	0.1	U	U	0	1	ND	1	0.05	1	5	10	34	C	0.346	34				0.346	34					7
8	C	0.1	U	U	0	1	ND	1	0.05	1	6	10	33	B	0.51999998	33	0.51999998	18								8
9	C	0.1	U	U	0	1	ND	1	0.05	1	7	10	32	B	0.44999999	32	0.44999999	17								9
10	C	0.1	U	U	0	1	ND	1	0.05	1	8	10	31	B	0.44	31	0.44	16								10
11	C	0.105	U	U	0	1	ND	1	0.0525	1	9	10	30	B	0.42000001	30	0.42000001	15								11
12	C	0.123	--	--	0	1	Detect	0	0.123	1	9	10	29	C	0.367	29				0.367	35					12
13	C	0.1365	--	--	0	1	Detect	0	0.1365	1	9	17	28	B	0.23999998	28	0.23999998	14								13
14	C	0.151	--	--	0	1	Detect	0	0.151	1	9	18	27	B	0.20999995	27	0.20999995	13								14
15	B	0.14	--	--	1	0	Detect	0	0.14	1	9	19	24	B	0.2	25	0.2	12								15
16	B	0.145	--	--	1	0	Detect	0	0.145	1	9	20	17	C	0.147	21				0.147	21					16
17	C	0.147	--	--	0	1	Detect	0	0.147	1	9	21	16	B	0.145	20	0.145	11								17
18	C	0.183	U	U	0	1	ND	1	0.0925	1	10	13	15	B	0.14	19	0.14	10								18
19	B	0.185	U	U	1	0	ND	1	0.0925	1	11	12	14	C	0.131	19				0.131	19					19
20	C	0.19	U	U	0	1	ND	1	0.095	1	12	12	13	C	0.1305	17				0.1305	17					20
21	C	0.19	U	U	0	1	ND	1	0.095	1	13	13	12	C	0.123	16				0.123	16					21
22	C	0.19	U	U	0	1	ND	1	0.095	1	14	13	25	C	0.1625	12.5				0.1625	12.5	<				22
23	C	0.2	U	U	0	1	ND	1	0.1	1	15	13	26	C	0.1625	13.5				0.1625	12.5	<				23
24	B	0.2	--	--	1	0	Detect	0	0.2	1	15	23	10	C	0.0975	11				0.0975	12	<				24
25	C	0.205	U	U	0	1	ND	1	0.1025	1	16	13.5	10	B	0.0925	12	0.0925	9	<							25
26	C	0.205	U	U	0	1	ND	1	0.1025	1	17	13.5	29	C	0.095	13				0.095	12	<				26
27	B	0.25999999	--	--	1	0	Detect	0	0.25999999	10	17	27	21	C	0.095	13				0.095	13	<				27
28	B	0.25999999	--	--	1	0	Detect	0	0.25999999	11	17	28	22	C	0.095	13				0.095	13	<				28
29	C	0.307	--	--	0	1	Detect	0	0.307	12	17	29	23	C	0.1	13				0.1	12	<				29
30	B	0.43999991	--	--	1	0	Detect	0	0.43999991	12	17	30	4	C	0.099	12.5				0.099	12.5					30
31	B	0.44	--	--	1	0	Detect	0	0.44	14	17	31	5	B	0.082	10.5	0.082	8	<							31
32	B	0.44999999	--	--	1	0	Detect	0	0.44999999	15	17	32	7	C	0.55	19				0.55	19	<				32
33	B	0.51999998	--	--	1	0	Detect	0	0.51999998	16	17	33	8	C	0.55	19				0.55	19	<				33
34	C	0.546	--	--	0	1	Detect	0	0.546	17	17	34	9	C	0.55	19				0.55	19	<				34
35	B	0.58999997	--	--	1	0	Detect	0	0.58999997	18	17	35	10	C	0.55	19				0.55	19	<				35
36	C	0.927	--	--	0	1	Detect	0	0.927	19	17	36	11	C	0.9525	19				0.9525	19	<				36
37	B	1.2999999	--	--	1	0	Detect	0	1.2999999	20	17	37	4	C	0.0475	8.5				0.0475	8.5	<				37
38	B	1.8999999	--	--	1	0	Detect	0	1.8999999	21	17	38	5	C	0.0475	8.5				0.0475	8.5	<				38
39	B	4.0999999	--	--	1	0	Detect	0	4.0999999	22	17	39	1	B	0.0075	3	0.0075	1	<							39
40	C	0.7	--	--	0	1	Detect	0	0.7	23	17	40	2	B	0.0075	4	0.0075	3	<							40

Table 3-27
Quantile Test Result for Benzo(g,h,i)perylene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Reiss Version 1.2 12/15/01

CDC ID #	
Name	Benzo(g,h,i)perylene
Units	mg/kg

INPUT
OUTPUT
Inactive Row

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	8	Table A.8 > # of largest measurements in m+n that must be examined (r = m+n < 200)
k =	5	Table A.8 > # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α = 0.05
	Yes	Can the Quantile Test be used?

69 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	55 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0075 ND

ND Rule: 1/2 value

NON = 23

Accept Ho (Site < Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B Value	B Val	B ND	C Data	C Rank	C ND	r	k	C	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	12.5	40	C	3.8	40				3.8	40		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	12.5	39	B	1.20000003	39	1.20000003		39				2	2		2
3	B	0.047	=	=	1	0	Detect	0	0.047	1	2	14	38	B	0.54	38	0.54		38				3	3		3
4	B	0.054	=	=	1	0	Detect	0	0.054	2	2	15	37	B	0.34	37	0.34		37				4	4		4
5	B	0.052	=	=	1	0	Detect	0	0.052	3	2	16	36	C	0.233	36				0.233	36		5	5	1	5
6	C	0.050	U	U	0	1	ND	1	0.0475	3	3	16	35	B	0.23	35	0.23		35							6
7	C	0.050	U	U	0	1	ND	1	0.0475	3	4	16	34	B	0.23	34	0.23		34							7
8	C	0.050	U	U	0	1	ND	1	0.0475	3	5	16	33	B	0.22	33	0.22		33							8
9	C	0.050	U	U	0	1	ND	1	0.0475	3	6	16	24	B	0.16000001	29	0.16000001		29							9
10	C	0.095	U	U	0	1	ND	1	0.0475	3	7	16	23	B	0.16	27	0.16		27							10
11	B	0.099	=	=	1	0	Detect	0	0.099	4	7	15.5	22	B	0.1100	25	0.1100		25							11
12	C	0.1	U	U	0	1	ND	1	0.05	4	8	14.5	21	B	0.11	23	0.11		23							12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	14.5	11	B	0.098	19.5	0.098		19.5							13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	14.5	28	C	0.0625	16.5				0.0625	16.5	=				14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	14.5	26	B	0.0625	16.5	0.0625	=	16.5	=						15
16	C	0.1	U	U	0	1	ND	1	0.05	4	12	14.5	27	C	0.095	16.5				0.095	16.5	=				16
17	C	0.1	U	U	0	1	ND	1	0.05	4	13	14.5	28	C	0.099	18.5				0.099	18.5	=				17
18	C	0.1	U	U	0	1	ND	1	0.05	4	14	14.5	25	C	0.095	18.5				0.095	18.5	=				18
19	C	0.1	U	U	0	1	ND	1	0.05	4	15	14.5	20	C	0.1	16.5				0.1	16.5	=				19
20	C	0.105	U	U	0	1	ND	1	0.0525	4	16	14.5	31	C	0.1025	16.5				0.1025	16.5	=				20
21	B	0.11	=	=	1	0	Detect	0	0.11	5	16	13	32	C	0.1025	16.5				0.1025	16.5	=				21
22	B	0.1100	=	=	1	0	Detect	0	0.1100	6	16	12	3	B	0.092	10	0.092		10							22
23	B	0.16	=	=	1	0	Detect	0	0.16	7	16	11	4	B	0.064	10	0.064		10							23
24	B	0.16000001	=	=	1	0	Detect	0	0.16000001	8	16	10	13	C	0.09	14.5				0.09	14.5	=				24
25	C	0.183	U	U	0	1	ND	1	0.0915	8	17	9.5	12	C	0.09	14.5				0.09	14.5	=				25
26	B	0.183	U	U	1	0	ND	1	0.0915	8	18	9.5	14	C	0.09	14.5				0.09	14.5	=				26
27	C	0.19	U	U	0	1	ND	1	0.095	8	19	9.5	15	C	0.09	14.5				0.09	14.5	=				27
28	C	0.19	U	U	0	1	ND	1	0.095	8	20	9.5	16	C	0.09	14.5				0.09	14.5	=				28
29	C	0.19	U	U	0	1	ND	1	0.095	8	21	9.5	17	C	0.09	14.5				0.09	14.5	=				29
30	C	0.2	U	U	0	1	ND	1	0.1	8	22	9.5	18	C	0.09	14.5				0.09	14.5	=				30
31	C	0.205	U	U	0	1	ND	1	0.1025	8	23	9.5	19	C	0.09	14.5				0.09	14.5	=				31
32	C	0.205	U	U	0	1	ND	1	0.1025	8	24	9.5	20	C	0.0525	14.5				0.0525	14.5	=				32
33	B	0.22	=	=	1	0	Detect	0	0.22	9	24	33	2	B	0.047	14	0.047	=	14							33
34	B	0.23	=	=	1	0	Detect	0	0.23	10	24	34	9	C	0.0475	14				0.0475	14	=				34
35	B	0.23	=	=	1	0	Detect	0	0.23	11	24	35	7	C	0.0475	14				0.0475	14	=				35
36	C	0.233	=	=	0	1	Detect	0	0.233	12	24	36	8	C	0.0475	14				0.0475	14	=				36
37	B	0.34	=	=	1	0	Detect	0	0.34	13	24	37	5	C	0.0475	14				0.0475	14	=				37
38	B	0.38	=	=	1	0	Detect	0	0.38	14	24	38	10	C	0.0475	14				0.0475	14	=				38
39	B	1.20000003	=	=	1	0	Detect	0	1.20000003	15	24	39	1	B	0.0075	12.5	0.0075	=	12.5	=						39
40	C	3.8	=	=	0	1	Detect	0	3.8	16	24	40	3	B	0.0075	12.5	0.0075	=	12.5	=						40

Table B3-8
Quantile Test Result for Benzo(k)fluoranthene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
K.S. Rebos Version 1.2 - 12/10/01

CAS ID #	
Name	Benzo(k)fluoranthene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Samples
Clean Up Area Samples

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements to m+n that must be examined (r < m+n < 200)
k =	5	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If a > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0075 ND

ND Rule: 1/2 value = 1

NDIN = 24

Accept Ho (Site = Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	23		IF MIN is DETECT, d=1, e=0, ELSE d=0, e=1						Sort by CALC RANK descending			B			C			r	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Tbin	Rank	adj.	Data	Rank	ND	s	s	t	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	12.5	40	C	7.8	40				7.8	40		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	12.5	39	B	4.4000001	39	4.4000001	39					2	2		2
3	B	0.059	--	--	1	0	Detect	0	0.059	1	2	14	38	B	0.91000003	38	0.91000003	38					3	3		3
4	C	0.055	U	U	0	1	ND	1	0.0475	1	3	13	37	B	0.66000003	37	0.66000003	37					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	1	4	13	36	B	0.34	36	0.34	36					5	5		5
6	C	0.095	U	U	0	1	ND	1	0.0475	1	5	13	35	B	0.3	35	0.3	35								6
7	C	0.095	U	U	0	1	ND	1	0.0475	1	6	13	34	B	0.28	34	0.28	34								7
8	C	0.095	U	U	0	1	ND	1	0.0475	1	7	13	33	B	0.27	33	0.27	33								8
9	C	0.1	U	U	0	1	ND	1	0.05	1	8	13	32	B	0.21	32	0.21	32								9
10	C	0.1	U	U	0	1	ND	1	0.05	1	9	13	31	C	0.271	31				0.271	31					10
11	C	0.1	U	U	0	1	ND	1	0.05	1	10	13	30	B	0.23999999	30	0.23999999	30								11
12	C	0.1	U	U	0	1	ND	1	0.05	1	11	13	29	C	0.246	29				0.246	29					12
13	C	0.1	U	U	0	1	ND	1	0.05	1	12	13	28	B	0.19	28	0.19	28								13
14	C	0.1	U	U	0	1	ND	1	0.05	1	13	13	27	C	0.179	27				0.179	27					14
15	C	0.105	U	U	0	1	ND	1	0.0525	1	14	13	26	B	0.11	27	0.11	27								15
16	B	0.11	--	--	1	0	Detect	0	0.11	2	14	21	25	C	0.099	14.5				0.099	14.5	+				16
17	B	0.17	U	U	1	0	ND	1	0.085	2	15	13.5	24	C	0.099	14.5				0.099	14.5	+				17
18	B	0.175	U	U	1	0	ND	1	0.0875	2	16	13.5	23	C	0.095	14.5				0.095	14.5	+				18
19	C	0.175	--	--	0	1	Detect	0	0.175	3	16	21	22	C	0.1	14.5				0.1	14.5	+				19
20	C	0.185	U	U	0	1	ND	1	0.0925	3	17	14	21	C	0.1025	14.5				0.1025	14.5	+				20
21	B	0.185	U	U	1	0	ND	1	0.0925	3	18	14	20	C	0.1025	14.5				0.1025	14.5	+				21
22	B	0.19	--	--	1	0	Detect	0	0.19	4	18	23	3	B	0.059	14	0.059	14								22
23	C	0.19	U	U	0	1	ND	1	0.095	4	19	14.5	20	C	0.0925	14				0.0925	14	+				23
24	C	0.19	U	U	0	1	ND	1	0.095	4	20	14.5	21	B	0.0925	14	0.0925	14	0							24
25	C	0.19	U	U	0	1	ND	1	0.095	4	21	14.5	17	B	0.085	13.5	0.085	13.5	0							25
26	C	0.2	U	U	0	1	ND	1	0.1	4	22	14.5	16	B	0.0875	13.5	0.0875	13.5	0							26
27	C	0.205	U	U	0	1	ND	1	0.1025	4	23	14.5	4	C	0.0475	13				0.0475	13	+				27
28	C	0.205	U	U	0	1	ND	1	0.1025	4	24	14.5	5	C	0.0475	13				0.0475	13	+				28
29	C	0.246	--	--	0	1	Detect	0	0.246	5	24	25	9	C	0.0475	13				0.0475	13	+				29
30	B	0.25999999	--	--	1	0	Detect	0	0.25999999	5	24	30	7	C	0.0475	13				0.0475	13	+				30
31	C	0.271	--	--	0	1	Detect	0	0.271	7	24	31	8	C	0.0475	13				0.0475	13	+				31
32	B	0.31	--	--	1	0	Detect	0	0.31	8	24	32	6	C	0.05	13				0.05	13	+				32
33	B	0.37	--	--	1	0	Detect	0	0.37	9	24	33	10	C	0.05	13				0.05	13	+				33
34	B	0.38	--	--	1	0	Detect	0	0.38	10	24	34	11	C	0.05	13				0.05	13	+				34
35	B	0.4	--	--	1	0	Detect	0	0.4	11	24	35	12	C	0.05	13				0.05	13	+				35
36	B	0.54	--	--	1	0	Detect	0	0.54	12	24	36	13	C	0.05	13				0.05	13	+				36
37	B	0.69999993	--	--	1	0	Detect	0	0.69999993	13	24	37	14	C	0.05	13				0.05	13	+				37
38	B	0.91000002	--	--	1	0	Detect	0	0.91000002	14	24	38	15	C	0.0525	13				0.0525	13	+				38
39	B	4.4000001	--	--	1	0	Detect	0	4.4000001	15	24	39	1	B	0.0925	12.5	0.0925	12.5	+							39
40	C	7.8	--	--	0	1	Detect	0	7.8	16	24	40	2	B	0.0975	12.5	0.0975	12.5	+							40

Table 3-3
Quantile Test Result for Chrysene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/19/01

COC ID #	
Name	chrysene
Units	mg/kg

INPUT
OUTPUT
Switches/Bins

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements in m+n that must be examined (r + m+n + 200)
k =	3	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

69 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	85 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0072 Detect

ND Rule: 1 | 1* value

NCN = 02

Accept Ho (Site = Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	17 m	23 n	ND	ND=1 Detect = 0	Data	d	s	Calculated Rank
1	B	0.0072	--	--	1	0	Detect	0	0.0072	1	0	10
2	B	0.0073	U	U	1	0	ND	1	0.00515	1	1	10
3	B	0.083	--	--	1	0	Detect	0	0.083	2	1	11.5
4	C	0.0879	--	--	0	1	Detect	0	0.0879	3	1	12.5
5	C	0.095	U	U	0	1	ND	1	0.0475	2	2	11
6	C	0.095	U	U	0	1	ND	1	0.0475	3	3	11
7	C	0.095	U	U	0	1	ND	1	0.0475	3	4	11
8	C	0.1	U	U	0	1	ND	1	0.05	2	5	11
9	C	0.1	U	U	0	1	ND	1	0.05	3	6	11
10	C	0.1	U	U	0	1	ND	1	0.05	3	7	11
11	C	0.1	U	U	0	1	ND	1	0.05	3	8	11
12	C	0.1	U	U	0	1	ND	1	0.05	3	9	11
13	B	0.103	--	--	1	0	Detect	0	0.103	4	9	17.5
14	C	0.105	U	U	0	1	ND	1	0.0525	4	10	11.5
15	C	0.10755	--	--	0	1	Detect	0	0.10755	5	10	15
16	C	0.131	--	--	0	1	Detect	0	0.131	6	10	20
17	B	0.13999001	--	--	1	0	Detect	0	0.13999001	7	10	21
18	B	0.16	--	--	1	0	Detect	0	0.16	8	10	22
19	C	0.165	U	U	0	1	ND	1	0.0825	8	11	13.5
20	B	0.165	U	U	1	0	ND	1	0.0825	8	12	13.5
21	B	0.19	--	--	1	0	Detect	0	0.19	9	12	24
22	C	0.19	U	U	0	1	ND	1	0.095	9	13	14
23	C	0.19	U	U	0	1	ND	1	0.095	9	14	14
24	C	0.19	U	U	0	1	ND	1	0.095	9	15	14
25	C	0.195	--	--	0	1	Detect	0	0.195	10	15	26.5
26	C	0.2	U	U	0	1	ND	1	0.1	10	16	16.5
27	C	0.205	U	U	0	1	ND	1	0.1025	10	17	16.5
28	C	0.205	U	U	0	1	ND	1	0.1025	10	18	16.5
29	C	0.272	--	--	0	1	Detect	0	0.272	11	18	29
30	B	0.28999999	--	--	1	0	Detect	0	0.28999999	12	18	30
31	B	0.28999999	--	--	1	0	Detect	0	0.28999999	13	18	31
32	C	0.432	--	--	0	1	Detect	0	0.432	14	18	32
33	B	0.46999001	--	--	1	0	Detect	0	0.46999001	15	18	33
34	B	0.47999999	--	--	1	0	Detect	0	0.47999999	16	18	34
35	B	0.47999999	--	--	1	0	Detect	0	0.47999999	17	18	35
36	B	0.54999997	--	--	1	0	Detect	0	0.54999997	18	18	36
37	B	0.91000003	--	--	1	0	Detect	0	0.91000003	19	18	37
38	B	1.39999998	--	--	1	0	Detect	0	1.39999998	20	18	38
39	B	4	--	--	1	0	Detect	0	4	21	18	39
40	C	10.3	--	--	0	1	Detect	0	10.3	22	18	40

IF MIN is DETECT, d=1, s=0, ELSE d=0, s=1

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
40	C	10.3	40
39	B	4	39
38	B	1.39999998	38
37	B	0.91000003	37
36	B	0.54999997	36
35	B	0.47999999	35
34	B	0.47999999	34
33	B	0.46999001	33
32	C	0.432	32
31	B	0.28999999	31
30	B	0.28999999	30
29	C	0.272	29
28	C	0.205	28.5
27	C	0.205	27
26	C	0.2	26
25	C	0.195	25
24	C	0.19	24
23	C	0.19	23
22	C	0.19	22
21	B	0.19	21
20	B	0.165	20
19	C	0.165	19
18	B	0.16	18
17	B	0.13999001	17
16	C	0.131	16
15	C	0.10755	15
14	C	0.105	14
13	B	0.103	13
12	C	0.1	12
11	C	0.1	11
10	C	0.1	10
9	C	0.1	9
8	C	0.1	8
7	C	0.095	7
6	C	0.095	6
5	C	0.095	5
4	C	0.0879	4
3	B	0.083	3
2	B	0.0073	2
1	B	0.0072	1

D

Data	Rank	ND
0.0072	1	
0.0073	2	
0.083	3	
0.0879	4	
0.095	5	
0.095	6	
0.095	7	
0.1	8	
0.1	9	
0.1	10	
0.1	11	
0.103	12	
0.105	13	
0.10755	14	
0.131	15	
0.13999001	16	
0.16	17	
0.165	18	
0.165	19	
0.19	20	
0.19	21	
0.19	22	
0.19	23	
0.19	24	
0.195	25	
0.2	26	
0.205	27	
0.205	28	
0.272	29	
0.28999999	30	
0.28999999	31	
0.432	32	
0.46999001	33	
0.47999999	34	
0.47999999	35	
0.54999997	36	
0.91000003	37	
1.39999998	38	
4	39	
10.3	40	

C

Data	Rank	ND
0.0073	1	
0.083	2	
0.0879	3	
0.095	4	
0.095	5	
0.095	6	
0.1	7	
0.1	8	
0.1	9	
0.1	10	
0.1	11	
0.105	12	
0.10755	13	
0.131	14	
0.16	15	
0.165	16	
0.165	17	
0.19	18	
0.19	19	
0.19	20	
0.19	21	
0.195	22	
0.2	23	
0.205	24	
0.205	25	
0.272	26	
0.28999999	27	
0.28999999	28	
0.432	29	
0.46999001	30	
0.47999999	31	
0.47999999	32	
0.54999997	33	
0.91000003	34	
1.39999998	35	
4	36	
10.3	37	

r	k	C
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	s	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	B	S	T	Counter
1	B	0.0072	--	--	1	0	Detect	0	0.0072	1	0	10	40	C	10.3	40				0.0073	1		1	1	1	1
2	B	0.0073	U	U	1	0	ND	1	0.00515	1	1	10	39	B	4	39	0.0073	2					2	2		2
3	B	0.083	--	--	1	0	Detect	0	0.083	2	1	11.5	38	B	1.39999998	38	0.083	3					3	3		3
4	C	0.0879	--	--	0	1	Detect	0	0.0879	3	1	12.5	37	B	0.91000003	37	0.0879	4					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	2	2	11	36	B	0.54999997	36	0.095	5					5	5		5
6	C	0.095	U	U	0	1	ND	1	0.0475	3	3	11	35	B	0.47999999	35	0.095	6								6
7	C	0.095	U	U	0	1	ND	1	0.0475	3	4	11	34	B	0.47999999	34	0.095	7								7
8	C	0.1	U	U	0	1	ND	1	0.05	2	5	11	33	B	0.46999001	33	0.095	8								8
9	C	0.1	U	U	0	1	ND	1	0.05	3	6	11	32	C	0.432	32				0.432	30					9
10	C	0.1	U	U	0	1	ND	1	0.05	3	7	11	31	B	0.28999999	31	0.28999999	9								10
11	C	0.1	U	U	0	1	ND	1	0.05	3	8	11	30	B	0.28999999	30	0.28999999	10								11
12	C	0.1	U	U	0	1	ND	1	0.05	3	9	11	29	C	0.272	29				0.272	29					12
13	B	0.103	--	--	1	0	Detect	0	0.103	4	9	17.5	28	C	0.205	28.5				0.205	26.5					13
14	C	0.105	U	U	0	1	ND	1	0.0525	4	10	11.5	27	B	0.19	24	0.19	24								14
15	C	0.10755	--	--	0	1	Detect	0	0.10755	5	10	15	26	C	0.19	22	0.19	23								15
16	C	0.131	--	--	0	1	Detect	0	0.131	6	10	20	25	B	0.13999001	21	0.13999001	21								16
17	B	0.13999001	--	--	1	0	Detect	0	0.13999001	7	10	21	24	C	0.131	20				0.131	25					17
18	B	0.16	--	--	1	0	Detect	0	0.16	8	10	22	23	C	0.10755	19				0.10755	24					18
19	C	0.165	U	U	0	1	ND	1	0.0825	8	11	13.5	22	B	0.103	17.5	0.103	17.5								19
20	B	0.165	U	U	1	0	ND	1	0.0825	8	12	13.5	21	C	0.1	14.5				0.1	14.5	*				20
21	B	0.19	--	--	1	0	Detect	0	0.19	9	12	24	20	C	0.1025	14.5				0.1025	14.5	*				21
22	C	0.19	U	U	0	1	ND	1	0.095	9	13	14	19	C	0.1025	14.5				0.1025	14.5	*				22
23	C	0.19	U	U	0	1	ND	1	0.095	9	14	14	18	C	0.095	14				0.095	14	*				23
24	C	0.19	U	U	0	1	ND	1	0.095	9	15	14	17	C	0.095	14				0.095	14	*				24
25	C	0.195	--	--	0	1	Detect	0	0.195	10	15	26.5	16	C	0.0525	13.5				0.0525	13.5	*				25
26	C	0.2	U	U	0	1	ND	1	0.1	10	16	16.5	15	C	0.0525	13.5				0.0525	13.5	*				26
27	C	0.205	U	U	0	1	ND	1	0.1025	10	17	16.5	14	B	0.0825	13.5	0.0825	13.5	*							27
28	C	0.205	U	U	0	1	ND	1	0.1025	10	18	16.5	13	C	0.0879	12.5				0.0879	12.5					28
29	C	0.272	--	--	0	1	Detect	0	0.272	11	18	29	12	B	0.083	11.5	0.083	11.5								29
30	B	0.28999999	--	--	1	0	Detect	0	0.28999999	12	18	30	11	C	0.0525	11.5				0.0525	11.5	*				30
31	B	0.28999999	--	--	1	0	Detect	0	0.28999999	13	18	31	10	C	0.0473	11				0.0473	11	*				31
32	C	0.432	--	--	0	1	Detect	0	0.432	14	18	32	9	C	0.0473	11				0.0473	11	*				32
33	B	0.46999001	--	--	1	0	Detect	0	0.46999001	15	18	33	8	C	0.0473	11				0.0473	11	*				33
34	B	0.47999999	--	--	1	0	Detect	0	0.47999999	16	18	34	7	C	0.05	11				0.05	11	*				34
35	B	0.47999999	--	--	1	0	Detect	0	0.47999999	17	18	35	6	C	0.05	11				0.05	11	*				35
36	B	0.54999997	--	--	1	0	Detect	0	0.54999997	18	18	36	5	C	0.05	11				0.05	11	*				36
37	B	0.91000003	--	--	1	0	Detect	0	0.91000003	19	18	37	4	C	0.05	11				0.05	11	*				37
38	B	1.39999998	--	--	1	0	Detect	0	1.39999998	20	18	38	3	C	0.05	11				0.05	11	*				38
39	B	4	--	--	1	0	Detect	0	4	21	18	39	2	B	0.0073	10	0.0073	10								39
40	C	10.3	--	--	0	1	Detect	0	10.3	22	18	40	1	B	0.0072	9	0.0072	9	*							40

Table 2A-10
Quantile Test Result for Dibenz[a,h]anthracene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Reddy Version 1.3 12/7/01

CGC ID #	
Alpha	dibenz[a,h]anthracene
Units	mg/kg

INPUT
OUTPUT
Instructions

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.3 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	5	Table A.3 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
50 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value =	0.0673	ND	

ND Rule: 1* value = 1

NUN = 27

Accept Ho (Site < Bkg) — Note: Ha is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	di	s	Calculated Rank	Notes	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	j	k	i	Counter
1	B	0.0673	U	U	1	0	ND	1	0.0673	0	1	14	40	C	15.3	40							1	1	1	1
2	B	0.0673	U	U	1	0	ND	1	0.0673	0	2	14	39	B	4	39	4	23					2	2		2
3	B	0.074	--	--	1	0	Detect	0	0.074	1	3	15.5	38	B	1.39999998	38	1.39999998	36					3	3		3
4	B	0.081	--	--	1	0	Detect	0	0.081	2	4	16.5	37	B	0.910000023	37	0.910000023	35					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0473	2	3	13	36	B	0.280000007	36	0.280000007	33	✓				5	5		5
6	C	0.095	U	U	0	1	ND	1	0.0473	2	4	13	35	B	0.479999989	35	0.479999989	34	✓							6
7	C	0.095	U	U	0	1	ND	1	0.0473	2	5	13	34	B	0.479999989	34	0.479999989	34								7
8	C	0.095	U	U	0	1	ND	1	0.0473	2	6	13	33	B	0.460000021	33	0.460000021	32	*							8
9	C	0.095	U	U	0	1	ND	1	0.0473	2	7	13	32	C	0.432	32				0.432	32	C				9
10	B	0.097	--	--	1	0	Detect	0	0.097	3	7	20	31	B	0.280000006	31	0.280000006	31	*							10
11	B	0.099	--	--	1	0	Detect	0	0.099	4	7	21	30	B	0.280000009	30	0.280000009	30	*							11
12	C	0.1	U	U	0	1	ND	1	0.05	4	8	16	29	C	0.272	29				0.272	29	C				12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	16	28	C	0.199	28.5				0.199	28.5					13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	16	27	B	0.12	24	0.12	24	*							14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	16	26	B	0.16	27	0.16	27	*							15
16	C	0.1	U	U	0	1	ND	1	0.05	4	12	16	25	B	0.130000001	21	0.130000001	21	*							16
17	C	0.1	U	U	0	1	ND	1	0.05	4	13	16	24	G	0.131	26				0.131	26	C				17
18	C	0.1	U	U	0	1	ND	1	0.05	4	14	16	23	C	0.19789	25				0.19789	25	C				18
19	C	0.1	U	U	0	1	ND	1	0.05	4	15	16	22	B	0.103	17.5	0.103	17.5	*							19
20	C	0.105	U	U	0	1	ND	1	0.0525	4	16	16	21	C	0.1	14.5				0.1	14.5	C				20
21	C	0.105	U	U	0	1	ND	1	0.0525	4	17	16	20	C	0.1025	14.5				0.1025	14.5	C				21
22	B	0.13	--	--	1	0	Detect	0	0.13	5	17	27	19	C	0.1025	14.5				0.1025	14.5	C				22
23	B	0.13	--	--	1	0	Detect	0	0.13	5	17	28	18	E	0.095	14				0.095	14					23
24	B	0.15000001	--	--	1	0	Detect	0	0.15000001	7	17	29	17	C	0.095	14				0.095	14					24
25	B	0.15000001	--	--	1	0	Detect	0	0.15000001	9	17	30	16	C	0.095	14				0.095	14					25
26	B	0.17	U	U	1	0	ND	1	0.085	8	18	18	15	C	0.0925	13.5				0.0925	13.5	C				26
27	B	0.175	U	U	1	0	ND	1	0.0875	9	19	19	14	B	0.0825	13.5	0.0825	13.5	*							27
28	C	0.189	U	U	0	1	ND	1	0.0923	9	20	19	13	C	0.0879	12.5				0.0879	12.5					28
29	B	0.195	U	U	1	0	ND	1	0.0925	9	21	19	12	B	0.083	11.5	0.083	11.5								29
30	C	0.19	U	U	0	1	ND	1	0.095	9	22	19	11	C	0.0925	11.5				0.0925	11.5	C				30
31	C	0.19	U	U	0	1	ND	1	0.095	9	23	19	10	C	0.0473	11				0.0473	11	C				31
32	C	0.19	U	U	0	1	ND	1	0.095	9	24	19	9	C	0.0473	11				0.0473	11	C				32
33	C	0.2	U	U	0	1	ND	1	0.1	9	25	19	8	C	0.0473	11				0.0473	11	C				33
34	B	0.2	--	--	1	0	Detect	0	0.2	9	25	33	8	C	0.05	11				0.05	11	C				34
35	C	0.205	U	U	0	1	ND	1	0.1025	9	26	19.5	7	C	0.05	11				0.05	11	C				35
36	C	0.205	U	U	0	1	ND	1	0.1025	9	27	19.5	6	C	0.05	11				0.05	11	C				36
37	B	0.23	--	--	1	0	Detect	0	0.23	10	27	37	5	C	0.05	11				0.05	11	C				37
38	B	0.38	--	--	1	0	Detect	0	0.38	11	27	38	4	C	0.05	11				0.05	11	C				38
39	B	1.39999998	--	--	1	0	Detect	0	1.39999998	12	27	39	3	B	0.0673	40	0.0673	40	*							39
40	C	1.85	--	--	0	1	Detect	0	1.85	13	27	40	2	B	0.0673	39	0.0673	39	*							40

Table [illegible]11
Quantile Test Result for Fluoranthene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Wedos Version 1.3 12/1995

COC ID #	
Name	fluoranthene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Records
Clean Up Area Records

m =	16	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	8	Table A.2 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	6	Table A.2 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.031	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

84 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.016 Detect

ND Rule 1* value
1

NON = 10

Accept Ho (Site < Bkg) Note: Ha is 1-tail (site > bkg)
α = 0.031

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					m	n	ND	If MIN is DETECT, q=1, p=0, ELSE q=0, s=1						Sort by CALC.RANK descending				B			C			r	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag				ND+1 Detect = S	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC.RANK	Name	Level	Wt	Data	Rank	Wt	R	S	T	Gauntlet
1	B	0.016	--	--	1	0	Detect	0	0.016	1	0	0	39	C	10.3	39				10.3	39		1	1	1	1
2	B	0.02	--	--	1	0	Detect	0	0.02	2	0	10	38	B	3.29999995	38	[illegible]		20				2	2		2
3	C	0.065	U	U	0	1	ND	1	0.0475	2	1	9.5	37	B	2.20000005	37	[illegible]		19				3	3		3
4	C	0.095	U	U	0	1	ND	1	0.0475	2	2	9.5	36	B	1.10000002	36	[illegible]		18				4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	9.5	35	B	0.670000017	35	[illegible]		17				5	5		5
6	C	0.1	U	U	0	1	ND	1	0.05	2	4	9.5	34	B	0.53	34	0.53		34				6	6		6
7	C	0.1	U	U	0	1	ND	1	0.05	2	5	9.5	33	B	0.379999995	33	[illegible]		33							7
8	C	0.1	U	U	0	1	ND	1	0.05	2	6	9.5	32	C	0.379	32				0.379	32					8
9	C	0.1	U	U	0	1	ND	1	0.05	2	7	9.5	31	B	0.329999995	31	[illegible]		31							9
10	C	0.103	--	--	0	1	Detect	0	0.103	3	7	14.5	30	B	0.479999995	30	0.479999995		30							10
11	C	0.105	U	U	0	1	ND	1	0.0525	3	8	16	29	C	0.419	29				0.419	29					11
12	C	0.129	--	--	0	1	Detect	0	0.129	4	8	16	28	B	0.37	28	0.37		29							12
13	C	0.153	--	--	0	1	Detect	0	0.153	5	8	17	27	C	0.349	27				0.349	27					13
14	B	0.16	--	--	1	0	Detect	0	0.16	6	8	18	26	B	0.32000001	26	0.32000001		28							14
15	B	0.16	--	--	1	0	Detect	0	0.16	7	8	19	25	C	0.306	25				0.306	25					15
16	C	0.183	U	U	0	1	ND	1	0.0915	7	9	12	16	B	0.19	21	0.19		21							16
17	B	0.185	U	U	1	0	ND	1	0.0925	7	10	12	15	B	0.18	19	0.18		19							17
18	B	0.19	--	--	1	0	Detect	0	0.19	8	10	21	14	B	0.16	18	0.16		18							18
19	C	0.19	U	U	0	1	ND	1	0.095	8	11	12.5	13	C	0.153	17				0.153	17					19
20	C	0.19	U	U	0	1	ND	1	0.095	8	12	12.5	12	C	0.129	16				0.129	16					20
21	C	0.19	U	U	0	1	ND	1	0.095	8	13	12.5	11	C	0.102	14.5				0.102	14.5					21
22	C	0.2	U	U	0	1	ND	1	0.1	8	14	12.5	10	C	0.093	12.5				0.093	12.5	+				22
23	C	0.201	U	U	0	1	ND	1	0.1005	8	15	12.5	9	C	0.095	12.5				0.095	12.5	+				23
24	C	0.205	U	U	0	1	ND	1	0.1025	8	16	12.5	21	C	0.095	12.5				0.095	12.5	+				24
25	C	0.304	--	--	0	1	Detect	0	0.304	9	16	25	33	C	0.1	12.5				0.1	12.5	+				25
26	B	0.33000001	--	--	1	0	Detect	0	0.33000001	10	16	25	23	C	0.1025	12.5				0.1025	12.5	+				26
27	C	0.365	--	--	0	1	Detect	0	0.365	11	16	27	24	C	0.1025	12.5				0.1025	12.5	+				27
28	B	0.37	--	--	1	0	Detect	0	0.37	12	16	29	18	C	0.0925	12				0.0925	12	+				28
29	C	0.418	--	--	0	1	Detect	0	0.418	13	16	29	17	B	0.0925	12	0.0925	12	*							29
30	B	0.47999999	--	--	1	0	Detect	0	0.47999999	14	16	30	2	B	0.02	10	0.02	10								30
31	B	0.50999999	--	--	1	0	Detect	0	0.50999999	15	16	31	11	C	0.0525	10				0.0525	10	+				31
32	C	0.579	--	--	0	1	Detect	0	0.579	16	16	32	3	C	0.0475	9.5				0.0475	9.5	+				32
33	B	0.579999998	--	--	1	0	Detect	0	0.579999998	17	16	33	4	C	0.0475	9.5				0.0475	9.5	+				33
34	B	0.89	--	--	1	0	Detect	0	0.89	18	16	34	5	C	0.0475	9.5				0.0475	9.5	+				34
35	B	0.870000011	--	--	1	0	Detect	0	0.870000011	19	16	35	6	C	0.05	9.5				0.05	9.5	+				35
36	B	1.10000002	--	--	1	0	Detect	0	1.10000002	20	16	36	7	C	0.05	9.5				0.05	9.5	+				36
37	B	2.20000005	--	--	1	0	Detect	0	2.20000005	21	16	37	8	C	0.05	9.5				0.05	9.5	+				37
38	B	3.29999995	--	--	1	0	Detect	0	3.29999995	22	16	38	9	C	0.05	9.5				0.05	9.5	+				38
39	C	10.3	--	--	0	1	Detect	0	10.3	23	16	39	1	B	0.016	9	0.016	9								39
40												0	0	B	0.00375	12.5	0.00375	12.5								40

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Table 12
Quantile Test Result for Fluorene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.3, Redox Version 1.3 12/19/01

COC ID #	
Name	fluorene
Units	mg/kg

INPUT
OUTPUT
Instruction

Site Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	9	Table A.8 = # of largest measurements in (m+n) that must be examined (r + s+n+c ≤ 256)
k =	5	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k ≤ r)
α =	0.001	If α = 0.05 after final iteration of r and k, then use the smallest (r,k) such that α = 0.05
	Yes	Can the Quantile Test be used?

59 %-chance of a Detect	11 %-chance of a ND
95 %-chance of a Detect in B	86 %-chance of a Detect in C
18 %-chance of a ND in B	14 %-chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0058 Detect

HD Rule = 1 | 1* value

NCIN = 20

Accept Ho (Site = Bkg) | Reds: Ho is 1-tail (site > bkg)

α = 0.001

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank
1	B	0.0058	--	--	1	0	Detect	0	0.0058	1	0	10.5
2	B	0.0075	U	U	1	0	ND	1	0.00375	1	1	10.5
3	B	0.0075	U	U	1	0	ND	1	0.00375	1	2	10.5
4	B	0.013	--	--	1	0	Detect	0	0.013	2	2	17.5
5	B	0.033	--	--	1	0	Detect	0	0.033	3	2	18.5
6	B	0.0375	U	U	1	0	ND	1	0.01875	3	3	19.5
7	B	0.038	--	--	1	0	Detect	0	0.038	4	3	20
8	B	0.038	U	U	1	0	ND	1	0.019	4	4	17
9	B	0.044	--	--	1	0	Detect	0	0.044	5	4	21.5
10	B	0.052	--	--	1	0	Detect	0	0.052	6	4	22.5
11	B	0.062	--	--	1	0	Detect	0	0.062	7	4	23.5
12	C	0.095	U	U	0	1	ND	1	0.0475	7	5	16.5
13	C	0.095	U	U	0	1	ND	1	0.0475	7	6	16.5
14	C	0.095	U	U	0	1	ND	1	0.0475	7	7	16.5
15	C	0.095	U	U	0	1	ND	1	0.0475	7	8	16.5
16	C	0.095	U	U	0	1	ND	1	0.0475	7	9	16.5
17	C	0.1	U	U	0	1	ND	1	0.05	7	10	16.5
18	C	0.1	U	U	0	1	ND	1	0.05	7	11	16.5
19	C	0.1	U	U	0	1	ND	1	0.05	7	12	16.5
20	C	0.1	U	U	0	1	ND	1	0.05	7	13	16.5
21	C	0.1	U	U	0	1	ND	1	0.05	7	14	16.5
22	C	0.1	U	U	0	1	ND	1	0.05	7	15	16.5
23	C	0.1	U	U	0	1	ND	1	0.05	7	16	16.5
24	C	0.1	U	U	0	1	ND	1	0.05	7	17	16.5
25	B	0.1	--	--	1	0	Detect	0	0.1	8	17	21
26	C	0.105	U	U	0	1	ND	1	0.0525	8	18	19
27	C	0.105	U	U	0	1	ND	1	0.0525	8	19	19
28	B	0.11	U	U	1	0	ND	1	0.055	8	20	19
29	B	0.173	U	U	1	0	ND	1	0.0875	8	21	19
30	C	0.185	U	U	0	1	ND	1	0.0925	8	22	19
31	B	0.185	U	U	1	0	ND	1	0.0925	8	23	19
32	C	0.19	U	U	0	1	ND	1	0.095	8	24	19
33	C	0.19	U	U	0	1	ND	1	0.095	8	25	19
34	C	0.19	U	U	0	1	ND	1	0.095	8	26	19
35	C	0.2	U	U	0	1	ND	1	0.1	8	27	19
36	C	0.205	U	U	0	1	ND	1	0.1025	8	28	19
37	C	0.205	U	U	0	1	ND	1	0.1025	8	29	19
38	B	0.22	--	--	1	0	Detect	0	0.22	9	29	24
39	B	0.44000000	--	--	1	0	Detect	0	0.44000000	10	29	25
40	C	4.8	--	--	0	1	Detect	0	4.8	11	29	40

IF MIN is DETECT, d=1, e=0, ELSE d=0, e=1

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
40	C	4.8	40
39	B	0.44000000	39
38	B	0.22	38
25	B	0.1	37
11	B	0.062	36.5
10	B	0.052	35.5
9	B	0.044	34.5
7	B	0.038	33
26	C	0.0525	32
27	C	0.0525	31
28	B	0.055	30
29	B	0.0875	29
30	C	0.0925	28
31	B	0.0925	27
12	C	0.0475	26
32	C	0.095	25
33	C	0.095	24
34	C	0.095	23
35	C	0.1	22
36	C	0.1025	21
37	C	0.1025	20
13	C	0.0475	19
14	C	0.0475	18
15	C	0.0475	17
16	C	0.0475	16
17	C	0.05	15
18	C	0.05	14
19	C	0.05	13
20	C	0.05	12
21	C	0.05	11
22	C	0.05	10
23	C	0.05	9
24	C	0.05	8
1	B	0.0058	7
2	B	0.00375	6
3	B	0.00375	5
4	B	0.013	4
5	B	0.033	3
6	B	0.01875	2
8	B	0.019	1

Index	Source (B or C)	Data	CALC RANK

Index	Source (B or C)	Data	CALC RANK

r	k	c
1	1	1
2	2	2
2	3	3
4	4	4
5	5	5

Index	Counter
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40

Table [illegible]3
Quantile Test Result for Indeno(1,2,3-c,d)pyrene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.D. Reilly Version 1.2 12/19/01

CDC ID #	
Name	Indeno(1,2,3-c,d)pyrene
Units	mg/kg

INPUT
OUTPUT
Interfaction

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements in m+n that must be examined (r < or=< 200)
k =	5	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

69 %-chance of a Detect	11 %-chance of a ND
90 %-chance of a Detect in D	85 %-chance of a Detect in C
10 %-chance of a ND in D	14 %-chance of a ND in C

ND more likely than Detect

Accept Ho (Site = Bkg) — Note: Ha is 1-tail (site > bkg)

α = 0.051

MIN Value =	0.0073	ND

ND Rule	"1" value
1	

NON = 24

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = d	Data	d	e	Calculated Rank	Index	Source (B or C)	Date	CALC RANK	B Data	B Rank	B#	C Data	C Rank	C#	r	k	C
1	B	0.0073	U	U	1	0	ND	1	0.00365	0	1	12.5	40	C	3.81	40				3.81	40		4	1	1
2	B	0.0073	U	U	1	0	ND	1	0.00365	0	2	12.5	39	B	2.29999995	39	2.29999995	16					2	2	
3	B	0.047	–	–	1	0	Detect	0	0.047	1	2	14	38	B	0.709999949	38	0.709999949	15					3	3	
4	B	0.088	–	–	1	0	Detect	0	0.088	2	2	15	37	B	0.420000001	37	0.420000001	13					4	4	
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	13.5	36	B	0.270000011	36	0.270000011	12					5	5	
6	C	0.095	U	U	0	1	ND	1	0.0475	2	4	13.5	35	C	0.263	35				0.263	35				
7	C	0.095	U	U	0	1	ND	1	0.0475	2	5	13.5	34	B	0.25	34	0.25	11							
8	C	0.095	U	U	0	1	ND	1	0.0475	2	6	13.5	33	B	0.23	33	0.23	10							
9	C	0.095	U	U	0	1	ND	1	0.0475	2	7	13.5	32	B	0.219999999	32	0.219999999	9							
10	B	0.096	–	–	1	0	Detect	0	0.096	3	7	16.5	25	B	0.19	25	0.19	8							
11	C	0.1	U	U	0	1	ND	1	0.05	3	8	14	22	B	0.180000001	24	0.180000001	7							
12	C	0.1	U	U	0	1	ND	1	0.05	3	9	14	20	B	0.16	24.1	0.16	6							
13	C	0.1	U	U	0	1	ND	1	0.05	3	10	14	19	C	0.102	23				0.102	23				
14	C	0.1	U	U	0	1	ND	1	0.05	3	11	14	10	B	0.094	19.3	0.094	5.5							
15	C	0.1	U	U	0	1	ND	1	0.05	3	12	14	26	C	0.093	18				0.093	18	c			
16	C	0.1	U	U	0	1	ND	1	0.05	3	13	14	27	C	0.093	18				0.093	18	c			
17	C	0.1	U	U	0	1	ND	1	0.05	3	14	14	28	C	0.093	18				0.093	18	c			
18	C	0.102	–	–	0	1	Detect	0	0.102	4	14	23	29	C	0.1	16				0.1	16	c			
19	C	0.103	U	U	0	1	ND	1	0.0525	4	15	14.5	30	C	0.1025	16				0.1025	16	c			
20	B	0.19	–	–	1	0	Detect	0	0.19	5	15	24.5	31	C	0.1025	16				0.1025	16	c			
21	B	0.17	U	U	1	0	ND	1	0.085	5	16	17	23	C	0.0525	15.5				0.0525	15.5	c			
22	B	0.190000001	–	–	1	0	Detect	0	0.190000001	6	16	25	24	B	0.0525	15.5	0.0525	4.5	c						
23	C	0.193	U	U	0	1	ND	1	0.0925	6	17	15.5	4	B	0.088	13	0.088	3							
24	B	0.193	U	U	1	0	ND	1	0.0925	6	18	15.5	21	B	0.083	12	0.083	2	c						
25	B	0.19	–	–	1	0	Detect	0	0.19	7	18	29	19	C	0.0525	14.5				0.0525	14.5	c			
26	C	0.19	U	U	0	1	ND	1	0.095	7	19	16	3	B	0.047	10	0.04	1	c						
27	C	0.19	U	U	0	1	ND	1	0.095	7	20	16	11	C	0.05	14				0.05	14	c			
28	C	0.19	U	U	0	1	ND	1	0.095	7	21	16	12	C	0.05	14				0.05	14	c			
29	C	0.2	U	U	0	1	ND	1	0.1	7	22	16	13	C	0.05	14				0.05	14	c			
30	C	0.204	U	U	0	1	ND	1	0.1025	7	23	16	14	C	0.05	14				0.05	14	c			
31	C	0.205	U	U	0	1	ND	1	0.1025	7	24	16	15	C	0.05	14				0.05	14	c			
32	B	0.23999999	–	–	1	0	Detect	0	0.23999999	8	24	32	16	C	0.05	14				0.05	14	c			
33	B	0.25	–	–	1	0	Detect	0	0.25	9	24	33	17	C	0.05	14				0.05	14	c			
34	B	0.25	–	–	1	0	Detect	0	0.25	10	24	34	5	C	0.0475	13.5				0.0475	13.5	c			
35	C	0.263	–	–	0	1	Detect	0	0.263	11	24	35	6	C	0.0475	13.5				0.0475	13.5	c			
36	B	0.270000011	–	–	1	0	Detect	0	0.270000011	12	24	36	7	C	0.0475	13.5				0.0475	13.5	c			
37	B	0.420000011	–	–	1	0	Detect	0	0.420000011	13	24	37	8	C	0.0475	13.5				0.0475	13.5	c			
38	B	0.709999949	–	–	1	0	Detect	0	0.709999949	14	24	38	9	C	0.0475	13.5				0.0475	13.5	c			
39	B	2.29999995	–	–	1	0	Detect	0	2.29999995	15	24	39	1	B	0.00375	12.5	0.00375	1	c						
40	C	3.81	–	–	0	1	Detect	0	3.81	16	24	40	2	B	0.00375	12.5	0.00375	12.5	c						

Table B3-14
Quantile Test Result for Naphthalene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Riches Version 1.3 12/10/01

COC ID #	
Name	naphthalene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	25	# measurements in Background (< 100)
n =	22	# measurements in Clean Up Area (< 100)
r =	4	Table A.3 = # of largest measurements to m+n that must be examined (r = s+n+1 .090)
k =	4	Table A.3 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.046	If p > 0.01 after final iteration of r and k, then use the smallest (r,k) such that α = 0.05
	Yes	Can the Quantile Test be used?

99 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in D	89 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0012 Detect

ND Rule 1* value
1

NON = 33

Accept Ho (Site = Bkg) Note: Ho is 1-tail (site > bkg)
α = 0.046

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B Data	B Rank	B ND	C Data	C Rank	C ND	r	k	C	Counter
1	B	0.0012	--	--	1	0	Detect	0	0.0012	1	0	16.5	48	C	1.73	48				1.73	48		1	1	1	1
2	B	0.0024	U	U	1	0	ND	1	0.0012	1	1	16.5	38	B	0.12	42.5	0.12	42.5					2	2		2
3	B	0.0024	U	U	1	0	ND	1	0.0013	1	2	16.5	37	B	0.165	41.5	0.165	41.5					3	3		3
4	B	0.00275	U	U	1	0	ND	1	0.001375	1	3	16.5	71	B	0.080	33	0.080	33					4	4		4
5	B	0.0028	U	U	1	0	ND	1	0.0014	1	4	16.5	15	B	0.025	29.5	0.025	29.5								5
6	B	0.00285	U	U	1	0	ND	1	0.001425	1	5	16.5	14	B	0.021	28.5	0.021	28.5								6
7	B	0.00325	U	U	1	0	ND	1	0.001625	1	6	16.5	13	B	0.01	27.5	0.01	27.5								7
8	B	0.0042	--	--	1	0	Detect	0	0.0042	2	6	22.5	12	B	0.018	26.5	0.018	26.5								8
9	B	0.0061	--	--	1	0	Detect	0	0.0061	3	6	23.5	11	B	0.019	25.5	0.019	25.5								9
10	B	0.01	--	--	1	0	Detect	0	0.01	4	6	24.5	10	B	0.01	24.5	0.01	24.5								10
11	B	0.018	--	--	1	0	Detect	0	0.018	5	6	25.5	39	B	0.0675	24	0.0675	24	*							11
12	B	0.018	--	--	1	0	Detect	0	0.018	6	6	26.5	40	C	0.0625	24				0.0625	24	*				12
13	B	0.02	--	--	1	0	Detect	0	0.02	7	6	27.5	41	B	0.165	24	0.165	24	*							13
14	B	0.021	--	--	1	0	Detect	0	0.021	8	6	28.5	42	C	0.19	24				0.19	24	*				14
15	B	0.025	--	--	1	0	Detect	0	0.025	9	6	29.5	43	C	0.19	24				0.19	24	*				15
16	B	0.0265	U	U	1	0	ND	1	0.01325	9	7	33.5	44	C	0.19	24				0.19	24	*				16
17	B	0.0415	U	U	1	0	ND	1	0.02075	9	8	22.5	45	C	0.2	24				0.2	24	*				17
18	B	0.042	U	U	1	0	ND	1	0.021	9	9	22.5	46	C	0.205	24				0.205	24	*				18
19	B	0.08	U	U	1	0	ND	1	0.04	9	10	22.5	47	C	0.205	24				0.205	24	*				19
20	B	0.08	U	U	1	0	ND	1	0.04	9	11	22.5	9	B	0.0065	23.5	0.0065	23.5								20
21	B	0.085	--	--	1	0	Detect	0	0.085	10	11	32	22	C	0.0675	22				0.0675	22	*				21
22	C	0.095	U	U	0	1	ND	1	0.0475	10	12	23	23	C	0.0475	23				0.0475	23	*				22
23	C	0.095	U	U	0	1	ND	1	0.0475	10	13	23	24	C	0.0475	23				0.0475	23	*				23
24	C	0.095	U	U	0	1	ND	1	0.0475	10	14	23	25	C	0.0475	23				0.0475	23	*				24
25	C	0.095	U	U	0	1	ND	1	0.0475	10	15	23	26	C	0.0475	23				0.0475	23	*				25
26	C	0.095	U	U	0	1	ND	1	0.0475	10	16	23	27	C	0.05	23				0.05	23	*				26
27	C	0.1	U	U	0	1	ND	1	0.05	10	17	23	28	C	0.05	23				0.05	23	*				27
28	C	0.1	U	U	0	1	ND	1	0.05	10	18	23	29	C	0.05	23				0.05	23	*				28
29	C	0.1	U	U	0	1	ND	1	0.05	10	19	23	30	C	0.05	23				0.05	23	*				29
30	C	0.1	U	U	0	1	ND	1	0.05	10	20	23	31	C	0.05	23				0.05	23	*				30
31	C	0.1	U	U	0	1	ND	1	0.05	10	21	23	32	C	0.05	23				0.05	23	*				31
32	C	0.1	U	U	0	1	ND	1	0.05	10	22	23	33	C	0.05	23				0.05	23	*				32
33	C	0.1	U	U	0	1	ND	1	0.05	10	23	23	34	C	0.05	23				0.05	23	*				33
34	C	0.1	U	U	0	1	ND	1	0.05	10	24	23	35	C	0.0525	23				0.0525	23	*				34
35	C	0.105	U	U	0	1	ND	1	0.0525	10	25	23	36	C	0.0525	23				0.0525	23	*				35
36	C	0.105	U	U	0	1	ND	1	0.0525	10	26	23	8	B	0.0042	22.5	0.0042	22.5								36
37	B	0.105	--	--	1	0	Detect	0	0.105	11	26	41.5	16	B	0.01575	27.5	0.01575	27.5	*							37
38	B	0.13	--	--	1	0	Detect	0	0.13	12	26	42.5	17	B	0.02075	22.5	0.02075	22.5	*							38
39	B	0.171	U	U	1	0	ND	1	0.0871	12	27	24	18	B	0.021	22.5	0.021	22.5	*							39
40	C	0.185	U	U	0	1	ND	1	0.0925	12	28	24	19	B	0.04	22.5	0.04	22.5	*							40
41	B	0.185	U	U	1	0	ND	1	0.185	12	29	24	20	B	0.04	22.5	0.04	22.5	*							41
42	C	0.19	U	U	0	1	ND	1	0.19	12	30	24	1	B	0.0012	16.5	0.0012	16.5								42
43	C	0.19	U	U	0	1	ND	1	0.19	12	31	24	2	B	0.0012	16.5	0.0012	16.5	*							43
44	C	0.19	U	U	0	1	ND	1	0.19	12	32	24	3	B	0.0013	16.5	0.0013	16.5	*							44
45	C	0.2	U	U	0	1	ND	1	0.2	12	33	24	4	B	0.001375	16.5	0.001375	16.5	*							45
46	C	0.205	U	U	0	1	ND	1	0.205	12	34	24	5	B	0.0014	16.5	0.0014	16.5	*							46
47	C	0.205	U	U	0	1	ND	1	0.205	12	35	24	6	B	0.001425	16.5	0.001425	16.5	*							47
48	C	1.8	--	--	0	1	Detect	0	1.73	13	35	48	7	B	0.001625	16.5	0.001625	16.5	*							48

Table 5.3.15
Quantile Test Result for Phenanthrene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Wedow Version 1.2 12/19/01

CDC ID #	
Name	phenanthrene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Results
If Background Results Missing, Enter Site Area Results

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	5	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.051	If α = 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect to B	85 % chance of a Detect to C
10 % chance of a ND to B	14 % chance of a ND to C

ND more likely than Detect

MIN Value = 0.012 Detect

ND Rule: 1* value = 1

NON = 10

Accept No (Site < Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	17 m	23 n	ND	IF MIN is DETECT, d=1, and, ELSE d=0, a=1 ND=1 Detect=0	Data	d	a	Calculated Rank
1	B	0.012	--	--	1	0	Detect	0	0.012	1	0	10.5
2	B	0.03	--	--	1	0	Detect	0	0.03	2	0	11.5
3	C	0.0756	--	--	0	1	Detect	0	0.0756	3	0	12.5
4	B	0.0845	--	--	1	0	Detect	0	0.0845	4	0	13.5
5	C	0.095	U	U	0	1	ND	1	0.0473	4	1	12
6	C	0.095	U	U	0	1	ND	1	0.0473	4	2	12
7	C	0.095	U	U	0	1	ND	1	0.0473	4	3	12
8	C	0.0981	--	--	0	1	Detect	0	0.0981	5	3	15
9	C	0.1	U	U	0	1	ND	1	0.05	5	4	12.5
10	C	0.1	U	U	0	1	ND	1	0.05	5	5	12.5
11	C	0.1	U	U	0	1	ND	1	0.05	5	6	12.5
12	C	0.1	U	U	0	1	ND	1	0.05	5	7	12.5
13	C	0.1	U	U	0	1	ND	1	0.05	5	8	12.5
14	C	0.1	U	U	0	1	ND	1	0.05	5	9	12.5
15	C	0.1	U	U	0	1	ND	1	0.05	5	10	12.5
16	C	0.105	U	U	0	1	ND	1	0.0525	5	11	12.5
17	B	0.11	--	--	1	0	Detect	0	0.11	6	11	27
18	B	0.16	--	--	1	0	Detect	0	0.16	7	11	22
19	C	0.189	U	U	0	1	ND	1	0.0925	7	12	13.5
20	B	0.185	U	U	1	0	ND	1	0.0925	7	13	13.5
21	B	0.19	--	--	1	0	Detect	0	0.19	8	13	24
22	C	0.19	U	U	0	1	ND	1	0.095	8	14	14
23	C	0.19	U	U	0	1	ND	1	0.095	8	15	14
24	C	0.19	U	U	0	1	ND	1	0.095	8	16	14
25	C	0.2	U	U	0	1	ND	1	0.1	8	17	14
26	C	0.205	U	U	0	1	ND	1	0.1025	8	18	14
27	C	0.205	U	U	0	1	ND	1	0.1025	8	19	14
28	B	0.21666666	--	--	1	0	Detect	0	0.21666666	9	19	28
29	C	0.268	--	--	0	1	Detect	0	0.268	10	19	29
30	C	0.273	--	--	0	1	Detect	0	0.273	11	19	30
31	B	0.30000001	--	--	1	0	Detect	0	0.30000001	12	19	21
32	B	0.30000001	--	--	1	0	Detect	0	0.30000001	13	19	32
33	B	0.33000001	--	--	1	0	Detect	0	0.33000001	14	19	23
34	B	0.49000001	--	--	1	0	Detect	0	0.49000001	15	19	34
35	B	0.55000001	--	--	1	0	Detect	0	0.55000001	16	19	35
36	B	0.66000002	--	--	1	0	Detect	0	0.66000002	17	19	36
37	B	1.2000000	--	--	1	0	Detect	0	1.2000000	18	19	37
38	B	2.2000000	--	--	1	0	Detect	0	2.2000000	19	19	38
39	B	4.6000001	--	--	1	0	Detect	0	4.6000001	20	19	39
40	C	10.5	--	--	0	1	Detect	0	10.5	21	19	40

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
40	C	10.5	40
39	B	4.6000001	39
38	B	2.2000000	38
37	B	1.2000000	37
36	B	0.66000002	36
35	B	0.55000001	35
34	B	0.49000001	34
33	B	0.33000001	33
32	B	0.30000001	32
31	B	0.30000001	31
30	C	0.273	30
29	C	0.268	29
28	B	0.21666666	28
27	C	0.205	27
26	C	0.205	26
25	C	0.2	25
24	C	0.19	24
23	C	0.19	23
22	C	0.19	22
21	B	0.19	21
20	B	0.185	20
19	C	0.189	19
18	B	0.16	18
17	B	0.11	17
16	C	0.105	16
15	C	0.1	15
14	C	0.1	14
13	C	0.1	13
12	C	0.1	12
11	C	0.1	11
10	C	0.1	10
9	C	0.1	9
8	C	0.0981	8
7	C	0.095	7
6	C	0.095	6
5	C	0.095	5
4	B	0.0845	4
3	C	0.0756	3
2	B	0.03	2
1	B	0.012	1

B

Index	Data	CALC RANK	Ties	Cum	Adj
40	10.5	40			
39	4.6000001	39	1	39	
38	2.2000000	38	1	38	
37	1.2000000	37	1	37	
36	0.66000002	36	1	36	
35	0.55000001	35	1	35	
34	0.49000001	34	1	34	
33	0.33000001	33	1	33	
32	0.30000001	32	1	32	
31	0.30000001	31	1	31	
30	0.273	30	1	30	
29	0.268	29	1	29	
28	0.21666666	28	1	28	
27	0.205	27	2	27	
26	0.205	26	2	26	
25	0.2	25	1	25	
24	0.19	24	4	24	
23	0.19	23	4	23	
22	0.19	22	4	22	
21	0.19	21	4	21	
20	0.185	20	1	20	
19	0.189	19	1	19	
18	0.16	18	1	18	
17	0.11	17	1	17	
16	0.105	16	1	16	
15	0.1	15	6	15	
14	0.1	14	6	14	
13	0.1	13	6	13	
12	0.1	12	6	12	
11	0.1	11	6	11	
10	0.1	10	6	10	
9	0.1	9	6	9	
8	0.0981	8	1	8	
7	0.095	7	4	7	
6	0.095	6	4	6	
5	0.095	5	4	5	
4	0.0845	4	1	4	
3	0.0756	3	1	3	
2	0.03	2	1	2	
1	0.012	1	1	1	

C

Index	Data	CALC RANK	Ties	Cum	Adj
40	10.5	40	1	40	
30	0.273	30	1	30	
29	0.268	29	1	29	
27	0.205	27	2	27	
26	0.205	26	2	26	
25	0.2	25	1	25	
24	0.19	24	4	24	
23	0.19	23	4	23	
22	0.19	22	4	22	
21	0.19	21	4	21	
20	0.185	20	1	20	
19	0.189	19	1	19	
18	0.16	18	1	18	
17	0.11	17	1	17	
16	0.105	16	1	16	
15	0.1	15	6	15	
14	0.1	14	6	14	
13	0.1	13	6	13	
12	0.1	12	6	12	
11	0.1	11	6	11	
10	0.1	10	6	10	
9	0.1	9	6	9	
8	0.0981	8	1	8	
7	0.095	7	4	7	
6	0.095	6	4	6	
5	0.095	5	4	5	
4	0.0845	4	1	4	
3	0.0756	3	1	3	
2	0.03	2	1	2	
1	0.012	1	1	1	

Index	Data	CALC RANK	Ties	Cum	Adj
40	10.5	40	1	40	
30	0.273	30	1	30	
29	0.268	29	1	29	
27	0.205	27	2	27	
26	0.205	26	2	26	
25	0.2	25	1	25	
24	0.19	24	4	24	
23	0.19	23	4	23	
22	0.19	22	4	22	
21	0.19	21	4	21	
20	0.185	20	1	20	
19	0.189	19	1	19	
18	0.16	18	1	18	
17	0.11	17	1	17	
16	0.105	16	1	16	
15	0.1	15	6	15	
14	0.1	14	6	14	
13	0.1	13	6	13	
12	0.1	12	6	12	
11	0.1	11	6	11	
10	0.1	10	6	10	
9	0.1	9	6	9	
8	0.0981	8	1	8	
7	0.095	7	4	7	
6	0.095	6	4	6	
5	0.095	5	4	5	
4	0.0845	4	1	4	
3	0.0756	3	1	3	
2	0.03	2	1	2	
1	0.012	1	1	1	

i	k	c	Counter
1	1	1	1
2	2		2
3	3		3
4	4		4
5	5		5
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Table 16
Quantile Test Result for Pyrene in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 (2/1999)

COC ID #	
Name	pyrene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Samples
Clean Up Area Samples

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
i =	5	Table A.6 = # of largest measurements in m+n that must be examined (r < m+n < 2m)
k =	5	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.051	If α = 0.05 after final iteration of i and k, then use the smallest (r,k) such that α = 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect | 11 % chance of a ND

90 % chance of a Detect in B | 84 % chance of a Detect in C
10 % chance of a ND in B | 16 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.011 Detect

HD Rule | "t" value
5

NDIN = 10

Accept Ho (Site = Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.051

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	r	k	Calculated Rank
1	B	0.011	--	--	1	0	Detect	0	0.011	1	0	9
2	B	0.012	--	--	1	0	Detect	0	0.012	2	0	10
3	C	0.095	U	U	0	1	ND	1	0.0475	2	1	8.5
4	C	0.095	U	U	0	1	ND	1	0.0475	2	2	8.5
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	8.5
6	C	0.1	U	U	0	1	ND	1	0.05	2	4	8.5
7	C	0.1	U	U	0	1	ND	1	0.05	2	5	8.5
8	C	0.1	U	U	0	1	ND	1	0.05	2	6	8.5
9	C	0.1	U	U	0	1	ND	1	0.05	2	7	8.5
10	C	0.104	--	--	0	1	Detect	0	0.104	2	7	14.5
11	C	0.105	--	--	0	1	Detect	0	0.105	4	7	15.5
12	C	0.105	U	U	0	1	ND	1	0.0525	4	8	16.5
13	C	0.1375	--	--	0	1	Detect	0	0.1375	5	8	17
14	B	0.14	--	--	1	0	Detect	0	0.14	6	8	18
15	B	0.15000001	--	--	1	0	Detect	0	0.15000001	7	8	19
16	B	0.18000001	--	--	1	0	Detect	0	0.18000001	8	8	20
17	C	0.185	U	U	0	1	ND	1	0.0925	8	9	12.5
18	B	0.185	U	U	1	0	ND	1	0.0925	8	10	12.5
19	C	0.19	U	U	0	1	ND	1	0.095	8	11	12.5
20	C	0.19	U	U	0	1	ND	1	0.095	8	12	12.5
21	C	0.19	U	U	0	1	ND	1	0.095	8	13	12.5
22	C	0.2	U	U	0	1	ND	1	0.1	8	14	12.5
23	C	0.205	U	U	0	1	ND	1	0.1025	8	15	12.5
24	C	0.205	U	U	0	1	ND	1	0.1025	8	16	12.5
25	B	0.25	--	--	1	0	Detect	0	0.25	9	16	23
26	C	0.255	--	--	0	1	Detect	0	0.255	10	16	24
27	B	0.31	--	--	1	0	Detect	0	0.31	11	16	27
28	C	0.32	--	--	0	1	Detect	0	0.32	12	16	28
29	B	0.41999999	--	--	1	0	Detect	0	0.41999999	13	16	29
30	B	0.47999999	--	--	1	0	Detect	0	0.47999999	14	16	30
31	C	0.52	--	--	0	1	Detect	0	0.52	15	16	31
32	B	0.58999997	--	--	1	0	Detect	0	0.58999997	16	16	32
33	B	0.63999999	--	--	1	0	Detect	0	0.63999999	17	16	33
34	C	0.809	--	--	0	1	Detect	0	0.809	18	16	34
35	B	0.89999998	--	--	1	0	Detect	0	0.89999998	19	16	35
36	B	0.93999997	--	--	1	0	Detect	0	0.93999997	20	16	36
37	B	1.5	--	--	1	0	Detect	0	1.5	21	16	37
38	B	2.4000001	--	--	1	0	Detect	0	2.4000001	22	16	38
39	B	7.3000001e	--	--	1	0	Detect	0	7.3000001e	23	16	39
40	C	18.5	--	--	0	1	Detect	0	18.5	24	16	40

IF MIN is DETECT, dr=1, s=0, ELSE dr=0, s=1

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
40	C	18.5	40
39	B	7.3000001e	39
38	B	2.4000001	38
37	B	1.5	37
36	B	0.93999997	36
35	B	0.89999998	35
34	C	0.809	34
33	B	0.63999999	33
32	B	0.58999997	32
31	C	0.52	31
30	B	0.47999999	30
29	B	0.41999999	29
28	C	0.32	28
27	B	0.31	27
26	C	0.255	26
25	B	0.25	25
24	C	0.205	24
23	C	0.2	23
22	C	0.19	22
21	C	0.19	21
20	C	0.19	20
19	C	0.19	19
18	B	0.185	18
17	C	0.185	17
16	B	0.18000001	16
15	B	0.15000001	15
14	B	0.14	14
13	C	0.1375	13
12	C	0.105	12
11	C	0.105	11
10	C	0.104	10
9	C	0.1	9
8	C	0.1	8
7	C	0.1	7
6	C	0.1	6
5	C	0.095	5
4	C	0.095	4
3	C	0.095	3
2	B	0.012	2
1	B	0.011	1

B

Data	Rank	ND
7.3000001e	39	
2.4000001	38	
1.5	37	
0.93999997	36	
0.89999998	35	
0.63999999	33	
0.58999997	32	
0.52	31	
0.47999999	30	
0.41999999	29	
0.32	28	
0.31	27	
0.25	25	
0.205	24	
0.2	23	
0.19	22	
0.19	21	
0.19	20	
0.19	19	
0.185	18	
0.185	16	
0.15000001	15	
0.14	14	
0.12	12	
0.105	11	
0.104	10	
0.1	9	
0.1	8	
0.1	7	
0.1	6	
0.095	5	
0.095	4	
0.095	3	
0.012	2	
0.011	1	

C

Data	Rank	ND
18.5	40	
0.809	34	
0.32	27	
0.255	26	
0.185	17	
0.1375	13	
0.105	12	
0.104	14.5	
0.0525	12.5	*
0.0475	8.5	*
0.0475	8.5	*
0.0475	8.5	*
0.05	8.5	*
0.05	8.5	*
0.05	8.5	*
0.05	8.5	*

r	k	C	Counter
1	1	1	1
2	2		2
3	3		3
4	4		4
5	5		5
			6
			7
			8
			9
			10
			11
			12
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			38
			39
			40

Table 5.5-17
Quantile Test Result for Selenium in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.2 12/1991

COC ID #	
Name	selenium
Units	mg/kg

INPUT
OUTPUT
Instruction

m =	17	# measurements in Background (<= 100)
n =	22	# measurements in Clean Up Area (<= 100)
r =	5	Table A.5 = # of largest measurements in m<=c that must be examined (r < m<= = 200)
k =	5	Table A.5 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.046	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
86 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.14 ND

ND Rule: 1 | 1st value:

NON = 14

Accept Ho (Site > Bkg) | Note: Ho is 1-tail (site > bkg)

α = 0.046

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

17 | 22

IF MIN is DETECT, d=1, and, ELSE d=0, e=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	e	Calculated Rank	Notes	Source (B or C)	Data	CALC RANK	B: Data	B: Rank	B: W1	C: Data	C: Rank	C: W1	r	k	C	Counter
1	C	0.14	U	U	0	1	ND	1	0.07	0	1	1.5	39	C	1.1	20				0.1	23		1	1	1	1
2	C	0.145	U	U	0	1	ND	1	0.0725	0	2	1.5	38	C	1	19				1	20		2	2	1	2
3	C	0.155	U	U	0	1	ND	1	0.0775	0	3	1.5	37	C	0.95	17				0.95	17		3	3	1	3
4	C	0.155	U	U	0	1	ND	1	0.0775	0	4	1.5	36	C	0.9	16				0.9	16		4	4	1	4
5	C	0.165	U	U	0	1	ND	1	0.0825	0	5	1.5	35	C	0.79	15				0.79	15		5	5	1	5
6	C	0.19	U	U	0	1	ND	1	0.095	0	6	1.5	34	C	0.74	14				0.74	14					6
7	B	0.19	U	U	1	0	ND	1	0.095	0	7	1.5	33	C	0.7	13				0.7	13					7
8	B	0.196	=	=	1	0	Detect	0	0.196	1	7	11.5	32	C	0.7	12				0.7	12					8
9	B	0.25	U	U	1	0	ND	1	0.14	1	8	8	31	C	0.68	11				0.68	11					9
10	B	0.25	U	U	1	0	ND	1	0.14	1	9	8	30	C	0.66	10				0.65	10					10
11	B	0.29	U	U	1	0	ND	1	0.14	1	10	8	29	C	0.64	9				0.64	9					11
12	B	0.2825999	=	=	1	0	Detect	0	0.2825999	2	10	14	28	C	0.63	8				0.63	8					12
13	B	0.2860001	=	=	1	0	Detect	0	0.2860001	3	10	15	27	C	0.595	7				0.595	7					13
14	B	0.2895	U	U	1	0	ND	1	0.14475	3	11	9	26	C	0.58	6				0.58	6					14
15	C	0.295	U	U	0	1	ND	1	0.1475	3	12	9	25	B	0.373	21	0.373	21								15
16	C	0.3	U	U	0	1	ND	1	0.15	3	13	9	24	B	0.2199999	24	0.2199999	24								16
17	B	0.3035	=	=	1	0	Detect	0	0.3035	4	13	17.5	23	B	0.3199999	23	0.3199999	23								17
18	B	0.3039999	=	=	1	0	Detect	0	0.3039999	5	13	18.5	22	B	0.2199999	22	0.2199999	22								18
19	B	0.3075	U	U	1	0	ND	1	0.15375	5	14	10	21	B	0.3179999	21	0.3179999	21								19
20	B	0.315	=	=	1	0	Detect	0	0.315	6	14	20	20	B	0.315	20	0.315	20								20
21	B	0.3179999	=	=	1	0	Detect	0	0.3179999	7	14	21	19	B	0.3039999	18.5	0.3039999	18.5								21
22	B	0.3199999	=	=	1	0	Detect	0	0.3199999	8	14	22	17	B	0.3035	17.5	0.3035	17.5								22
23	B	0.3199999	=	=	1	0	Detect	0	0.3199999	9	14	23	16	B	0.2955001	16	0.2955001	16								23
24	B	0.3199999	=	=	1	0	Detect	0	0.3199999	10	14	24	15	B	0.2825999	14	0.2825999	14								24
25	B	0.373	=	=	1	0	Detect	0	0.373	11	14	25	8	B	0.196	11.5	0.196	11.5								25
26	C	0.58	=	=	0	1	Detect	0	0.58	12	14	26	10	B	0.15375	10	0.15375	10	=							26
27	C	0.595	=	=	0	1	Detect	0	0.595	13	14	27	14	B	0.1447	9	0.1447	9	=							27
28	C	0.63	=	=	0	1	Detect	0	0.63	14	14	28	13	C	0.1475	9				0.1475	9	=				28
29	C	0.64	=	=	0	1	Detect	0	0.64	15	14	29	16	C	0.15	9				0.15	9	=				29
30	C	0.66	=	=	0	1	Detect	0	0.66	16	14	30	9	B	0.14	8	0.14	8	=							30
31	C	0.68	=	=	0	1	Detect	0	0.68	17	14	31	10	B	0.14	8	0.14	8	=							31
32	C	0.7	=	=	0	1	Detect	0	0.7	18	14	32	11	B	0.14	8	0.14	8	=							32
33	C	0.7	=	=	0	1	Detect	0	0.7	19	14	33	1	C	0.07	1.5				0.07	1.5	=				33
34	C	0.74	=	=	0	1	Detect	0	0.74	20	14	34	2	C	0.0725	1.5				0.0725	1.5	=				34
35	C	0.75	=	=	0	1	Detect	0	0.75	21	14	35	3	C	0.0775	1.5				0.0775	1.5	=				35
36	C	0.8	=	=	0	1	Detect	0	0.8	22	14	36	4	C	0.0775	1.5				0.0775	1.5	=				36
37	C	0.85	=	=	0	1	Detect	0	0.85	23	14	37	5	C	0.0825	1.5				0.0825	1.5	=				37
38	C	1	=	=	0	1	Detect	0	1	24	14	38	6	C	0.095	1.5				0.095	1.5	=				38
39	C	1.1	=	=	0	1	Detect	0	1.1	25	14	39	7	B	0.095	7.5	0.095	7.5	=							39
40												0	26	B	0.14475	16.5	0.14475	16.5								40

Table E3-18
Quantile Test Result for Thallium in Surface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.B. Radios Version 1.3 12/99/01

COC ID #	
Name	thallium
Units	mg/kg

INPUT
OUTPUT
Restrictions

Background Area(s)
Clean Up Area Reading

m =	17	# measurements in Background (< 100)
n =	23	# measurements in Clean Up Area (< 100)
r =	6	Table A.6 = # of largest measurements in m+n that must be examined (r < m+n < 250)
k =	6	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.026	If α > 0.05 after final iterations of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

59 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 6E-05 ND

ND Rule: 1 (1= value)

NCAN = 20

Accept Ha (Site > Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.026

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect=0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	C: Value	C: Blank	C: ND	C: Data	C: Rank	C: ND	r	k	C	Counter
1	B	6E-05	U	U	1	0	ND	1	3E-05	0	1	10.5	40	C	10.1	40				10.1	40		1	1	1	1
2	B	6E-05	U	U	1	0	ND	1	3E-05	0	2	10.5	39	C	5.8	39				5.8	39		2	2	1	2
3	B	0.1656001	U	U	1	0	ND	1	0.0825	0	3	10.5	38	C	5.8	38				5.8	38		3	3	1	3
4	B	0.2479	U	U	1	0	ND	1	0.12375	0	4	10.5	37	C	4.5	37				4.5	37		4	4	1	4
5	B	0.2565999	U	U	1	0	ND	1	0.1334999	0	5	10.5	36	C	3.4	36				3.4	36		5	5	1	5
6	B	0.2730001	U	U	1	0	ND	1	0.1365001	0	6	10.5	35	C	2.8	35				2.8	35		6	6	1	6
7	B	0.2730001	U	U	1	0	ND	1	0.1375	0	7	10.5	34	C	2.8	34				2.8	34					7
8	B	0.278	U	U	1	0	ND	1	0.139	0	8	10.5	33	B	1.67999993	33	1.67999993	33								8
9	C	0.28	U	U	0	1	ND	1	0.14	0	9	10.5	32	C	1.9	32				1.9	32					9
10	C	0.28	U	U	0	1	ND	1	0.14	0	10	10.5	31	C	1.1	31				1.1	31					10
11	B	0.2889999	U	U	1	0	ND	1	0.1444999	0	11	10.5	30	C	1	30				1	30					11
12	B	0.2910001	U	U	1	0	ND	1	0.1455001	0	12	10.5	29	C	0.67	29				0.67	29					12
13	B	0.2940001	U	U	1	0	ND	1	0.147	0	13	10.5	28	C	0.68	28				0.68	28					13
14	B	0.2910001	U	U	1	0	ND	1	0.1455	0	14	10.5	27	C	0.66	27				0.66	27					14
15	B	0.2924999	U	U	1	0	ND	1	0.1462499	0	15	10.5	26	C	0.63	26				0.63	26					15
16	C	0.295	U	U	0	1	ND	1	0.1475	0	16	10.5	25	C	0.43	25				0.43	25					16
17	B	0.2969999	U	U	1	0	ND	1	0.1485	0	17	10.5	24	C	0.63	24				0.63	24					17
18	C	0.3	U	U	0	1	ND	1	0.15	0	18	10.5	23	C	0.59	23				0.59	23					18
19	B	0.3125	U	U	1	0	ND	1	0.15625	0	19	10.5	22	C	0.56	22				0.56	22					19
20	B	0.3165001	U	U	1	0	ND	1	0.158251	0	20	10.5	21	C	0.51	21				0.51	21					20
21	C	0.31	--	--	0	1	Detect	0	0.31	1	20	21	1	B	3E-05	10.5	3E-05	10.5	+							21
22	C	0.34	--	--	0	1	Detect	0	0.34	2	20	22	2	B	2E-05	10.5	2E-05	10.5	+							22
23	C	0.34	--	--	0	1	Detect	0	0.38	3	20	23	3	B	0.0825	10.5	0.0825	10.5	+							23
24	C	0.83	--	--	0	1	Detect	0	0.83	4	20	24	4	B	0.12375	10.5	0.12375	10.5	+							24
25	C	0.83	--	--	0	1	Detect	0	0.83	5	20	25	5	B	0.1334999	10.5	0.1334999	10.5	+							25
26	C	0.83	--	--	0	1	Detect	0	0.83	6	20	26	6	B	0.1365001	10.5	0.1365001	10.5	+							26
27	C	0.89	--	--	0	1	Detect	0	0.89	7	20	27	7	B	0.1375	10.5	0.1375	10.5	+							27
28	C	0.89	--	--	0	1	Detect	0	0.89	8	20	28	8	B	0.139	10.5	0.139	10.5	+							28
29	C	0.97	--	--	0	1	Detect	0	0.97	9	20	29	9	C	0.14	10.5				0.14	10.5	+				29
30	C	1	--	--	0	1	Detect	0	1	10	20	30	10	C	0.14	10.5				0.14	10.5	+				30
31	C	1.1	--	--	0	1	Detect	0	1.1	11	20	31	11	B	0.1444999	10.5	0.1444999	10.5	+							31
32	C	1.2	--	--	0	1	Detect	0	1.2	12	20	32	12	B	0.147	10.5	0.147	10.5	+							32
33	B	1.67999993	--	--	1	0	Detect	0	1.67999993	13	20	33	13	B	0.142	10.5	0.142	10.5	+							33
34	C	2.3	--	--	0	1	Detect	0	2.3	14	20	34	14	B	0.1455	10.5	0.1455	10.5	+							34
35	C	2.8	--	--	0	1	Detect	0	2.8	15	20	35	15	B	0.1462499	10.5	0.1462499	10.5	+							35
36	C	3.4	--	--	0	1	Detect	0	3.4	16	20	36	16	C	0.1475	10.5				0.1475	10.5	+				36
37	C	4.5	--	--	0	1	Detect	0	4.5	17	20	37	17	B	0.1485	10.5	0.1485	10.5	+							37
38	C	5.8	--	--	0	1	Detect	0	5.8	18	20	38	18	C	0.15	10.5				0.15	10.5	+				38
39	C	5.8	--	--	0	1	Detect	0	5.8	19	20	39	19	B	0.15625	10.5	0.15625	10.5	+							39
40	C	10.1	--	--	0	1	Detect	0	10.1	20	20	40	20	B	0.15825	10.5	0.15825	10.5	+							40

Table B3-19
Quantile Test Result for 2-Methylnaphthalene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Reiss Version 1.3 12/19/01

COC ID #	
Name	2-Methylnaphthalene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Reading
Clean Up Area Reading

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A,B = # of largest measurements in m/n that must be examined (r < .m+n < 200)
k =	7	Table A,B = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.035	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α = 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
86 % chance of a Detect in B	89 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value =	0.067	ND	

ND Rule	1/2 value
	1

NDIN =	40

Accept Ho (Site = Bkg) — Note: Ha is 1-tail (site > bkg)
α = 0.035

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					r7	n31		IF MIN is DETECT, d=1, and, ELSE d=0, a=1					Sort by CALC RANK descending			B			C			r	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	a	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Value	ND	Data	Rank	ND	r	k	C	Counter
1	B	0.067	U	U	1	0	ND	1	0.0335	0	1	20.5	48	C	0.5	48				0.5	69		1	1	1	1
2	B	0.082	--	--	1	0	Detect	0	0.082	1	1	21.5	27	B	0.1	37	0.1	0.1					2	2		2
3	B	0.019	--	--	1	0	Detect	0	0.019	2	1	22.5	11	B	0.048	28.5	0.048	28.5					3	3		3
4	B	0.027	--	--	1	0	Detect	0	0.027	3	1	23.5	16	B	0.044	27.5	0.044	27.5					4	4		4
5	B	0.035	--	--	1	0	Detect	0	0.035	4	1	24.5	5	B	0.033	24.5	0.033	24.5					5	5		5
6	B	0.036	U	U	1	0	ND	1	0.018	4	2	22.5	28	C	0.0531	34				0.0531	24	+	6	6	1	6
7	B	0.0385	U	U	1	0	ND	1	0.01925	4	3	22.5	29	C	0.0525	24				0.0525	24	+	7	7	1	7
8	B	0.0415	U	U	1	0	ND	1	0.02075	4	4	22.5	30	B	0.065	34	0.065	34	+							8
9	B	0.047	U	U	1	0	ND	1	0.021	4	5	22.5	31	B	0.0473	24	0.0473	24	+							9
10	B	0.051	--	--	1	0	Detect	0	0.044	5	5	27.5	32	C	0.0521	24				0.0521	24	+				10
11	B	0.048	--	--	1	0	Detect	0	0.048	6	5	28.5	33	B	0.0525	24	0.0525	24	+							11
12	B	0.06	U	U	1	0	ND	1	0.04	6	6	23.5	34	C	0.055	24				0.055	24	+				12
13	B	0.06	U	U	1	0	ND	1	0.04	6	7	23.5	35	C	0.057	24				0.057	24	+				13
14	C	0.055	U	U	0	1	ND	1	0.0475	6	8	23.5	36	C	0.059	24				0.059	24	+				14
15	C	0.055	U	U	0	1	ND	1	0.0475	6	9	23.5	37	C	0.059	24				0.059	24	+				15
16	C	0.055	U	U	0	1	ND	1	0.0475	6	10	23.5	38	C	0.0673	24				0.0673	24	+				16
17	C	0.055	U	U	0	1	ND	1	0.0475	6	11	23.5	39	C	0.0673	24				0.0673	24	+				17
18	C	0.055	U	U	0	1	ND	1	0.0475	6	12	23.5	40	C	0.1	24				0.1	24	+				18
19	C	0.1	U	U	0	1	ND	1	0.05	6	13	23.5	41	C	0.2	24				0.2	24	+				19
20	C	0.1	U	U	0	1	ND	1	0.05	6	14	23.5	42	C	0.2	24				0.2	24	+				20
21	C	0.1	U	U	0	1	ND	1	0.05	6	15	23.5	43	C	0.2	24				0.2	24	+				21
22	C	0.1	U	U	0	1	ND	1	0.05	6	16	23.5	44	C	0.255	24				0.255	24	+				22
23	C	0.1	U	U	0	1	ND	1	0.05	6	17	23.5	45	C	0.255	24				0.255	24	+				23
24	C	0.1	U	U	0	1	ND	1	0.05	6	18	23.5	46	C	0.255	24				0.255	24	+				24
25	C	0.1	U	U	0	1	ND	1	0.05	6	19	23.5	47	C	0.255	24				0.255	24	+				25
26	C	0.1	U	U	0	1	ND	1	0.05	6	20	23.5	4	B	0.027	23.5	0.027	23.5								26
27	B	0.1	--	--	1	0	Detect	0	0.1	7	20	27	12	B	0.04	23.5	0.04	23.5	+							27
28	C	0.105	U	U	0	1	ND	1	0.0525	7	21	24	13	B	0.04	23.5	0.04	23.5	-							28
29	C	0.105	U	U	0	1	ND	1	0.0525	7	22	24	14	C	0.0475	23.5				0.0475	23.5	+				29
30	B	0.17	U	U	1	0	ND	1	0.085	7	23	24	15	C	0.0475	23.5				0.0475	23.5	+				30
31	B	0.175	U	U	1	0	ND	1	0.0875	7	24	24	16	C	0.0475	23.5				0.0475	23.5	+				31
32	C	0.185	U	U	0	1	ND	1	0.0925	7	25	24	17	C	0.0475	23.5				0.0475	23.5	+				32
33	B	0.185	U	U	1	0	ND	1	0.0925	7	26	24	18	C	0.0475	23.5				0.0475	23.5	+				33
34	C	0.19	U	U	0	1	ND	1	0.095	7	27	24	19	C	0.05	23.5				0.05	23.5	+				34
35	C	0.19	U	U	0	1	ND	1	0.095	7	28	24	20	C	0.05	23.5				0.05	23.5	+				35
36	C	0.19	U	U	0	1	ND	1	0.095	7	29	24	21	C	0.05	23.5				0.05	23.5	+				36
37	C	0.19	U	U	0	1	ND	1	0.095	7	30	24	22	C	0.05	23.5				0.05	23.5	+				37
38	C	0.185	U	U	0	1	ND	1	0.0975	7	31	24	23	C	0.06	23.5				0.06	23.5	+				38
39	C	0.195	U	U	0	1	ND	1	0.0975	7	32	24	24	C	0.05	23.5				0.05	23.5	+				39
40	C	0.2	U	U	0	1	ND	1	0.1	7	33	24	25	C	0.05	23.5				0.05	23.5	+				40
41	C	0.2	U	U	0	1	ND	1	0.2	7	34	24	26	C	0.05	23.5				0.05	23.5	+				41
42	C	0.2	U	U	0	1	ND	1	0.2	7	35	24	3	B	0.019	22.5	0.019	22.5								42
43	C	0.2	U	U	0	1	ND	1	0.2	7	36	24	8	B	0.019	22.5	0.019	22.5	+							43
44	C	0.205	U	U	0	1	ND	1	0.205	7	37	24	7	B	0.01925	22.5	0.01925	22.5	+							44
45	C	0.205	U	U	0	1	ND	1	0.205	7	38	24	9	B	0.02075	22.5	0.02075	22.5	+							45
46	C	0.205	U	U	0	1	ND	1	0.205	7	39	24	6	B	0.021	22.5	0.021	22.5	+							46
47	C	0.205	U	U	0	1	ND	1	0.205	7	40	24	2	B	0.0687	21.5	0.0687	21.5								47
48	C	1.2	--	--	0	1	Detect	0	0.6	8	40	48	1	B	0.0835	20.5	0.0835	20.5	+							48

Table 63-20
Quantile Test Result for Acenaphthene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/1998

COC ID #	
Name	acenaphth
Units	mg/kg

INPUT
OUTPUT
Instruction

Background (Reference Area)
Clean Up Area (Results of)

m =	17	# measurements in Background (* 190)
n =	31	# measurements in Clean Up Area (* 190)
r =	7	Table A.2 = # of largest measurements in m+n that must be exeditined (r < m+n < 200)
k =	7	Table A.2 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

59 %-chance of a Detect	11 %-chance of a ND
90 %-chance of a Detect in B	86 %-chance of a Detect in C
10 %-chance of a ND in B	14 %-chance of a ND in C

ND more likely than Detect

MIN Value =	0.0660	Detect		

ND Rule	1* value
	1

MDN =	30

Accept Ho (Site = Bkg) — Reject Ho (Site > Bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	31		IF MIN is DETECT, (m+1, will ELSE (m+
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = 0
1	B	0.0660	–	–	1	0	Detect	0
2	B	0.0073	U	U	1	0	ND	1
3	B	0.0073	U	U	1	0	ND	1
4	B	0.013	–	–	1	0	Detect	0
5	B	0.027	–	–	1	0	Detect	0
6	B	0.0073	U	U	1	0	ND	1
7	B	0.036	U	U	1	0	ND	1
8	B	0.0415	U	U	1	0	ND	1
9	B	0.043	–	–	1	0	Detect	0
10	B	0.057	–	–	1	0	Detect	0
11	B	0.065	–	–	1	0	Detect	0
12	C	0.066	U	U	0	1	ND	1
13	C	0.066	U	U	0	1	ND	1
14	C	0.066	U	U	0	1	ND	1
15	C	0.066	U	U	0	1	ND	1
16	C	0.066	U	U	0	1	ND	1
17	C	0.1	U	U	0	1	ND	1
18	C	0.1	U	U	0	1	ND	1
19	C	0.1	U	U	0	1	ND	1
20	C	0.1	U	U	0	1	ND	1
21	C	0.1	U	U	0	1	ND	1
22	C	0.1	U	U	0	1	ND	1
23	C	0.1	U	U	0	1	ND	1
24	C	0.1	U	U	0	1	ND	1
25	B	0.1	–	–	1	0	Detect	0
26	C	0.105	U	U	0	1	ND	1
27	C	0.109	U	U	0	1	ND	1
28	B	0.17	U	U	1	0	ND	1
29	B	0.175	U	U	1	0	ND	1
30	C	0.185	U	U	0	1	ND	1
31	B	0.185	U	U	1	0	ND	1
32	C	0.19	U	U	0	1	ND	1
33	C	0.19	U	U	0	1	ND	1
34	C	0.19	U	U	0	1	ND	1
35	C	0.19	U	U	0	1	ND	1
36	C	0.195	U	U	0	1	ND	1
37	C	0.195	U	U	0	1	ND	1
38	C	0.2	U	U	0	1	ND	1
39	C	0.2	U	U	0	1	ND	1
40	C	0.2	U	U	0	1	ND	1
41	C	0.2	U	U	0	1	ND	1
42	C	0.205	U	U	0	1	ND	1
43	C	0.205	U	U	0	1	ND	1
44	C	0.205	U	U	0	1	ND	1
45	C	0.205	U	U	0	1	ND	1
46	B	0.23	–	–	1	0	Detect	0
47	B	0.54000002	–	–	1	0	Detect	0
48	C	0.1	–	–	0	1	Detect	0

Index	Source (B or C)	Data	CALC RANK
49	C	3.65	49
47	B	0.27000001	47
46	B	0.115	46
28	B	0.1	28
11	B	0.063	27.5
10	B	0.057	26.5
9	B	0.043	25.5
5	B	0.027	24
26	C	0.0525	23
27	C	0.0535	23
29	B	0.063	23
30	C	0.066	23
31	B	0.066	23
32	C	0.066	23
33	C	0.066	23
34	C	0.066	23
35	C	0.066	23
36	C	0.066	23
37	C	0.066	23
38	C	0.066	23
39	C	0.066	23
40	C	0.066	23
41	C	0.066	23
42	C	0.066	23
43	C	0.066	23
44	C	0.066	23
45	C	0.066	23
48	C	0.1	48

	B			C			x	y	C
	Data	Ranks	ND	Data	Ranks	ND	J	I	Y	Counter
				3.65	49		1	1	1	1
							2	2		2
							3	3		3
							4	4		4
							5	5		5
							6	6		6
							7	7		7
										8
				0.0525	23	+				9
				0.066	23	+				10
										11
										12
				0.0525	23	+				13
										14
				0.066	23	+				15
				0.066	23	+				16
				0.066	23	+				17
				0.0673	27	+				18
				0.0674	27	+				19
				0.0675	27	+				20
				0.1	23	+				21
				0.1	27	+				22
				0.1	23	+				23
				0.2	23	+				24
				0.205	23	+				25
				0.205	23	+				26
				0.205	23	+				27
				0.205	23	+				28
				0.0475	22.5	+				29
				0.0475	22.5	+				30
				0.0475	22.5	+				31
				0.0475	22.5	+				32
				0.0475	22.5	+				33
				0.05	22.5	+				34
				0.05	22.5	+				35
				0.05	22.5	+				36
				0.05	22.5	+				37
				0.05	22.5	+				38
				0.05	22.5	+				39
				0.05	22.5	+				40
				0.05	22.5	+				41
										42
										43
										44
										45
										46
										47
										48

Table B3-21
Quantile Test Result for Anthracene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Rados Version 1.2 10/19/01

COC ID #	
Name	anthracene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 1000)
n =	21	# measurements in Clean Up Area (< 1000)
r =	7	Table A.8 = # of largest measurements in (m+n) that must be exceeded (r < (m+n) * .200)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
99 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C

ND score likely than Detect

MIN Value =	0.0075	ND

ND Rule: 1/2 value
1

NDIN = 38

Accept Ho (Site = Bkg) Note: Ho vs. 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					m	n	ND	NDn1 Detect x B	Data	d	e	Calculated Rank	Index	Source (B or C)	Date	CALC RANK	B			C			r	k	c	Consider
Index	Source (B or C)	Value	Lab Flag	Val Flag													Data	Rank	ND	Data	Rank	ND				
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	19.5	48	C	1.2	48				1.2	25		1	1	1	1
2	B	0.0975	U	U	1	0	ND	1	0.00375	0	2	18.5	47	B	0.44999998	47							2	2		2
3	B	0.014	–	–	1	0	Detect	0	0.014	1	3	39	46	B	0.245	46	0.245	46					3	3		3
4	B	0.0375	U	U	1	0	ND	1	0.01875	1	3	19	45	D	5.13	45	5.13	45					4	4		4
5	B	0.047	–	–	1	0	Detect	0	0.047	2	3	21.5	38	B	0.19	37	0.19	37					5	5		5
6	B	0.056	–	–	1	0	Detect	0	0.056	3	3	22.5	27	D	0.18000001	35	0.18000001	35					6	6		6
7	B	0.058	–	–	1	0	Detect	0	0.058	4	3	23.5	24	B	0.11	33	0.11	33					7	7		7
8	C	0.055	U	U	0	1	ND	1	0.0475	4	4	20.5	23	B	0.11	32	0.11	32								8
9	C	0.055	U	U	0	1	ND	1	0.0475	4	5	20.5	7	B	0.058	31.5	0.058	31.5								9
10	C	0.055	U	U	0	1	ND	1	0.0475	4	6	20.5	6	B	0.056	30.5	0.056	30.5								10
11	C	0.055	U	U	0	1	ND	1	0.0475	4	7	20.5	31	C	0.055	22.5				0.055	22.5	+				11
12	C	0.055	U	U	0	1	ND	1	0.0475	4	8	20.5	32	C	0.055	22.5				0.055	22.5	+				12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	20.5	33	C	0.055	22.5				0.055	22.5	+				13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	20.5	34	C	0.055	22.5				0.055	22.5	+				14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	20.5	35	C	0.0975	22.5				0.0975	22.5	+				15
16	C	0.1	U	U	0	1	ND	1	0.05	4	12	20.5	36	C	0.0975	22.5				0.0975	22.5	+				16
17	C	0.1	U	U	0	1	ND	1	0.05	4	13	20.5	37	C	0.1	22.5				0.1	22.5	+				17
18	C	0.1	U	U	0	1	ND	1	0.05	4	14	20.5	38	C	0.1	22.5				0.1	22.5	+				18
19	C	0.1	U	U	0	1	ND	1	0.05	4	15	20.5	39	C	0.1	22.5				0.1	22.5	+				19
20	C	0.1	U	U	0	1	ND	1	0.05	4	16	20.5	40	C	0.1	22.5				0.1	22.5	+				20
21	C	0.105	U	U	0	1	ND	1	0.0525	4	17	20.5	41	C	0.205	23.5				0.205	23.5	+				21
22	C	0.105	U	U	0	1	ND	1	0.0525	4	18	20.5	42	C	0.205	23.5				0.205	23.5	+				22
23	B	0.11	–	–	1	0	Detect	0	0.11	5	18	22	43	C	0.205	23.5				0.205	23.5	+				23
24	B	0.11	–	–	1	0	Detect	0	0.11	5	19	22	44	C	0.205	23.5				0.205	23.5	+				24
25	D	0.17	U	U	1	0	ND	1	0.085	5	19	21.5	28	C	0.0925	22				0.0925	22	+				25
26	B	0.172	U	U	1	0	ND	1	0.0875	5	20	21.5	29	D	0.0925	22	0.0925	22	+							26
27	D	0.18000001	–	–	1	0	Detect	0	0.18000001	7	20	25	3	B	0.047	21.5	0.047	21.5								27
28	C	0.185	U	U	0	1	ND	1	0.0925	7	21	27	25	B	0.085	21.5	0.085	21.5	+							28
29	B	0.185	U	U	1	0	ND	1	0.0925	7	22	27	26	D	0.0875	21.5	0.0875	21.5	+							29
30	B	0.19	–	–	1	0	Detect	0	0.19	8	22	27	8	C	0.0475	20.5				0.0975	25.5	+				30
31	C	0.19	U	U	0	1	ND	1	0.095	8	23	22.5	9	C	0.0475	20.5				0.0975	25.5	+				31
32	C	0.19	U	U	0	1	ND	1	0.095	8	24	22.5	10	C	0.0475	20.5				0.0975	25.5	+				32
33	C	0.19	U	U	0	1	ND	1	0.095	8	25	22.5	11	C	0.0475	20.5				0.0975	25.5	+				33
34	C	0.19	U	U	0	1	ND	1	0.095	8	26	22.5	12	C	0.0475	20.5				0.0975	25.5	+				34
35	C	0.195	U	U	0	1	ND	1	0.0975	8	27	23.5	13	C	0.05	23.5				0.05	23.5	+				35
36	C	0.195	U	U	0	1	ND	1	0.0975	8	28	23.5	14	C	0.05	23.5				0.05	23.5	+				36
37	C	0.2	U	U	0	1	ND	1	0.1	8	29	22.5	15	C	0.05	23.5				0.05	23.5	+				37
38	C	0.2	U	U	0	1	ND	1	0.1	8	30	22.5	16	C	0.05	23.5				0.05	23.5	+				38
39	C	0.2	U	U	0	1	ND	1	0.1	8	31	22.5	17	C	0.05	23.5				0.05	23.5	+				39
40	C	0.2	U	U	0	1	ND	1	0.1	8	32	22.5	18	C	0.05	23.5				0.05	23.5	+				40
41	C	0.205	U	U	0	1	ND	1	0.205	8	33	22.5	19	C	0.05	23.5				0.05	23.5	+				41
42	C	0.205	U	U	0	1	ND	1	0.205	8	34	22.5	20	C	0.05	23.5				0.05	23.5	+				42
43	C	0.205	U	U	0	1	ND	1	0.205	8	35	22.5	21	C	0.0525	23.5				0.0525	23.5	+				43
44	C	0.205	U	U	0	1	ND	1	0.205	8	36	22.5	22	C	0.0525	23.5				0.0525	23.5	+				44
45	B	0.21999999	–	–	1	0	Detect	0	0.12	9	36	46	2	B	0.214	20	0.214	20								45
46	B	0.45999997	–	–	1	0	Detect	0	0.245	10	36	46	4	B	0.01875	19	0.01875	19	+							46
47	B	1.2999999	–	–	1	0	Detect	0	0.44999998	11	36	47	1	B	0.00375	18.5	0.00375	18.5	+							47
48	C	1.2	–	–	0	1	Detect	0	1.2	12	36	48	7	B	0.00375	18.5	0.00375	18.5	+							48

Table B5-22
Quantile Test Result for Benzo(a)anthracene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Reske Version 1.2 12/19/01

GIC ID #	
Name	benzo(a)anthracene
Units	mg/kg

INPUT
OUTPUT
Instruction

m =	29	# measurements in Background (= 1000)
n =	18	# measurements in Clean Up Area (= 1000)
r =	7	Table A.5 = # of largest measurements in m+n that must be examined (r < m+n < 2m)
k =	7	Table A.5 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.001	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

88 % chance of a Detect		11 % chance of a ND	
86 % chance of a Detect in B		86 % chance of a Detect in C	
14 % chance of a ND in B		14 % chance of a ND in C	

ND more likely than Detect

MIN Value =	0.007	ND	

ND Rule	1* value
	1

NON =	20

Accept Ho (Site = Bkg) Reject Ho (Site > Bkg)

α = 0.001

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

IF MIN is DETECT, ch=1, ynd, ELSE ch=0, yn=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	s	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B' Data	B' Rank	W	C' Data	C' Rank	W	r	k	C
1	B	0.019	--	--	1	0	Detect	0	0.019	1	0	19	47	C	5.25	47				5.25	47		7	1	1
2	B	0.1	--	--	1	0	Detect	0	0.1	2	0	17	46	B	0.0400000	46	0.0400000	46					2	2	2
3	B	0.027	--	--	1	0	Detect	0	0.027	3	0	16	45	B	0.0459999	45	0.0459999	45					3	3	3
4	B	0.044	--	--	1	0	Detect	0	0.044	4	0	15	44	B	0.0490000	44	0.0490000	44					4	4	4
5	B	0.05	--	--	1	0	Detect	0	0.05	5	0	20	43	B	0.25	43	0.25	43					5	5	5
6	B	0.0057	--	--	1	0	Detect	0	0.0057	6	0	21	42	B	0.2240000	42	0.2240000	42					6	6	6
7	B	0.048	--	--	1	0	Detect	0	0.048	7	0	22	41	B	0.285	41	0.285	41					7	7	7
8	B	0.0415	U	U	1	0	ND	1	0.02075	7	1	19	39	B	0.31	39.5	0.31	39.5							8
9	B	0.042	U	U	1	0	ND	1	0.021	7	2	18	38	B	0.3399999	38.5	0.3399999	38.5							9
10	B	0.038	U	U	1	0	ND	1	0.019	7	3	17	37	B	0.35	37	0.35	37	+						10
11	B	0.007	U	U	1	0	ND	1	0.0035	7	4	16	36	B	0.3899999	36	0.3899999	36	+						11
12	B	0.0365	U	U	1	0	ND	1	0.01825	7	5	15	35	B	0.39	35	0.39	35	+						12
13	B	0.08	U	U	1	0	ND	1	0.04	7	6	15	34	C	0.139	34				0.139	34	+			13
14	B	0.08	U	U	1	0	ND	1	0.04	7	7	14	33	C	0.185	33.5				0.185	33.5	+			14
15	B	0.065	U	U	1	0	ND	1	0.0325	7	8	13	32	B	0.3633	32	0.3633	32							15
16	B	0.475	U	U	1	0	ND	1	0.2375	7	9	15	31	C	0.205	31.5				0.205	31.5	+			16
17	B	0.17	U	U	1	0	ND	1	0.085	7	10	11	30	C	0.205	31.5				0.205	31.5	+			17
18	B	0.165	U	U	1	0	ND	1	0.0825	7	11	10	29	C	0.205	31.5				0.205	31.5	+			18
19	B	0.1	U	U	1	0	ND	1	0.05	7	12	9	28	C	0.205	31.5				0.205	31.5	+			19
20	C	0.1	U	U	0	1	ND	1	0.05	7	13	9	27	C	0.0675	31.5				0.0675	31.5	+			20
21	B	0.1	U	U	1	0	ND	1	0.05	7	14	9	26	C	0.0675	31.5				0.0675	31.5	+			21
22	B	0.105	U	U	1	0	ND	1	0.0525	7	15	9	25	C	0.1	31.5				0.1	31.5	+			22
23	C	0.095	U	U	0	1	ND	1	0.0475	7	16	9	24	C	0.1	31.5				0.1	31.5	+			23
24	C	0.1	U	U	0	1	ND	1	0.05	7	17	10	23	C	0.1	31.5				0.1	31.5	+			24
25	C	0.095	U	U	0	1	ND	1	0.0475	7	18	10	22	C	0.1	31.5				0.1	31.5	+			25
26	C	0.1	U	U	0	1	ND	1	0.05	7	19	10	21	C	0.1025	31.5				0.1025	31.5				26
27	C	0.095	U	U	0	1	ND	1	0.0475	7	20	10	20	C	0.1025	31.5				0.1025	31.5	+			27
28	C	0.095	U	U	0	1	ND	1	0.0475	7	21	10	19	C	0.1025	31.5				0.1025	31.5	+			28
29	C	0.095	U	U	0	1	ND	1	0.0475	7	22	10	18	C	0.1025	31.5				0.1025	31.5	+			29
30	C	0.1	U	U	0	1	ND	1	0.05	7	23	10	17	C	0.116	31.5				0.116	31.5	+			30
31	C	0.1	U	U	0	1	ND	1	0.05	7	24	10	16	C	0.0525	31				0.0525	31				31
32	C	0.1	U	U	0	1	ND	1	0.05	7	25	10	15	C	0.0525	31				0.0525	31	+			32
33	C	1.2	--	--	0	1	Detect	0	1.2	8	25	30.5	14	B	0.0625	15	0.0625	15	+						33
34	C	0.185	U	U	0	1	ND	1	0.0925	8	26	10.5	13	C	0.0625	15				0.0625	15				34
35	C	0.19	U	U	0	1	ND	1	0.095	8	27	10.5	12	C	0.0675	17.5				0.0675	17.5				35
36	C	0.205	U	U	0	1	ND	1	0.1025	8	28	10.5	11	C	0.0675	17.5				0.0675	17.5	+			36
37	C	0.205	--	U	0	1	ND	1	0.1025	8	29	10.5	10	C	0.0675	17.5				0.0675	17.5	+			37
38	B	0.2	--	--	1	0	Detect	0	0.2	9	29	38.5	10	C	0.05	17.5				0.05	17.5	+			38
39	B	0.19	--	--	1	0	Detect	0	0.19	10	29	39.5	11	C	0.05	17.5				0.05	17.5	+			39
40	C	0.19	--	U	0	1	ND	1	0.095	10	30	25.5	12	C	0.05	17.5				0.05	17.5	+			40
41	B	0.19	--	--	1	0	Detect	0	0.095	11	30	41	13	C	0.05	17.5				0.05	17.5	+			41
42	B	0.2	--	--	1	0	Detect	0	0.1	12	30	42	14	C	0.05	17.5				0.05	17.5	+			42
43	B	0.205	--	--	1	0	Detect	0	0.1025	13	30	43	15	C	0.05	17.5				0.05	17.5	+			43
44	B	0.2	--	--	1	0	Detect	0	0.1	14	30	44	16	C	0.0625	17.5				0.0625	17.5	+			44
45	B	0.165	--	--	1	0	Detect	0	0.0825	15	30	45	3	B	0.067	17	0.067	17							45
46	B	0.2	--	--	1	0	Detect	0	0.1	16	30	46	1	B	0.06273	18.5	0.06273	18.5							46
47	C	0.185	--	--	0	1	Detect	0	0.0875	17	30	47	2	B	0.06273	18.5	0.06273	18.5							47

Table 5.23
Quantile Test Result for Benzo(a)pyrene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.2 12/1991

COC ID #
Name: Benzo(a)pyrene
Units: mg/kg

INPUT
OUTPUT
Instruction

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.3 = # of largest measurements in m+n that must be examined (r < m+n < 200)
k =	7	Table A.3 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

95 %-chance of a Detect | 11 %-chance of a ND
98 %-chance of a Detect (in S) | 86 %-chance of a Detect (in C)
10 %-chance of a ND (in S) | 14 %-chance of a ND (in C)
ND more likely than Detect

MIN Value = 0.0073 ND
ND Rule: 1* value
NCIN = 29

Accept Ho (Site = Bkg) None: Ho is 1-tail (site > bkg)
α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	31		IF MIN is DETECT, dl=1, and, ELSE dl=0, a=1					Sort by CALC RANK descending			S			C			T	R	C	
Index	Source (S or C)	Value	Lab Flag	VM Flag	m	n	ND	ND=1 Detect =0	Data	dl	a	Calculated Rank	Index	Source (S or C)	Data	CALC RANK	Value	Kranz	ND	Value	Kranz	ND	T	R	C	Counter
1	B	0.0073	U	U	1	0	ND	1	0.0073	1	1	13.5	48	C	4.8	48				4.8	84		1	1	1	1
2	B	0.0073	U	U	1	0	ND	1	0.0073	1	2	53.5	47	S	1.200000000	47	1.200000000	93					2	2		2
3	C	0.0091	–	–	0	1	Detect	0	0.0091	1	3	15	46	S	0.490000000	46	0.490000000	92					3	3		3
4	B	0.055	–	–	1	0	Detect	0	0.055	1	4	16	45	S	0.449999999	45	0.449999999	91					4	4		4
5	C	0.0094	–	–	0	1	Detect	0	0.0094	1	5	17	44	S	0.25	44	0.25	90					5	5		5
6	C	0.07945	–	–	0	1	Detect	0	0.07945	1	6	18	43	S	0.205999997	43	0.205999997	89					6	6		6
7	C	0.095	U	U	0	1	ND	1	0.0475	1	7	19.5	42	S	0.194999994	42	0.194999994	88					7	7		7
8	C	0.095	U	U	0	1	ND	1	0.0475	1	8	19.5	41	C	0.182	41				0.182	41					8
9	C	0.095	U	U	0	1	ND	1	0.0475	1	9	19.5	40	C	0.269	40				0.269	40					9
10	C	0.0097	–	–	0	1	Detect	0	0.0097	1	10	20.5	39	S	0.159999996	39	0.159999996	87								10
11	C	0.1	U	U	0	1	ND	1	0.05	1	11	22	38	S	0.279999971	38	0.279999971	86								11
12	C	0.1	U	U	0	1	ND	1	0.05	1	12	22	37	S	0.25	37	0.25	85								12
13	C	0.1	U	U	0	1	ND	1	0.05	1	13	22	36	S	0.17	36	0.17	84								13
14	C	0.1	U	U	0	1	ND	1	0.05	1	14	22	35	C	0.16	35				0.16	39					14
15	C	0.105	U	U	0	1	ND	1	0.0525	1	15	24	34	S	0.13	34	0.13	83								15
16	B	0.12	–	–	1	0	Detect	0	0.12	1	16	24	33	S	0.123	33	0.123	82								16
17	B	0.123	–	–	1	0	Detect	0	0.123	1	17	25	32	S	0.12	32	0.12	81								17
18	B	0.13	–	–	1	0	Detect	0	0.13	1	18	26	31	C	0.0987	31.5				0.0987	32.5					18
19	C	0.16	–	–	0	1	Detect	0	0.16	1	19	27	30	C	0.0925	18.5				0.0925	18.5	+				19
20	B	0.17	–	–	1	0	Detect	0	0.17	1	20	28	29	B	0.0925	18.5	0.0925	18.5	+							20
21	C	0.189	U	U	0	1	ND	1	0.0945	1	21	29.5	28	C	0.095	18.5				0.095	18.5	+				21
22	B	0.195	U	U	1	0	ND	1	0.0975	1	22	30.5	27	C	0.095	18.5				0.095	18.5	+				22
23	C	0.19	U	U	0	1	ND	1	0.095	1	23	31.5	26	C	0.095	18.5				0.095	18.5	+				23
24	C	0.19	U	U	0	1	ND	1	0.095	1	24	31.5	25	C	0.095	18.5				0.095	18.5	+				24
25	C	0.19	U	U	0	1	ND	1	0.095	1	25	31.5	24	C	0.0975	18.5				0.0975	18.5	+				25
26	C	0.19	U	U	0	1	ND	1	0.095	1	26	31.5	23	C	0.0975	18.5				0.0975	18.5	+				26
27	C	0.195	U	U	0	1	ND	1	0.0975	1	27	32.5	22	C	0.1	18.5				0.1	18.5	+				27
28	C	0.195	U	U	0	1	ND	1	0.0975	1	28	32.5	21	C	0.1	18.5				0.1	18.5	+				28
29	C	0.2	U	U	0	1	ND	1	0.1	1	29	33.5	20	C	0.1	18.5				0.1	18.5	+				29
30	C	0.2	U	U	0	1	ND	1	0.1	1	30	33.5	19	C	0.1	18.5				0.1	18.5	+				30
31	C	0.2	U	U	0	1	ND	1	0.1	1	31	33.5	18	C	0.1	18.5				0.1	18.5	+				31
32	C	0.2	U	U	0	1	ND	1	0.1	1	32	33.5	17	C	0.1025	18.5				0.1025	18.5	+				32
33	C	0.205	U	U	0	1	ND	1	0.1025	1	33	34.5	16	C	0.1025	18.5				0.1025	18.5	+				33
34	C	0.205	U	U	0	1	ND	1	0.1025	1	34	34.5	15	C	0.1025	18.5				0.1025	18.5	+				34
35	C	0.205	U	U	0	1	ND	1	0.1025	1	35	34.5	14	C	0.07945	18				0.07945	18					35
36	C	0.209	U	U	0	1	ND	1	0.1025	1	36	34.5	13	C	0.0956	17				0.0956	17					36
37	B	0.25	–	–	1	0	Detect	0	0.25	1	37	37	12	B	0.098	16	0.098	80								37
38	B	0.27000001	–	–	1	0	Detect	0	0.27000001	1	38	38	11	C	0.03	15				0.03	15	+				38
39	B	0.29999999	–	–	1	0	Detect	0	0.29999999	1	39	39	10	C	0.03	15				0.03	15	+				39
40	C	0.299	–	–	0	1	Detect	0	0.299	1	40	40	9	C	0.03	15				0.03	15	+				40
41	C	0.304	–	–	0	1	Detect	0	0.183	1	41	41	8	C	0.03	15				0.03	15	+				41
42	B	0.38999999	–	–	1	0	Detect	0	0.19499999	1	42	42	7	C	0.0525	15				0.0525	15	+				42
43	B	0.41999999	–	–	1	0	Detect	0	0.20999999	1	43	43	6	C	0.0475	15.5				0.0475	15.5	+				43
44	B	0.5	–	–	1	0	Detect	0	0.25	1	44	44	5	C	0.0475	15.5				0.0475	15.5	+				44
45	B	0.89999998	–	–	1	0	Detect	0	0.44999999	1	45	45	4	C	0.0473	15.1				0.0473	15.5	+				45
46	B	1.2999999	–	–	1	0	Detect	0	0.65999999	1	46	46	3	C	0.0181	13				0.0181	13					46
47	B	3.9600001	–	–	1	0	Detect	0	1.9800000	1	47	47	1	B	0.00275	13.5	0.00275	13.5	+							47
48	C	4.8	–	–	0	1	Detect	0	4.8	1	48	48	2	B	0.00273	12.5	0.00273	12.5	+							48

Table 6.6-24
Quantile Test Result for Benzo(b)fluoranthene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/1001

COC ID #	
Name	Benzo(b)fluoranthene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements to (r+s) that must be examined (r + s<=u = 200)
s =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.026	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
99 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0075 ND

HD Rule = 1 | 1st value

NON = 25

Accept Ho (Site = Bkg) Note: Ha is 1-tail (wlhs + bkg)

α = 0.026

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	s	Calculated Rank
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	13
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	13
3	B	0.052	–	–	1	0	Detect	0	0.052	1	2	14.5
4	C	0.055	U	U	0	1	ND	1	0.0475	1	3	13.5
5	C	0.055	U	U	0	1	ND	1	0.0475	1	4	13.5
6	C	0.059	–	–	0	1	Detect	0	0.059	2	4	15.5
7	C	0.1	U	U	0	1	ND	1	0.05	2	5	14
8	C	0.1	U	U	0	1	ND	1	0.05	2	6	14
9	C	0.1	U	U	0	1	ND	1	0.05	2	7	14
10	C	0.1	U	U	0	1	ND	1	0.05	2	8	14
11	C	0.103	U	U	0	1	ND	1	0.0515	2	9	14
12	C	0.123	–	–	0	1	Detect	0	0.123	3	9	20
13	C	0.1305	–	–	0	1	Detect	0	0.1305	4	9	21
14	C	0.131	–	–	0	1	Detect	0	0.131	5	9	22
15	B	0.14	–	–	1	0	Detect	0	0.14	5	9	22
16	B	0.145	–	–	1	0	Detect	0	0.145	7	9	24
17	C	0.147	–	–	0	1	Detect	0	0.147	8	9	25
18	C	0.188	U	U	0	1	ND	1	0.0925	8	10	17
19	B	0.189	U	U	1	0	ND	1	0.0925	8	11	17
20	C	0.19	U	U	0	1	ND	1	0.095	8	12	17
21	C	0.19	U	U	0	1	ND	1	0.095	8	13	17
22	C	0.19	U	U	0	1	ND	1	0.095	8	14	17
23	C	0.19	U	U	0	1	ND	1	0.095	8	15	17
24	C	0.195	U	U	0	1	ND	1	0.0975	8	16	17
25	C	0.195	U	U	0	1	ND	1	0.0975	8	17	17
26	C	0.2	U	U	0	1	ND	1	0.1	8	18	17
27	C	0.2	U	U	0	1	ND	1	0.1	8	19	17
28	C	0.2	U	U	0	1	ND	1	0.1	8	20	17
29	C	0.2	U	U	0	1	ND	1	0.1	8	21	17
30	B	0.2	–	–	1	0	Detect	0	0.2	8	21	17
31	C	0.205	U	U	0	1	ND	1	0.1025	8	22	17.5
32	C	0.205	U	U	0	1	ND	1	0.1025	8	23	17.5
33	C	0.205	U	U	0	1	ND	1	0.1025	8	24	17.5
34	C	0.205	U	U	0	1	ND	1	0.1025	8	25	17.5
35	B	0.20000000	–	–	1	0	Detect	0	0.20000000	10	25	26
36	B	0.25000000	–	–	1	0	Detect	0	0.25000000	11	25	28
37	C	0.307	–	–	0	1	Detect	0	0.307	12	25	37
38	B	0.43000001	–	–	1	0	Detect	0	0.43000001	13	25	38
39	B	0.44	–	–	1	0	Detect	0	0.44	14	25	39
40	B	0.44000006	–	–	1	0	Detect	0	0.44000006	15	25	40
41	B	0.21000006	–	–	1	0	Detect	0	0.25000006	16	25	41
42	C	0.346	–	–	0	1	Detect	0	0.273	17	25	43
43	B	0.58000007	–	–	1	0	Detect	0	0.25400006	18	25	43
44	C	0.827	–	–	0	1	Detect	0	0.4635	19	25	44
45	B	1.2000004	–	–	1	0	Detect	0	0.54000006	20	25	45
46	B	1.4900004	–	–	1	0	Detect	0	0.84000006	21	25	46
47	B	4.8600006	–	–	1	0	Detect	0	2.0400000	22	25	47
48	C	6.7	–	–	0	1	Detect	0	4.85	23	25	48

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
48	C	4.85	48
47	B	2.04000000	47
46	B	0.84000006	46
45	B	0.54000006	45
44	C	0.4635	44
43	B	0.25400006	43
42	C	0.273	42
41	B	0.25000006	41
40	B	0.44000006	40
39	B	0.44	39
38	B	0.43000001	38
37	C	0.307	37
36	B	0.25000000	36
35	B	0.20000000	35
34	C	0.1025	17.5
33	C	0.1025	17.5
32	C	0.1025	17.5
31	C	0.1025	17.5
30	B	0.1	17
29	C	0.1	17
28	C	0.1	17
27	C	0.1	17
26	C	0.1	17
25	C	0.0975	17
24	C	0.0975	17
23	C	0.095	17
22	C	0.095	17
21	C	0.095	17
20	C	0.095	17
19	B	0.0925	17
18	C	0.0925	17
17	C	0.147	25
16	B	0.145	24
15	B	0.14	22
14	C	0.131	22
13	C	0.1305	21
12	C	0.123	20
11	C	0.0515	14
10	C	0.05	14
9	C	0.05	14
8	C	0.05	14
7	C	0.05	14
6	C	0.059	15.5
5	C	0.0475	13.5
4	C	0.0475	13.5
3	B	0.052	14.5
2	B	0.00375	13
1	B	0.00375	13

Index	Source (B or C)	Data	Rank	ND
48	C	4.85	48	
47	B	2.04000000	47	
46	B	0.84000006	46	
45	B	0.54000006	45	
44	C	0.4635	44	
43	B	0.25400006	43	
42	C	0.273	42	
41	B	0.25000006	41	
40	B	0.44000006	40	
39	B	0.44	39	
38	B	0.43000001	38	
37	C	0.307	37	
36	B	0.25000000	36	
35	B	0.20000000	35	
34	C	0.1025	17.5	+
33	C	0.1025	17.5	+
32	C	0.1025	17.5	+
31	C	0.1025	17.5	+
30	B	0.1	17	+
29	C	0.1	17	+
28	C	0.1	17	+
27	C	0.1	17	+
26	C	0.1	17	+
25	C	0.0975	17	+
24	C	0.0975	17	+
23	C	0.095	17	+
22	C	0.095	17	+
21	C	0.095	17	+
20	C	0.095	17	+
19	B	0.0925	17	+
18	C	0.0925	17	+
17	C	0.147	25	
16	B	0.145	24	
15	B	0.14	22	
14	C	0.131	22	
13	C	0.1305	21	
12	C	0.123	20	
11	C	0.0515	14	
10	C	0.05	14	
9	C	0.05	14	
8	C	0.05	14	
7	C	0.05	14	
6	C	0.059	15.5	
5	C	0.0475	13.5	
4	C	0.0475	13.5	
3	B	0.052	14.5	
2	B	0.00375	13	
1	B	0.00375	13	

Index	i	k	C	Counter
1	1	1	1	1
2	2			2
3	3			3
4	4			4
5	5	1		5
6	6			6
7	7	1		7
8				8
9				9
10				10
11				11
12				12
13				13
14				14
15				15
16				16
17				17
18				18
19				19
20				20
21				21
22				22
23				23
24				24
25				25
26				26
27				27
28				28
29				29
30				30
31				31
32				32
33				33
34				34
35				35
36				36
37				37
38				38
39				39
40				40
41				41
42				42
43				43
44				44
45				45
46				46
47				47
48				48

Table 25
Quantile Test Result for Benzo(g,h,i)perylene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Rodus Version 1.2 (2/1997)

COC ID #	
Name	Benzo(g,h,i)perylene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in m+n that must be examined (r = zero = 200)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
98 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0675 ND

ND Rule: 1* value = 1

NDIN = 10

Accept H0 (Site = Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	31		If MIN is DETECT, jm+1, and ELSE jm0, s+1						Sort by CALC RANK descending			B			T			t	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	RD	Data	Rank	RD	T	f	d	Counter
1	B	0.0675	U	U	1	0	ND	1	0.0675	0	1	16.5	48	C	1.9	48				1.9	50		1	1	1	1
2	B	0.0675	U	U	1	0	ND	1	0.0675	0	2	19.1	47	B	0.605000007	47	0.0385000	47					2	2		2
3	B	0.047	–	–	1	0	Detect	0	0.047	1	2	18	46	B	0.28	46	0.28	46					3	3		3
4	B	0.064	–	–	1	0	Detect	0	0.064	2	2	19	45	B	0.17	45	0.17	45					4	4		4
5	B	0.092	–	–	1	0	Detect	0	0.092	3	2	20	44	C	0.1165	44				0.1165	48		5	5	1	5
6	C	0.095	U	U	0	1	ND	1	0.0475	3	3	18	43	B	0.115	43	0.115	43					6	6		6
7	C	0.095	U	U	0	1	ND	1	0.0475	3	4	19	42	B	0.110	42	0.110	42					7	7		7
8	C	0.095	U	U	0	1	ND	1	0.0475	3	5	18	41	B	0.11	41	0.11	41								8
9	C	0.095	U	U	0	1	ND	1	0.0475	3	6	18	24	B	0.18000001	32	0.18000001	32								9
10	C	0.095	U	U	0	1	ND	1	0.0475	3	7	18	23	B	0.18	31	0.18	31								10
11	B	0.099	–	–	1	0	Detect	0	0.099	4	7	23.5	22	B	0.1165	30	0.1165	30								11
12	C	0.1	U	U	0	1	ND	1	0.05	4	8	16.5	21	B	0.11	29	0.11	29								12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	16.5	11	B	0.099	23.5	0.099	23.5								13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	16.5	25	C	0.0925	26.5				0.0925	33.5	e				14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	16.5	26	B	0.0925	26.5	0.0925	26.5	e							15
16	C	0.1	U	U	0	1	ND	1	0.05	4	12	16.5	27	C	0.095	28.5				0.0950	33.5	e				16
17	C	0.1	U	U	0	1	ND	1	0.05	4	13	16.5	28	C	0.095	28.5				0.0950	33.5	e				17
18	C	0.1	U	U	0	1	ND	1	0.05	4	14	16.5	29	C	0.095	28.5				0.0950	33.5	e				18
19	C	0.1	U	U	0	1	ND	1	0.05	4	15	16.5	30	C	0.095	28.5				0.0950	33.5	e				19
20	C	0.105	U	U	0	1	ND	1	0.0525	4	16	19.1	31	C	0.0975	30.5				0.0975	33.5	e				20
21	B	0.11	–	–	1	0	Detect	0	0.11	5	16	29	32	C	0.0975	30.5				0.0975	34.5	e				21
22	B	0.1165	–	–	1	0	Detect	0	0.1165	6	16	30	33	C	0.1	33.5				0.1	35.5	e				22
23	B	0.18	–	–	1	0	Detect	0	0.18	7	16	31	34	C	0.1	33.5				0.1	35.5	e				23
24	B	0.18000001	–	–	1	0	Detect	0	0.18000001	8	16	32	35	C	0.1	33.5				0.1	35.5	e				24
25	C	0.183	U	U	0	1	ND	1	0.0925	8	17	20.5	36	C	0.1	33.5				0.1	39.5	e				25
26	B	0.185	U	U	1	0	ND	1	0.0925	8	18	20.5	37	C	0.1025	39.5				0.1025	39.5	e				26
27	C	0.19	U	U	0	1	ND	1	0.095	8	19	20.5	38	C	0.1025	39.5				0.1025	39.5	e				27
28	C	0.19	U	U	0	1	ND	1	0.095	8	20	20.5	39	C	0.1025	39.5				0.1025	39.5	e				28
29	C	0.19	U	U	0	1	ND	1	0.095	8	21	20.5	40	C	0.1025	39.5				0.1025	39.5	e				29
30	C	0.19	U	U	0	1	ND	1	0.095	8	22	20.5	5	B	0.092	29	0.092	29								30
31	C	0.195	U	U	0	1	ND	1	0.0975	8	23	20.5	4	B	0.064	19	0.064	19								31
32	C	0.195	U	U	0	1	ND	1	0.0975	8	24	20.5	12	C	0.05	18.5				0.05	18.5	e				32
33	C	0.2	U	U	0	1	ND	1	0.1	8	25	20.5	13	C	0.05	18.5				0.05	18.5	e				33
34	C	0.2	U	U	0	1	ND	1	0.1	8	26	20.5	14	C	0.05	18.5				0.05	18.5	e				34
35	C	0.2	U	U	0	1	ND	1	0.1	8	27	20.5	15	C	0.05	18.5				0.05	18.5	e				35
36	C	0.2	U	U	0	1	ND	1	0.1	8	28	20.5	16	C	0.05	18.5				0.05	18.5	e				36
37	C	0.205	U	U	0	1	ND	1	0.1025	8	29	20.5	17	C	0.05	18.5				0.05	18.5	e				37
38	C	0.205	U	U	0	1	ND	1	0.1025	8	30	20.5	18	C	0.05	18.5				0.05	18.5	e				38
39	C	0.205	U	U	0	1	ND	1	0.1025	8	31	20.5	19	C	0.05	18.5				0.05	18.5	e				39
40	C	0.205	U	U	0	1	ND	1	0.1025	8	32	20.5	20	C	0.0525	18.5				0.0525	18.5	e				40
41	B	0.22	–	–	1	0	Detect	0	0.11	9	32	41	3	B	0.047	18	0.047	18								41
42	B	0.23	–	–	1	0	Detect	0	0.115	10	32	42	6	C	0.0475	18				0.0475	18	e				42
43	B	0.23	–	–	1	0	Detect	0	0.115	11	32	43	7	C	0.0475	18				0.0475	18	e				43
44	C	0.233	–	–	0	1	Detect	0	0.1165	12	32	44	8	C	0.0475	18				0.0475	18	e				44
45	B	0.34	–	–	1	0	Detect	0	0.17	13	32	45	9	C	0.0475	18				0.0475	18	e				45
46	B	0.38	–	–	1	0	Detect	0	0.28	14	32	46	10	C	0.0475	18				0.0475	18	e				46
47	B	1.2000000	–	–	1	0	Detect	0	0.60000002	15	32	47	1	B	0.0625	18.5	0.0625	18.5	e							47
48	C	2.8	–	–	0	1	Detect	0	1.4	16	32	48	2	B	0.0625	18.5	0.0625	18.5	e							48

Table 6-26
Quantile Test Result for Benzo(k)fluoranthene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.B. Rentox Version 1.3 12/1997

CDC ID #	
Name	Benzo(k)fluoranthene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Sample(s)
Clean Up Area Sample(s)

m =	17	# measurements in Background (< 100)
n =	21	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in m+n that must be examined (r < m+n = 206)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
96 % chance of a Detect to B	86 % chance of a Detect to C
68 % chance of a ND to B	14 % chance of a ND to C
ND more likely than Detect	

MIN Value = 0.0075 ND

ND Rule: 1st value = 1

IMON = 22

Accept H0 (Site = Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = S	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	r	S	C	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	16.5	48	C	3.9	48				0.5	48		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	16.5	47	B	2.20000000	47	2.20000000	47					2	2		2
3	B	0.059	–	–	1	0	Detect	0	0.059	1	3	18	46	B	0.40500001	46	0.40500001	46					3	3		3
4	C	0.059	U	U	0	1	ND	1	0.0473	1	3	17	45	B	0.23000001	45	0.23000001	45					4	4		4
5	C	0.065	U	U	0	1	ND	1	0.0473	1	4	17	44	B	0.26	44	0.26	44					5	5		5
6	C	0.065	U	U	0	1	ND	1	0.0473	1	5	17	43	B	0.25	43	0.25	43					6	6		6
7	C	0.065	U	U	0	1	ND	1	0.0473	1	6	17	42	B	0.19	42	0.19	42					7	7		7
8	C	0.065	U	U	0	1	ND	1	0.0473	1	7	17	41	B	0.185	41	0.185	41								8
9	C	0.1	U	U	0	1	ND	1	0.05	1	8	17	40	B	0.21	40	0.21	40								9
10	C	0.1	U	U	0	1	ND	1	0.05	1	9	17	39	C	0.271	39				0.271	39					10
11	C	0.1	U	U	0	1	ND	1	0.05	1	10	17	38	B	0.25000000	38	0.25000000	38								11
12	C	0.1	U	U	0	1	ND	1	0.05	1	11	17	37	C	0.246	37				0.246	37					12
13	C	0.1	U	U	0	1	ND	1	0.05	1	12	17	36	B	0.19	36	0.19	36								13
14	C	0.1	U	U	0	1	ND	1	0.05	1	13	17	35	C	0.179	35				0.179	35					14
15	C	0.105	U	U	0	1	ND	1	0.0525	1	14	17	34	B	0.11	29	0.11	29								15
16	B	0.11	–	–	1	0	Detect	0	0.11	2	14	20	33	C	0.095	14.5				0.095	16.5	+				16
17	B	0.17	U	U	1	0	ND	1	0.085	2	15	17.5	24	C	0.094	16.5				0.094	14.5	+				17
18	B	0.175	U	U	1	0	ND	1	0.0875	2	16	17.5	25	C	0.095	14.5				0.095	16.5	+				18
19	C	0.179	–	–	0	1	Detect	0	0.179	3	16	21	26	C	0.095	16.5				0.095	14.5	+				19
20	C	0.185	U	U	0	1	ND	1	0.0925	3	17	18	27	C	0.0975	18.5				0.0975	18.5	+				20
21	B	0.185	U	U	1	0	ND	1	0.0925	3	18	18	28	C	0.0975	18.5				0.0975	18.5	+				21
22	B	0.19	–	–	1	0	Detect	0	0.19	4	18	20	29	C	0.1	18.5				0.1	18.5	+				22
23	C	0.19	U	U	0	1	ND	1	0.095	4	19	18.5	30	C	0.1	18.5				0.1	18.5	+				23
24	C	0.19	U	U	0	1	ND	1	0.095	4	20	18.5	31	C	0.1	18.5				0.1	18.5	+				24
25	C	0.19	U	U	0	1	ND	1	0.095	4	21	18.5	32	C	0.1	18.5				0.1	18.5	+				25
26	C	0.19	U	U	0	1	ND	1	0.095	4	22	18.5	33	C	0.1025	18.5				0.1025	18.5	+				26
27	C	0.195	U	U	0	1	ND	1	0.0975	4	23	18.5	34	C	0.1025	18.5				0.1025	18.5	+				27
28	C	0.195	U	U	0	1	ND	1	0.0975	4	24	18.5	35	C	0.1025	18.5				0.1025	18.5	+				28
29	C	0.2	U	U	0	1	ND	1	0.1	4	25	18.5	36	C	0.1025	18.5				0.1025	18.5	+				29
30	C	0.2	U	U	0	1	ND	1	0.1	4	26	18.5	3	B	0.089	16	0.089	16								30
31	C	0.2	U	U	0	1	ND	1	0.1	4	27	18.5	20	C	0.0975	16				0.0975	16	+				31
32	C	0.2	U	U	0	1	ND	1	0.1	4	28	18.5	21	B	0.0975	16	0.0975	16	+							32
33	C	0.205	U	U	0	1	ND	1	0.1025	4	29	18.5	17	B	0.085	17.5	0.085	17.5	+							33
34	C	0.205	U	U	0	1	ND	1	0.1025	4	30	18.5	18	B	0.0875	17.5	0.0875	17.5	+							34
35	C	0.205	U	U	0	1	ND	1	0.1025	4	31	18.5	4	C	0.0475	12				0.0475	12	+				35
36	C	0.205	U	U	0	1	ND	1	0.1025	4	32	18.5	5	C	0.0475	12				0.0475	12	+				36
37	C	0.246	–	–	0	1	Detect	0	0.246	5	32	22	6	C	0.0473	12				0.0473	12	+				37
38	B	0.25000000	–	–	1	0	Detect	0	0.25000000	6	32	19	7	C	0.0475	12				0.0475	12	+				38
39	C	0.271	–	–	0	1	Detect	0	0.271	7	32	23	8	C	0.0475	12				0.0475	12	+				39
40	B	0.21	–	–	1	0	Detect	0	0.21	8	32	40	9	C	0.05	12				0.05	12	+				40
41	B	0.37	–	–	1	0	Detect	0	0.185	9	32	41	10	C	0.05	12				0.05	12	+				41
42	B	0.38	–	–	1	0	Detect	0	0.19	10	32	42	11	C	0.05	12				0.05	12	+				42
43	B	0.5	–	–	1	0	Detect	0	0.25	11	32	43	12	C	0.05	12				0.05	12	+				43
44	B	0.54	–	–	1	0	Detect	0	0.27	12	32	44	13	C	0.05	12				0.05	12	+				44
45	B	0.66000001	–	–	1	0	Detect	0	0.33000001	13	32	45	14	C	0.05	12				0.05	12	+				45
46	B	0.81000012	–	–	1	0	Detect	0	0.40500001	14	32	46	15	C	0.0525	12				0.0525	12	+				46
47	B	4.4000001	–	–	1	0	Detect	0	2.20000005	15	32	47	1	B	0.00375	16.5	0.00375	16.5	+							47
48	C	7.9	–	–	0	1	Detect	0	3.9	16	32	48	2	B	0.00375	16.5	0.00375	16.5	+							48

Table [illegible]7
Quantile Test Result for Chrysene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/1998

COC ID #	
Name	chrysene
Units	mg/kg

INPUT
OUTPUT
Interpolation

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.6 = # of largest measurements in m+n that must be exceeded (r = m+n - 24)
k =	7	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.035	If α < 0.05 after final iteration of r and k, then see the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
98 % chance of a Detect in B	86 % chance of a Detect in C
58 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0072 Detect

ND Rule: 1/2 value

NCIN = 29

Accept Ho (Site > Bkg) — None: Ha is 1-tail (site > bkg)

α = 0.035

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank
1	B	0.0072	--	--	1	0	Detect	0	0.0072	1	0	14
2	B	0.0075	U	U	1	0	ND	1	0.00375	1	1	14
3	B	0.082	--	--	1	0	Detect	0	0.082	2	1	15.5
4	C	0.0875	--	--	0	1	Detect	0	0.0875	3	1	15.5
5	C	0.095	U	U	0	1	ND	1	0.0475	3	2	13
6	C	0.095	U	U	0	1	ND	1	0.0475	3	3	12
7	C	0.095	U	U	0	1	ND	1	0.0475	3	4	11
8	C	0.1	U	U	0	1	ND	1	0.05	3	5	10
9	C	0.1	U	U	0	1	ND	1	0.05	3	6	9
10	C	0.1	U	U	0	1	ND	1	0.05	3	7	8
11	C	0.1	U	U	0	1	ND	1	0.05	3	8	7
12	C	0.1	U	U	0	1	ND	1	0.05	3	9	6
13	B	0.163	--	--	1	0	Detect	0	0.163	4	9	21.5
14	C	0.165	U	U	0	1	ND	1	0.0825	4	10	19.5
15	C	0.16785	--	--	0	1	Detect	0	0.16785	5	10	23
16	C	0.131	--	--	0	1	Detect	0	0.131	6	10	24
17	B	0.15999001	--	--	1	0	Detect	0	0.15999001	7	10	27
18	B	0.16	--	--	1	0	Detect	0	0.16	8	10	26
19	C	0.165	U	U	0	1	ND	1	0.0825	8	11	17.5
20	B	0.165	U	U	0	0	ND	1	0.0825	8	12	17.5
21	B	0.19	--	--	1	0	Detect	0	0.19	9	12	28
22	C	0.19	U	U	0	1	ND	1	0.095	9	13	19
23	C	0.19	U	U	0	1	ND	1	0.095	9	14	18
24	C	0.19	U	U	0	1	ND	1	0.095	9	15	18
25	C	0.19	U	U	0	1	ND	1	0.095	9	16	18
26	C	0.195	--	--	0	1	Detect	0	0.195	10	16	21
27	C	0.195	U	U	0	1	ND	1	0.0975	10	17	18.5
28	C	0.195	U	U	0	1	ND	1	0.0975	10	18	18.5
29	C	0.2	U	U	0	1	ND	1	0.1	10	19	18.5
30	C	0.2	U	U	0	1	ND	1	0.1	10	20	18.5
31	C	0.2	U	U	0	1	ND	1	0.1	10	21	18.5
32	C	0.2	U	U	0	1	ND	1	0.1	10	22	18.5
33	C	0.205	U	U	0	1	ND	1	0.1025	10	23	18.5
34	C	0.205	U	U	0	1	ND	1	0.1025	10	24	18.5
35	C	0.205	U	U	0	1	ND	1	0.1025	10	25	18.5
36	C	0.205	U	U	0	1	ND	1	0.1025	10	26	18.5
37	C	0.273	--	--	0	1	Detect	0	0.273	11	26	27
38	B	0.28999999	--	--	1	0	Detect	0	0.28999999	12	26	28
39	B	0.28999999	--	--	1	0	Detect	0	0.28999999	13	26	29
40	C	0.432	--	--	0	1	Detect	0	0.432	14	26	30
41	B	0.46999001	--	--	1	0	Detect	0	0.23	15	26	31
42	B	0.47999999	--	--	1	0	Detect	0	0.23999999	16	26	32
43	B	0.47999999	--	--	1	0	Detect	0	0.23999999	17	26	33
44	B	0.58999997	--	--	1	0	Detect	0	0.29499999	18	26	34
45	B	0.61999001	--	--	1	0	Detect	0	0.45500001	19	26	35
46	B	1.3999999	--	--	1	0	Detect	0	0.69999999	20	26	36
47	B	4	--	--	1	0	Detect	0	2	21	26	37
48	C	16.3	--	--	0	1	Detect	0	8.15	22	26	38

If MIN is DETECT, d=1, e=0, ELSE d=0, e=1

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
48	C	8.15	38
47	B	4	37
46	B	1.3999999	36
45	B	0.61999001	35
44	B	0.58999997	34
43	B	0.47999999	33
42	B	0.47999999	32
41	B	0.46999001	31
40	C	0.432	30
39	B	0.28999999	29
38	B	0.28999999	28
37	C	0.273	27
36	C	0.205	26
35	C	0.205	25
34	C	0.205	24
33	C	0.205	23
32	C	0.2	22
31	C	0.2	21
30	C	0.2	20
29	C	0.2	19
28	C	0.195	18
27	C	0.195	17
26	C	0.195	16
25	C	0.19	15
24	C	0.19	14
23	C	0.19	13
22	C	0.19	12
21	B	0.19	11
20	B	0.165	10
19	C	0.165	9
18	B	0.16	8
17	B	0.15999001	7
16	C	0.131	6
15	C	0.16785	5
14	C	0.165	4
13	B	0.163	3
12	C	0.1	2
11	C	0.1	1
10	C	0.1	0
9	C	0.1	0
8	C	0.1	0
7	C	0.095	0
6	C	0.095	0
5	C	0.095	0
4	C	0.0875	0
3	B	0.082	0
2	B	0.0075	0
1	B	0.0072	0

D				C			r	s	t
Data	Rank	ND	Data	Rank	ND				
			8.15	38			1	1	1
							2	2	
							3	3	
							4	4	
							5	5	
							6	6	
							7	7	
			0.432	30					
			0.273	27					
			0.195	17					
0.16	26								
0.16	25								
0.1	20								
0.1	19								
0.1	18								
0.1	17								
0.1	16								
0.1	15								
0.1	14								
0.1	13								
0.1	12								
0.1	11								
0.1	10								
0.1	9								
0.1	8								
0.1	7								
0.1	6								
0.1	5								
0.1	4								
0.1	3								
0.1	2								
0.1	1								

Page 1 of 1

Table D2-29
Quantile Test Result for Dibenz(a,h)anthracene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.B. Rectus Version 1.3 12/1997

COC ID #	
Name	dibenz(a,h)anthracene
Units	mg/kg

INPUT
OUTPUT
Instructions

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in m+n that must be examined (r = m+n+1-2I(k))
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k <= r)
α =	0.026	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND	
90 % chance of a Detect in B	85 % chance of a Detect in C	
10 % chance of a ND in B	14 % chance of a ND in C	

ND more likely than Detect

MIN Value = 0.0075 ND

ND Rule: 1* value

NON = 30

Accept Ho (Site = Bkg) — Note: Ha is 1-tail (site > bkg)

α = 0.026

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

IF MIN is DETECT, d=1, and, ELSE d=0, e=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B Data	B Rank	B ND	C Data	C Rank	C ND	r	k	C	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	18	48	C	0.825	48				0.825	48		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	19	47	B	0.20000000	47	0.20000000	47					2	2		2
3	B	0.024	--	--	1	0	Detect	0	0.024	1	2	19.5	46	B	0.19	46	0.19	46					3	3		3
4	B	0.051	--	--	1	0	Detect	0	0.051	2	3	20.5	45	B	0.115	45	0.115	45					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	18	44	B	0.2	44	0.2	44					5	5		5
6	C	0.095	U	U	0	1	ND	1	0.0475	2	4	18	25	D	0.15000001	24	0.15000001	24					6	6		6
7	C	0.095	U	U	0	1	ND	1	0.0475	2	5	18	24	B	0.15000001	23	0.15000001	23					7	7		7
8	C	0.095	U	U	0	1	ND	1	0.0475	2	6	18	23	B	0.13	22	0.13	22								8
9	C	0.095	U	U	0	1	ND	1	0.0475	2	7	18	22	B	0.13	21	0.13	21								9
10	B	0.097	--	--	1	0	Detect	0	0.097	3	7	24	11	B	0.099	20	0.099	20								10
11	B	0.099	--	--	1	0	Detect	0	0.099	4	7	25	10	B	0.097	34	0.097	34								11
12	C	0.1	U	U	0	1	ND	1	0.05	4	8	20	43	C	0.205	22.5				0.205	22.5	+				12
13	C	0.1	U	U	0	1	ND	1	0.05	4	9	20	42	C	0.203	22.5				0.203	22.5	+				13
14	C	0.1	U	U	0	1	ND	1	0.05	4	10	20	43	C	0.203	22.5				0.203	22.5	+				14
15	C	0.1	U	U	0	1	ND	1	0.05	4	11	20	44	C	0.209	22.5				0.209	22.5	+				15
16	C	0.1	U	U	0	1	ND	1	0.05	4	12	20	26	B	0.095	23	0.095	23	+							16
17	C	0.1	U	U	0	1	ND	1	0.05	4	13	20	27	B	0.0975	23	0.0975	23	+							17
18	C	0.1	U	U	0	1	ND	1	0.05	4	14	20	28	C	0.0925	23				0.0925	23	+				18
19	C	0.1	U	U	0	1	ND	1	0.05	4	15	20	29	B	0.0925	23	0.0925	23	+							19
20	C	0.105	U	U	0	1	ND	1	0.0525	4	16	20	30	C	0.094	23				0.095	23	+				20
21	C	0.105	U	U	0	1	ND	1	0.0525	4	17	20	31	C	0.095	23				0.094	23	+				21
22	B	0.13	--	--	1	0	Detect	0	0.13	5	17	21	32	C	0.095	23				0.095	23	+				22
23	B	0.13	--	--	1	0	Detect	0	0.13	6	17	22	33	C	0.095	23				0.095	23	+				23
24	B	0.15000001	--	--	1	0	Detect	0	0.15000001	7	17	23	34	C	0.0975	23				0.0975	23	+				24
25	B	0.15000001	--	--	1	0	Detect	0	0.15000001	8	17	24	35	C	0.0975	23				0.0975	23	+				25
26	B	0.17	U	U	1	0	ND	1	0.085	8	18	22	36	C	0.1	23				0.1	23	+				26
27	B	0.175	U	U	1	0	ND	1	0.0875	8	19	22	37	C	0.1	23				0.1	23	+				27
28	C	0.185	U	U	0	1	ND	1	0.0925	8	20	22	38	C	0.1	23				0.1	23	+				28
29	B	0.185	U	U	1	0	ND	1	0.0925	8	21	22	39	C	0.1	23				0.1	23	+				29
30	C	0.19	U	U	0	1	ND	1	0.095	8	22	22	4	B	0.951	28.5	0.951	28.5								30
31	C	0.19	U	U	0	1	ND	1	0.095	8	23	22	12	C	0.05	26				0.05	26	+				31
32	C	0.19	U	U	0	1	ND	1	0.095	8	24	22	13	C	0.05	26				0.05	26	+				32
33	C	0.19	U	U	0	1	ND	1	0.095	8	25	22	14	C	0.05	26				0.05	26	+				33
34	C	0.195	U	U	0	1	ND	1	0.0975	8	26	22	15	C	0.05	26				0.05	26	+				34
35	C	0.195	U	U	0	1	ND	1	0.0975	8	27	22	16	C	0.05	26				0.05	26	+				35
36	C	0.2	U	U	0	1	ND	1	0.1	8	28	22	17	C	0.05	26				0.05	26	+				36
37	C	0.2	U	U	0	1	ND	1	0.1	8	29	22	18	C	0.05	26				0.05	26	+				37
38	C	0.2	U	U	0	1	ND	1	0.1	8	30	22	19	C	0.05	26				0.05	26	+				38
39	C	0.2	U	U	0	1	ND	1	0.1	8	31	22	20	C	0.0525	26				0.0525	26	+				39
40	B	0.2	--	--	1	0	Detect	0	0.2	9	31	23	21	C	0.0525	26				0.0525	26	+				40
41	C	0.205	U	U	0	1	ND	1	0.205	9	32	22.5	3	B	0.024	18.5	0.024	18.5								41
42	C	0.205	U	U	0	1	ND	1	0.205	9	33	22.5	5	C	0.0475	19				0.0475	19	+				42
43	C	0.205	U	U	0	1	ND	1	0.205	9	34	22.5	6	C	0.0475	19				0.0475	19	+				43
44	C	0.205	U	U	0	1	ND	1	0.205	9	35	22.5	7	C	0.0475	19				0.0475	19	+				44
45	B	0.23	--	--	1	0	Detect	0	0.115	10	35	45	8	C	0.0475	19				0.0475	19	+				45
46	B	0.36	--	--	1	0	Detect	0	0.18	11	35	46	9	C	0.0475	19				0.0475	19	+				46
47	B	1.7999999	--	--	1	0	Detect	0	0.89999995	12	35	47	1	B	0.00375	18	0.00375	18	+							47
48	C	1.85	--	--	0	1	Detect	0	0.925	13	35	48	2	B	0.00375	19	0.00375	19	+							48

Table 6.5-29
Quantile Test Result for Fluoranthene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Rader Version 1.3 (3/1999)

COC ID #	
Name	fluoranthene
Units	mg/kg

INPUT
OUTPUT
Instruction

Data Represent Records
Clean Up Area Records

m =	16	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in (m) that must be exceeded (r < m+n + 200)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.042	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
82 % chance of a Detect in B	95 % chance of a Detect in C
18 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value =	0.016	Detect

ND Rule: 1* value = 1

NDN = 20

Accept Ho (Wilk < Bkg) — Note: Ha is 1-tail (wilk > bkg)

α = 0.042

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

m = 16 n = 31

IF MIN is DETECT, d=1, unit, ELSE d=0, a=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	a	Calculated Rank
1	B	0.016	--	--	1	0	Detect	0	0.016	1	0	13
2	B	0.02	--	--	1	0	Detect	0	0.02	2	0	14
3	C	0.055	U	U	0	1	ND	1	0.0475	2	1	15.5
4	C	0.055	U	U	0	1	ND	1	0.0475	2	2	15.5
5	C	0.055	U	U	0	1	ND	1	0.0475	2	3	15.5
6	C	0.1	U	U	0	1	ND	1	0.05	2	4	17.5
7	C	0.1	U	U	0	1	ND	1	0.05	2	5	17.5
8	C	0.1	U	U	0	1	ND	1	0.05	2	6	17.5
9	C	0.1	U	U	0	1	ND	1	0.05	2	7	17.5
10	C	0.102	--	--	0	1	Detect	0	0.102	2	7	19.5
11	C	0.105	U	U	0	1	ND	1	0.0525	2	8	21
12	C	0.128	--	--	0	1	Detect	0	0.128	4	8	22
13	C	0.155	--	--	0	1	Detect	0	0.155	5	8	23
14	B	0.16	--	--	1	0	Detect	0	0.16	6	8	24
15	B	0.19	--	--	1	0	Detect	0	0.19	7	8	25
16	C	0.189	U	U	0	1	ND	1	0.0525	7	9	26
17	B	0.189	U	U	1	0	ND	1	0.0525	7	10	26
18	B	0.19	--	--	1	0	Detect	0	0.19	8	10	28
19	C	0.19	U	U	0	1	ND	1	0.095	8	11	29.5
20	C	0.19	U	U	0	1	ND	1	0.095	8	12	29.5
21	C	0.19	U	U	0	1	ND	1	0.095	8	13	29.5
22	C	0.19	U	U	0	1	ND	1	0.095	8	14	29.5
23	C	0.189	U	U	0	1	ND	1	0.0975	8	15	32.5
24	C	0.195	U	U	0	1	ND	1	0.0975	8	16	32.5
25	C	0.2	U	U	0	1	ND	1	0.1	8	17	35.5
26	C	0.2	U	U	0	1	ND	1	0.1	8	18	35.5
27	C	0.2	U	U	0	1	ND	1	0.1	8	19	35.5
28	C	0.2	U	U	0	1	ND	1	0.1	8	20	35.5
29	C	0.205	U	U	0	1	ND	1	0.1025	8	21	38.5
30	C	0.205	U	U	0	1	ND	1	0.1025	8	22	38.5
31	C	0.205	U	U	0	1	ND	1	0.1025	8	23	38.5
32	C	0.205	U	U	0	1	ND	1	0.1025	8	24	38.5
33	C	0.305	--	--	0	1	Detect	0	0.305	9	24	41
34	B	0.33666667	--	--	1	0	Detect	0	0.33666667	10	24	42
35	C	0.365	--	--	0	1	Detect	0	0.365	11	24	43
36	B	0.37	--	--	1	0	Detect	0	0.37	12	24	44
37	C	0.419	--	--	0	1	Detect	0	0.419	12	24	45
38	B	0.47666666	--	--	1	0	Detect	0	0.47666666	14	24	46
39	B	0.59999999	--	--	1	0	Detect	0	0.59999999	15	24	47
40	C	0.675	--	--	0	1	Detect	0	0.675	15	24	48
41	B	0.67999998	--	--	1	0	Detect	0	0.67999998	17	24	49
42	B	0.69	--	--	1	0	Detect	0	0.69	18	24	50
43	B	0.87000001	--	--	1	0	Detect	0	0.87000001	19	24	51
44	B	1.10000001	--	--	1	0	Detect	0	1.10000001	20	24	52
45	B	2.79999995	--	--	1	0	Detect	0	2.79999995	21	24	53
46	B	2.89999995	--	--	1	0	Detect	0	2.89999995	22	24	54
47	C	10.5	--	--	0	1	Detect	0	10.5	23	24	55
48												0

Index	Source (B or C)	Data	CALC RANK
47	C	9.79	47
46	B	1.04999995	46
45	B	1.14999998	45
44	B	0.53000001	44
43	B	0.48500001	43
42	B	0.345	42
41	B	0.28999999	41
40	C	0.579	40
39	B	0.50999999	39
38	B	0.47999999	38
37	C	0.419	37
36	B	0.37	36
35	C	0.365	35
34	B	0.22000001	34
33	C	0.305	33
32	C	0.205	32
31	C	0.205	31
30	C	0.205	30
29	C	0.205	29
28	C	0.2	28
27	C	0.2	27
26	C	0.2	26
25	C	0.2	25
24	C	0.195	24
23	C	0.189	23
22	C	0.19	22
21	C	0.19	21
20	C	0.19	20
19	C	0.19	19
18	B	0.19	18
17	B	0.189	17
16	C	0.189	16
15	B	0.19	15
14	B	0.19	14
13	C	0.155	13
12	C	0.128	12
11	C	0.105	11
10	C	0.102	10
9	C	0.1	9
8	C	0.1	8
7	C	0.1	7
6	C	0.1	6
5	C	0.055	5
4	C	0.055	4
3	C	0.055	3
2	B	0.02	2
1	B	0.016	1

Index	Source (B or C)	Data	Rank	ND
47	C	9.79	47	
46	B	1.04999995	46	
45	B	1.14999998	45	
44	B	0.53000001	44	
43	B	0.48500001	43	
42	B	0.345	42	
41	B	0.28999999	41	
40	C	0.579	40	
39	B	0.50999999	39	
38	B	0.47999999	38	
37	C	0.419	37	
36	B	0.37	36	
35	C	0.365	35	
34	B	0.22000001	34	
33	C	0.305	33	
32	C	0.205	32	
31	C	0.205	31	
30	C	0.205	30	
29	C	0.205	29	
28	C	0.2	28	
27	C	0.2	27	
26	C	0.2	26	
25	C	0.2	25	
24	C	0.195	24	
23	C	0.189	23	
22	C	0.19	22	
21	C	0.19	21	
20	C	0.19	20	
19	C	0.19	19	
18	B	0.19	18	
17	B	0.189	17	
16	C	0.189	16	
15	B	0.19	15	
14	B	0.19	14	
13	C	0.155	13	
12	C	0.128	12	
11	C	0.105	11	
10	C	0.102	10	
9	C	0.1	9	
8	C	0.1	8	
7	C	0.1	7	
6	C	0.1	6	
5	C	0.055	5	
4	C	0.055	4	
3	C	0.055	3	
2	B	0.02	2	
1	B	0.016	1	

Index	Source (B or C)	Data	Rank	ND
47	C	9.79	47	
46	B	1.04999995	46	
45	B	1.14999998	45	
44	B	0.53000001	44	
43	B	0.48500001	43	
42	B	0.345	42	
41	B	0.28999999	41	
40	C	0.579	40	
39	B	0.50999999	39	
38	B	0.47999999	38	
37	C	0.419	37	
36	B	0.37	36	
35	C	0.365	35	
34	B	0.22000001	34	
33	C	0.305	33	
32	C	0.205	32	
31	C	0.205	31	
30	C	0.205	30	
29	C	0.205	29	
28	C	0.2	28	
27	C	0.2	27	
26	C	0.2	26	
25	C	0.2	25	
24	C	0.195	24	
23	C	0.189	23	
22	C	0.19	22	
21	C	0.19	21	
20	C	0.19	20	
19	C	0.19	19	
18	B	0.19	18	
17	B	0.189	17	
16	C	0.189	16	
15	B	0.19	15	
14	B	0.19	14	
13	C	0.155	13	
12	C	0.128	12	
11	C	0.105	11	
10	C	0.102	10	
9	C	0.1	9	
8	C	0.1	8	
7	C	0.1	7	
6	C	0.1	6	
5	C	0.055	5	
4	C	0.055	4	
3	C	0.055	3	
2	B	0.02	2	
1	B	0.016	1	

r	k	i	Counter
1	1	1	1
2	2		2
3	3		3
4	4		4
5	5		5
6	6		6
7	7		7
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Table B3-30
Quantile Test Result for Fluorene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RAMJUNO AND QUANTILE WORKSHEET
R.E. Radius Version 1.3 12/10/01

COC ID #	
Name	fluorene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Area Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	21	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in (m+n that must be examined (r < (m+n < 200))
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.030	If α > 0.05 after final iteration of r and k, then use the smallest (>A) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
50 % chance of a Detect in B	50 % chance of a Detect in C
18 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.0020 Detect

ND Hide: 1 (1= value)

NON = 37

Accept Ho (Site = Bkg) — Note: Ha is 1-tail (site > bkg)

α = 0.030

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	21		IF MIN is DETECT, d=1, and, ELSE d=0, q=1						Sort by CALC RANK descending			B'			C			i	k	C
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	q	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	i	k	C	Counter
1	B	0.0020	--	--	1	0	Detect	0	0.0020	1	0	10.5	49	C	2.4	49				2.4	49		1	1	1	1
2	B	0.0073	U	U	1	0	ND	1	0.00375	1	1	16.5	47	B	0.22499999	47	0.22499999	47					2	2		2
3	B	0.0075	U	U	1	0	ND	1	0.00375	1	2	19.5	46	B	0.11	46	0.11	46					3	3		3
4	B	0.013	--	--	1	0	Detect	0	0.013	2	2	21.5	29	B	0.1	33	0.1	33					4	4		4
5	B	0.033	--	--	1	0	Detect	0	0.033	2	2	22.5	11	B	0.082	27.5	0.082	27.5					5	5		5
6	B	0.0375	U	U	1	0	ND	1	0.01875	3	3	20.0	10	B	0.052	26.5	0.052	26.5					6	6		6
7	B	0.039	--	--	1	0	Detect	0	0.039	4	3	24	9	B	0.044	25.5	0.044	25.5					7	7		7
8	B	0.039	U	U	1	0	ND	1	0.019	4	4	21	7	B	0.039	24	0.039	24								8
9	B	0.044	--	--	1	0	Detect	0	0.044	5	4	25.0	26	C	0.0525	23				0.0525	23	+				9
10	B	0.052	--	--	1	0	Detect	0	0.052	6	4	26.5	27	C	0.0525	23				0.0525	23	+				10
11	B	0.052	--	--	1	0	Detect	0	0.052	7	4	27.5	28	B	0.065	23	0.065	23	+							11
12	C	0.055	U	U	0	1	ND	1	0.0475	7	5	23.0	29	B	0.0875	23	0.0875	23	+							12
13	C	0.055	U	U	0	1	ND	1	0.0475	7	6	23.0	30	C	0.0525	23				0.0525	23	+				13
14	C	0.055	U	U	0	1	ND	1	0.0475	7	7	23.0	31	B	0.0625	23	0.0625	23	+							14
15	C	0.055	U	U	0	1	ND	1	0.0475	7	8	23.0	32	C	0.055	23				0.055	23	+				15
16	C	0.055	U	U	0	1	ND	1	0.0475	7	9	23.0	33	C	0.055	23				0.055	23	+				16
17	C	0.1	U	U	0	1	ND	1	0.05	7	10	23.0	34	C	0.055	23				0.055	23	+				17
18	C	0.1	U	U	0	1	ND	1	0.05	7	11	23.0	35	C	0.055	23				0.055	23	+				18
19	C	0.1	U	U	0	1	ND	1	0.05	7	12	23.0	36	C	0.0575	23				0.0575	23	+				19
20	C	0.1	U	U	0	1	ND	1	0.05	7	13	23.0	37	C	0.0575	23				0.0575	23	+				20
21	C	0.1	U	U	0	1	ND	1	0.05	7	14	23.0	38	C	0.1	23				0.1	23	+				21
22	C	0.1	U	U	0	1	ND	1	0.05	7	15	23.0	39	C	0.1	23				0.1	23	+				22
23	C	0.1	U	U	0	1	ND	1	0.05	7	16	23.0	40	C	0.1	23				0.1	23	+				23
24	C	0.1	U	U	0	1	ND	1	0.05	7	17	23.0	41	C	0.2	23				0.2	23	+				24
25	B	0.1	--	--	1	0	Detect	0	0.1	8	17	30	42	C	0.205	23				0.205	23	+				25
26	C	0.105	U	U	0	1	ND	1	0.0525	8	18	23	43	C	0.205	23				0.205	23	+				26
27	C	0.105	U	U	0	1	ND	1	0.0525	8	19	23	44	C	0.205	23				0.205	23	+				27
28	B	0.17	U	U	1	0	ND	1	0.085	9	20	23	45	C	0.205	23				0.205	23	+				28
29	B	0.175	U	U	1	0	ND	1	0.0875	9	21	23	3	B	0.033	22.5	0.033	22.5								29
30	C	0.185	U	U	0	1	ND	1	0.0925	9	22	23	17	C	0.0475	22.5				0.0475	22.5	+				30
31	B	0.185	U	U	1	0	ND	1	0.0925	9	23	23	12	C	0.0475	22.5				0.0475	22.5	+				31
32	C	0.19	U	U	0	1	ND	1	0.095	9	24	23	14	C	0.0475	22.5				0.0475	22.5	+				32
33	C	0.19	U	U	0	1	ND	1	0.095	9	25	23	15	C	0.0475	22.5				0.0475	22.5	+				33
34	C	0.19	U	U	0	1	ND	1	0.095	9	26	23	16	C	0.0475	22.5				0.0475	22.5	+				34
35	C	0.19	U	U	0	1	ND	1	0.095	9	27	23	17	C	0.05	22.5				0.05	22.5	+				35
36	C	0.195	U	U	0	1	ND	1	0.0975	9	28	23	18	C	0.05	22.5				0.05	22.5	+				36
37	C	0.195	U	U	0	1	ND	1	0.0975	9	29	23	19	C	0.05	22.5				0.05	22.5	+				37
38	C	0.2	U	U	0	1	ND	1	0.1	9	30	23	20	C	0.05	22.5				0.05	22.5	+				38
39	C	0.2	U	U	0	1	ND	1	0.1	9	31	23	21	C	0.05	22.5				0.05	22.5	+				39
40	C	0.2	U	U	0	1	ND	1	0.1	9	32	23	22	C	0.05	22.5				0.05	22.5	+				40
41	C	0.2	U	U	0	1	ND	1	0.2	9	33	23	23	C	0.05	22.5				0.05	22.5	+				41
42	C	0.205	U	U	0	1	ND	1	0.205	9	34	23	24	C	0.05	22.5				0.05	22.5	+				42
43	C	0.205	U	U	0	1	ND	1	0.205	9	35	23	4	B	0.013	21.5	0.013	21.5								43
44	C	0.205	U	U	0	1	ND	1	0.205	9	36	23	8	B	0.018	21	0.018	21	+							44
45	C	0.205	U	U	0	1	ND	1	0.205	9	37	23	6	B	0.01875	20.5	0.01875	20.5	+							45
46	B	0.21	--	--	1	0	Detect	0	0.11	9	37	46	1	B	0.0020	10.5	0.0020	10.5								46
47	B	0.44999999	--	--	1	0	Detect	0	0.22499999	10	37	47	2	B	0.00375	16.5	0.00375	16.5	+							47
48	C	4.8	--	--	0	1	Detect	0	2.4	11	37	48	5	B	0.00375	16.5	0.00375	16.5	+							48

Table [illegible]-31
Quantile Test Result for Indeno(1,2,3-c,d)pyrene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 12/1999

COC ID #	
Name	Indeno(1,2,3-c,d)pyrene
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Records
Clean Up Area Records

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in m+n that must be exceeded (r + nm/n < 200)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.03b	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

69 % chance of a Detect	11 % chance of a ND
98 % chance of a Detect in B	89 % chance of a Detect in C
19 % chance of a ND in B	14 % chance of a ND in C

ND more likely than Detect

MIN Value = 0.0075 ND

ND Rule: 1* native

NCNI = 22

Accept Ho (Site = Bkg) Note: Ho is 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	31		IF MIN is DETECT, d=1, e=0, ELSE d=0, e=1						Sort by CALC RANK descending			B			C			r	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	CALC	Rank	ND	Data	Rank	ND	r	k	C	Counter
1	B	0.0075	U	U	1	0	ND	1	0.00375	0	1	16.5	48	C	1.825	48				1.825	48		1	1	1	1
2	B	0.0075	U	U	1	0	ND	1	0.00375	0	2	16.5	47	B	0.14[illegible]	47	0.14[illegible]	47					2	2		2
3	B	0.047	--	--	1	0	Detect	0	0.047	1	2	19	46	B	0.20[illegible]	46	0.20[illegible]	46					3	3		3
4	B	0.089	--	--	1	0	Detect	0	0.089	1	2	19	45	B	0.215	45	0.215	45					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	17.5	44	B	0.13500001	44	0.13500001	44					5	5		5
6	C	0.095	U	U	0	1	ND	1	0.0475	2	4	17.5	43	C	0.1215	43				0.1215	43		6	6	1	6
7	C	0.095	U	U	0	1	ND	1	0.0475	2	5	17.5	42	B	0.125	42	0.125	42					7	7		7
8	C	0.095	U	U	0	1	ND	1	0.0475	2	6	17.5	41	B	0.125	41	0.125	41								8
9	C	0.095	U	U	0	1	ND	1	0.0475	2	7	17.5	40	B	0.23000000	40	0.23000000	40								9
10	B	0.099	--	--	1	0	Detect	0	0.099	1	7	22.5	39	B	0.19	39	0.19	39								10
11	C	0.1	U	U	0	1	ND	1	0.05	2	8	18	38	B	0.18000001	38	0.18000001	38								11
12	C	0.1	U	U	0	1	ND	1	0.05	2	9	18	37	B	0.19	37	0.19	37								12
13	C	0.1	U	U	0	1	ND	1	0.05	2	10	18	36	C	0.152	36				0.152	36					13
14	C	0.1	U	U	0	1	ND	1	0.05	2	11	18	35	B	0.099	35	0.099	35								14
15	C	0.1	U	U	0	1	ND	1	0.05	2	12	18	34	C	0.099	34				0.099	34					15
16	C	0.1	U	U	0	1	ND	1	0.05	2	13	18	33	C	0.095	33				0.095	33					16
17	C	0.1	U	U	0	1	ND	1	0.05	2	14	18	32	C	0.095	32				0.095	32					17
18	C	0.102	--	--	0	1	Detect	0	0.102	4	14	27	31	C	0.095	31				0.095	31					18
19	C	0.105	U	U	0	1	ND	1	0.0525	4	15	18.5	30	C	0.0975	30				0.0975	30					19
20	B	0.19	--	--	1	0	Detect	0	0.19	0	15	28.5	29	C	0.0975	29				0.0975	29					20
21	B	0.17	U	U	1	0	ND	1	0.085	0	15	15	28	C	0.1	28				0.1	28					21
22	B	0.19000001	--	--	1	0	Detect	0	0.19000001	0	15	30	27	C	0.1	27				0.1	27					22
23	C	0.195	U	U	0	1	ND	1	0.0975	6	17	19.5	26	C	0.1	26				0.1	26					23
24	B	0.195	U	U	1	0	ND	1	0.0975	0	15	19.5	25	C	0.1	25				0.1	25					24
25	B	0.19	--	--	1	0	Detect	0	0.19	7	15	32	24	C	0.1025	24				0.1025	24					25
26	C	0.19	U	U	0	1	ND	1	0.095	7	16	20	23	C	0.1025	23				0.1025	23					26
27	C	0.19	U	U	0	1	ND	1	0.095	7	20	20	22	C	0.1025	22				0.1025	22					27
28	C	0.19	U	U	0	1	ND	1	0.095	7	21	20	21	C	0.1025	21				0.1025	21					28
29	C	0.19	U	U	0	1	ND	1	0.095	7	22	20	20	C	0.0525	19.5				0.0525	19.5					29
30	C	0.195	U	U	0	1	ND	1	0.0975	7	23	20	19	B	0.0925	18.5	0.0925	18.5	*							30
31	C	0.195	U	U	0	1	ND	1	0.0975	7	24	20	18	B	0.085	18	0.085	18	*							31
32	C	0.2	U	U	0	1	ND	1	0.1	7	25	20	17	B	0.085	17	0.085	17	*							32
33	C	0.2	U	U	0	1	ND	1	0.1	7	26	20	16	C	0.0525	16.5				0.0525	16.5					33
34	C	0.2	U	U	0	1	ND	1	0.1	7	27	20	15	B	0.047	15	0.047	15								34
35	C	0.2	U	U	0	1	ND	1	0.1	7	28	20	14	C	0.05	14				0.05	14					35
36	C	0.205	U	U	0	1	ND	1	0.1025	7	29	20	13	C	0.05	13				0.05	13					36
37	C	0.205	U	U	0	1	ND	1	0.1025	7	30	20	12	C	0.05	12				0.05	12					37
38	C	0.205	U	U	0	1	ND	1	0.1025	7	31	20	11	C	0.05	11				0.05	11					38
39	C	0.205	U	U	0	1	ND	1	0.1025	7	32	20	10	C	0.05	10				0.05	10					39
40	B	0.21999999	--	--	1	0	Detect	0	0.21999999	8	32	40	9	C	0.05	9				0.05	9					40
41	B	0.25	--	--	1	0	Detect	0	0.125	9	32	41	8	C	0.05	8				0.05	8					41
42	B	0.25	--	--	1	0	Detect	0	0.125	10	32	42	7	C	0.0475	7.5				0.0475	7.5					42
43	C	0.263	--	--	0	1	Detect	0	0.1315	11	32	43	6	C	0.0475	7.5				0.0475	7.5					43
44	B	0.27000001	--	--	1	0	Detect	0	0.13500001	12	32	44	5	C	0.0475	7.5				0.0475	7.5					44
45	B	0.43000001	--	--	1	0	Detect	0	0.215	13	32	45	4	C	0.0475	7.5				0.0475	7.5					45
46	B	5.7999999	--	--	1	0	Detect	0	0.89499998	14	32	46	3	C	0.0475	7.5				0.0475	7.5					46
47	B	2.2999999	--	--	1	0	Detect	0	1.1499999	15	32	47	2	B	0.00375	1.5	0.00375	1.5	*							47
48	C	3.65	--	--	0	1	Detect	0	1.825	16	32	48	1	B	0.00375	1.5	0.00375	1.5	*							48

Table 3-32
Quantile Test Result for Naphthalene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
K.S. Rentox Version 1.3 12/18/01

COC ID #	
Rtxcxe	Naphthalene
Units	mg/Kg

INPUT
CELCULATED
Interpolated

m =	48	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	5	Table A.8 = # of largest measurements in xm+n that must be examined (r + s/m < 200)
k =	3	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.032	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

49 % chance of a Detect		11 % chance of a ND	
89 % chance of a Detect in B		89 % chance of a Detect in C	
11 % chance of a ND in B		11 % chance of a ND in C	
ND more likely than Detect			

MIN Value = 0.0011 Detect

ND Rule: 1* value = 1

NDN = 52

Accept Ho (Site > Bkg) — Note: Ho is 1-tail (site > bkg)

α = 0.032

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

IF MIN is DETECT, d=1, and, ELSE d=0, s=1

Sort by CALC RANK descending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect =0	Date	d	s	Calculated Rank	Index	Source (B or C)	Date	CALC RANK	B: Data	B: Rank	B: ND	C: Data	C: Rank	C: ND	r	k	S	I	Counter
1	B	0.0011	--	--	1	0	Detect	0	0.0011	1	0	32	79	C	1.75	79				1.21	79		1	1	1	1	1
2	B	0.0012	--	--	1	0	Detect	0	0.0012	2	0	33	69	B	0.053	69	0.053	69					2	2			2
3	B	0.00275	U	U	1	0	ND	1	0.001125	2	1	32.5	54	B	0.0525	68	0.0525	68					3	3			3
4	B	0.0024	U	U	1	0	ND	1	0.0012	2	2	32.5	43	B	0.0425	58.5	0.0425	58.5					4	4			4
5	B	0.0024	U	U	1	0	ND	1	0.0012	2	3	32.5	37	B	0.03	56	0.03	56					5	5			5
6	B	0.0026	U	U	1	0	ND	1	0.0013	2	4	32.5	36	B	0.025	53	0.025	53					6				6
7	B	0.0029	U	U	1	0	ND	1	0.0013	2	5	32.5	35	B	0.025	54	0.025	54									7
8	B	0.0026	U	U	1	0	ND	1	0.001325	2	6	32.5	34	B	0.021	53	0.021	53									8
9	B	0.0027	U	U	1	0	ND	1	0.00135	2	7	32.5	33	B	0.02	52	0.02	52									9
10	B	0.0027	U	U	1	0	ND	1	0.00135	2	8	32.5	32	B	0.018	51	0.018	51									10
11	B	0.00275	U	U	1	0	ND	1	0.001375	2	9	32.5	31	B	0.018	50	0.018	50									11
12	B	0.0028	U	U	1	0	ND	1	0.0014	2	10	32.5	30	B	0.013	49	0.013	49									12
13	B	0.002825	U	U	1	0	ND	1	0.0014125	2	11	32.5	29	B	0.01	48	0.01	48									13
14	B	0.00285	U	U	1	0	ND	1	0.001425	2	12	32.5	25	B	0.0065	46.5	0.0065	46.5									14
15	B	0.00335	U	U	1	0	ND	1	0.001625	2	13	32.5	17	B	0.0042	41	0.0042	41									15
16	B	0.0037	U	U	1	0	ND	1	0.00185	2	14	32.5	61	B	0.175	59.5	0.175	59.5	+								16
17	B	0.0042	--	--	1	0	Detect	0	0.0042	3	14	41	62	B	0.18666601	60.5	0.18666601	60.5	+								17
18	B	0.0045	U	U	1	0	ND	1	0.00225	3	15	33	63	C	5.183	39.5				5.183	39.5	+					18
19	B	0.0071	U	U	1	0	ND	1	0.00375	3	16	33	64	B	0.189	39.5	0.189	39.5	+								19
20	B	0.0071	U	U	1	0	ND	1	0.00375	3	17	33	65	C	6.19	39.5				6.19	39.5	+					20
21	B	0.008	U	U	1	0	ND	1	0.004	3	18	33	66	C	6.19	39.5				6.19	39.5	+					21
22	B	0.008	U	U	1	0	ND	1	0.004	3	19	33	67	C	6.19	39.5				6.19	39.5	+					22
23	B	0.008	U	U	1	0	ND	1	0.004	3	20	33	68	C	6.19	39.5				6.19	39.5	+					23
24	B	0.008	U	U	1	0	ND	1	0.004	3	21	33	69	C	6.195	39.5				6.195	39.5	+					24
25	B	0.0083	--	--	1	0	Detect	0	0.0083	4	21	40.5	70	C	6.199	39.5				6.199	39.5	+					25
26	B	0.0083	U	U	1	0	ND	1	0.00415	4	22	33.5	71	C	6.2	39.5				6.2	39.5	+					26
27	B	0.0083	U	U	1	0	ND	1	0.00425	4	23	33.5	72	C	6.2	39.5				6.2	39.5	+					27
28	B	0.0085	U	U	1	0	ND	1	0.00425	4	24	33.5	73	C	6.2	39.5				6.2	39.5	+					28
29	B	0.01	--	--	1	0	Detect	0	0.01	5	24	48	74	C	6.2	39.5				6.2	39.5	+					29
30	B	0.013	--	--	1	0	Detect	0	0.013	6	24	48	75	C	6.205	39.5				6.205	39.5	+					30
31	B	0.015	--	--	1	0	Detect	0	0.015	7	24	50	76	C	6.205	39.5				6.205	39.5	+					31
32	B	0.016	--	--	1	0	Detect	0	0.016	8	24	51	77	C	6.205	39.5				6.205	39.5	+					32
33	B	0.02	--	--	1	0	Detect	0	0.02	9	24	52	78	C	6.205	39.5				6.205	39.5	+					33
34	B	0.021	--	--	1	0	Detect	0	0.021	10	24	53	44	C	6.095	38.5				6.095	38.5	+					34
35	B	0.025	--	--	1	0	Detect	0	0.025	11	24	54	45	C	6.099	38.5				6.099	38.5	+					35
36	B	0.025	--	--	1	0	Detect	0	0.025	12	24	55	46	C	6.095	38.5				6.095	38.5	+					36
37	B	0.03	--	--	1	0	Detect	0	0.03	13	24	56	47	C	6.095	38.5				6.095	38.5	+					37
38	B	0.0385	U	U	1	0	ND	1	0.01925	13	25	38	48	C	6.099	38.5				6.099	38.5	+					38
39	B	0.041	U	U	1	0	ND	1	0.02075	13	26	38	49	C	6.1	38.5				6.1	38.5	+					39
40	B	0.042	U	U	1	0	ND	1	0.021	13	27	38	50	C	6.1	38.5				6.1	38.5	+					40
41	B	0.08	U	U	1	0	ND	1	0.08	13	28	38	51	C	6.1	38.5				6.1	38.5	+					41
42	B	0.08	U	U	1	0	ND	1	0.08	13	29	38	52	C	6.1	38.5				6.1	38.5	+					42
43	B	0.085	--	--	1	0	Detect	0	0.0425	14	29	38.5	53	C	6.1	38.5				6.1	38.5	+					43
44	C	0.085	U	U	0	1	ND	1	0.085	14	30	38.5	54	C	6.1	38.5				6.1	38.5	+					44
45	C	0.085	U	U	0	1	ND	1	0.085	14	31	38.5	55	C	6.1	38.5				6.1	38.5	+					45
46	C	0.085	U	U	0	1	ND	1	0.085	14	32	38.5	56	C	6.1	38.5				6.1	38.5	+					46
47	C	0.085	U	U	0	1	ND	1	0.085	14	33	38.5	57	C	6.105	38.5				6.105	38.5	+					47
48	C	0.085	U	U	0	1	ND	1	0.085	14	34	38.5	58	C	6.106	38.5				6.105	38.5	+					48
49	C	0.1	U	U	0	1	ND	1	0.1	14	35	38.5	28	B	0.01925	28	0.01925	28	+								49
50	C	0.1	U	U	0	1	ND	1	0.1	14	36	38.5	38	B	0.02075	38	0.02075	38	+								50
51	C	0.1	U	U	0	1	ND	1	0.1	14	37	38.5	40	B	0.021	38	0.021	38	+								51
52	C	0.1	U	U	0	1	ND	1	0.1	14	38	38.5	41	B	0.08	38	0.08	38	+								52
53	C	0.1	U	U	0	1	ND	1	0.1	14	39	38.5	42	B	0.08	38	0.08	38	+								53
54	C	0.1	U	U	0	1	ND	1	0.1	14	40	38.5	26	B	0.08425	33.5	0.08425	33.5	+								54
55	C	0.1	U	U	0	1	ND	1	0.1	14	41	38.5	27	B	0.08435	33.5	0.08435	33.5	+								55
56	C	0.1	U	U	0	1	ND	1	0.1	14	42	38.5	28	B	0.08435	33.5	0.08435	33.5	+								56
57	C	0.105	U	U	0	1	ND	1	0.105	14	43	38.5	2	B	0.0012	32	0.0012	32									57
58	C	0.105	U	U	0	1	ND	1	0.105	14	44	38.5	18	B	0.00135	33	0.00135	33	+								58
59	B	0.105	--	--	1	0	Detect	0	0.0525	15	44	55	19	B	0.00375	33	0.00375	33	+								59
60	B	0.11	--	--	1	0	Detect	0	0.055	16	44	56	20	B	0.00375	33	0.00375	33	+								60

Table [illegible]
Quantile Test Result for Naphthalene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.S. Radius Version 1.3 (2/1997)

COC ID #	
Name	naphthalene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Statistics
Clean Up Area Results

m =	48	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	9	Table A.6 = # of largest measurements in m+n that must be examined (r + s+n < 200)
k =	3	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.032	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
50 % chance of a Detect in B	86 % chance of a Detect in C
50 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

	MDN Value =	0.0011	Detect			ND Rule	1st value		NCN =	62						Accept Ho (Site = Bkg)								Note: Ho vs 1-tail (site > bkg)	
41	B	0.175	U	U	1	0	ND	1	0.175	16	45	39.5	21	0	0.004	33	0.004	33	+							41
42	B	0.18000001	U	U	1	0	ND	1	0.18000001	16	46	39.5	22	0	0.004	33	0.004	33	+							42
43	C	0.185	U	U	0	1	ND	1	0.185	16	47	39.5	23	0	0.004	33	0.004	33	+							43
44	B	0.185	U	U	1	0	ND	1	0.185	16	48	39.5	24	0	0.004	33	0.004	33	+							44
45	C	0.19	U	U	0	1	ND	1	0.19	16	49	39.5	2	0	0.001125	32.5	0.001125	32.5	+							45
46	C	0.19	U	U	0	1	ND	1	0.19	16	50	39.5	4	0	0.0012	32.5	0.0012	32.5	+							46
47	C	0.19	U	U	0	1	ND	1	0.19	16	51	39.5	5	0	0.0012	32.5	0.0012	32.5	+							47
48	C	0.19	U	U	0	1	ND	1	0.19	16	52	39.5	6	0	0.0013	32.5	0.0013	32.5	+							48
49	C	0.195	U	U	0	1	ND	1	0.195	16	53	39.5	7	0	0.0013	32.5	0.0013	32.5	+							49
70	C	0.199	U	U	0	1	ND	1	0.199	16	54	39.5	8	0	0.001325	32.5	0.001325	32.5	+							70
71	C	0.2	U	U	0	1	ND	1	0.2	16	55	39.5	9	0	0.00135	32.5	0.00135	32.5	+							71
72	C	0.2	U	U	0	1	ND	1	0.2	16	56	39.5	10	0	0.00136	32.5	0.00136	32.5	+							72
73	C	0.2	U	U	0	1	ND	1	0.2	16	57	39.5	11	0	0.001375	32.5	0.001375	32.5	+							73
74	C	0.2	U	U	0	1	ND	1	0.2	16	58	39.5	12	0	0.0014	32.5	0.0014	32.5	+							74
75	C	0.205	U	U	0	1	ND	1	0.205	16	59	39.5	13	0	0.001425	32.5	0.001425	32.5	+							75
76	C	0.205	U	U	0	1	ND	1	0.205	16	60	39.5	14	0	0.001425	32.5	0.001425	32.5	+							76
77	C	0.205	U	U	0	1	ND	1	0.205	16	61	39.5	15	0	0.001425	32.5	0.001425	32.5	+							77
78	C	0.205	U	U	0	1	ND	1	0.205	16	62	39.5	16	0	0.00155	32.5	0.00155	32.5	+							78
79	C	3.5	--	--	0	1	Detect	0	3.73	17	62	79	1	0	0.0011	32	0.0011	32								79

Table B3-33
Quantile Test Result for Phenanthrene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R 3, Redox Version 1.3 12/19/01

COC ID #
Name: phenanthrene
Units: mg/kg

INPUT
OUTPUT
Instruction

Background Measurements
Clean Up Area Measurements

m =	17	# measurements in Background (< 999)
n =	31	# measurements in Clean Up Area (< 999)
r =	7	Table A.3 = # of largest measurements in m+n that must be examined (r = m+n < 299)
k =	7	Table A.3 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k = r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

MIN Value = 0.012 Detect

ND Rule: 1* value

NON = 27

99 % chance of a Detect | 11 % chance of a ND
90 % chance of a Detect in B | 86 % chance of a Detect in C
10 % chance of a ND in B | 14 % chance of a ND in C

ND score likely than Detect

Accept Ho (Site = Bkg) | Note: Ha is 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	rl	s	Calculated Rank
1	B	0.012	–	–	1	0	Detect	0	0.012	1	0	14.0
2	B	0.03	–	–	1	0	Detect	0	0.03	2	0	15.5
3	C	0.0798	–	–	0	1	Detect	0	0.0798	3	0	16.0
4	B	0.0845	–	–	1	0	Detect	0	0.0845	4	0	17.0
5	C	0.095	U	U	0	1	ND	1	0.0475	4	1	18
6	C	0.095	U	U	0	1	ND	1	0.0475	4	2	19
7	C	0.095	U	U	0	1	ND	1	0.0475	4	3	20
8	C	0.0981	–	–	0	1	Detect	0	0.0981	5	3	20
9	C	0.1	U	U	0	1	ND	1	0.05	5	4	22.0
10	C	0.1	U	U	0	1	ND	1	0.05	5	5	23.5
11	C	0.1	U	U	0	1	ND	1	0.05	5	6	25.0
12	C	0.1	U	U	0	1	ND	1	0.05	5	7	26.5
13	C	0.1	U	U	0	1	ND	1	0.05	5	8	28.5
14	C	0.1	U	U	0	1	ND	1	0.05	5	9	30.5
15	C	0.1	U	U	0	1	ND	1	0.05	5	10	32.5
16	C	0.105	U	U	0	1	ND	1	0.0525	5	11	34.5
17	B	0.11	–	–	1	0	Detect	0	0.11	6	11	33
18	B	0.16	–	–	1	0	Detect	0	0.16	7	11	35
19	C	0.165	U	U	0	1	ND	1	0.0825	7	12	37.5
20	B	0.165	U	U	1	0	ND	1	0.0825	7	13	37.5
21	B	0.19	–	–	1	0	Detect	0	0.19	8	13	39
22	C	0.19	U	U	0	1	ND	1	0.095	8	14	41
23	C	0.19	U	U	0	1	ND	1	0.095	8	15	42
24	C	0.19	U	U	0	1	ND	1	0.095	8	16	43
25	C	0.19	U	U	0	1	ND	1	0.095	8	17	44
26	C	0.195	U	U	0	1	ND	1	0.0975	8	18	45
27	C	0.195	U	U	0	1	ND	1	0.0975	8	19	46
28	C	0.2	U	U	0	1	ND	1	0.1	9	19	47
29	C	0.2	U	U	0	1	ND	1	0.1	9	20	48
30	C	0.2	U	U	0	1	ND	1	0.1	9	21	49
31	C	0.2	U	U	0	1	ND	1	0.1	9	22	50
32	C	0.205	U	U	0	1	ND	1	0.1025	9	23	51
33	C	0.205	U	U	0	1	ND	1	0.1025	9	24	52
34	C	0.205	U	U	0	1	ND	1	0.1025	9	25	53
35	C	0.205	U	U	0	1	ND	1	0.1025	9	26	54
36	B	0.23999999	–	–	1	0	Detect	0	0.23999999	10	26	55
37	C	0.268	–	–	0	1	Detect	0	0.268	10	27	57
38	C	0.272	–	–	0	1	Detect	0	0.272	11	27	58
39	B	0.30000001	–	–	1	0	Detect	0	0.30000001	12	27	59
40	B	0.30000001	–	–	1	0	Detect	0	0.30000001	13	27	60
41	B	0.31000001	–	–	1	0	Detect	0	0.16500001	14	27	61
42	B	0.49000001	–	–	1	0	Detect	0	0.245	15	27	62
43	B	0.55000001	–	–	1	0	Detect	0	0.27500001	16	27	63
44	B	0.60000002	–	–	1	0	Detect	0	0.33000001	17	27	64
45	B	1.2999999	–	–	1	0	Detect	0	0.64999999	18	27	65
46	B	2.3999999	–	–	1	0	Detect	0	1.1999999	19	27	66
47	B	4.8999999	–	–	1	0	Detect	0	2.3499999	20	27	67
48	C	15.5	–	–	0	1	Detect	0	7.75	21	27	68

Sort by CALC RANK descending

Index	Source (B or C)	Data	CALC RANK
49	C	7.75	48
47	B	2.3499999	47
46	B	1.1999999	46
45	B	0.64999999	45
44	B	0.33000001	44
43	B	0.27500001	43
42	B	0.245	42
41	B	0.16500001	41
40	B	0.30000001	40
39	B	0.30000001	39
38	C	0.272	38
37	C	0.268	37
36	B	0.23999999	36
35	B	0.19	35
34	B	0.16	34
33	B	0.11	33
32	C	0.095	32
31	C	0.095	31
30	C	0.095	30
29	C	0.095	29
28	C	0.095	28
27	C	0.0975	27
26	C	0.0975	26
25	C	0.095	25
24	C	0.095	24
23	C	0.095	23
22	C	0.095	22
21	C	0.095	21
20	B	0.095	20
19	C	0.0825	19
18	C	0.0825	18
17	B	0.0845	17
16	B	0.0798	16
15	C	0.05	15.5
14	B	0.03	15.5
13	C	0.05	15.5
12	C	0.05	15.5
11	C	0.05	15.5
10	C	0.05	15.5
9	C	0.05	15.5
8	C	0.0475	15
7	C	0.0475	15
6	C	0.0475	15
5	C	0.0475	15
4	B	0.012	14.5
3	C	0.0798	14
2	B	0.03	13.5
1	B	0.012	14.5

Page 1 of 1

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Quantile Test Result for Pyrene in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.E. Rindos, Version 1.3 (2/10/01

COC ID #	
Name	pyrene
Units	mg/kg

INPUT
OUTPUT
Instructions

Background Results
Clean Up Area Results

m =	17	# measurements in Background (< 100)
n =	31	# measurements in Clean Up Area (< 100)
r =	7	Table A.8 = # of largest measurements in m+n that must be examined (r = zero < 250)
k =	7	Table A.8 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k ≤ r)
α =	0.036	If α > 0.05 after final iteration of r and k, then use the smallest (r,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value = 0.011 Detect

ND Rule: 1* value

NON = 23

Accept Ho (Site > Bkg)

Note: Ho is 1-tail (site > bkg)

α = 0.036

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					17	31		IF MIN is DETECT, d=1, and, ELSE d=0, e=1					Sort by CALC RANK descending			B			C			I	K	Q	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Value	Rank	ND	Value	Rank	ND	I	I'	J	Counter
1	B	0.011	--	--	1	0	Detect	0	0.011	1	0	12.5	48	C	0.25	48				0.25	48		1	1	1	1
2	B	0.012	--	--	1	0	Detect	0	0.012	2	0	13.5	47	B	3.650000	47	1.4166667	2					2	2		2
3	C	0.095	U	U	0	1	ND	1	0.0475	2	1	13	46	B	1.250000025	46	1.2500000	3					3	3		3
4	C	0.095	U	U	0	1	ND	1	0.0475	2	2	13	45	B	0.73	45	0.73	4					4	4		4
5	C	0.095	U	U	0	1	ND	1	0.0475	2	3	13	44	B	0.465	44	0.465	5					5	5		5
6	C	0.1	U	U	0	1	ND	1	0.05	2	4	13	43	B	0.44455559	43	0.4445556	6					6	6		6
7	C	0.1	U	U	0	1	ND	1	0.05	2	5	13	42	C	0.404	42				0.404	42		7	7	1	7
8	C	0.1	U	U	0	1	ND	1	0.05	2	6	13	41	B	0.21000059	41	0.2100000	7								8
9	C	0.1	U	U	0	1	ND	1	0.05	2	7	13	40	B	0.19999997	40	0.2000000	8								9
10	C	0.104	--	--	0	1	Detect	0	0.104	3	7	16	39	C	0.22	39				0.22	39					10
11	C	0.105	--	--	0	1	Detect	0	0.105	4	7	17	38	B	0.47500000	38	0.4750000	9								11
12	C	0.105	U	U	0	1	ND	1	0.0525	4	8	14	37	B	0.41999999	37	0.4200000	10								12
13	C	0.1375	--	--	0	1	Detect	0	0.1375	5	8	20.5	36	C	0.32	36				0.32	36					13
14	B	0.14	--	--	1	0	Detect	0	0.14	6	8	21.5	35	B	0.21	35	0.15	11								14
15	B	0.15000001	--	--	1	0	Detect	0	0.15000001	7	8	22.5	34	C	0.255	34				0.255	34					15
16	B	0.16999999	--	--	1	0	Detect	0	0.16999999	8	8	23.5	33	B	0.25	33	0.25	12								16
17	C	0.185	--	--	0	1	Detect	0	0.185	9	8	24.5	32	C	0.185	24.5				0.185	24.5					17
18	B	0.185	U	U	1	0	ND	1	0.0925	9	9	16.5	31	B	0.18999999	23.5	0.1899999	13.5								18
19	C	0.19	U	U	0	1	ND	1	0.095	9	10	16.5	30	B	0.15999999	22.5	0.1599999	15.5								19
20	C	0.19	U	U	0	1	ND	1	0.095	9	11	16.5	29	B	0.14	21.5	0.14	17.5								20
21	C	0.19	U	U	0	1	ND	1	0.095	9	12	16.5	28	C	0.1375	20.5				0.1375	20.5					21
22	C	0.19	U	U	0	1	ND	1	0.095	9	13	16.5	27	C	0.105	19				0.105	19					22
23	C	0.193	U	U	0	1	ND	1	0.0965	9	14	16.5	26	C	0.104	18				0.104	18					23
24	C	0.193	U	U	0	1	ND	1	0.0965	9	15	16.5	25	B	0.0925	16.5	0.0925	18.5	1							24
25	C	0.2	U	U	0	1	ND	1	0.1	9	16	16.5	24	C	0.095	16.5				0.095	16.5	*				25
26	C	0.2	U	U	0	1	ND	1	0.1	9	17	16.5	23	C	0.095	16.5				0.095	16.5	*				26
27	C	0.2	U	U	0	1	ND	1	0.1	9	18	16.5	22	C	0.095	16.5				0.095	16.5	*				27
28	C	0.2	U	U	0	1	ND	1	0.1	9	19	16.5	21	C	0.095	16.5				0.095	16.5	*				28
29	C	0.205	U	U	0	1	ND	1	0.1025	9	20	16.5	20	C	0.0975	16.5				0.0975	16.5	*				29
30	C	0.205	U	U	0	1	ND	1	0.1025	9	21	16.5	19	C	0.0975	16.5				0.0975	16.5	*				30
31	C	0.205	U	U	0	1	ND	1	0.1025	9	22	16.5	18	C	0.1	16.5				0.1	16.5	*				31
32	C	0.205	U	U	0	1	ND	1	0.1025	9	23	16.5	17	C	0.1	16.5				0.1	16.5	*				32
33	B	0.25	--	--	1	0	Detect	0	0.25	10	23	33	16	C	0.1	16.5				0.1	16.5	*				33
34	C	0.255	--	--	0	1	Detect	0	0.255	11	23	34	15	C	0.1	16.5				0.1	16.5	*				34
35	B	0.31	--	--	1	0	Detect	0	0.31	12	23	35	14	C	0.1025	16.5				0.1025	16.5	*				35
36	C	0.33	--	--	0	1	Detect	0	0.33	13	23	36	13	C	0.1025	16.5				0.1025	16.5	*				36
37	B	0.41999999	--	--	1	0	Detect	0	0.41999999	14	23	37	12	C	0.1025	16.5				0.1025	16.5	*				37
38	B	0.47500000	--	--	1	0	Detect	0	0.47499999	15	23	38	11	C	0.1025	16.5				0.1025	16.5	*				38
39	C	0.52	--	--	0	1	Detect	0	0.52	16	23	39	10	C	0.0525	14				0.0525	14	*				39
40	B	0.58000007	--	--	1	0	Detect	0	0.58000007	17	23	40	9	B	0.012	13.0	0.012	13.0								40
41	B	0.63999999	--	--	1	0	Detect	0	0.21999999	18	23	41	8	C	0.0475	12				0.0475	12	*				41
42	C	0.808	--	--	0	1	Detect	0	0.404	19	23	42	7	C	0.0475	12				0.0475	12	*				42
43	B	0.88999999	--	--	1	0	Detect	0	0.44459999	20	23	43	6	C	0.0475	12				0.0475	12	*				43
44	B	0.93000001	--	--	1	0	Detect	0	0.465	21	23	44	5	C	0.05	12				0.05	12	*				44
45	B	1.3	--	--	1	0	Detect	0	0.73	22	23	45	4	C	0.05	12				0.05	12	*				45
46	B	2.000000	--	--	1	0	Detect	0	1.2000000	23	23	46	3	C	0.05	12				0.05	12	*				46
47	B	7.3000015	--	--	1	0	Detect	0	3.6500001	24	23	47	2	C	0.05	12				0.05	12	*				47
48	C	16.5	--	--	0	1	Detect	0	8.25	25	23	48	1	B	0.011	12.5	0.011	12.5								48

Table B3-35
Quantile Test Result for Selenium in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
M.S. Native Version 1.3 12/19/01

CDC ID #	
Name	selenium
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	34	# measurements in Background (< 500)
n =	31	# measurements in Clean Up Area (< 100)
r =	4	Table A.2 r = # of largest measurements to zero that must be examined (r < zero, < 200)
k =	4	Table A.2 k = # of measurements from Clean Up Area that MAY BE among the r largest measurements (k < r)
α =	0.040	If α < 0.05 after final iteration of r and k, then use the smallest (α,k) such that α < 0.05
	Yes	Can the Quantile Test be used?

89 % chance of a Detect	11 % chance of a ND
95 % chance of a Detect in B	89 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND rours likely than Detect	

MIN Value = 5.2E-02 ND

ND Rule: 1st value = 1

MDN = 40

Accept Ha (Site > Bkg) Note: Ha is 1-tail (site > bkg)

α = 0.040

ENTER Source, Value, Lab Flag, and Validation Flag
SORT all by Value Ascending

					34	31		If MIN is DETECT, d=1, and, ELSE d=0, a=1					Sort by CALC RANK descending			B			C			r	k	C	
Index	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND+1 Detect = 0	Data	d	a	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	Data	Rank	ND	Data	Rank	ND	r	k	C	Counter
1	B	5.2E-02	U	U	1	0	ND	1	2.75E-02	0	1	20.5	65	C	0.03	65				0.03	65		1	1	1	1
2	C	0.14	U	U	0	1	ND	1	0.07	0	2	55.5	64	C	0.3	64				0.3	64		2	2	1	2
3	C	0.145	U	U	0	1	ND	1	0.0725	0	3	75.5	63	C	0.473	63				0.473	63		3	3	1	3
4	C	0.145	U	U	0	1	ND	1	0.0725	0	4	20.5	62	C	0.49	62				0.49	62		4	4	1	4
5	C	0.145	U	U	0	1	ND	1	0.0725	0	5	20.5	61	C	0.399	61				0.399	61					5
6	C	0.155	U	U	0	1	ND	1	0.0775	0	6	20.5	60	C	0.37	60				0.37	60					6
7	C	0.155	U	U	0	1	ND	1	0.0775	0	7	20.5	59	C	0.34	59				0.34	59					7
8	C	0.155	U	U	0	1	ND	1	0.0775	0	8	20.5	58	C	0.32	58				0.32	58					8
9	C	0.16	U	U	0	1	ND	1	0.08	0	9	20.5	57	C	0.24	57				0.24	57					9
10	C	0.165	U	U	0	1	ND	1	0.0825	0	10	20.5	56	C	0.31	56				0.31	56					10
11	C	0.17	U	U	0	1	ND	1	0.085	0	11	20.5	55	C	0.32	55				0.32	55					11
12	C	0.175	U	U	0	1	ND	1	0.0875	0	12	20.5	54	C	0.213	54				0.213	54					12
13	C	0.18	U	U	0	1	ND	1	0.095	0	13	20.5	53	C	0.2975	53				0.2975	53					13
14	C	0.19	U	U	0	1	ND	1	0.095	0	14	20.5	52	C	0.29	52				0.29	52					14
15	C	0.19	U	U	0	1	ND	1	0.095	0	15	20.5	51	B	0.03402899	51	0.03402899	51								15
16	C	0.19	U	U	0	1	ND	1	0.095	0	16	20.5	50	B	0.2173	50	0.2173	50								16
17	B	0.195	=	=	1	0	Detect	0	0.195	1	16	29	49	B	0.2	49	0.2	49								17
18	B	0.271	U	U	1	0	ND	1	0.1355	1	17	31	48	B	0.1875	48	0.1875	48								18
19	B	0.27799001	U	U	1	0	ND	1	0.13899501	1	18	31	46	B	0.19	46.5	0.19	46.5								19
20	B	0.28	U	U	1	0	ND	1	0.14	1	19	31	46	B	0.19	46.5	0.19	46.5								20
21	B	0.28	U	U	1	0	ND	1	0.14	1	20	31	44	B	0.15899999	44	0.15899999	44								21
22	B	0.28	U	U	1	0	ND	1	0.14	1	21	31	43	B	0.3065	43	0.3065	43								22
23	B	0.28	U	U	1	0	ND	1	0.14	1	22	31	42	B	0.30399999	42	0.30399999	42								23
24	B	0.28	U	U	1	0	ND	1	0.14	1	23	31	41	B	0.28200001	33.5	0.28200001	33.5								24
25	B	0.28200001	=	=	1	0	Detect	0	0.28200001	2	23	33.5	17	B	0.198	25	0.198	25								25
26	B	0.28200999	U	U	1	0	ND	1	0.1411	2	24	31.5	47	B	0.349	24	0.349	24	+							26
27	B	0.2865001	U	U	1	0	ND	1	0.14325	2	25	31.5	42	B	0.21899001	23	0.21899001	23	+							27
28	B	0.2869	U	U	1	0	ND	1	0.14475	2	26	31.5	43	B	0.21899001	22	0.21899001	22	+							28
29	B	0.28930001	U	U	1	0	ND	1	0.14600001	2	27	31.5	44	B	0.21900001	21	0.21900001	21	+							29
30	C	0.295	U	U	0	1	ND	1	0.1475	2	28	31.5	39	B	0.15375	22.5	0.15375	22.5	+							30
31	B	0.2965	U	U	1	0	ND	1	0.14825	2	29	31.5	40	B	0.1575	22.5	0.1575	22.5	+							31
32	B	0.2965	U	U	1	0	ND	1	0.14825	2	30	31.5	26	B	0.1410	21.5	0.1410	21.5	+							32
33	C	0.3	U	U	0	1	ND	1	0.15	2	31	31.5	37	B	0.14325	21.5	0.14325	21.5	+							33
34	B	0.30000001	U	U	1	0	ND	1	0.15000001	2	32	31.5	28	B	0.14475	21.5	0.14475	21.5	+							34
35	B	0.3035	U	U	1	0	ND	1	0.15175	2	33	31.5	29	B	0.14500001	21.5	0.14500001	21.5	+							35
36	B	0.3035	U	U	1	0	ND	1	0.15175	2	34	31.5	35	C	0.1475	21.5				0.1475	21.5	+				36
37	B	0.30399999	=	=	1	0	Detect	0	0.30399999	3	34	40	31	B	0.14525	21.5	0.14525	21.5	+							37
38	B	0.3065	=	=	1	0	Detect	0	0.3065	4	24	41	32	B	0.14625	21.5	0.14625	21.5	+							38
39	B	0.3075	U	U	1	0	ND	1	0.15375	4	25	22.5	33	C	0.15	21.5				0.15	21.5	+				39
40	B	0.315	U	U	1	0	ND	1	0.1575	4	30	22.5	34	B	0.13999001	21.5	0.13999001	21.5	+							40
41	B	0.31799999	=	=	1	0	Detect	0	0.15899999	5	26	40	36	B	0.15375	21.5	0.15375	21.5	+							41
42	B	0.31900001	U	U	1	0	ND	1	0.21900001	5	27	23	36	B	0.15375	21.5	0.15375	21.5	+							42
43	B	0.31900001	U	U	1	0	ND	1	0.21900001	5	28	23	18	B	0.1393	21	0.1393	21	+							43
44	B	0.31900001	U	U	1	0	ND	1	0.21900001	5	29	23	19	B	0.13800001	21	0.13800001	21	+							44
45	B	0.31999999	=	=	1	0	Detect	0	0.16	4	29	45.5	20	B	0.14	21	0.14	21	+							45
46	B	0.31999999	=	=	1	0	Detect	0	0.16	7	29	45.5	21	B	0.14	21	0.14	21	+							46
47	B	0.345	U	U	1	0	ND	1	0.345	7	40	24	22	B	0.14	21	0.14	21	+							47
48	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	22	B	0.14	21	0.14	21	+							48
49	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							49
50	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							50
51	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							51
52	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							52
53	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							53
54	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							54
55	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							55
56	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							56
57	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							57
58	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							58
59	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							59
60	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							60
61	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							61
62	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							62
63	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							63
64	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							64
65	B	0.375	=	=	1	0	Detect	0	0.1875	8	40	48	23	B	0.14	21	0.14	21	+							65

Table [illegible]
Quantile Test Result for Thallium in Subsurface Soil
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

RANKING AND QUANTILE WORKSHEET
R.N. Bailey Version 1.3 12/19/01

COC ID #	
Name	thallium
Units	mg/kg

INPUT
OUTPUT
Instruction

Background Results
Clean Up Area Results

m =	30	# measurements in Background (< 100)
n =	30	# measurements in Clean Up Area (< 100)
r =	4	Table A.6 = # of largest measurements in crm that must be examined (r < m/n + 2000)
s =	4	Table A.6 = # of measurements from Clean Up Area that MAY BE among the r largest measurements (s < r)
w =	0.035	If a > 0.05 after final iteration of r and s, then use the smallest (r,s) pair that a < 0.05
	Yes	Can the Quantile Test be used?

99 % chance of a Detect	11 % chance of a ND
90 % chance of a Detect in B	86 % chance of a Detect in C
10 % chance of a ND in B	14 % chance of a ND in C
ND more likely than Detect	

MIN Value =	36.05	ND

ND Rule	'r' value
	4

HIGH =	39

Accept Ha (Site > Bkg)
Note: Ha is 1-tail (site > bkg)
a = 0.035

Notes	Source (B or C)	Value	Lab Flag	Val Flag	m	n	ND	ND=1 Detect = 0	Data	d	e	Calculated Rank	Index	Source (B or C)	Data	CALC RANK	B Value	B Rank	B ND	C Value	C Rank	C ND	r	s	C	Counter
1	B	0.05	U	U	1	0	ND	1	0.05	0	1	29	46	C	0.55	55				0.55	55		1	1	1	1
2	B	0.05	U	U	1	0	ND	1	0.05	0	2	29	47	C	0.6	56				0.6	56		2	2	1	2
3	B	0.16	U	U	1	0	ND	1	0.08	0	3	29	54	C	2.9	64				2.9	64		3	3	1	3
4	B	0.16000001	U	U	1	0	ND	1	0.0825	0	4	29	53	C	2.75	63				2.75	63		4	4	1	4
5	B	0.2475	U	U	1	0	ND	1	0.12375	0	5	29	62	C	2.28	62				2.28	62					5
6	B	0.25	U	U	1	0	ND	1	0.125	0	6	29	63	C	1.7	61				1.7	61					6
7	B	0.2815	U	U	1	0	ND	1	0.13075	0	7	29	66	C	1.55	60				1.55	60					7
8	B	0.264	U	U	1	0	ND	1	0.132	0	8	29	64	C	1.55	59				1.55	59					8
9	B	0.26666666	U	U	1	0	ND	1	0.13349999	0	9	29	58	C	1.45	58				1.45	58					9
10	B	0.26833333	U	U	1	0	ND	1	0.1345	0	10	29	57	C	1.45	57				1.45	57					10
11	B	0.26949999	U	U	1	0	ND	1	0.13475999	0	11	29	56	C	1.3	55				1.3	55					11
12	B	0.27000001	U	U	1	0	ND	1	0.13500001	0	12	29	55	C	1.13	54				1.13	54					12
13	B	0.27299997	U	U	1	0	ND	1	0.13625	0	13	29	54	B	0.88999997	54	0.88999997	54								13
14	B	0.27500001	U	U	1	0	ND	1	0.1375	0	14	29	53	C	0.95	53				0.95	53					14
15	B	0.279	U	U	1	0	ND	1	0.139	0	15	29	52	C	0.9	52				0.9	52					15
16	C	0.28	U	U	0	1	ND	1	0.14	0	16	29	51	C	0.78	51				0.78	51					16
17	C	0.28	U	U	0	1	ND	1	0.14	0	17	29	49	C	0.55	49.5				0.55	49.5					17
18	B	0.28999999	U	U	1	0	ND	1	0.14499999	0	18	29	50	C	0.5	48.5				0.5	48.5					18
19	B	0.28159991	U	U	1	0	ND	1	0.14079991	0	19	29	47	C	0.465	47.5				0.465	47.5					19
20	B	0.2840001	U	U	1	0	ND	1	0.142	0	20	29	48	C	0.44	46.5				0.44	46.5					20
21	B	0.285	U	U	1	0	ND	1	0.1425	0	21	29	45	C	0.43	45.5				0.43	45.5					21
22	B	0.28584999	U	U	1	0	ND	1	0.14279999	0	22	29	44	C	0.325	44.5				0.325	44.5					22
23	B	0.29159991	U	U	1	0	ND	1	0.1464	0	23	29	43	C	0.215	43.5				0.215	43.5					23
24	B	0.29700001	U	U	1	0	ND	1	0.1453	0	24	29	42	C	0.215	42.5				0.215	42.5					24
25	B	0.292	U	U	1	0	ND	1	0.146	0	25	29	41	C	0.205	41.5				0.205	41.5					25
26	B	0.29249999	U	U	1	0	ND	1	0.14624999	0	26	29	40	C	0.05	40.5				0.05	40.5					26
27	B	0.294	U	U	1	0	ND	1	0.147	0	27	29	39	C	0.01	39.5				0.01	39.5					27
28	C	0.295	U	U	0	1	ND	1	0.1475	0	28	29	38	B	0.17499999	29.5	0.17499999	29.5	=							28
29	B	0.29850001	U	U	1	0	ND	1	0.149	0	29	29	1	B	36.05	29	36.05	29	=							29
30	B	0.29850002	U	U	1	0	ND	1	0.1490	0	30	29	2	B	36.05	29	36.05	29	=							30
31	C	0.3	U	U	0	1	ND	1	0.15	0	31	29	3	B	0.05	29	0.05	29	=							31
32	B	0.301	U	U	1	0	ND	1	0.1505	0	32	29	4	B	0.0525	29	0.0525	29	=							32
33	B	0.30425	U	U	1	0	ND	1	0.152125	0	33	29	5	B	0.12375	29	0.12375	29	=							33
34	B	0.3125	U	U	1	0	ND	1	0.15625	0	34	29	6	B	0.125	29	0.125	29	=							34
35	B	0.31649999	U	U	1	0	ND	1	0.15825	0	35	29	7	B	0.13075	29	0.13075	29	=							35
36	B	0.31900001	U	U	1	0	ND	1	0.15935	0	36	29	8	B	0.132	29	0.132	29	=							36
37	B	0.31949997	U	U	1	0	ND	1	0.15625	0	37	29	9	B	0.13349999	29	0.13349999	29	=							37
38	B	0.33250001	U	U	1	0	ND	1	0.16625001	0	38	29	10	B	0.1345	29	0.1345	29	=							38
39	C	0.35	--	--	0	1	Detect	0	0.35	1	39	29.5	11	B	0.13474999	29	0.13474999	29	=							39
40	C	0.36	--	--	0	1	Detect	0	0.36	2	38	28.5	12	B	0.15000001	29	0.15000001	29	=							40
41	C	0.39	--	--	0	1	Detect	0	0.195	3	36	27.5	13	B	0.1625	29	0.1625	29	=							41
42	C	0.42	--	--	0	1	Detect	0	0.315	4	34	26.5	14	B	0.1575	29	0.1575	29	=							42
43	C	0.43	--	--	0	1	Detect	0	0.215	5	25	25.5	15	B	0.156	29	0.156	29	=							43
44	C	0.45	--	--	0	1	Detect	0	0.225	6	24	24.5	16	C	0.14	29				0.14	29	U				44
45	C	0.46	--	--	0	1	Detect	0	0.23	7	24	23.5	17	C	0.14	29				0.14	29	U				45
46	C	0.46	--	--	0	1	Detect	0	0.23	8	23	22.5	18	B	0.14499999	29	0.14499999	29	=							46
47	C	0.47	--	--	0	1	Detect	0	0.235	9	22	21.5	19	B	0.14675001	29	0.14675001	29	=							47
48	C	1	--	--	0	1	Detect	0	0.5	10	18	20.5	20	B	0.142	29	0.142	29	=							48
49	C	1.1	--	--	0	1	Detect	0	0.55	11	18	19.5	21	B	0.1425	29	0.1425	29	=							49
50	B	1.17499995	U	U	1	0	ND	1	1.17499995	11	19	18.5	22	B	0.14274999	29	0.14274999	29	=							50
51	C	1.5	--	--	0	1	Detect	0	0.75	12	20	17	23	B	0.1455	29	0.1455	29	=							51
52	C	1.8	--	--	0	1	Detect	0	0.9	13	20	16	24	B	0.1455	29	0.1455	29	=							52
53	C	1.8	--	--	0	1	Detect	0	0.9	14	20	15	25	B	0.146	29	0.146	29	=							53
54	B	1.87999993	--	--	1	0	Detect	0	0.93999991	15	20	14	26	B	0.14634991	29	0.14634991	29	=							54
55	C	2.3	--	--	0	1	Detect	0	1.15	16	20	13	27	B	0.147	29	0.147	29	=							55
56	C	2.6	--	--	0	1	Detect	0	1.3	17	20	12	28	C	0.1475	29				0.1475	29	U				56
57	C	2.8	--	--	0	1	Detect	0	1.45	18	20	11	29	B	0.149	29	0.149	29	=							57
58	C	2.9	--	--	0	1	Detect	0	1.45	19	20	10	30	B	0.1495	29	0.1495	29	=							58
59	C	3.1	--	--	0	1	Detect	0	1.55	20	19	9	31	C	0.15	29				0.15	29	U				59
60	C	3.1	--	--	0	1	Detect	0	1.55	21	18	8	32	B	0.1505	29	0.1505	29	=							60
61	C	3.4	--	--	0	1	Detect	0	1.7	22	18	7	33	B	0.152125	29	0.152125	29	=							61
62	C	4.5	--	--	0	1	Detect	0	2.25	23	18	6	34	B	0.15625	29	0.15625	29	=							62
63	C	5.5	--	--	0	1	Detect	0	2.75	24	18	5	35	B	0.15825	29	0.15825	29	=							63
64	C	5.8	--	--	0	1	Detect	0	2.9	25	18	4	36	B	0.15935	29	0.15935	29	=							64
65	C	7.8	--	--	0	1	Detect	0	3.9	26	18	3	37	B	0.16625	29	0.16625	29	=							65
66	C	10.1	--	--	0	1	Detect	0	5.05	27	18	2	38	B	0.16625001	29	0.16625001	29	=							66

APPENDIX C

DEVELOPMENT OF SCREENING RISK-BASED CONCENTRATIONS, UPPER CONFIDENCE LIMITS OF MEAN CONCENTRATIONS AND JOHNSON & ETTINGER EVALUATIONS OF INDOOR AIR

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Appendix C1. Development of Trench Worker Risk-Based Concentrations (RBCs) and Comparison to EPA Region III Industrial RBCs

The Human Health Risk Assessment Work Plan (Mactec 2005, as modified) states that the screening of data from site media will include risk-based concentrations (RBCs) that are protective of a construction worker who works in a trench. The Virginia Department of Environmental Quality (VDEQ) Voluntary Remediation Program provides a prescribed method for evaluating sites including the use of EPA Region III residential soil RBCs to identify chemicals of potential concern (COPCs) (URL: http://www.deq.state.va.us/vrprisk/raguide.html#322). VDEQ also provides the method for evaluating a trench worker who may be exposed to groundwater.

At the Defense Supply Center Richmond (DSCR), Virginia, groundwater is evaluated as a separate operating unit (OU) such that soil is the only medium of interest at OU1 in the evaluation of the trench worker. While VDEQ has developed a model to estimate contaminant transfer from groundwater to a trench worker's air space, a similar model from soil is not available. Instead, development of soil RBCs that are protective of trench workers were based on a modified version of algorithms presented in EPA's *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (EPA 2002). The calculated trench worker RBCs include exposure through ingestion, dermal contact, and inhalation; EPA Region III RBCs only consider incidental ingestion. The model used for estimating the site-specific carcinogenic RBCs is shown below.

$$PRG_C = \frac{TCRxBWxAT}{EDxEFx\left[\left(CSF_oxIRSxFIxCF\right)+\left(CSF_oxSAxABSxAFxEVxCF\right)+\left(CSF_ixIRAxETx\left(\frac{1}{PEF}+\frac{1}{VF}\right)\right)\right]}$$

where:

PRG_C = Site-specific PRG for specific receptors (mg/kg)
TCR = Target cancer risk for exposure to carcinogenic chemicals (unitless)
BW = Body weight (kg)
AT = Carcinogenic averaging time (days)
ED = Exposure duration (years)
EF = Exposure frequency (days per year)
CSFo = Oral cancer slope factor for carcinogenic chemicals [(milligram per kilogram-day)$^{-1}$ (mg/kg-day)$^{-1}$]
IRS = Ingestion rate of soil (mg/day)
FI = Fraction ingestion from source (unitless)
CF = Conversion factor (kg/mg)
SA = Exposed skin surface area (square centimeters [cm^2]/event)
ABS = Dermal absorption factor (unitless)
AF = Adherence factor (milligrams per square centimeter [mg/cm^2])
EV = Event frequency (events per day)
CSFi = Inhalation cancer slope factor for carcinogenic chemicals [(mg/kg-day)$^{-1}$]
IRA = Inhalation rate (cubic meters [m^3]/hour)

ET = Exposure time (hours/day)
PEF = Particulate emission factor (cubic meters per kilogram [m^3/kg])
VF = Volatilization Factor (m^3/kg) [Note: the 1/VF factor is included only for volatile chemicals.]

A similar model is used to estimate the soil PRGs for non-carcinogenic chemicals. The model shown below was used for estimating the non-carcinogenic PRGs.

$$PRG = \frac{THQ \times BW \times AT}{\frac{IRS \times FI \times EF \times ED \times CF}{RfD_o} + \frac{SA \times AF \times ABS \times EF \times ED \times EV \times CF}{RfD_o} + \frac{IRA \times ET \times EF \times ED \times \left(1/VF + 1/PEF\right)}{RfD_i}}$$

where:

THQ = Target hazard quotient for exposure to non-carcinogenic chemicals (unitless)
RfDo = Oral reference dose for non-carcinogenic chemicals (mg/kg-day)
RfDi = Inhalation reference dose for non-carcinogenic chemicals (mg/kg-day)

The exposure parameters used in the soil PRG equations were taken primarily from VDEQ (Table C1-1).

Table C1-1. Exposure Factors for the Trench Worker

Parameter	Definition	Construction/ Utility Worker RME
IRS	Soil Ingestion Rate (mg/day)	480
FI	Fraction Ingestion from Source (unitless)	0.5
IRA	Inhalation Rate (m^3/hour)	0.83
PEF	Particulate Emission Factor (m^3/kg)	7.44E+06
SA	Exposed Surface Area (cm^2/event)	3,300
AF	Weighted Adherence Factor (mg/cm^2)	0.2
ABS	Absorption Factor (unitless)	Chemical-specific
ET	Exposure Time (hour/day)	4
EF	Exposure Frequency (days/year)	125
ED	Exposure Duration (year)	1
EV	Event Frequency (events/day)	1
CF	Conversion Factor (kg/mg)	1.00E-06
BW	Body Weight (kg)	70
AT	Averaging Time (days): Noncarcinogenic Carcinogenic	 365 25,550
TCR	Target Cancer Risk	1.00E-06
THQ	Target Hazard Quotient	1.0

Because the exposure duration of the trench worker is 1 year, subchronic toxicity values were used to assess non-carcinogenic hazards. All toxicity values were taken from VDEQ with the exception of aluminum. A subchronic oral reference dose of 2.0 E+00 milligrams per kilogram (mg/kg) was chosen for aluminum and is based on a subchronic minimal risk level (MRL) provided by the Agency of Toxic Substances and Disease Registry (July 1999).

Particulate emission factor (PEF) and volatilization factor (VF) are site-specific. The approved Human Health Risk Assessment Work Plan (Mactec 2005, as modified) determined the PEF value of 7.44 E+06. The algorithms used in deriving VFs follow the *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* and are presented below (Equation 5-14; EPA 2002):

$$VF = Q/C \times 1/F_D \times \frac{(3.14 \times D_A \times T)^{0.5}}{(2 \times \rho b \times D_A)} \times 10^{-4}\ m^2/cm^2$$

where

$$D_A = \frac{[(\theta a^{10/3} \times D_i \times H') + (\theta w^{10/3} \times Dw)]/n^2}{[(\rho b \times K_d) + \theta w + (\theta a \times H')]}$$

Q/C = $A \exp ((\ln Ac - B)^2 / C)$
A , B, C are constants specific for construction worker
(A = 2.4538, B = 17.566, C = 189.0426)

Ac = extent of site soil contamination (m^2)
Fd = 0.185 (unitless default factor from SSG)
D_A = apparent diffusivity (chemical-specific)
T = total time over which construction occurs (seconds)
ρ_b = dry soil bulk density (g/cm^3)
θ_a = air-filled porosity (L_{air}/L_{soil})
θ_w = water-filled porosity (L_{water}/L_{soil})
D_i = diffusivity in air (cm^2/sec) (chemical-specific)
D_w = diffusivity in water (cm^2/sec) (chemical-specific)
H' = unitless Henry's Law constant (chemical-specific)
K_d = soil-water partition coefficient (cm^3/g) (chemical-specific)
[$K_d = K_{oc} \times f_{oc}$]
K_{oc} = soil-organic carbon partition coefficient (cm^3/g) (chemical-specific)
f_{oc} = fraction of organic carbon in soil (g/g)

Default values for relevant soil geophysical parameters are available from the *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (EPA 2002). These values can be applied to all soil types (Table C1-2).

Table C1-2. Soil Parameters for Estimating Apparent Diffusivity and Volatilization Factor

Parameter	Value	Reference
Construction Area	0.5 acres	SSG default assumption
Construction Duration	1 year	VDEQ default
Dry Bulk Soil Density	1.5	SSG default assumption
Total Soil Porosity	0.434	SSG default assumption

Air-filled Porosity	0.284	SSG default assumption
Water-filled Porosity	0.15	SSG default assumption
Kd (= Koc x foc)	Chemical-specific	Based on a fraction of organic carbon default value of 0.006 (SSG)

Using the above assumptions, VF for each volatile COPC is presented below (Table C1-3). These values are used in determining inhalation-based RBCs for construction workers.

Table C1-3
Volitilization Factors for Volatile Chemicals Applicable to Construction Trench Workers
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Chemical	VOC	TOX	Water Solubility (mg/L)	Henry's Law Constant (H) (atm-m³/mol)	Henry's Law Constant (H') (unitless)	Soil Organic Carbon Partition (K_{oc}) (cm³/g)	Diffusivity in Air (D_i) (cm²/s)	Diffusivity in Water (D_w) (cm²/s)	Soil/Water Partition Coefficient (K_d) (cm³/g)	Apparent Diffusivity (D_A) (cm²/s)	Soil-to-Air Volatization Factor (VF) (m³/kg)	Soil Saturation Limit (C_{sat}) (mg/kg)
Acetone	x		1,000,000	3.90E-05	1.60E-03	1.80E+01	1.00E-01	1 10E-05	1.08E-01	4.14E-05	3.99E+03	208,303
Benzene	x	x	1,800	5.50E-03	2.26E-01	5.89E+01	8.80E-02	9.80E-06	3.53E-01	2.14E-03	5.55E+02	893
Bromodichloromethane	x		6,735	1.60E-03	6.56E-02	5.10E+01	8.00E-02	1.06E-05	3.06E-01	6.71E-04	9.90E+02	2,818
Bromoform	x	x	3,010	5.35E-04	2.19E-02	5.20E+01	1.49E-02	1.03E-05	3.12E-01	4.22E-05	3.95E+03	1,253
Bromomethane	x	x	15,220	6 24E-03	2.56E-01	1.06E+02	1.00E-01	1.20E-05	6.36E-01	1.75E-03	6.14E+02	11,939
Carbon disulfide	x	x	1,185	3.03E-02	1.24E+00	6.50E+01	1.10E-01	1.00E-05	3.90E-01	1.01E-02	2.55E+02	859
Carbon tetrachloride	x	x	804.8	1.60E-02	6.56E-01	1.10E+02	7.98E-02	8.80E-06	6.60E-01	3.17E-03	4.56E+02	712
Chlorobenzene	x	x	497	3.77E-03	1.55E-01	2.75E+02	7.20E-02	6.80E-06	1.65E+00	3.35E-04	1.40E+03	884
Chloroform	x	x	7,950	3.67E-03	1.50E-01	4.50E+01	8.87E-02	1.00E-05	2.70E-01	1.79E-03	6 06E+02	3,168
Chloromethane	x	x	5,325	8.82E-03	3 62E-01	7.40E+01	1.09E-01	6.50E-06	4.44E-01	3.44E-03	4.37E+02	3,261
Dibromochloromethane	x		4,000	1.00E-03	4.10E-02	8.32E+01	1.96E-02	1.05E-05	4.99E-01	7.10E-05	3.05E+03	2,427
1,2-Dichlorobenzene	x	x	83.96	1.90E-03	7.79E-02	2.80E+02	1.30E-01	7.90E-06	1.68E+00	3.01E-04	1.48E+03	151
1,3-Dichlorobenzene	x		123	3.59E-03	1.47E-01	1.70E+03	1.30E-01	7.90E-06	1.02E+01	9.90E-05	2.58E+03	1,270
1,4-Dichlorobenzene	x	x	81.3	2 40E-03	9.84E-02	6.00E+02	1.30E-01	7.90E-06	3.60E+00	1.84E-04	1.89E+03	302
1,1-Dichloroethane	x	x	2,250	2.61E-02	1.07E+00	5.90E+01	9.00E-02	1.05E-05	3.54E-01	7.85E-03	2.90E+02	1,477
1,2-Dichloroethane (EDC)	x	x	8,608	9.80E-04	4.02E-02	3.20E+01	9.10E-02	9.90E-06	1.92E-01	6.53E-04	1.00E+03	2,579
1,1-Dichloroethylene	x	x	2,250	2.61E-02	1 07E+00	3.43E+02	7.91E-02	1.04E-05	2.06E+00	1.92E-03	5.86E+02	5,311
1,2-Dichloroethylene (cis)	x		800	7.50E-03	3.08E-01	3.16E+01	7.91E-02	1.13E-05	1.90E-01	3.74E-03	4.19E+02	278
1,2-Dichloroethylene (trans)	x		6,300	6.74E-03	2.76E-01	5.89E+01	7.91E-02	1.13E-05	3.53E-01	2.31E-03	5.33E+02	3,185
1,2-Dichloroethylene (mixture)	x		3,500	4.08E-03	1.67E-01	3.50E+01	7.91E-02	1.13E-05	2.10E-01	2.07E-03	5.63E+02	1,196
1,2-Dichloropropane	x	x	2,700	2.80E-03	1.15E-01	2.70E+01	7.98E-02	8.73E-06	1.62E-01	1.73E-03	6.17E+02	766
Ethylbenzene	x	x	206	8.43E+00	3.46E+02	2.50E+02	7.50E-02	7.80E-06	1.50E+00	2.07E-02	1.78E+02	13,810
Methylene chloride	x	x	13,030	2.19E-03	8.98E-02	2.80E+01	1.01E-01	1.17E-05	1.68E-01	1.70E-03	6.22E+02	3,714
Methyl ethyl ketone	x	x	223,000	5.60E-05	2.30E-03	5.20E+00	8.95E-02	9.80E-06	3.12E-02	8.40E-05	2.80E+03	29,355
Methyl isobutyl ketone	x	x	19,000	1.38E-04	5.66E-03	1.90E+01	7.50E-02	7.80E-06	1.14E-01	1.06E-04	2.49E+03	4,086
Methyl styrene (mixture)	x	x	300	2.30E-03	9.43E-02	3.60E+02	7.12E-02	8.00E-06	2.16E+00	1.58E-04	2.04E+03	683
Nitrobenzene	x	x	2,090	2 40E-05	9.84E-04	6.46E+01	7.62E-02	8 60E-06	3.88E-01	8.34E-06	8.89E+03	1,019
m-Nitrotoluene	x		498	5 40E-05	2.21E-03	6.46E+01	7.60E-02	8.60E-06	3.88E-01	1.86E-05	5.95E+03	243
o-Nitrotoluene	x		652	4.50E-05	1.85E-03	6.46E+01	7.60E-02	8.60E-06	3.88E-01	1.55E-05	6.52E+03	318
p-Nitrotoluene	x		442	5 00E-05	2.05E-03	6.46E+01	7.60E-02	8.60E-06	3.88E-01	1.72E-05	6.19E+03	216
Styrene	x	x	320	2.83E-03	1.16E-01	9.20E+02	7.10E-02	8 00E-06	5.52E+00	7.81E-05	2.90E+03	1,805
1,1,2,2-Tetrachloroethane	x	x	2,962	4.55E-04	1.87E-02	7.90E+02	7.29E-02	7 90E-06	4.74E+00	1.50E-05	6.62E+03	14,347
Tetrachloroethylene (PCE)	x	x	200	1.84E-02	7.54E-01	2.38E+02	7.20E-02	8.20E-06	1.43E+00	1.74E-03	6.15E+02	334
Toluene	x	x	526	6.60E-03	2.71E-01	1.82E+02	9.90E-04	8.60E-06	1.09E+00	1.16E-05	7.54E+03	654
1,2,4-Trichlorobenzene	x	x	49	1.41E-03	5.78E-02	1.43E+03	6.21E-02	8.23E-06	8.58E+00	2.21E-05	5.46E+03	426
1,1,1-Trichloroethane	x	x	1,495	1.72E-02	7 05E-01	1.79E+02	7.97E-02	8.80E-06	1.07E+00	2.30E-03	5.35E+02	1,955
1,1,2-Trichloroethane	x	x	4,420	9.13E-04	3.74E-02	7.90E+01	7.97E-02	8.80E-06	4.74E-01	2.75E-04	1.55E+03	2,568
Trichloroethylene (TCE)	x	x	1,100	1.03E-02	4.22E-01	1.66E+02	7.90E-02	9.10E-06	9.96E-01	1.52E-03	6.58E+02	1,294
Trichlorofluoromethane	x	x	1,240	1.73E+00	7.09E+01	1 59E+02	8.70E-02	1.30E-05	9.51E-01	2.28E-02	1.70E+02	17,956
1,2,3-Trichloropropane	x		2,700	3.18E-04	1.30E-02	5.10E+01	7.10E-02	7.90E-06	3.06E-01	1.21E-04	2.33E+03	1,103
Vinyl chloride	x	x	8,800	2.70E-02	1.11E+00	1.35E+02	1.07E-01	1.23E-06	8.10E-01	5.68E-03	3.40E+02	9,852
m-Xylene	x	x	200	6.90E-03	2.83E-01	2.40E+02	6.90E-03	7.80E-06	1.44E+00	6.56E-05	3.17E+03	319
o-Xylene	x	x	178	5.19E-03	2.13E-01	1.29E+02	4.90E-03	1.00E-05	7.74E-01	6.11E-05	3.28E+03	163
p-Xylene	x	x	162	7.60E-03	3.12E-01	2.60E+02	7.00E-03	8.44E-06	1.56E+00	6.79E-05	3.11E+03	279
Xylene (total)	x		175	6 73E-03	2.76E-01	3.68E+02	8.00E-02	8.40E-06	2.21E+00	5.01E-04	1.15E+03	413

Since the anticipated future use at OU1 of the DSCR is industrial, EPA Region III industrial soil RBCs were evaluated for screening purposes. The lower value between the calculated trench worker RBCs and EPA Region III industrial RBCs was chosen for screening site data in the identification of COPCs (Table C1-4). A comparison shows that Region III industrial RBCs are lower than calculated trench worker RBCs for carcinogenic chemicals but are higher for most non-carcinogenic chemicals. The reason for non-carcinogens to have lower trench worker RBCs is the higher chemical intake over the lower averaging time.

Table C1-4
Comparison of EPA Region III Industrial Soil RBCs and Caluculated Trench Worker RBCs
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Chemical	VOC	EPA Region III Industrial PRG (mg/kg)	Basis of PRG	Construction Trench Worker		Soil Screening Value (mg/kg)
				Adult NC PRG (mg/kg)	Adult Cancer PRG (mg/kg)	
Acetone	x	9.20E+05	NC	2.27E+06	---	9.20E+05
Aldrin		1.70E-01	C	6.81E+00	9.35E-01	1.70E-01
Aluminum*		1.00E+06	NC	2.28E+05	---	2.28E+05
Ammonia				1.31E+07	---	1.31E+07
Antimony and compounds		4.10E+02	NC	2.41E+02	---	2.41E+02
Arsenic				6.81E+01	---	6.81E+01
Arsenic as carcinogen		1.90E+00	C	---	3.61E+01	1.90E+00
Barium and compounds		2.00E+05	NC	4.64E+04	---	4.64E+04
Benzene	x	5.20E+01	C	2.22E+02	6.78E+01	5.20E+01
Benzoic acid		4.10E+06	NC	2.67E+06	---	2.67E+06
Benzyl alcohol		3.10E+05	NC	6.68E+05	---	3.10E+05
Beryllium and compounds		2.00E+03	NC	1.61E+03	3.82E+03	1.61E+03
bis(2-Ethylhexyl)phthalate (DEHP)		2.00E+02	C	4.54E+03	1.13E+03	2.00E+02
Boron (and borates)		2.00E+05	NC	1.60E+05	---	1.60E+05
Bromodichloromethane	x	4.60E+01	C	4.54E+03	5.43E+01	4.60E+01
Bromoform	x	3.60E+02	C	4.54E+04	1.38E+03	3.60E+02
Bromomethane	x	1.40E+03	NC	3.18E+02	---	3.18E+02
Butyl benzyl phthalate		1.50E+03	C	4.54E+05	---	1.50E+03
Cadmium and compounds[b]		1.00E+03	NC	7.28E+02	5.09E+03	7.28E+02
Carbon disulfide	x	1.00E+05	NC	2.76E+03	---	2.76E+03
Carbon tetrachloride	x	2.20E+01	C	1.44E+02	2.87E+01	2.20E+01
Chlordane (Technical)		8.20E+00	C	1.36E+01	4.54E+01	8.20E+00
Chlorobenzene	x	2.00E+04	NC	1.11E+03	---	1.11E+03
Chloroform	x	1.00E+04	NC	4.25E+02	3.22E+01	3.22E+01
Chloromethane	x	--		7.00E+02	6.48E+01	6.48E+01
2-Chlorophenol		5.10E+03	NC	1.14E+04	---	5.10E+03
Chromium III and compounds		1.50E+06	NC	1.28E+06	---	1.28E+06
Chromium VI and compounds		3.10E+03	NC	7.41E+03	7.82E+02	7.82E+02
Chromium (Total)				7.19E+03	7.63E+02	7.63E+02
Cobalt*		2.00E+04	NC	1.66E+03	---	1.66E+03
Copper and compounds		4.10E+04	NC	9.08E+03	---	9.08E+03
Cyanide, free		2.00E+04	NC	4.54E+03	---	4.54E+03
Dalapon		3.10E+04	NC	2.00E+04	---	2.00E+04
2,4-D (2,4-Dichlorophenoxyacetic acid)		1.00E+04	NC	7.49E+03	---	7.49E+03
DDD		1.20E+01	C	4.54E+02	6.62E+01	1.20E+01
DDE		8.40E+00	C	---	4.67E+01	8.40E+00
DDT		8.40E+00	C	1.14E+02	4.67E+01	8.40E+00
Dibenzofuran*		2.00E+03	NC	4.54E+02	---	4.54E+02
Dibromochloromethane	x	3.40E+01	C	4.54E+04	8.56E+01	3.40E+01
Dibutyl phthalate		1.00E+05	NC	2.27E+05	---	1.00E+05
1,2-Dichlorobenzene	x	9.20E+04	NC	1.47E+04	---	1.47E+04
1,3-Dichlorobenzene	x	3.10E+03	NC	6.81E+02	---	6.81E+02
1,4-Dichlorobenzene	x	1.20E+02	C	6.30E+03	2.38E+02	1.20E+02
1,1-Dichloroethane	x	2.00E+05	NC	2.37E+04	---	2.37E+04
1,2-Dichloroethane (EDC)	x	3.10E+01	C	4.10E+03	3.74E+01	3.10E+01
1,1-Dichloroethylene	x	5.10E+04	NC	1.74E+03	---	1.74E+03
1,2-Dichloroethylene (cis)*	x	1.00E+04	NC	2.27E+04	---	1.00E+04
1,2-Dichloroethylene (trans)	x	2.00E+04	NC	5.51E+02	---	5.51E+02
1,2-Dichloroethylene (mixture)	x	9.20E+03	NC	2.04E+03	---	2.04E+03
1,2-Dichloropropane	x	4.20E+01	C	1.41E+02	3.35E+01	3.35E+01
Dieldrin		1.80E-01	C	1.14E+01	9.93E-01	1.80E-01
Diethyl phthalate		8.20E+05	NC	1.82E+06	---	8.20E+05
2,4-Dimethylphenol		2.00E+04	NC	4.54E+04	---	2.00E+04
2,6-Dimethylphenol		6.10E+02	NC	4.01E+03	---	6.10E+02
3,4-Dimethylphenol		1.00E+03	NC	6.68E+03	---	1.00E+03
Dimethyl phthalate*		1.00E+07	NC	2.27E+06	---	2.27E+06
1,2-Dinitrobenzene*		1.00E+02	NC	6.68E+01	---	6.68E+01
1,3-Dinitrobenzene		1.00E+02	NC	6.68E+01	---	6.68E+01
1,4-Dinitrobenzene*		1.00E+02	NC	6.68E+01	---	6.68E+01
2,4-Dinitrophenol		2.00E+03	NC	4.54E+02	---	4.54E+02
Dinitrotoluene mixture		4.20E+00	C	---	6.87E+01	4.20E+00
2-Amino-4,6-dinitrotoluene				9.35E+03	---	9.35E+03
4-Amino-2,6-dinitrotoluene				6.68E+03	---	6.68E+03
2,4-Dinitrotoluene		2.00E+03	NC	4.54E+02	---	4.54E+02
2,6-Dinitrotoluene		1.00E+03	NC	2.27E+03	---	1.00E+03
Dinoseb		1.00E+03	NC	6.68E+02	---	6.68E+02
di-n-Octyl phthalate*		4.10E+04	NC	9.08E+03	---	9.08E+03

Table C1-4
Comparison of EPA Region III Industrial Soil RBCs and Caluculated Trench Worker RBCs
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Chemical	VOC	EPA Region III Industrial PRG (mg/kg)	Basis of PRG	Construction Trench Worker		Soil Screening Value (mg/kg)
				Adult NC PRG (mg/kg)	Adult Cancer PRG (mg/kg)	
Endosulfan		6.10E+03	NC	1.36E+03	---	1.36E+03
Endrin		3.10E+02	NC	6.81E+01	---	6.81E+01
Ethylbenzene	x	1.00E+05	NC	2.76E+03	---	2.76E+03
Fluorine (soluble fluoride)		6.10E+04	NC	4.01E+04	---	4.01E+04
HCH (alpha)		4.50E-01	C	1.14E+02	2.52E+00	4.50E-01
HCH (beta)		1.60E+00	C	4.54E+01	8.83E+00	1.60E+00
HCH (gamma) Lindane		2.20E+00	C	6.81E+02	1.22E+01	2.20E+00
HCH-technical		1.60E+00	C	---	2.98E+01	1.60E+00
Heptachlor		6.40E-01	C	1.14E+02	3.53E+00	6.40E-01
Heptachlor epoxide		3.10E-01	C	2.95E+00	1.75E+00	3.10E-01
Hexachlorobenzene		1.80E+00	C	1.82E+02	9.93E+00	1.80E+00
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)		2.60E+01	C	2.00E+03	4.24E+02	2.60E+01
Hydrazine/Hydrazine sulfate		9.50E-01	C	---	1.55E+01	9.50E-01
Iron		3.10E+05	NC	6.81E+04	---	6.81E+04
Isophorone		3.00E+03	C	4.54E+05	1.67E+04	3.00E+03
Manganese and compounds [c]		2.00E+04	NC	4.83E+03	---	4.83E+03
Mercury (inorganic)		3.10E+02	NC	2.03E+03	---	3.10E+02
Methoxychlor		5.10E+03	NC	1.14E+03	---	1.14E+03
2-Methyl-4-chlorophenoxyacetic acid (MCPA)		5.10E+02	NC	3.34E+02	---	3.34E+02
2-(2-Methyl-4-chlorophenoxy)propionic acid (MCPP)		1.00E+03	NC	6.68E+03	---	1.00E+03
Methylene chloride	x	3.80E+02	C	9.63E+03	9.23E+02	3.80E+02
Methyl ethyl ketone (MEK or 2-butanone)	x	6.10E+05	NC	1.58E+05	---	1.58E+05
Methyl isobutyl ketone	x			7.65E+04	---	7.65E+04
2-Methylphenol (o-cresol)		5.10E+04	NC	1.14E+05	---	5.10E+04
3-Methylphenol (m-cresol)		5.10E+04	NC	1.14E+05	---	5.10E+04
4-Methylphenol (p-cresol)		5.10E+03	NC	1.14E+03	---	1.14E+03
Methyl styrene (mixture)	x	6.10E+03	NC	1.12E+03	---	1.12E+03
Molybdenum		5.10E+03	NC	4.26E+03	---	4.26E+03
Nickel and compounds		2.00E+04	NC	1.53E+04	---	1.53E+04
Nitrate		1.60E+06	NC	1.36E+06	---	1.36E+06
Nitrite		1.00E+05	NC	8.52E+04	---	8.52E+04
2-Nitroaniline*		3.10E+03	NC	6.50E+02	---	6.50E+02
3-Nitroaniline		1.40E+02	C	6.81E+01	7.57E+02	6.81E+01
4-Nitroaniline		1.40E+02	C	6.80E+02	7.57E+02	1.40E+02
Nitrobenzene	x	5.10E+02	NC	2.45E+02	---	2.45E+02
N-nitrosodiethylamine		1.90E-02	C	---	3.11E-01	1.90E-02
N-nitrosodimethylamine		5.60E-02	C	5.34E+00	9.16E-01	5.60E-02
N-Nitrosodiphenylamine		5.80E+02	C	4.54E+03	3.24E+03	5.80E+02
N-nitroso-di-n-propylamine		4.10E-01	C	---	2.27E+00	4.10E-01
m-Nitrotoluene*	x	2.00E+04	NC	8.52E+04	---	2.00E+04
o-Nitrotoluene	x	1.00E+04	NC	8.52E+04	8.30E+01	8.30E+01
p-Nitrotoluene*	x	1.70E+02	C	8.52E+04	1.08E+03	1.70E+02
Octahydro-1357-tetranitro-1357-tetrazocine (HMX)		5.10E+04	NC	3.34E+04	---	3.34E+04
Pentachlorophenol		2.40E+01	C	6.81E+03	1.32E+02	2.40E+01
Perchlorate		7.20E+02	NC	8.49E+01	---	8.49E+01
Phenol		3.10E+05	NC	6.81E+04	---	6.81E+04
Polychlorinated biphenyls (PCBs):		1.40E+00	C	---	2.15E+01	1.40E+00
Aroclor 1016		4.10E+01	C	1.59E+01	2.27E+02	1.59E+01
Aroclor 1254		4.10E+00	C	1.14E+01	7.94E+00	4.10E+00
Aroclor 1260		4.10E+00	C	1.14E+02	7.94E+00	4.10E+00
Polycyclic aromatic hydrocarbons (PAHs):						0.00E+00
Acenaphthene		6.10E+04	NC	1.36E+05	---	6.10E+04
Anthracene		3.10E+05	NC	6.81E+05	---	3.10E+05
Benz[a]anthracene		3.90E+00	C	---	2.18E+01	3.90E+00
Benzo[b]fluoranthene		3.90E+00	C	---	2.18E+01	3.90E+00
Benzo[k]fluoranthene		3.90E+01	C	---	2.18E+02	3.90E+01
Benzo[a]pyrene		3.90E-01	C	---	2.18E+00	3.90E-01
Carbazole		1.40E+02	C	---	7.94E+02	1.40E+02
Chrysene		3.90E+02	C	---	2.18E+03	3.90E+02
Dibenz[ah]anthracene		3.90E-01	C	---	2.18E+00	3.90E-01
Fluoranthene		4.10E+04	NC	9.08E+04	---	4.10E+04
Fluorene		4.10E+04	NC	9.08E+04	---	4.10E+04
Indeno[1,2,3-cd]pyrene		3.90E+00	C	---	2.18E+01	3.90E+00
Naphthalene		2.00E+04	NC	4.49E+03	---	4.49E+03
Pyrene		3.10E+04	NC	6.81E+04	---	3.10E+04
Selenium		5.10E+03	NC	1.14E+03	---	1.14E+03
Silver and compounds		5.10E+03	NC	3.84E+03	---	3.84E+03

Table C1-4
Comparison of EPA Region III Industrial Soil RBCs and Caluculated Trench Worker RBCs
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Chemical	VOC	EPA Region III Industrial PRG (mg/kg)	Basis of PRG	Construction Trench Worker		Soil Screening Value (mg/kg)
				Adult NC PRG (mg/kg)	Adult Cancer PRG (mg/kg)	
Styrene	x	2.00E+05	NC	3.51E+04	---	3.51E+04
2,3,7,8-TCDD (dioxin)		1.90E-05	C	---	1.06E-04	1.90E-05
1,1,2,2-Tetrachloroethane	x	1.40E+01	C	1.36E+04	3.93E+02	1.40E+01
Tetrachloroethylene (PCE)	x	5.30E+00	C	4.30E+03	2.39E+01	5.30E+00
Thallium and compounds		7.20E+01	NC	1.59E+01	---	1.59E+01
Toluene	x	8.20E+04	NC	2.70E+05	---	8.20E+04
1,2,4-Trichlorobenzene	x	1.00E+04	NC	2.24E+03	---	2.24E+03
1,1,1-Trichloroethane	x	2.90E+05	NC	1.56E+04	---	1.56E+04
1,1,2-Trichloroethane	x	5.00E+01	C	9.08E+03	8.35E+01	5.00E+01
Trichloroethylene (TCE)	x	7.20E+00	C	5.83E+01	6.02E+00	6.02E+00
Trichlorofluoromethane	x	3.10E+05	NC	1.85E+04	---	1.85E+04
1,2,3-Trichloropropane	x	1.40E+00	C	2.00E+02	4.29E+00	1.40E+00
1,3,5-Trinitrobenzene		3.10E+04	NC	3.34E+02	---	3.34E+02
Trinitrophenylmethylnitramine				6.68E+04	---	6.68E+04
2,4,6-Trinitrotoluene		9.50E+01	C	3.34E+02	1.56E+03	9.50E+01
Vanadium		1.00E+03	NC	7.95E+02	---	7.95E+02
Vinyl chloride	x	4.00E+00	C	3.19E+02	1.72E+01	4.00E+00
m-Xylene	x			5.59E+03	---	5.59E+03
o-Xylene	x			5.79E+03	---	5.79E+03
p-Xylene	x			5.49E+03	---	5.49E+03
Xylene (mixed)	x	2.00E+05	NC	1.96E+03	---	1.96E+03
Zinc		3.10E+05	NC	6.81E+04	---	6.81E+04

Notes:
a PRG = Preliminary remediation goal.
b Cadmium Region 3 PRG based upon food consumption.
c Manganese Region 3 PRG based upon Nonfood consumption.

EPA Region 3 Industrial PRGs from October 2005 EPA Region III RBC Table.

* Constituents withdrawn from Region III RBC Table in October 2005. Values are consistent with EPA Region III April 2005 RBC Table.

Table C2.
Calculation of Upper Confidence Limit of the Mean COPC Concentration
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Variable name	Detections	NumObs	Frequency of Detection	Frequency of Non-detection	Minimum Test Value (mg/kg)	Maximum Test Value (mg/kg)	Maximum Detection (mg/kg)	Mean	95% UCL	Distribution	Method	EPC
Surface Soil (0-3 feet bgs)												
Arsenic	22	22	100%	0%	1.2	132	132	14.3	74.7	Non-parametric	Chebyshev (Mean,Sd)	74.7102
Iron	23	23	100%	0%	8560	43500	43500	20611	23445	gamma	Approximate gamma	23445.2
Thallium	19	23	83%	17%	0.28	10.1	10.1	2.04	--	--	--	10.1
Benzo(a)anthracene	6	23	26%	74%	0.0923	10.5	10.5	0.599	--	--	--	10.5
Benzo(a)pyrene	8	23	35%	65%	0.0591	9.6	9.6	0.560	--	--	--	9.6
Benzo(b)fluoranthene	9	23	39%	61%	0.095	9.7	9.7	0.616	--	--	--	9.7
Dibenzo(a,h)anthracene	1	23	4%	96%	0.095	1.85	1.85	0.204	--	--	--	1.85
Naphthalene	1	23	4%	96%	0.095	3.5	3.5	0.276	--	--	--	3.5
Chloroform	1	23	4%	96%	0.002	0.0031	0.002	0.003	--	--	--	0.0031
Trichloroethylene	1	23	4%	96%	0.002	0.0031	0.002	0.003	--	--	--	0.0031
bis(2-Ethylhexyl)phthalate	1	23	4%	96%	0.095	0.205	0.12	0.129	--	--	--	0.205
Subsurface Soil (0-6 feet bgs)												
Arsenic	28	28	100%	0%	1.2	132	132	11.7	59.9	Non-parametric	Chebyshev (Mean,Sd)	59.89316
Iron	31	31	100%	0%	3090	43500	43500	18206	20662	normal	student's t	20661.96
Thallium	26	30	87%	13%	0.28	10.1	10.1	2.22	3.04	gamma	approximate gamma	3.041382
Benzo(a)anthracene	6	31	19%	81%	0.0923	10.5	10.5	0.496	--	--	--	10.5
Benzo(a)pyrene	8	31	26%	74%	0.0591	9.6	9.6	0.467	--	--	--	9.6
Benzo(b)fluoranthene	9	31	29%	71%	0.095	9.7	9.7	0.508	--	--	--	9.7
Dibenzo(a,h)anthracene	1	31	3%	97%	0.095	1.85	1.85	0.203	--	--	--	1.85
Naphthalene	1	31	3%	97%	0.095	3.5	3.5	0.256	--	--	--	3.5
Chloroform	1	31	3%	97%	0.002	0.0031	0.002	0.003	--	--	--	0.0031
Trichloroethylene	1	31	3%	97%	0.002	0.0031	0.002	0.003	--	--	--	0.0031
bis(2-Ethylhexyl)phthalate	3	31	10%	90%	0.086	1.5	1.5	0.186	--	--	--	1.5

bgs = below ground surface
-- = too few detections to calculate UCL

Table C3-1
Estimated Indoor TCE Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

SL-ADV
Version 3.1; 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
79016	2.00E+00	Trichloroethylene

MORE ↓

ENTER Average soil temperature T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) L_b (cm)	ENTER Totals must add up to value of L_t (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	16	91	16	0	0	LS		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum A soil organic carbon fraction, f_{oc}^A (unitless)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum B soil organic carbon fraction, f_{oc}^B (unitless)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)	ENTER Stratum C soil organic carbon fraction, f_{oc}^C (unitless)
LS	1.62	0.39	0.076	0.002										

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	244	0.1	0.5	

ENTER Averaging time for carcinogens AT_C (yrs)	ENTER Averaging time for noncarcinogens AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Table C3-1
Estimated Indoor TCE Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Exposure duration, τ (sec)	Source-building separation, LT (cm)	Stratum A soil air-filled porosity, θαA (cm3/cm3)	Stratum B soil air-filled porosity, θαB (cm3/cm3)	Stratum C soil air-filled porosity, θαX (cm3/cm3)	Stratum A effective total fluid saturation, Ste (cm3/cm3)	Stratum A soil intrinsic permeability, ki (cm2)	Stratum A soil relative air permeability, krg (cm2)	Stratum A soil effective vapor permeability, kv (cm2)	Floor-wall seam perimeter, Xcrack (cm)	Initial soil concentration used, CR (mg/kg)	Bldg. ventilation rate, Qbuilding (cm3/s)
7.88E+08	1	0.314	ERROR	ERROR	0.079	1.62E-08	0.957	1.55E-08	4,000	2.00E+00	3.39E+04

Area of enclosed space below grade, AB (cm2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Zcrack (cm)	Enthalpy of vaporization at ave. soil temperature, ΔHϖ,TΣ (cal/mol)	Henry's law constant at ave. soil temperature, HTS (atm-m3/mol)	Henry's law constant at ave. soil temperature, H'TS (unitless)	Vapor viscosity at ave. soil temperature, μTΣ (g/cm-s)	Stratum A effective diffusion coefficient, DeffA (cm2/s)	Stratum B effective diffusion coefficient, DeffB (cm2/s)	Stratum C effective diffusion coefficient, DeffC (cm2/s)	Total overall effective diffusion coefficient, DeffT (cm2/s)	Diffusion path length, Ld (cm)	Convection path length, Lp (cm)
1.06E+06	3.77E-04	15	8,557	4.78E-03	2.06E-01	1.75E-04	1.10E-02	0.00E+00	0.00E+00	1.10E-02	1	15

Soil-water partition coefficient, Kd (cm3/g)	Source vapor conc., Csource (mg/m3)	Crack radius, rcrack (cm)	Average vapor flow rate into bldg., Qsoil (cm3/s)	Crack effective diffusion coefficient, Dcrack (cm2/s)	Area of crack, Acrack (cm2)	Exponent of equivalent foundation Peclet number, exp(Pef) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., Cbuilding (mg/m3)	Finite source β τερμ (unitless)	Finite source ψ τερμ (sec)-1	Time for source depletion, τΔ (sec)	Exposure duration > time for source depletion (YES/NO)
3.32E-01	9.83E+02	0.10	1.56E+01	1.10E-02	4.00E+02	2.83E+15	NA	NA	7.46E+02	3.33E-03	1.77E+07	YES

Finite source indoor attenuation coefficient, <a> (unitless)	Mass limit bldg. conc., Cbuilding (μg/m^3)	Finite source bldg. conc., Cbuilding (μg/m^3)	Final finite source bldg. conc., Cbuilding (μg/m^3)	Unit risk factor, URF (μg/m^3)$^{-1}$	Reference conc., RfC (mg/m^3)
NA	9.64E-03	NA	9.64E-03	1.1E-04	4.0E-02

END

Table C3-2
Estimated Indoor Chloroform Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

SL-ADV
Version 3.1; 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES: X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
67663	2.00E+00	Chloroform

MORE ↓

ENTER Average soil temperature T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown L_b (cm)	ENTER Totals must add up to value of L_t (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	16	91	16	0	0	LS		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum A soil organic carbon fraction, f_{oc}^A (unitless)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum B soil organic carbon fraction, f_{oc}^B (unitless)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)	ENTER Stratum C soil organic carbon fraction, f_{oc}^C (unitless)
LS	1.62	0.39	0.076	0.002										

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length; L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	244	0.1	0.5	

ENTER Averaging time for carcinogens AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Table C3-2
Estimated Indoor Chloroform Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Exposure duration, τ (sec)	Source-building separation, LT (cm)	Stratum A soil air-filled porosity, θαA (cm3/cm3)	Stratum B soil air-filled porosity, θαB (cm3/cm3)	Stratum C soil air-filled porosity, θαX (cm3/cm3)	Stratum A effective total fluid saturation, Ste (cm3/cm3)	Stratum A soil intrinsic permeability, ki (cm2)	Stratum A soil relative air permeability, krg (cm2)	Stratum A soil effective vapor permeability, kv (cm2)	Floor-wall seam perimeter, Xcrack (cm)	Initial soil concentration used, CR (mg/kg)	Bldg. ventilation rate, Qbuilding (cm3/s)
7.88E+08	1	0.314	ERROR	ERROR	0.079	1.62E-08	0.957	1.55E-08	4.000	2.00E+00	3.39E+04

Area of enclosed space below grade, AB (cm2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Zcrack (cm)	Enthalpy of vaporization at ave. soil temperature, ΔHϖ,TΣ (cal/mol)	Henry's law constant at ave. soil temperature, HTS (atm-m3/mol)	Henry's law constant at ave. soil temperature, H'TS (unitless)	Vapor viscosity at ave. soil temperature, μTΣ (g/cm-s)	Stratum A effective diffusion coefficient, DeffA (cm2/s)	Stratum B effective diffusion coefficient, DeffB (cm2/s)	Stratum C effective diffusion coefficient, DeffC (cm2/s)	Total overall effective diffusion coefficient, DeffT (cm2/s)	Diffusion path length, Ld (cm)	Convection path length, Lp (cm)
1.06E+06	3.77E-04	15	7,554	1.86E-03	8.02E-02	1.75E-04	1.44E-02	0.00E+00	0.00E+00	1.44E-02	1	15

Soil-water partition coefficient, Kd (cm3/g)	Source vapor conc., Csource (mg/m3)	Crack radius, rcrack (cm)	Average vapor flow rate into bldg., Qsoil (cm3/s)	Crack effective diffusion coefficient, Dcrack (cm2/s)	Area of crack, Acrack (cm2)	Exponent of equivalent foundation Peclet number, exp(Pef) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., Cbuilding (mg/m3)	Finite source β τερμ (unitless)	Finite source ψ τερμ (sec)-1	Time for source depletion, τΔ (sec)	Exposure duration > time for source depletion (YES/NO)
7.96E-02	1.13E+03	0.10	1.56E+01	1.44E-02	4.00E+02	5.47E+11	NA	NA	9.82E+02	5.03E-03	1.52E+07	YES

Finite source indoor attenuation coefficient, <a> (unitless)	Mass limit bldg. conc., Cbuilding (μg/m^3)	Finite source bldg. conc., Cbuilding (μg/m^3)	Final finite source bldg. conc., Cbuilding (μg/m^3)	Unit risk factor, URF (μg/m^3)$^{-1}$	Reference conc., RfC (mg/m^3)
NA	9.64E-03	NA	9.64E-03	2.3E-05	NA

END

Table C3-3
Estimated Indoor Benzo(b)fluoranthene Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

SL-ADV
Version 3.1; 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [x]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
205992	9.70E+03	Benzo(b)fluoranthene

MORE ↓

ENTER Average soil temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) L_b (cm)	ENTER Totals must add up to value of L_t (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	16	91	16	0	0	LS		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum A soil organic carbon fraction, f_{oc}^A (unitless)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum B soil organic carbon fraction, f_{oc}^B (unitless)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)	ENTER Stratum C soil organic carbon fraction, f_{oc}^C (unitless)
LS	1.62	0.39	0.076	0.002										

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	244	0.1	0.5	

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based soil concentration.	

END

Table C3-3
Estimated Indoor Benzo(b)fluoranthene Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Exposure duration, τ (sec)	Source-building separation, LT (cm)	Stratum A soil air-filled porosity, θαA (cm3/cm3)	Stratum B soil air-filled porosity, θαB (cm3/cm3)	Stratum C soil air-filled porosity, θαX (cm3/cm3)	Stratum A effective total fluid saturation, Ste (cm3/cm3)	Stratum A soil intrinsic permeability, ki (cm2)	Stratum A soil relative air permeability, krg (cm2)	Stratum A soil effective vapor permeability, kv (cm2)	Floor-wall seam perimeter, Xcrack (cm)	Initial soil concentration used, CR (mg/kg)	Bldg. ventilation rate, Qbuilding (cm3/s)
7.88E+08	1	0.314	ERROR	ERROR	0.079	1.62E-08	0.957	1.55E-08	4,000	3.69E+03	3.39E+04

Area of enclosed space below grade, AB (cm2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Zcrack (cm)	Enthalpy of vaporization at ave. soil temperature, ΔHα,TΣ (cal/mol)	Henry's law constant at ave. soil temperature, HTS (atm-m3/mol)	Henry's law constant at ave. soil temperature, HTS (unitless)	Vapor viscosity at ave. soil temperature, μTΣ (g/cm-s)	Stratum A effective diffusion coefficient, DeffA (cm2/s)	Stratum B effective diffusion coefficient, DeffB (cm2/s)	Stratum C effective diffusion coefficient, DeffC (cm2/s)	Total overall effective diffusion coefficient, DeffT (cm2/s)	Diffusion path length, Ld (cm)	Convection path length, Lp (cm)
1.06E+06	3.77E-04	15	25,576	1.12E-05	4.84E-04	1.75E-04	3.15E-03	0.00E+00	0.00E+00	3.15E-03	1	15

Soil-water partition coefficient, Kd (cm3/g)	Source vapor conc., Csource (mg/m3)	Crack radius, rcrack (cm)	Average vapor flow rate into bldg., Qsoil (cm3/s)	Crack effective diffusion coefficient, Dcrack (cm2/s)	Area of crack, Acrack (cm2)	Exponent of equivalent foundation Peclet number, exp(Pef) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., Cbuilding (mg/m3)	Finite source β τερμ (unitless)	Finite source ψ τερμ (sec)-1	Time for source depletion, τΔ (sec)	Exposure duration > time for source depletion (YES/NO)
2.46E+03	7.26E-01	0.10	1.56E+01	3.15E-03	4.00E+02	5.91E+53	NA	NA	2.15E+02	3.83E-10	4.95E+13	NO

Finite source indoor attenuation coefficient, <a> (unitless)	Mass limit bldg. conc., Cbuilding (μg/m^3)	Finite source bldg. conc., Cbuilding (μg/m^3)	Final finite source bldg. conc., Cbuilding (μg/m^3)	Unit risk factor, URF (μg/m^3)$^{-1}$	Reference conc., RfC (mg/m^3)
4.59E-04	NA	3.33E-04	3.33E-04	2.1E-04	NA

END

Table C3-4
Estimated Indoor Naphthalene Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

SL-ADV
Version 3.1; 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ ]

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [X]

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial soil conc., C_R (µg/kg)	Chemical
91203	3.50E+03	Naphthalene

MORE ↓

ENTER Average soil temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to top of contamination, L_t (cm)	ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) L_b (cm)	ENTER Totals must add up to value of L_t (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	16	91	16	0	0	LS		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum A soil organic carbon fraction, f_{oc}^A (unitless)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum B soil organic carbon fraction, f_{oc}^B (unitless)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)	ENTER Stratum C soil organic carbon fraction, f_{oc}^C (unitless)
LS	1.62	0.39	0.076	0.002										

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1000	1000	244	0.1	0.5	

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1

Used to calculate risk-based soil concentration.

END

Table C3-4
Estimated Indoor Naphthalene Concentration Using the Johnson Ettinger Model
Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, VA

Exposure duration, τ (sec)	Source-building separation, LT (cm)	Stratum A soil air-filled porosity, θαA (cm3/cm3)	Stratum B soil air-filled porosity, θαB (cm3/cm3)	Stratum C soil air-filled porosity, θαX (cm3/cm3)	Stratum A effective total fluid saturation, Ste (cm3/cm3)	Stratum A soil intrinsic permeability, ki (cm2)	Stratum A soil relative air permeability, krg (cm2)	Stratum A soil effective vapor permeability, kv (cm2)	Floor-wall seam perimeter, Xcrack (cm)	Initial soil concentration used, CR (mg/kg)	Bldg. ventilation rate, Qbuilding (cm3/s)
7.88E+08	1	0.314	ERROR	ERROR	0.079	1.62E-08	0.957	1.55E-08	4,000	3.50E+03	3.39E+04

Area of enclosed space below grade, AB (cm2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Zcrack (cm)	Enthalpy of vaporization at ave. soil temperature, ΔHω,TΣ (cal/mol)	Henry's law constant at ave. soil temperature, HTS (atm-m3/mol)	Henry's law constant at ave. soil temperature, H'TS (unitless)	Vapor viscosity at ave. soil temperature, μTΣ (g/cm-s)	Stratum A effective diffusion coefficient, DeffA (cm2/s)	Stratum B effective diffusion coefficient, DeffB (cm2/s)	Stratum C effective diffusion coefficient, DeffC (cm2/s)	Total overall effective diffusion coefficient, DeffT (cm2/s)	Diffusion path length, Ld (cm)	Convection path length, Lp (cm)
1.06E+06	3.77E-04	15	12,913	1.52E-04	6.54E-03	1.75E-04	8.20E-03	0.00E+00	0.00E+00	8.20E-03	1	15

Soil-water partition coefficient, Kd (cm3/g)	Source vapor conc., Csource (mg/m3)	Crack radius, rcrack (cm)	Average vapor flow rate into bldg., Qsoil (cm3/s)	Crack effective diffusion coefficient, Dcrack (cm2/s)	Area of crack, Acrack (cm2)	Exponent of equivalent foundation Peclet number, exp(Pef) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., Cbuilding (mg/m3)	Finite source β τερμ (unitless)	Finite source ψ τερμ (sec)-1	Time for source depletion, τΔ (sec)	Exposure duration > time for source depletion (YES/NO)
4.00E+00	5.65E+03	0.10	1.56E+01	8.20E-03	4.00E+02	4.86E+20	NA	NA	5.57E+02	8.17E-06	5.46E+09	NO

Finite source indoor attenuation coefficient, <a> (unitless)	Mass limit bldg. conc., Cbuilding ($\mu g/m^3$)	Finite source bldg. conc., Cbuilding ($\mu g/m^3$)	Final finite source bldg. conc., Cbuilding ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
4.55E-04	NA	2.57E+00	2.57E+00	NA	3.0E-03

END

APPENDIX D

RECEPTOR- AND PATHWAY-SPECIFIC RISK CALCULATIONS

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TABLE D-1

RISK CHARACTERIZATION
SOIL INGESTION - CURRENT INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDo (b)	HQ (c)	ADDc (a)	SFo (b)	Risk (d)
Metals/Inorganics:						
Arsenic	6.6E-05	3.0E-04	2.2E-01	2.3E-05	1.5E+00	3.5E-05
Iron	2.1E-02	3.0E-01	6.9E-02	7.4E-03	Nav	Nav
Thallium	8.9E-06	7.0E-05	1.3E-01	3.2E-06	Nav	Nav
Organics:						
Benzo(a)anthracene	9.2E-06	Nav	Nav	3.3E-06	7.3E-01	2.4E-06
Benzo(a)pyrene	8.5E-06	Nav	Nav	3.0E-06	7.3E+00	2.2E-05
Benzo(b)fluoranthene	8.2E-07	Nav	Nav	2.9E-07	7.3E-01	2.1E-07
Dibenzo(a,h)anthracene	1.6E-06	Nav	Nav	5.8E-07	7.3E+00	4.2E-06
Naphthalene	3.1E-06	2.0E-02	1.5E-04	1.1E-06	Nav	Nav
Chloroform	1.8E-09	1.0E-02	1.8E-07	6.3E-10	Nav	Nav
TCE	1.8E-09	3.0E-04	5.9E-06	6.3E-10	4.0E-01	2.5E-10
Total			**4E-01**			**6E-05**

Notes:

(a) ADDn = (IWcur,dc x CF x IR x EF x ED)/(BW x Atn)
ADDc = (IWcur,dc x CF x IR x EF x ED)/(BW x ATc)
Terms from Tables 3-1 and 3-2.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDo.

(d) ADDc x SFo

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDo Reference dose (oral)
SFo Cancer Slope Factor (oral)

TABLE D-2

RISK CHARACTERIZATION
SOIL DERMAL CONTACT - CURRENT INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDd (b)	HQ (c)	ADDc (a)	SFd (b)	Risk (d)
Metals/Inorganics:						
Arsenic	1.3E-05	3.0E-04	4.3E-02	4.7E-06	1.5E+00	7.0E-06
Iron	1.4E-03	4.5E-02	3.0E-02	4.9E-04	Nav	Nav
Thallium	5.9E-07	7.0E-05	8.4E-03	2.1E-07	Nav	Nav
Organics:						
Benzo(a)anthracene	7.9E-06	Nav	Nav	2.8E-06	7.3E-01	2.1E-06
Benzo(a)pyrene	7.3E-06	Nav	Nav	2.6E-06	7.3E+00	1.9E-05
Benzo(b)fluoranthene	7.0E-07	Nav	Nav	2.5E-07	7.3E-01	1.8E-07
Dibenzo(a,h)anthracene	1.4E-06	Nav	Nav	5.0E-07	7.3E+00	3.6E-06
Naphthalene	2.6E-06	2.0E-02	1.3E-04	9.4E-07	Nav	Nav
Chloroform	3.5E-10	1.0E-02	3.5E-08	1.2E-10	Nav	Nav
TCE	3.5E-10	3.0E-04	1.2E-06	1.2E-10	4.0E-01	5.0E-11
Total			**8E-02**			**3E-05**

Notes:

(a) ADDn = (IWcur,dc x SAF x CF x SA x DeAF x EF x ED)/(BW x ATn)
ADDc = (IWcur,dc x SAF x CF x SA x DeAFx EF x ED)/(BW x ATc)
Terms from Tables 3-1, 3-2 and 3-3.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDd.

(d) ADDc x SFd.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDd Reference dose (dermal)
SFd Cancer Slope Factor (dermal)

TABLE D-3

RISK CHARACTERIZATION
DUST INHALATION - CURRENT INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDi (b)	HQ (c)	ADDc (a)	SFi (b)	Risk (d)
Metals/Inorganics:						
Arsenic	3.2E-09	Nav	Nav	1.2E-09	1.5E+01	1.7E-08
Iron	1.0E-06	Nav	Nav	3.6E-07	Nav	Nav
Thallium	4.4E-10	Nav	Nav	1.6E-10	Nav	Nav
Organics:						
Benzo(a)anthracene	4.5E-10	Nav	Nav	1.6E-10	3.1E-01	5.0E-11
Benzo(a)pyrene	4.1E-10	Nav	Nav	1.5E-10	3.1E+00	4.6E-10
Benzo(b)fluoranthene	4.0E-11	Nav	Nav	1.4E-11	3.1E-01	4.4E-12
Dibenzo(a,h)anthracene	8.0E-11	Nav	Nav	2.9E-11	3.1E+00	8.8E-11
Naphthalene	1.5E-10	8.6E-04	1.8E-07	5.4E-11	Nav	Nav
Chloroform	8.6E-14	1.4E-02	6.2E-12	3.1E-14	8.1E-02	2.5E-15
TCE	8.6E-14	1.0E-02	8.6E-12	3.1E-14	4.0E-01	1.2E-14
Total			**2E-07**			**2E-08**

Notes:

(a) ADDc = (IWcur,du,c x InR x ET x EF x ED)/(BW x ATc)
ADDn = (IWcur,du,c x InR x ET x EF x ED)/(BW x ATn)
Terms from Tables 3-1 and 3-2.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDi.

(d) ADDc x SFi.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDi Reference dose (inhalation)
Sfi Cancer Slope Factor (inhalation)

TABLE D-4

RISK CHARACTERIZATION
SOIL INGESTION - FUTURE INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDo (b)	HQ (c)	ADDc (a)	SFo (b)	Risk (d)
Metals/Inorganics:						
Arsenic	5.3E-05	3.0E-04	1.8E-01	1.9E-05	1.5E+00	2.8E-05
Iron	1.8E-02	3.0E-01	6.1E-02	6.5E-03	Nav	Nav
Thallium	2.7E-06	7.0E-05	3.8E-02	9.6E-07	Nav	Nav
Organics:						
Benzo(a)anthracene	9.2E-06	Nav	Nav	3.3E-06	7.3E-01	2.4E-06
Benzo(a)pyrene	8.5E-06	Nav	Nav	3.0E-06	7.3E+00	2.2E-05
Benzo(b)fluoranthene	8.5E-06	Nav	Nav	3.1E-06	7.3E-01	2.2E-06
Dibenzo(a,h)anthracene	1.6E-06	Nav	Nav	5.8E-07	7.3E+00	4.2E-06
Naphthalene	3.1E-06	2.0E-02	1.5E-04	1.1E-06	Nav	Nav
Chloroform	1.8E-09	1.0E-02	1.8E-07	6.3E-10	Nav	Nav
TCE	1.8E-09	3.0E-04	5.9E-06	6.3E-10	4.0E-01	2.5E-10
Total			**3E-01**			**6E-05**

Notes:

(a) ADDc = (IWfut,dc x CF x IR x EF x ED)/(BW x ATc)
ADDn = (IWfut,dc x CF x IR x EF x ED)/(BW x ATn)
Terms from Tables 3-1 and 3-2.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDo.

(d) ADDc x SFo

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDo Reference dose (oral)
SFo Cancer Slope Factor (oral)

TABLE D-5

RISK CHARACTERIZATION
SOIL DERMAL CONTACT - FUTURE INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDd (b)	HQ (c)	ADDc (a)	SFd (b)	Risk (d)
Metals/Inorganics:						
Arsenic	1.0E-05	3.0E-04	3.5E-02	3.7E-06	1.5E+00	5.6E-06
Iron	1.2E-03	4.5E-02	2.7E-02	4.3E-04	Nav	Nav
Thallium	1.8E-07	7.0E-05	2.5E-03	6.3E-08	Nav	Nav
Organics:						
Benzo(a)anthracene	7.9E-06	Nav	Nav	2.8E-06	7.3E-01	2.1E-06
Benzo(a)pyrene	7.3E-06	Nav	Nav	2.6E-06	7.3E+00	1.9E-05
Benzo(b)fluoranthene	7.3E-06	Nav	Nav	2.6E-06	7.3E-01	1.9E-06
Dibenzo(a,h)anthracene	1.4E-06	Nav	Nav	5.0E-07	7.3E+00	3.6E-06
Naphthalene	2.6E-06	2.0E-02	1.3E-04	9.4E-07	Nav	Nav
Chloroform	3.5E-10	1.0E-02	3.5E-08	1.2E-10	Nav	Nav
TCE	3.5E-10	3.0E-04	1.2E-06	1.2E-10	4.0E-01	5.0E-11
Total			**6E-02**			**3E-05**

Notes:

(a) ADDn = (IWfut,dc x SAF x CF x SA x DeAF x EF x ED)/(BW x ATn)
ADDc = (IWfut,dc x SAF x CF x SA x DeAFx EF x ED)/(BW x ATc)
Terms from Tables 3-1, 3-2 and 3-3.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDd.

(d) ADDc x SFd.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDd Reference dose (dermal)
SFd Cancer Slope Factor (dermal)

TABLE D-6

RISK CHARACTERIZATION
DUST INHALATION - FUTURE INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDi (b)	HQ (c)	ADDc (a)	SFi (b)	Risk (d)
Metals/Inorganics:						
Arsenic	2.6E-09	Nav	Nav	9.2E-10	1.5E+01	1.4E-08
Iron	8.9E-07	Nav	Nav	3.2E-07	Nav	Nav
Thallium	1.3E-10	Nav	Nav	4.7E-11	Nav	Nav
Organics:						
Benzo(a)anthracene	4.5E-10	Nav	Nav	1.6E-10	3.1E-01	5.0E-11
Benzo(a)pyrene	4.1E-10	Nav	Nav	1.5E-10	3.1E+00	4.6E-10
Benzo(b)fluoranthene	4.2E-10	Nav	Nav	1.5E-10	3.1E-01	4.6E-11
Dibenzo(a,h)anthracene	8.0E-11	Nav	Nav	2.9E-11	3.1E+00	8.8E-11
Naphthalene	1.5E-10	8.6E-04	1.8E-07	5.4E-11	Nav	Nav
Chloroform	8.6E-14	1.4E-02	6.2E-12	3.1E-14	8.1E-02	2.5E-15
TCE	8.6E-14	1.0E-02	8.6E-12	3.1E-14	4.0E-01	1.2E-14
Total			**2E-07**			**1E-08**

Notes:

(a) ADDc = (IWfut,du,c x InR x ET x EF x ED)/(BW x ATc)
ADDn = (IWfut,du,c x InR x ET x EF x ED)/(BW x ATn)
Terms from Tables 3-1 and 3-2.
(b) Toxicity values from Table 4-1.
(c) ADDn/RfDi.
(d) ADDc x SFi.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDi Reference dose (inhalation)
Sfi Cancer Slope Factor (inhalation)

TABLE D-7

RISK CHARACTERIZATION
VAPOR INHALATION - FUTURE INDOOR INDUSTRIAL WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDi (b)	HQ (c)	ADDc (a)	SFi (b)	Risk (d)
Metals/Inorganics:						
Arsenic	Nav	Nav	Nav	Nav	1.5E+01	Nav
Iron	Nav	Nav	Nav	Nav	Nav	Nav
Thallium	Nav	Nav	Nav	Nav	Nav	Nav
Organics:						
Benzo(a)anthracene	Nav	Nav	Nav	Nav	3.1E-01	Nav
Benzo(a)pyrene	Nav	Nav	Nav	Nav	3.1E+00	Nav
Benzo(b)fluoranthene	2.2E-08	Nav	Nav	7.8E-09	3.1E-01	2.4E-09
Dibenzo(a,h)anthracene	Nav	Nav	Nav	Nav	3.1E+00	Nav
Naphthalene	1.7E-04	8.6E-04	2.0E-01	6.0E-05	Nav	Nav
Chloroform	6.3E-07	1.4E-02	4.5E-05	2.2E-07	8.1E-02	1.8E-08
TCE	6.3E-07	1.0E-02	6.3E-05	2.2E-07	4.0E-01	9.0E-08
Total			**2E-01**			**1E-07**

Notes:

(a) ADDc = (IWfut,v,c x InR x ET x EF x ED)/(BW x ATc)
ADDn = (IWfut,v,c x InR x ET x EF x ED)/(BW x ATn)
Terms from Tables 3-1 and 3-2.
(b) Toxicity values from Table 4-1.
(c) ADDn/RfDi.
(d) ADDc x SFi.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDi Reference dose (inhalation)
SFi Cancer Slope Factor (inhalation)

TABLE D-8

RISK CHARACTERIZATION
SOIL INGESTION - FUTURE CONSTRUCTION WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSCE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDo (b)	HQ (c)	ADDc (a)	SFo (b)	Risk (d)
Metals/Inorganics:						
Arsenic	1.9E-04	3.0E-04	6.4E-01	1.4E-06	1.5E+00	2.1E-06
Iron	6.7E-02	3.0E-01	2.2E-01	4.8E-04	Nav	Nav
Thallium	9.8E-06	7.0E-05	1.4E-01	7.0E-08	Nav	Nav
Organics:						
Benzo(a)anthracene	3.4E-05	Nav	Nav	2.4E-07	7.3E-01	1.8E-07
Benzo(a)pyrene	3.1E-05	Nav	Nav	2.2E-07	7.3E+00	1.6E-06
Benzo(b)fluoranthene	3.1E-05	Nav	Nav	2.2E-07	7.3E-01	1.6E-07
Dibenzo(a,h)anthracene	6.0E-06	Nav	Nav	4.3E-08	7.3E+00	3.1E-07
Naphthalene	1.1E-05	2.0E-02	5.7E-04	8.1E-08	Nav	Nav
Chloroform	6.5E-09	1.0E-02	6.5E-07	4.6E-11	Nav	Nav
TCE	6.5E-09	3.0E-04	2.2E-05	4.6E-11	4.0E-01	1.8E-11
Total			**1E+00**			**4E-06**

Notes:

(a) ADDn = (CWdc x CF x IR x EF x ED)/(BW x ATn)
ADDc = (CWdc x CF x IR x EF x ED)/(BW x ATc)
Terms from Tables 3-1 and 3-2.

(b) Toxicity values from Table 4-1.

(c) ADDn/RfDo.

(d) ADDc x SFo

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDo Reference dose (oral)
SFo Cancer Slope Factor (oral)

TABLE D-9

RISK CHARACTERIZATION
SOIL DERMAL CONTACT - FUTURE CONSTRUCTION WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDd (b)	HQ (c)	ADDc (a)	SFd (b)	Risk (d)
Metals/Inorganics:						
Arsenic	1.7E-05	3.0E-04	5.8E-02	1.2E-07	1.5E+00	1.9E-07
Iron	2.0E-03	4.5E-02	4.4E-02	1.4E-05	Nav	Nav
Thallium	2.9E-07	7.0E-05	4.2E-03	2.1E-09	Nav	Nav
Organics:						
Benzo(a)anthracene	1.3E-05	Nav	Nav	9.4E-08	7.3E-01	6.9E-08
Benzo(a)pyrene	1.2E-05	Nav	Nav	8.6E-08	7.3E+00	6.3E-07
Benzo(b)fluoranthene	1.2E-05	Nav	Nav	8.7E-08	7.3E-01	6.4E-08
Dibenzo(a,h)anthracene	2.3E-06	Nav	Nav	1.7E-08	7.3E+00	1.2E-07
Naphthalene	4.4E-06	2.0E-02	2.2E-04	3.1E-08	Nav	Nav
Chloroform	5.8E-10	1.0E-02	5.8E-08	4.2E-12	Nav	Nav
TCE	5.8E-10	3.0E-04	1.9E-06	4.2E-12	4.0E-01	1.7E-12
Total			**1E-01**			**1E-06**

Notes:

(a) ADDc = (CWdc x SAF x CF x SA x DeAFx EF x ED)/(BW x ATc)
ADDn = (CWdc x SAF x CF x SA x DeAF x EF x ED)/(BW x ATn)
Terms from Tables 3-1, 3-2 and 3-3.
(b) Toxicity values from Table 4-1.
(c) ADDn/RfDd.
(d) ADDc x SFd.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDd Reference dose (dermal)
SFd Cancer Slope Factor (dermal)

TABLE D-10

RISK CHARACTERIZATION
DUST INHALATION - FUTURE CONSTRUCTION WORKER
HUMAN HEALTH BASELINE RISK ASSESSMENT
OPERABLE UNIT 1
DEFENSE SUPPLY CENTER RICHMOND
RICHMOND, VIRGINIA

Chemical	ADDn (a)	RfDi (b)	HQ (c)	ADDc (a)	SFi (b)	Risk (d)
Metals/Inorganics:						
Arsenic	5.3E-07	Nav	Nav	3.8E-09	1.5E+01	5.7E-08
Iron	1.8E-04	Nav	Nav	1.3E-06	Nav	Nav
Thallium	2.7E-08	Nav	Nav	1.9E-10	Nav	Nav
Organics:						
Benzo(a)anthracene	9.2E-08	Nav	Nav	6.6E-10	3.1E-01	2.0E-10
Benzo(a)pyrene	8.4E-08	Nav	Nav	6.0E-10	3.1E+00	1.9E-09
Benzo(b)fluoranthene	8.5E-08	Nav	Nav	6.1E-10	3.1E-01	1.9E-10
Dibenzo(a,h)anthracene	1.6E-08	Nav	Nav	1.2E-10	3.1E+00	3.6E-10
Naphthalene	3.1E-08	8.6E-04	3.6E-05	2.2E-10	Nav	Nav
Chloroform	1.8E-11	1.4E-02	1.3E-09	1.3E-13	8.1E-02	1.0E-14
TCE	1.8E-11	1.0E-02	1.8E-09	1.3E-13	4.0E-01	5.0E-14
Total			**4E-05**			**6E-08**

Notes:

(a) ADDc = (CWdu,c x InR x ET x EF x ED)/(BW x ATc)
ADDn = (CWdu,c x InR x ET x EF x ED)/(BW x ATn)
Terms from Tables 3-1 and 3-2.
(b) Toxicity values from Table 4-1.
(c) ADDn/RfDi.
(d) ADDc x SFi.

ADDc Average Daily Dose (carcinogenic)
ADDn Average Daily Dose (noncarcinogenic)
HQ Hazard Quotient
Nav Not available
RfDi Reference dose (inhalation)
Sfi Cancer Slope Factor (inhalation)

APPENDIX E

SOIL DATA COLLECTED PRIOR TO 1992

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PRE-1992 SOIL DATA OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

LOCATION	LOGDATE	ANMCODE	DESCRIPT	SACODE	SAMPLEID	MATRIX	SBD	SED	EXMCODE	UNITS	PARVQ	PARVAL	REPLIMIT	LABDL	FLAG
DMS-59	6/10/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-59	SO	0	1		mg/Kg	ND	0	0.005		
DMS-60	6/10/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-60	SO	0	1		mg/Kg	ND	0	0.005		
DMS-55	6/11/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-55	SO	0	1		mg/Kg	ND	0	0.005		
DMS-53	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-53	SO	0	1		mg/Kg	ND	0	0.005		
DMS-56	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-56	SO	0	1		mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-58	SO	0	1		mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-61	SO	0	1		mg/Kg	ND	0	0.005		
DMS-52	6/19/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-52	SO	0	1		mg/Kg	ND	0	0.005		
DMS-54	6/19/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-54	SO	0	1		mg/Kg	ND	0	0.005		
DMS-57	6/24/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-57	SO	0	1		mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-15A	SO	0	1		mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-15A	SO	0	1		mg/Kg	ND	0	0.005		
DMS-89	4/28/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-89	SO	0	1		mg/Kg	ND	0	0.005		
DMS-98	5/3/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-98	SO	0	1		mg/Kg	ND	0	0.005		
DMS-100	5/5/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-100	SO	0	1		mg/Kg	ND	0	0.005		
DMS-103	5/9/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-103	SO	0	1		mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-58	SO	0	2		mg/Kg	ND	0	0.005		
DMS-82	4/25/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-82	SO	0	2		mg/Kg	ND	0	0.005		
DMS-83	4/25/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-83	SO	0	2		mg/Kg	ND	0	0.005		
DMS-85	4/26/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-85	SO	0	2		mg/Kg	ND	0	0.005		
DMS-86	4/26/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-86	SO	0	2		mg/Kg	ND	0	0.005		
DMS-88	4/28/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-88	SO	0	2		mg/Kg	ND	0	0.005		
DMS-91	5/2/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-91	SO	0	2		mg/Kg	ND	0	0.005		
DMS-92	5/2/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-92	SO	0	2		mg/Kg	ND	0	0.005		
DMS-93	5/2/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-93	SO	0	2		mg/Kg	ND	0	0.005		
DMS-97	5/3/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-97	SO	0	2		mg/Kg	ND	0	0.005		
DMS-99	5/5/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-99	SO	0	2		mg/Kg	ND	0	0.005		
DMS-102	5/9/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-102	SO	0	2		mg/Kg	ND	0	0.005		
DMS-104	5/9/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-104	SO	0	2		mg/Kg	ND	0	0.005		
DMS-105	5/9/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-105	SO	0	2		mg/Kg	ND	0	0.005		
DMS-84	4/26/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-84	SO	0	4		mg/Kg	ND	0	0.005		
DMS-87	4/28/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-87	SO	0	4		mg/Kg	ND	0	0.005		
DMS-95	5/3/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-95	SO	0	4		mg/Kg	ND	0	0.005		
DMS-101	5/5/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-101	SO	0	4		mg/Kg	ND	0	0.005		
DMW-14A	11/9/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-14A	SO	0	5		mg/Kg	ND	0	0.005		
DMS-55	6/11/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-55	SO	0	6		mg/Kg	ND	0	0.005		
DMS-57	6/11/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-57	SO	0	6		mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-61	SO	0	6		mg/Kg	ND	0	0.005		
DMS-59	6/10/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-59	SO	0	8		mg/Kg	ND	0	0.005		
DMS-60	6/10/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-60	SO	0	8		mg/Kg	ND	0	0.005		
DMS-53	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-53	SO	0	8		mg/Kg	ND	0	0.005		
DMS-56	6/12/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-56	SO	0	8		mg/Kg	ND	0	0.005		
DMS-52	6/19/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-52	SO	0	8		mg/Kg	ND	0	0.005		
DMS-54	6/19/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-54	SO	0	10		mg/Kg	ND	0	0.005		
DMW-18A	11/9/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-18A	SO	0	10		mg/Kg	ND	0	0.005		
DMW-14E	10/6/1988	SW8260	1,1,1-Trichloroethane	NS1	DMW-14E	SO	0	10		mg/Kg	ND	0	0.005		
DMW-17A	11/3/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-17A	SO	0	15		mg/Kg	ND	0	0.005		

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DMW-17A	11/3/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1,1-Trichloroethane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	1,1,1-Trichloroethane	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	1,1,1-Trichloroethane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	1,1-Dichloroethane	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	1,1-Dichloroethane	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,1-Dichloroethane	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethane	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,1-Dichloroethane	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethane	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	1,1-Dichloroethane	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	1,1-Dichloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	1,1-Dichloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	1,1-Dichloroethane	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	1,1-Dichloroethane	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	1,1-Dichloroethane	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	1,1-Dichloroethane	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	1,1-Dichloroethane	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	1,1-Dichloroethane	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	1,1-Dichloroethane	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	1,1-Dichloroethane	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	1,1-Dichloroethane	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	1,1-Dichloroethane	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	1,1-Dichloroethane	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	1,1-Dichloroethane	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	1,1-Dichloroethane	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	1,1-Dichloroethane	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	1,1-Dichloroethane	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	1,1-Dichloroethane	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	1,1-Dichloroethane	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	1,1-Dichloroethane	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	1,1-Dichloroethane	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	1,1-Dichloroethane	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	1,1-Dichloroethane	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	1,1-Dichloroethane	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,1-Dichloroethane	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	1,1-Dichloroethane	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethane	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	1,1-Dichloroethane	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005

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DMS-60	6/10/1985	SW8260	1,1-Dichloroethane	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,1-Dichloroethane	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,1-Dichloroethane	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethane	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	1,1-Dichloroethane	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	1,1-Dichloroethane	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,1-Dichloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,1-Dichloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	1,1-Dichloroethane	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	1,1-Dichloroethane	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	1,1-Dichloroethane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	1,1-Dichloroethane	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	1,1-Dichloroethane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	1,1-Dichloroethane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	1,1-Dichloroethene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	1,1-Dichloroethene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,1-Dichloroethene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,1-Dichloroethene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	1,1-Dichloroethene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	1,1-Dichloroethene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	1,1-Dichloroethene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	1,1-Dichloroethene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	1,1-Dichloroethene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	1,1-Dichloroethene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	1,1-Dichloroethene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	1,1-Dichloroethene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	1,1-Dichloroethene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	1,1-Dichloroethene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	1,1-Dichloroethene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	1,1-Dichloroethene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	1,1-Dichloroethene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	1,1-Dichloroethene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	1,1-Dichloroethene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	1,1-Dichloroethene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	1,1-Dichloroethene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	1,1-Dichloroethene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	1,1-Dichloroethene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	1,1-Dichloroethene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	1,1-Dichloroethene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005

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DMW-14A	11/9/1986	SW8260	1,1-Dichloroethene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,1-Dichloroethene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	1,1-Dichloroethene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	1,1-Dichloroethene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	1,1-Dichloroethene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,1-Dichloroethene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,1-Dichloroethene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	1,1-Dichloroethene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	1,1-Dichloroethene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,1-Dichloroethene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,1-Dichloroethene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,1-Dichloroethene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,1-Dichloroethene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	1,1-Dichloroethene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	1,1-Dichloroethene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	1,1-Dichloroethene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	1,1-Dichloroethene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	1,1-Dichloroethene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	1,1-Dichloroethene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33

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DMS-99	5/5/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	1,2,4-Trichlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	1,2,4-Trichlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

TABLE E-1

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DMS-83	4/25/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	1,2-Dichlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,2-Dichlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	1,2-Dichlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	1,2-Dichlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8260	1,2-Dichloroethane	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	1,2-Dichloroethane	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,2-Dichloroethane	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,2-Dichloroethane	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,2-Dichloroethane	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,2-Dichloroethane	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	1,2-Dichloroethane	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005

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DMW-15A	11/8/1986	SW8260	1,2-Dichloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	1,2-Dichloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	1,2-Dichloroethane	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	1,2-Dichloroethane	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	1,2-Dichloroethane	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	1,2-Dichloroethane	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	1,2-Dichloroethane	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	1,2-Dichloroethane	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	1,2-Dichloroethane	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	1,2-Dichloroethane	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	1,2-Dichloroethane	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	1,2-Dichloroethane	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	1,2-Dichloroethane	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	1,2-Dichloroethane	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	1,2-Dichloroethane	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	1,2-Dichloroethane	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	1,2-Dichloroethane	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	1,2-Dichloroethane	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	1,2-Dichloroethane	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	1,2-Dichloroethane	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	1,2-Dichloroethane	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	1,2-Dichloroethane	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	1,2-Dichloroethane	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	1,2-Dichloroethane	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	1,2-Dichloroethane	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	1,2-Dichloroethane	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,2-Dichloroethane	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	1,2-Dichloroethane	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	1,2-Dichloroethane	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	1,2-Dichloroethane	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	1,2-Dichloroethane	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,2-Dichloroethane	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	1,2-Dichloroethane	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	1,2-Dichloroethane	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,2-Dichloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	1,2-Dichloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	1,2-Dichloroethane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	1,2-Dichloroethane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	1,2-Dichloroethane	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	1,2-Dichloroethane	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	1,2-Dichloroethane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	1,2-Dichloroethane	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	1,2-Dichloroethane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	1,2-Dichloroethane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	1,2-Dichloroethene, tota	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	1,2-Dichloroethene, tota	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005

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DMS-100	5/5/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	1,2-Dichloroethene, tot	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33

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DMS-104	5/9/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	1,3-Dichlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,3-Dichlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	1,3-Dichlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	1,3-Dichlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33

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DMS-86	4/26/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	1,4-Dichlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	1,4-Dichlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	1,4-Dichlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	1,4-Dichlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8080	2,4,5-T	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8080	2,4,5-T	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8080	2,4,5-T	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8080	2,4,5-T	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8080	2,4,5-T	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8080	2,4,5-T	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-T	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8080	2,4,5-T	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-T	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01
DMS-57	6/24/1985	SW8080	2,4,5-T	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8080	2,4,5-T	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8080	2,4,5-T	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01

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DMS-58	6/12/1985	SW8080	2,4,5-T	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8080	2,4,5-T	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01
DMS-57	6/11/1985	SW8080	2,4,5-T	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-T	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8080	2,4,5-T	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8080	2,4,5-T	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8080	2,4,5-T	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8080	2,4,5-T	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8080	2,4,5-T	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-T	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01
DMW-18A	11/9/1986	SW8080	2,4,5-T	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8080	2,4,5-T	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8080	2,4,5-T	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-T	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-T	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01
DMW-16A	10/27/1986	SW8080	2,4,5-T	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01
DMW-16B	10/22/1986	SW8080	2,4,5-T	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01
DMW-16C	11/9/1986	SW8080	2,4,5-T	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01
DMS-57	6/24/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01
DMS-57	6/11/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01
DMW-18A	11/9/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8080	2,4,5-TP (Silvex)	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01
DMW-16A	10/27/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01
DMW-16B	10/22/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01
DMW-16C	11/9/1986	SW8080	2,4,5-TP (Silvex)	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01

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DMS-59	6/10/1985	SW8080	2,4-D	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.1
DMS-60	6/10/1985	SW8080	2,4-D	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.1
DMS-55	6/11/1985	SW8080	2,4-D	NS1	DMS-55	SO	0	1	mg/Kg	=	0.069	0.1
DMS-53	6/12/1985	SW8080	2,4-D	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.1
DMS-56	6/12/1985	SW8080	2,4-D	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.1
DMS-58	6/12/1985	SW8080	2,4-D	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.1
DMS-61	6/18/1985	SW8080	2,4-D	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.1
DMS-52	6/19/1985	SW8080	2,4-D	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.1
DMS-54	6/19/1985	SW8080	2,4-D	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.1
DMS-57	6/24/1985	SW8080	2,4-D	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.1
DMW-15A	11/8/1986	SW8080	2,4-D	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.1
DMW-15A	11/8/1986	SW8080	2,4-D	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.1
DMS-58	6/12/1985	SW8080	2,4-D	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.1
DMS-55	6/11/1985	SW8080	2,4-D	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.1
DMS-57	6/11/1985	SW8080	2,4-D	NS1	DMS-57	SO	0	6	mg/Kg	=	0.13	0.1
DMS-61	6/18/1985	SW8080	2,4-D	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.1
DMS-59	6/10/1985	SW8080	2,4-D	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.1
DMS-60	6/10/1985	SW8080	2,4-D	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.1
DMS-53	6/12/1985	SW8080	2,4-D	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.1
DMS-56	6/12/1985	SW8080	2,4-D	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.1
DMS-52	6/19/1985	SW8080	2,4-D	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.1
DMS-54	6/19/1985	SW8080	2,4-D	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.1
DMW-18A	11/9/1986	SW8080	2,4-D	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.1
DMW-17A	11/3/1986	SW8080	2,4-D	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.1
DMW-17A	11/3/1986	SW8080	2,4-D	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.1
DMS-61	6/18/1985	SW8080	2,4-D	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.1
DMS-54	6/19/1985	SW8080	2,4-D	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.1
DMW-16A	10/27/1986	SW8080	2,4-D	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.1
DMW-16B	10/22/1986	SW8080	2,4-D	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.1
DMW-16C	11/9/1986	SW8080	2,4-D	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.1
DMS-59	6/10/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

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DMS-83	4/25/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	2,4-Dimethylphenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dimethylphenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	2,4-Dimethylphenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	2,4-Dimethylphenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33

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DMW-15A	11/8/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	2,4-Dinitrotoluene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2,4-Dinitrotoluene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	2,4-Dinitrotoluene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	2,4-Dinitrotoluene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8260	2-Butanone	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	2-Butanone	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01

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DMS-55	6/11/1985	SW8260	2-Butanone	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	2-Butanone	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	2-Butanone	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	2-Butanone	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Butanone	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	2-Butanone	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Butanone	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01
DMS-57	6/24/1985	SW8260	2-Butanone	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	2-Butanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	2-Butanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMS-89	4/28/1988	SW8260	2-Butanone	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.01
DMS-98	5/3/1988	SW8260	2-Butanone	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.01
DMS-100	5/5/1988	SW8260	2-Butanone	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.01
DMS-103	5/9/1988	SW8260	2-Butanone	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	2-Butanone	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01
DMS-82	4/25/1988	SW8260	2-Butanone	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.01
DMS-83	4/25/1988	SW8260	2-Butanone	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.01
DMS-85	4/26/1988	SW8260	2-Butanone	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.01
DMS-86	4/26/1988	SW8260	2-Butanone	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.01
DMS-88	4/28/1988	SW8260	2-Butanone	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.01
DMS-91	5/2/1988	SW8260	2-Butanone	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.01
DMS-92	5/2/1988	SW8260	2-Butanone	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.01
DMS-93	5/2/1988	SW8260	2-Butanone	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.01
DMS-97	5/3/1988	SW8260	2-Butanone	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.01
DMS-99	5/5/1988	SW8260	2-Butanone	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.01
DMS-102	5/9/1988	SW8260	2-Butanone	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.01
DMS-104	5/9/1988	SW8260	2-Butanone	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.01
DMS-105	5/9/1988	SW8260	2-Butanone	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.01
DMS-84	4/26/1988	SW8260	2-Butanone	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.01
DMS-87	4/28/1988	SW8260	2-Butanone	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.01
DMS-95	5/3/1988	SW8260	2-Butanone	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.01
DMS-101	5/5/1988	SW8260	2-Butanone	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.01
DMW-14A	11/9/1986	SW8260	2-Butanone	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8260	2-Butanone	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01
DMS-57	6/11/1985	SW8260	2-Butanone	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Butanone	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8260	2-Butanone	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	2-Butanone	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	2-Butanone	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	2-Butanone	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	2-Butanone	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Butanone	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01
DMW-18A	11/9/1986	SW8260	2-Butanone	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01
DMW-14E	10/6/1988	SW8260	2-Butanone	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	2-Butanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	2-Butanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Butanone	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Butanone	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01

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DMS-90	4/28/1988	SW8260	2-Butanone	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.01
DMS-96	5/3/1988	SW8260	2-Butanone	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.01
DMW-16A	10/27/1986	SW8260	2-Butanone	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01
DMS-94	5/2/1988	SW8260	2-Butanone	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.01
DMW-16B	10/22/1986	SW8260	2-Butanone	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01
DMW-16C	11/9/1986	SW8260	2-Butanone	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8270	2-Chlorophenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Chlorophenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Chlorophenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Chlorophenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2-Chlorophenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Chlorophenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	2-Chlorophenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Chlorophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Chlorophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	2-Chlorophenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	2-Chlorophenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	2-Chlorophenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	2-Chlorophenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	2-Chlorophenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	2-Chlorophenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	2-Chlorophenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	2-Chlorophenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	2-Chlorophenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	2-Chlorophenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	2-Chlorophenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	2-Chlorophenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	2-Chlorophenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	2-Chlorophenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	2-Chlorophenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	2-Chlorophenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	2-Chlorophenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	2-Chlorophenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	2-Chlorophenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	2-Chlorophenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	2-Chlorophenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	2-Chlorophenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Chlorophenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	2-Chlorophenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Chlorophenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2-Chlorophenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Chlorophenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Chlorophenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33

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DMS-52	6/19/1985	SW8270	2-Chlorophenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Chlorophenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	2-Chlorophenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	2-Chlorophenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Chlorophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Chlorophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Chlorophenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Chlorophenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	2-Chlorophenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	2-Chlorophenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	2-Chlorophenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	2-Chlorophenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	2-Chlorophenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	2-Chlorophenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8260	2-Hexanone	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	2-Hexanone	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8260	2-Hexanone	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	2-Hexanone	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	2-Hexanone	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	2-Hexanone	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Hexanone	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	2-Hexanone	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Hexanone	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01
DMS-57	6/24/1985	SW8260	2-Hexanone	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	2-Hexanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	2-Hexanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMS-89	4/28/1988	SW8260	2-Hexanone	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.01
DMS-98	5/3/1988	SW8260	2-Hexanone	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.01
DMS-100	5/5/1988	SW8260	2-Hexanone	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.01
DMS-103	5/9/1988	SW8260	2-Hexanone	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	2-Hexanone	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01
DMS-82	4/25/1988	SW8260	2-Hexanone	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.01
DMS-83	4/25/1988	SW8260	2-Hexanone	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.01
DMS-85	4/26/1988	SW8260	2-Hexanone	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.01
DMS-86	4/26/1988	SW8260	2-Hexanone	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.01
DMS-88	4/28/1988	SW8260	2-Hexanone	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.01
DMS-91	5/2/1988	SW8260	2-Hexanone	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.01
DMS-92	5/2/1988	SW8260	2-Hexanone	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.01
DMS-93	5/2/1988	SW8260	2-Hexanone	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.01
DMS-97	5/3/1988	SW8260	2-Hexanone	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.01
DMS-99	5/5/1988	SW8260	2-Hexanone	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.01
DMS-102	5/9/1988	SW8260	2-Hexanone	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.01
DMS-104	5/9/1988	SW8260	2-Hexanone	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.01
DMS-105	5/9/1988	SW8260	2-Hexanone	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.01
DMS-84	4/26/1988	SW8260	2-Hexanone	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.01
DMS-87	4/28/1988	SW8260	2-Hexanone	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.01
DMS-95	5/3/1988	SW8260	2-Hexanone	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.01
DMS-101	5/5/1988	SW8260	2-Hexanone	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.01

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DMW-14A	11/9/1986	SW8260	2-Hexanone	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8260	2-Hexanone	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01
DMS-57	6/11/1985	SW8260	2-Hexanone	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Hexanone	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8260	2-Hexanone	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	2-Hexanone	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	2-Hexanone	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	2-Hexanone	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	2-Hexanone	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Hexanone	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01
DMW-18A	11/9/1986	SW8260	2-Hexanone	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01
DMW-14E	10/6/1988	SW8260	2-Hexanone	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	2-Hexanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	2-Hexanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	2-Hexanone	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	2-Hexanone	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01
DMS-90	4/28/1988	SW8260	2-Hexanone	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.01
DMS-96	5/3/1988	SW8260	2-Hexanone	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.01
DMW-16A	10/27/1986	SW8260	2-Hexanone	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01
DMS-94	5/2/1988	SW8260	2-Hexanone	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.01
DMW-16B	10/22/1986	SW8260	2-Hexanone	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01
DMW-16C	11/9/1986	SW8260	2-Hexanone	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8270	2-Methylnaphthalene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Methylnaphthalene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Methylnaphthalene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylnaphthalene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2-Methylnaphthalene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylnaphthalene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	2-Methylnaphthalene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Methylnaphthalene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Methylnaphthalene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	2-Methylnaphthalene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	2-Methylnaphthalene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	2-Methylnaphthalene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	2-Methylnaphthalene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	2-Methylnaphthalene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	2-Methylnaphthalene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	2-Methylnaphthalene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	2-Methylnaphthalene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	2-Methylnaphthalene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	2-Methylnaphthalene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	2-Methylnaphthalene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	2-Methylnaphthalene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	2-Methylnaphthalene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33

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DMS-99	5/5/1988	SW8270	2-Methylnaphthalene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	2-Methylnaphthalene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	2-Methylnaphthalene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	2-Methylnaphthalene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	2-Methylnaphthalene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	2-Methylnaphthalene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	2-Methylnaphthalene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	2-Methylnaphthalene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	2-Methylnaphthalene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Methylnaphthalene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	2-Methylnaphthalene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylnaphthalene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2-Methylnaphthalene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Methylnaphthalene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Methylnaphthalene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2-Methylnaphthalene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylnaphthalene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	2-Methylnaphthalene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	2-Methylnaphthalene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Methylnaphthalene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Methylnaphthalene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylnaphthalene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylnaphthalene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	2-Methylnaphthalene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	2-Methylnaphthalene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	2-Methylnaphthalene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	2-Methylnaphthalene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	2-Methylnaphthalene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	2-Methylnaphthalene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2-Methylphenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Methylphenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Methylphenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylphenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2-Methylphenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylphenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	2-Methylphenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Methylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	2-Methylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	2-Methylphenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	2-Methylphenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	2-Methylphenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	2-Methylphenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	2-Methylphenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

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DMS-83	4/25/1988	SW8270	2-Methylphenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	2-Methylphenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	2-Methylphenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	2-Methylphenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	2-Methylphenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	2-Methylphenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	2-Methylphenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	2-Methylphenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	2-Methylphenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	2-Methylphenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	2-Methylphenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	2-Methylphenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	2-Methylphenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	2-Methylphenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	2-Methylphenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	2-Methylphenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	2-Methylphenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	2-Methylphenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	2-Methylphenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylphenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	2-Methylphenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	2-Methylphenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	2-Methylphenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	2-Methylphenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylphenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	2-Methylphenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	2-Methylphenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Methylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	2-Methylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	2-Methylphenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	2-Methylphenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	2-Methylphenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	2-Methylphenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	2-Methylphenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	2-Methylphenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	2-Methylphenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	2-Methylphenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8080	4,4'-DDD	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDD	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	4,4'-DDD	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDD	NS1	DMS-61	SO	0	1	mg/Kg	=	0.0042	0.004
DMS-52	6/19/1985	SW8080	4,4'-DDD	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDD	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.004
DMS-57	6/24/1985	SW8080	4,4'-DDD	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.004

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DMW-15A	11/8/1986	SW8080	4,4'-DDD	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	4,4'-DDD	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMS-89	4/28/1988	SW8080	4,4'-DDD	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.004
DMS-98	5/3/1988	SW8080	4,4'-DDD	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.004
DMS-100	5/5/1988	SW8080	4,4'-DDD	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.004
DMS-103	5/9/1988	SW8080	4,4'-DDD	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.004
DMS-82	4/25/1988	SW8080	4,4'-DDD	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.004
DMS-83	4/25/1988	SW8080	4,4'-DDD	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.004
DMS-85	4/26/1988	SW8080	4,4'-DDD	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.004
DMS-86	4/26/1988	SW8080	4,4'-DDD	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.004
DMS-88	4/28/1988	SW8080	4,4'-DDD	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.004
DMS-91	5/2/1988	SW8080	4,4'-DDD	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.004
DMS-92	5/2/1988	SW8080	4,4'-DDD	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.004
DMS-93	5/2/1988	SW8080	4,4'-DDD	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.004
DMS-97	5/3/1988	SW8080	4,4'-DDD	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.004
DMS-99	5/5/1988	SW8080	4,4'-DDD	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.004
DMS-102	5/9/1988	SW8080	4,4'-DDD	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.004
DMS-104	5/9/1988	SW8080	4,4'-DDD	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.004
DMS-105	5/9/1988	SW8080	4,4'-DDD	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.004
DMS-84	4/26/1988	SW8080	4,4'-DDD	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.004
DMS-87	4/28/1988	SW8080	4,4'-DDD	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.004
DMS-95	5/3/1988	SW8080	4,4'-DDD	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.004
DMS-101	5/5/1988	SW8080	4,4'-DDD	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.004
DMW-14A	11/9/1986	SW8080	4,4'-DDD	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	4,4'-DDD	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.004
DMS-57	6/11/1985	SW8080	4,4'-DDD	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDD	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	4,4'-DDD	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDD	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDD	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	4,4'-DDD	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDD	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.004
DMW-18A	11/9/1986	SW8080	4,4'-DDD	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.004
DMW-14E	10/6/1988	SW8080	4,4'-DDD	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDD	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDD	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDD	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDD	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.004
DMS-90	4/28/1988	SW8080	4,4'-DDD	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.004
DMS-96	5/3/1988	SW8080	4,4'-DDD	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.004
DMW-16A	10/27/1986	SW8080	4,4'-DDD	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.004
DMS-94	5/2/1988	SW8080	4,4'-DDD	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.004
DMW-16B	10/22/1986	SW8080	4,4'-DDD	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.004
DMW-16C	11/9/1986	SW8080	4,4'-DDD	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	4,4'-DDE	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDE	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.004

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DMS-55	6/11/1985	SW8080	4,4'-DDE	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDE	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	4,4'-DDE	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDE	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.004
DMS-57	6/24/1985	SW8080	4,4'-DDE	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	4,4'-DDE	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	4,4'-DDE	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMS-89	4/28/1988	SW8080	4,4'-DDE	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.004
DMS-98	5/3/1988	SW8080	4,4'-DDE	NS1	DMS-98	SO	0	1	mg/Kg	=	0.04	0.004
DMS-100	5/5/1988	SW8080	4,4'-DDE	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.004
DMS-103	5/9/1988	SW8080	4,4'-DDE	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.004
DMS-82	4/25/1988	SW8080	4,4'-DDE	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.004
DMS-83	4/25/1988	SW8080	4,4'-DDE	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.004
DMS-85	4/26/1988	SW8080	4,4'-DDE	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.004
DMS-86	4/26/1988	SW8080	4,4'-DDE	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.004
DMS-88	4/28/1988	SW8080	4,4'-DDE	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.004
DMS-91	5/2/1988	SW8080	4,4'-DDE	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.004
DMS-92	5/2/1988	SW8080	4,4'-DDE	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.004
DMS-93	5/2/1988	SW8080	4,4'-DDE	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.004
DMS-97	5/3/1988	SW8080	4,4'-DDE	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.004
DMS-99	5/5/1988	SW8080	4,4'-DDE	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.004
DMS-102	5/9/1988	SW8080	4,4'-DDE	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.004
DMS-104	5/9/1988	SW8080	4,4'-DDE	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.004
DMS-105	5/9/1988	SW8080	4,4'-DDE	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.004
DMS-84	4/26/1988	SW8080	4,4'-DDE	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.004
DMS-87	4/28/1988	SW8080	4,4'-DDE	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.004
DMS-95	5/3/1988	SW8080	4,4'-DDE	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.004
DMS-101	5/5/1988	SW8080	4,4'-DDE	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.004
DMW-14A	11/9/1986	SW8080	4,4'-DDE	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	4,4'-DDE	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.004
DMS-57	6/11/1985	SW8080	4,4'-DDE	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDE	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	4,4'-DDE	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDE	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDE	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	4,4'-DDE	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDE	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.004
DMW-18A	11/9/1986	SW8080	4,4'-DDE	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.004
DMW-14E	10/6/1988	SW8080	4,4'-DDE	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDE	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDE	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDE	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDE	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.004

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DMS-90	4/28/1988	SW8080	4,4'-DDE	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.004
DMS-96	5/3/1988	SW8080	4,4'-DDE	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.004
DMW-16A	10/27/1986	SW8080	4,4'-DDE	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.004
DMS-94	5/2/1988	SW8080	4,4'-DDE	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.004
DMW-16B	10/22/1986	SW8080	4,4'-DDE	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.004
DMW-16C	11/9/1986	SW8080	4,4'-DDE	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	4,4'-DDT	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDT	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	4,4'-DDT	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDT	NS1	DMS-61	SO	0	1	mg/Kg	=	0.009	0.004
DMS-52	6/19/1985	SW8080	4,4'-DDT	NS1	DMS-52	SO	0	1	mg/Kg	=	0.016	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDT	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.004
DMS-57	6/24/1985	SW8080	4,4'-DDT	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	4,4'-DDT	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	4,4'-DDT	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMS-89	4/28/1988	SW8080	4,4'-DDT	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.004
DMS-98	5/3/1988	SW8080	4,4'-DDT	NS1	DMS-98	SO	0	1	mg/Kg	=	0.22	0.004
DMS-100	5/5/1988	SW8080	4,4'-DDT	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.004
DMS-103	5/9/1988	SW8080	4,4'-DDT	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.004
DMS-82	4/25/1988	SW8080	4,4'-DDT	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.004
DMS-83	4/25/1988	SW8080	4,4'-DDT	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.004
DMS-85	4/26/1988	SW8080	4,4'-DDT	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.004
DMS-86	4/26/1988	SW8080	4,4'-DDT	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.004
DMS-88	4/28/1988	SW8080	4,4'-DDT	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.004
DMS-91	5/2/1988	SW8080	4,4'-DDT	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.004
DMS-92	5/2/1988	SW8080	4,4'-DDT	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.004
DMS-93	5/2/1988	SW8080	4,4'-DDT	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.004
DMS-97	5/3/1988	SW8080	4,4'-DDT	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.004
DMS-99	5/5/1988	SW8080	4,4'-DDT	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.004
DMS-102	5/9/1988	SW8080	4,4'-DDT	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.004
DMS-104	5/9/1988	SW8080	4,4'-DDT	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.004
DMS-105	5/9/1988	SW8080	4,4'-DDT	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.004
DMS-84	4/26/1988	SW8080	4,4'-DDT	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.004
DMS-87	4/28/1988	SW8080	4,4'-DDT	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.004
DMS-95	5/3/1988	SW8080	4,4'-DDT	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.004
DMS-101	5/5/1988	SW8080	4,4'-DDT	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.004
DMW-14A	11/9/1986	SW8080	4,4'-DDT	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	4,4'-DDT	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.004
DMS-57	6/11/1985	SW8080	4,4'-DDT	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDT	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	4,4'-DDT	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	4,4'-DDT	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-53	SO	0	8	mg/Kg	=	0.011	0.004
DMS-56	6/12/1985	SW8080	4,4'-DDT	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.004

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DMS-52	6/19/1985	SW8080	4,4'-DDT	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDT	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.004
DMW-18A	11/9/1986	SW8080	4,4'-DDT	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.004
DMW-14E	10/6/1988	SW8080	4,4'-DDT	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDT	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	4,4'-DDT	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	4,4'-DDT	NS1	DMS-61	SO	0	18	mg/Kg	=	0.0063	0.004
DMS-54	6/19/1985	SW8080	4,4'-DDT	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.004
DMS-90	4/28/1988	SW8080	4,4'-DDT	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.004
DMS-96	5/3/1988	SW8080	4,4'-DDT	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.004
DMW-16A	10/27/1986	SW8080	4,4'-DDT	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.004
DMS-94	5/2/1988	SW8080	4,4'-DDT	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.004
DMW-16B	10/22/1986	SW8080	4,4'-DDT	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.004
DMW-16C	11/9/1986	SW8080	4,4'-DDT	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33

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DMW-14A	11/9/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	4-Chloro-3-methylphen	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Chloro-3-methylphen	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	4-Chloro-3-methylphen	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	4-Chloro-3-methylphen	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01
DMS-57	6/24/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMW-15A	11/8/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01
DMS-89	4/28/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.01
DMS-98	5/3/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.01
DMS-100	5/5/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.01
DMS-103	5/9/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.01
DMS-58	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01
DMS-82	4/25/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.01
DMS-83	4/25/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.01
DMS-85	4/26/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.01
DMS-86	4/26/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.01
DMS-88	4/28/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.01
DMS-91	5/2/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.01
DMS-92	5/2/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.01
DMS-93	5/2/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.01
DMS-97	5/3/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.01

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DMS-99	5/5/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.01
DMS-102	5/9/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.01
DMS-104	5/9/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.01
DMS-105	5/9/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.01
DMS-84	4/26/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.01
DMS-87	4/28/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.01
DMS-95	5/3/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.01
DMS-101	5/5/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.01
DMW-14A	11/9/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.01
DMS-55	6/11/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01
DMS-57	6/11/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01
DMS-60	6/10/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01
DMS-53	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01
DMS-56	6/12/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01
DMS-52	6/19/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01
DMW-18A	11/9/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01
DMW-14E	10/6/1988	SW8260	4-Methyl-2-pentanone	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMW-17A	11/3/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01
DMS-61	6/18/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01
DMS-54	6/19/1985	SW8260	4-Methyl-2-pentanone	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01
DMS-90	4/28/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.01
DMS-96	5/3/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.01
DMW-16A	10/27/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01
DMS-94	5/2/1988	SW8260	4-Methyl-2-pentanone	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.01
DMW-16B	10/22/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01
DMW-16C	11/9/1986	SW8260	4-Methyl-2-pentanone	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01
DMS-59	6/10/1985	SW8270	4-Methylphenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	4-Methylphenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	4-Methylphenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Methylphenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	4-Methylphenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Methylphenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	4-Methylphenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	4-Methylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	4-Methylphenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	4-Methylphenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	4-Methylphenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	4-Methylphenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	4-Methylphenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-[redacted]	4/25/1988	SW8270	4-Methylphenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

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DMS-83	4/25/1988	SW8270	4-Methylphenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	4-Methylphenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	4-Methylphenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	4-Methylphenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	4-Methylphenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	4-Methylphenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	4-Methylphenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	4-Methylphenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	4-Methylphenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	4-Methylphenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	4-Methylphenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	4-Methylphenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	4-Methylphenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	4-Methylphenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	4-Methylphenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	4-Methylphenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	4-Methylphenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	4-Methylphenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	4-Methylphenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Methylphenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	4-Methylphenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	4-Methylphenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	4-Methylphenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	4-Methylphenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Methylphenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	4-Methylphenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	4-Methylphenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	4-Methylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	4-Methylphenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	4-Methylphenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	4-Methylphenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	4-Methylphenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	4-Methylphenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	4-Methylphenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	4-Methylphenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	4-Methylphenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	4-Methylphenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	4-Nitrophenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	4-Nitrophenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	4-Nitrophenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	4-Nitrophenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	4-Nitrophenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	4-Nitrophenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1.6
DMS-57	6/24/1985	SW8270	4-Nitrophenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1.6

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DMW-15A	11/8/1986	SW8270	4-Nitrophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMW-15A	11/8/1986	SW8270	4-Nitrophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMS-89	4/28/1988	SW8270	4-Nitrophenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1.6
DMS-98	5/3/1988	SW8270	4-Nitrophenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1.6
DMS-100	5/5/1988	SW8270	4-Nitrophenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1.6
DMS-103	5/9/1988	SW8270	4-Nitrophenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1.6
DMS-82	4/25/1988	SW8270	4-Nitrophenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1.6
DMS-83	4/25/1988	SW8270	4-Nitrophenol	NS1	DMS-83	SO	0	2	mg/Kg	=	0.05	1.6
DMS-85	4/26/1988	SW8270	4-Nitrophenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1.6
DMS-86	4/26/1988	SW8270	4-Nitrophenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1.6
DMS-88	4/28/1988	SW8270	4-Nitrophenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	1.6
DMS-91	5/2/1988	SW8270	4-Nitrophenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1.6
DMS-92	5/2/1988	SW8270	4-Nitrophenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1.6
DMS-93	5/2/1988	SW8270	4-Nitrophenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1.6
DMS-97	5/3/1988	SW8270	4-Nitrophenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1.6
DMS-99	5/5/1988	SW8270	4-Nitrophenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1.6
DMS-102	5/9/1988	SW8270	4-Nitrophenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	1.6
DMS-104	5/9/1988	SW8270	4-Nitrophenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	1.6
DMS-105	5/9/1988	SW8270	4-Nitrophenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	1.6
DMS-84	4/26/1988	SW8270	4-Nitrophenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1.6
DMS-87	4/28/1988	SW8270	4-Nitrophenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1.6
DMS-95	5/3/1988	SW8270	4-Nitrophenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1.6
DMS-101	5/5/1988	SW8270	4-Nitrophenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	1.6
DMW-14A	11/9/1986	SW8270	4-Nitrophenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	4-Nitrophenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1.6
DMS-57	6/11/1985	SW8270	4-Nitrophenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	4-Nitrophenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1.6
DMS-59	6/10/1985	SW8270	4-Nitrophenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	4-Nitrophenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	4-Nitrophenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	4-Nitrophenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	4-Nitrophenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1.6
DMW-18A	11/9/1986	SW8270	4-Nitrophenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	1.6
DMW-14E	10/6/1988	SW8270	4-Nitrophenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	4-Nitrophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	4-Nitrophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	4-Nitrophenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	4-Nitrophenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1.6
DMS-90	4/28/1988	SW8270	4-Nitrophenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1.6
DMS-96	5/3/1988	SW8270	4-Nitrophenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1.6
DMW-16A	10/27/1986	SW8270	4-Nitrophenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1.6
DMS-94	5/2/1988	SW8270	4-Nitrophenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1.6
DMW-16B	10/22/1986	SW8270	4-Nitrophenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1.6
DMW-16C	11/9/1986	SW8270	4-Nitrophenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Acenaphthene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Acenaphthene	NS1	DMS-60	SO	0	1				

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DMS-55	6/11/1985	SW8270	Acenaphthene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Acenaphthene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Acenaphthene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Acenaphthene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Acenaphthene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Acenaphthene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Acenaphthene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Acenaphthene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Acenaphthene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Acenaphthene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Acenaphthene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Acenaphthene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Acenaphthene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Acenaphthene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Acenaphthene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Acenaphthene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Acenaphthene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Acenaphthene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Acenaphthene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Acenaphthene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Acenaphthene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Acenaphthene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Acenaphthene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Acenaphthene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Acenaphthene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Acenaphthene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Acenaphthene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Acenaphthene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Acenaphthene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Acenaphthene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Acenaphthene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Acenaphthene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Acenaphthene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Acenaphthene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Acenaphthene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Acenaphthene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Acenaphthene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Acenaphthene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Acenaphthene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Acenaphthene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Acenaphthene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Acenaphthene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Acenaphthene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Acenaphthene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Acenaphthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Acenaphthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Acenaphthene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Acenaphthene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33

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DMS-90	4/28/1988	SW8270	Acenaphthene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Acenaphthene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Acenaphthene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Acenaphthene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Acenaphthene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Acenaphthene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Acenaphthylene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Acenaphthylene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Acenaphthylene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Acenaphthylene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Acenaphthylene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Acenaphthylene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Acenaphthylene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Acenaphthylene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Acenaphthylene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Acenaphthylene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Acenaphthylene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Acenaphthylene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Acenaphthylene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Acenaphthylene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Acenaphthylene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Acenaphthylene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Acenaphthylene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Acenaphthylene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Acenaphthylene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Acenaphthylene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Acenaphthylene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Acenaphthylene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Acenaphthylene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Acenaphthylene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Acenaphthylene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Acenaphthylene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Acenaphthylene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Acenaphthylene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Acenaphthylene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Acenaphthylene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Acenaphthylene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Acenaphthylene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Acenaphthylene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Acenaphthylene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Acenaphthylene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Acenaphthylene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Acenaphthylene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33

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DMS-52	6/19/1985	SW8270	Acenaphthylene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Acenaphthylene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Acenaphthylene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Acenaphthylene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Acenaphthylene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Acenaphthylene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Acenaphthylene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Acenaphthylene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Acenaphthylene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Acenaphthylene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Acenaphthylene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Acenaphthylene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Acenaphthylene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Acenaphthylene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8260	Acetone	NS1	DMS-59	SO	0	1	mg/Kg	=	0.015	0.01	
DMS-60	6/10/1985	SW8260	Acetone	NS1	DMS-60	SO	0	1	mg/Kg	=	0.023	0.01	
DMS-55	6/11/1985	SW8260	Acetone	NS1	DMS-55	SO	0	1	mg/Kg	=	0.012	0.01	
DMS-53	6/12/1985	SW8260	Acetone	NS1	DMS-53	SO	0	1	mg/Kg	=	0.02	0.01	
DMS-56	6/12/1985	SW8260	Acetone	NS1	DMS-56	SO	0	1	mg/Kg	=	0.029	0.01	
DMS-58	6/12/1985	SW8260	Acetone	NS1	DMS-58	SO	0	1	mg/Kg	=	0.0059	0.01	JB
DMS-61	6/18/1985	SW8260	Acetone	NS1	DMS-61	SO	0	1	mg/Kg	=	0.039	0.01	B
DMS-52	6/19/1985	SW8260	Acetone	NS1	DMS-52	SO	0	1	mg/Kg	=	0.022	0.01	B
DMS-54	6/19/1985	SW8260	Acetone	NS1	DMS-54	SO	0	1	mg/Kg	=	0.062	0.01	B
DMS-57	6/24/1985	SW8260	Acetone	NS1	DMS-57	SO	0	1	mg/Kg	=	0.0064	0.01	
DMW-15A	11/8/1986	SW8260	Acetone	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.015	0.01	
DMW-15A	11/8/1986	SW8260	Acetone	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.015	0.01	
DMS-89	4/28/1988	SW8260	Acetone	NS1	DMS-89	SO	0	1	mg/Kg	=	0.028	0.01	B
DMS-98	5/3/1988	SW8260	Acetone	NS1	DMS-98	SO	0	1	mg/Kg	=	0.012	0.01	B
DMS-100	5/5/1988	SW8260	Acetone	NS1	DMS-100	SO	0	1	mg/Kg	=	0.013	0.01	BJ
DMS-103	5/9/1988	SW8260	Acetone	NS1	DMS-103	SO	0	1	mg/Kg	=	0.023	0.01	B
DMS-58	6/12/1985	SW8260	Acetone	NS1	DMS-58	SO	0	2	mg/Kg	=	0.033	0.01	B
DMS-82	4/25/1988	SW8260	Acetone	NS1	DMS-82	SO	0	2	mg/Kg	=	0.016	0.01	B
DMS-83	4/25/1988	SW8260	Acetone	NS1	DMS-83	SO	0	2	mg/Kg	=	0.016	0.01	B
DMS-85	4/26/1988	SW8260	Acetone	NS1	DMS-85	SO	0	2	mg/Kg	=	0.01	0.01	BJ
DMS-86	4/26/1988	SW8260	Acetone	NS1	DMS-86	SO	0	2	mg/Kg	=	0.009	0.01	BJ
DMS-88	4/28/1988	SW8260	Acetone	NS1	DMS-88	SO	0	2	mg/Kg	=	0.019	0.01	B
DMS-91	5/2/1988	SW8260	Acetone	NS1	DMS-91	SO	0	2	mg/Kg	=	0.034	0.01	B
DMS-92	5/2/1988	SW8260	Acetone	NS1	DMS-92	SO	0	2	mg/Kg	=	0.019	0.01	B
DMS-93	5/2/1988	SW8260	Acetone	NS1	DMS-93	SO	0	2	mg/Kg	=	0.016	0.01	B
DMS-97	5/3/1988	SW8260	Acetone	NS1	DMS-97	SO	0	2	mg/Kg	=	0.008	0.01	BJ
DMS-99	5/5/1988	SW8260	Acetone	NS1	DMS-99	SO	0	2	mg/Kg	=	0.041	0.01	B
DMS-102	5/9/1988	SW8260	Acetone	NS1	DMS-102	SO	0	2	mg/Kg	=	0.031	0.01	B
DMS-104	5/9/1988	SW8260	Acetone	NS1	DMS-104	SO	0	2	mg/Kg	=	0.028	0.01	B
DMS-105	5/9/1988	SW8260	Acetone	NS1	DMS-105	SO	0	2	mg/Kg	=	0.016	0.01	B
DMS-84	4/26/1988	SW8260	Acetone	NS1	DMS-84	SO	0	4	mg/Kg	=	0.009	0.01	BJ
DMS-87	4/28/1988	SW8260	Acetone	NS1	DMS-87	SO	0	4	mg/Kg	=	0.023	0.01	
DMS-95	5/3/1988	SW8260	Acetone	NS1	DMS-95	SO	0	4	mg/Kg	=	0.06	0.01	B
DMS-101	5/5/1988	SW8260	Acetone	NS1	DMS-101	SO	0	4	mg/Kg	=	0.046	0.01	B

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DMW-14A	11/9/1986	SW8260	Acetone	NS1	DMW-14A	SO	0	5	mg/Kg	=	0.022	0.01	
DMS-55	6/11/1985	SW8260	Acetone	NS1	DMS-55	SO	0	6	mg/Kg	=	0.024	0.01	
DMS-57	6/11/1985	SW8260	Acetone	NS1	DMS-57	SO	0	6	mg/Kg	=	0.01	0.01	
DMS-61	6/18/1985	SW8260	Acetone	NS1	DMS-61	SO	0	6	mg/Kg	=	0.043	0.01	B
DMS-59	6/10/1985	SW8260	Acetone	NS1	DMS-59	SO	0	8	mg/Kg	=	0.066	0.01	
DMS-60	6/10/1985	SW8260	Acetone	NS1	DMS-60	SO	0	8	mg/Kg	=	0.016	0.01	
DMS-53	6/12/1985	SW8260	Acetone	NS1	DMS-53	SO	0	8	mg/Kg	=	0.065	0.01	
DMS-56	6/12/1985	SW8260	Acetone	NS1	DMS-56	SO	0	8	mg/Kg	=	0.082	0.01	
DMS-52	6/19/1985	SW8260	Acetone	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01	
DMS-54	6/19/1985	SW8260	Acetone	NS1	DMS-54	SO	0	10	mg/Kg	=	0.06	0.01	B
DMW-18A	11/9/1986	SW8260	Acetone	NS1	DMW-18A	SO	0	10	mg/Kg	=	0.027	0.01	
DMW-14E	10/6/1988	SW8260	Acetone	NS1	DMW-14E	SO	0	10	mg/Kg	=	0.032	0.01	B
DMW-17A	11/3/1986	SW8260	Acetone	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.065	0.01	
DMW-17A	11/3/1986	SW8260	Acetone	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.065	0.01	
DMS-61	6/18/1985	SW8260	Acetone	NS1	DMS-61	SO	0	18	mg/Kg	=	0.04	0.01	B
DMS-54	6/19/1985	SW8260	Acetone	NS1	DMS-54	SO	0	18	mg/Kg	=	0.27	0.01	B
DMS-90	4/28/1988	SW8260	Acetone	NS1	DMS-90	SO	0	19	mg/Kg	=	0.028	0.01	B
DMS-96	5/3/1988	SW8260	Acetone	NS1	DMS-96	SO	0	19	mg/Kg	=	0.053	0.01	B
DMW-16A	10/27/1986	SW8260	Acetone	NS1	DMW-16A	SO	0	20	mg/Kg	=	0.075	0.01	
DMS-94	5/2/1988	SW8260	Acetone	NS1	DMS-94	SO	0	24	mg/Kg	=	0.035	0.01	B
DMW-16B	10/22/1986	SW8260	Acetone	NS1	DMW-16B	SO	0	25	mg/Kg	=	0.18	0.01	
DMW-16C	11/9/1986	SW8260	Acetone	NS1	DMW-16C	SO	0	56	mg/Kg	=	0.16	0.01	
DMS-59	6/10/1985	SW6010	Aluminum	NS1	DMS-59	SO	0	1	mg/Kg	=	17406	20	
DMS-60	6/10/1985	SW6010	Aluminum	NS1	DMS-60	SO	0	1	mg/Kg	=	12671	20	
DMS-55	6/11/1985	SW6010	Aluminum	NS1	DMS-55	SO	0	1	mg/Kg	=	11500	20	
DMS-53	6/12/1985	SW6010	Aluminum	NS1	DMS-53	SO	0	1	mg/Kg	=	7228	20	
DMS-56	6/12/1985	SW6010	Aluminum	NS1	DMS-56	SO	0	1	mg/Kg	=	12813	20	
DMS-58	6/12/1985	SW6010	Aluminum	NS1	DMS-58	SO	0	1	mg/Kg	=	8240	20	
DMS-61	6/18/1985	SW6010	Aluminum	NS1	DMS-61	SO	0	1	mg/Kg	=	9217	20	
DMS-52	6/19/1985	SW6010	Aluminum	NS1	DMS-52	SO	0	1	mg/Kg	=	14313	20	
DMS-54	6/19/1985	SW6010	Aluminum	NS1	DMS-54	SO	0	1	mg/Kg	=	22025	20	
DMS-57	6/24/1985	SW6010	Aluminum	NS1	DMS-57	SO	0	1	mg/Kg	=	5878	20	
DMW-15A	11/8/1986	SW6010	Aluminum	NS1	DMW-15A	SO	0	1	mg/Kg	=	9310	20	
DMW-15A	11/8/1986	SW6010	Aluminum	NS1	DMW-15A	SO	0	1	mg/Kg	=	9310	20	
DMS-89	4/28/1988	SW6010	Aluminum	NS1	DMS-89	SO	0	1	mg/Kg	=	11200	20	
DMS-98	5/3/1988	SW6010	Aluminum	NS1	DMS-98	SO	0	1	mg/Kg	=	7170	20	
DMS-100	5/5/1988	SW6010	Aluminum	NS1	DMS-100	SO	0	1	mg/Kg	=	9140	20	
DMS-103	5/9/1988	SW6010	Aluminum	NS1	DMS-103	SO	0	1	mg/Kg	=	12000	20	
DMS-58	6/12/1985	SW6010	Aluminum	NS1	DMS-58	SO	0	2	mg/Kg	=	9196	20	
DMS-82	4/25/1988	SW6010	Aluminum	NS1	DMS-82	SO	0	2	mg/Kg	=	7890	20	
DMS-83	4/25/1988	SW6010	Aluminum	NS1	DMS-83	SO	0	2	mg/Kg	=	6330	20	
DMS-85	4/26/1988	SW6010	Aluminum	NS1	DMS-85	SO	0	2	mg/Kg	=	10800	20	
DMS-86	4/26/1988	SW6010	Aluminum	NS1	DMS-86	SO	0	2	mg/Kg	=	7100	20	
DMS-88	4/28/1988	SW6010	Aluminum	NS1	DMS-88	SO	0	2	mg/Kg	=	15900	20	
DMS-91	5/2/1988	SW6010	Aluminum	NS1	DMS-91	SO	0	2	mg/Kg	=	6500	20	
DMS-92	5/2/1988	SW6010	Aluminum	NS1	DMS-92	SO	0	2	mg/Kg	=	7860	20	
DMS-93	5/2/1988	SW6010	Aluminum	NS1	DMS-93	SO	0	2	mg/Kg	=	5900	20	
DMS-97	5/3/1988	SW6010	Aluminum	NS1	DMS-97	SO	0	2	mg/Kg	=	15600	20	

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DMS-99	5/5/1988	SW6010	Aluminum	NS1	DMS-99	SO	0	2	mg/Kg	=	16800	20
DMS-102	5/9/1988	SW6010	Aluminum	NS1	DMS-102	SO	0	2	mg/Kg	=	15800	20
DMS-104	5/9/1988	SW6010	Aluminum	NS1	DMS-104	SO	0	2	mg/Kg	=	14800	20
DMS-105	5/9/1988	SW6010	Aluminum	NS1	DMS-105	SO	0	2	mg/Kg	=	15400	20
DMS-84	4/26/1988	SW6010	Aluminum	NS1	DMS-84	SO	0	4	mg/Kg	=	6320	20
DMS-87	4/28/1988	SW6010	Aluminum	NS1	DMS-87	SO	0	4	mg/Kg	=	19600	20
DMS-95	5/3/1988	SW6010	Aluminum	NS1	DMS-95	SO	0	4	mg/Kg	=	10900	20
DMS-101	5/5/1988	SW6010	Aluminum	NS1	DMS-101	SO	0	4	mg/Kg	=	6530	20
DMW-14A	11/9/1986	SW6010	Aluminum	NS1	DMW-14A	SO	0	5	mg/Kg	=	7440	20
DMS-55	6/11/1985	SW6010	Aluminum	NS1	DMS-55	SO	0	6	mg/Kg	=	10710	20
DMS-57	6/11/1985	SW6010	Aluminum	NS1	DMS-57	SO	0	6	mg/Kg	=	8522	20
DMS-61	6/18/1985	SW6010	Aluminum	NS1	DMS-61	SO	0	6	mg/Kg	=	6365	20
DMS-59	6/10/1985	SW6010	Aluminum	NS1	DMS-59	SO	0	8	mg/Kg	=	13297	20
DMS-60	6/10/1985	SW6010	Aluminum	NS1	DMS-60	SO	0	8	mg/Kg	=	4773	20
DMS-53	6/12/1985	SW6010	Aluminum	NS1	DMS-53	SO	0	8	mg/Kg	=	10975	20
DMS-56	6/12/1985	SW6010	Aluminum	NS1	DMS-56	SO	0	8	mg/Kg	=	5550	20
DMS-52	6/19/1985	SW6010	Aluminum	NS1	DMS-52	SO	0	8	mg/Kg	=	8434	20
DMS-54	6/19/1985	SW6010	Aluminum	NS1	DMS-54	SO	0	10	mg/Kg	=	394	20
DMW-18A	11/9/1986	SW6010	Aluminum	NS1	DMW-18A	SO	0	10	mg/Kg	=	2670	20
DMW-14E	10/6/1988	SW6010	Aluminum	NS1	DMW-14E	SO	0	10	mg/Kg	=	15000	20
DMW-17A	11/3/1986	SW6010	Aluminum	NS1	DMW-17A	SO	0	15	mg/Kg	=	4570	20
DMW-17A	11/3/1986	SW6010	Aluminum	NS1	DMW-17A	SO	0	15	mg/Kg	=	4570	20
DMS-61	6/18/1985	SW6010	Aluminum	NS1	DMS-61	SO	0	18	mg/Kg	=	2521	20
DMS-54	6/19/1985	SW6010	Aluminum	NS1	DMS-54	SO	0	18	mg/Kg	=	1942	20
DMS-90	4/28/1988	SW6010	Aluminum	NS1	DMS-90	SO	0	19	mg/Kg	=	8520	20
DMS-96	5/3/1988	SW6010	Aluminum	NS1	DMS-96	SO	0	19	mg/Kg	=	4540	20
DMW-16A	10/27/1986	SW6010	Aluminum	NS1	DMW-16A	SO	0	20	mg/Kg	=	2940	20
DMS-94	5/2/1988	SW6010	Aluminum	NS1	DMS-94	SO	0	24	mg/Kg	=	6890	20
DMW-16B	10/22/1986	SW6010	Aluminum	NS1	DMW-16B	SO	0	25	mg/Kg	=	9190	20
DMW-16C	11/9/1986	SW6010	Aluminum	NS1	DMW-16C	SO	0	56	mg/Kg	=	1120	20
DMS-59	6/10/1985	SW8270	Anthracene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Anthracene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Anthracene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Anthracene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Anthracene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Anthracene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Anthracene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Anthracene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Anthracene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Anthracene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.062	0.33
DMW-15A	11/8/1986	SW8270	Anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.062	0.33
DMS-89	4/28/1988	SW8270	Anthracene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Anthracene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Anthracene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Anthracene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Anthracene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Anthracene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

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DMS-83	4/25/1988	SW8270	Anthracene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Anthracene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Anthracene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Anthracene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Anthracene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Anthracene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Anthracene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Anthracene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Anthracene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Anthracene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Anthracene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Anthracene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Anthracene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Anthracene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Anthracene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Anthracene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Anthracene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Anthracene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Anthracene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Anthracene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Anthracene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Anthracene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Anthracene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Anthracene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Anthracene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Anthracene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Anthracene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Anthracene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Anthracene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Anthracene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Anthracene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Anthracene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Anthracene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Anthracene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Anthracene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Anthracene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Antimony	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	6
DMS-60	6/10/1985	SW6010	Antimony	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	6
DMS-55	6/11/1985	SW6010	Antimony	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	6
DMS-53	6/12/1985	SW6010	Antimony	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	6
DMS-56	6/12/1985	SW6010	Antimony	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	6
DMS-58	6/12/1985	SW6010	Antimony	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	6
DMS-61	6/18/1985	SW6010	Antimony	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	6
DMS-52	6/19/1985	SW6010	Antimony	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	6
DMS-54	6/19/1985	SW6010	Antimony	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	6
DMS-57	6/24/1985	SW6010	Antimony	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	6

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DMW-15A	11/8/1986	SW6010	Antimony	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	6	
DMW-15A	11/8/1986	SW6010	Antimony	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	6	
DMS-89	4/28/1988	SW6010	Antimony	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	6	
DMS-98	5/3/1988	SW6010	Antimony	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	6	
DMS-100	5/5/1988	SW6010	Antimony	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	6	
DMS-103	5/9/1988	SW6010	Antimony	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	6	
DMS-58	6/12/1985	SW6010	Antimony	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	6	
DMS-82	4/25/1988	SW6010	Antimony	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	6	
DMS-83	4/25/1988	SW6010	Antimony	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	6	
DMS-85	4/26/1988	SW6010	Antimony	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	6	
DMS-86	4/26/1988	SW6010	Antimony	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	6	
DMS-88	4/28/1988	SW6010	Antimony	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	6	
DMS-91	5/2/1988	SW6010	Antimony	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	6	
DMS-92	5/2/1988	SW6010	Antimony	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	6	
DMS-93	5/2/1988	SW6010	Antimony	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	6	
DMS-97	5/3/1988	SW6010	Antimony	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	6	
DMS-99	5/5/1988	SW6010	Antimony	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	6	
DMS-102	5/9/1988	SW6010	Antimony	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	6	
DMS-104	5/9/1988	SW6010	Antimony	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	6	
DMS-105	5/9/1988	SW6010	Antimony	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	6	
DMS-84	4/26/1988	SW6010	Antimony	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	6	
DMS-87	4/28/1988	SW6010	Antimony	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	6	
DMS-95	5/3/1988	SW6010	Antimony	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	6	
DMS-101	5/5/1988	SW6010	Antimony	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	6	
DMW-14A	11/9/1986	SW6010	Antimony	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	6	
DMS-55	6/11/1985	SW6010	Antimony	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	6	
DMS-57	6/11/1985	SW6010	Antimony	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	6	
DMS-61	6/18/1985	SW6010	Antimony	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	6	
DMS-59	6/10/1985	SW6010	Antimony	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	6	
DMS-60	6/10/1985	SW6010	Antimony	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	6	
DMS-53	6/12/1985	SW6010	Antimony	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	6	
DMS-56	6/12/1985	SW6010	Antimony	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	6	
DMS-52	6/19/1985	SW6010	Antimony	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	6	
DMS-54	6/19/1985	SW6010	Antimony	NS1	DMS-54	SO	0	10	mg/Kg	=	0.88	6	
DMW-18A	11/9/1986	SW6010	Antimony	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	6	
DMW-14E	10/6/1988	SW6010	Antimony	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	6	
DMW-17A	11/3/1986	SW6010	Antimony	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	6	
DMW-17A	11/3/1986	SW6010	Antimony	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	6	
DMS-61	6/18/1985	SW6010	Antimony	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	6	
DMS-54	6/19/1985	SW6010	Antimony	NS1	DMS-54	SO	0	18	mg/Kg	=	2	6	
DMS-90	4/28/1988	SW6010	Antimony	NS1	DMS-90	SO	0	19	mg/Kg	=	6.6	6	JQ
DMS-96	5/3/1988	SW6010	Antimony	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	6	
DMW-16A	10/27/1986	SW6010	Antimony	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	6	
DMS-94	5/2/1988	SW6010	Antimony	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	6	
DMW-16B	10/22/1986	SW6010	Antimony	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	6	
DMW-16C	11/9/1986	SW6010	Antimony	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	6	
DMS-59	6/10/1985	SW6010	Arsenic	NS1	DMS-59	SO	0	1	mg/Kg	=	66	1	
DMS-60	6/10/1985	SW6010	Arsenic	NS1	DMS-60	SO	0	1	mg/Kg	=	31	1	

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DMS-55	6/11/1985	SW6010	Arsenic	NS1	DMS-55	SO	0	1	mg/Kg	=	34	1	
DMS-53	6/12/1985	SW6010	Arsenic	NS1	DMS-53	SO	0	1	mg/Kg	=	18	1	
DMS-56	6/12/1985	SW6010	Arsenic	NS1	DMS-56	SO	0	1	mg/Kg	=	67	1	
DMS-58	6/12/1985	SW6010	Arsenic	NS1	DMS-58	SO	0	1	mg/Kg	=	15	1	
DMS-61	6/18/1985	SW6010	Arsenic	NS1	DMS-61	SO	0	1	mg/Kg	=	25	1	
DMS-52	6/19/1985	SW6010	Arsenic	NS1	DMS-52	SO	0	1	mg/Kg	=	28	1	
DMS-54	6/19/1985	SW6010	Arsenic	NS1	DMS-54	SO	0	1	mg/Kg	=	7	1	
DMS-57	6/24/1985	SW6010	Arsenic	NS1	DMS-57	SO	0	1	mg/Kg	=	2	1	
DMW-15A	11/8/1986	SW6010	Arsenic	NS1	DMW-15A	SO	0	1	mg/Kg	=	8.6	1	
DMW-15A	11/8/1986	SW6010	Arsenic	NS1	DMW-15A	SO	0	1	mg/Kg	=	8.6	1	
DMS-89	4/28/1988	SW6010	Arsenic	NS1	DMS-89	SO	0	1	mg/Kg	=	5.6	1	F
DMS-98	5/3/1988	SW6010	Arsenic	NS1	DMS-98	SO	0	1	mg/Kg	=	38	1	
DMS-100	5/5/1988	SW6010	Arsenic	NS1	DMS-100	SO	0	1	mg/Kg	=	5	1	F
DMS-103	5/9/1988	SW6010	Arsenic	NS1	DMS-103	SO	0	1	mg/Kg	=	6	1	F
DMS-58	6/12/1985	SW6010	Arsenic	NS1	DMS-58	SO	0	2	mg/Kg	=	26	1	
DMS-82	4/25/1988	SW6010	Arsenic	NS1	DMS-82	SO	0	2	mg/Kg	=	0.97	1	JQF
DMS-83	4/25/1988	SW6010	Arsenic	NS1	DMS-83	SO	0	2	mg/Kg	=	1.4	1	JQF
DMS-85	4/26/1988	SW6010	Arsenic	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1	
DMS-86	4/26/1988	SW6010	Arsenic	NS1	DMS-86	SO	0	2	mg/Kg	=	1.4	1	JQF
DMS-88	4/28/1988	SW6010	Arsenic	NS1	DMS-88	SO	0	2	mg/Kg	=	5.3	1	F
DMS-91	5/2/1988	SW6010	Arsenic	NS1	DMS-91	SO	0	2	mg/Kg	=	2.1	1	JQF
DMS-92	5/2/1988	SW6010	Arsenic	NS1	DMS-92	SO	0	2	mg/Kg	=	1.3	1	JQF
DMS-93	5/2/1988	SW6010	Arsenic	NS1	DMS-93	SO	0	2	mg/Kg	=	1.5	1	JQF
DMS-97	5/3/1988	SW6010	Arsenic	NS1	DMS-97	SO	0	2	mg/Kg	=	3.5	1	F
DMS-99	5/5/1988	SW6010	Arsenic	NS1	DMS-99	SO	0	2	mg/Kg	=	2.5	1	JQ
DMS-102	5/9/1988	SW6010	Arsenic	NS1	DMS-102	SO	0	2	mg/Kg	=	4.6	1	F
DMS-104	5/9/1988	SW6010	Arsenic	NS1	DMS-104	SO	0	2	mg/Kg	=	5	1	F
DMS-105	5/9/1988	SW6010	Arsenic	NS1	DMS-105	SO	0	2	mg/Kg	=	1.7	1	JQF
DMS-84	4/26/1988	SW6010	Arsenic	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1	
DMS-87	4/28/1988	SW6010	Arsenic	NS1	DMS-87	SO	0	4	mg/Kg	=	8.7	1	F
DMS-95	5/3/1988	SW6010	Arsenic	NS1	DMS-95	SO	0	4	mg/Kg	=	3	1	F
DMS-101	5/5/1988	SW6010	Arsenic	NS1	DMS-101	SO	0	4	mg/Kg	=	0.78	1	JQF
DMW-14A	11/9/1986	SW6010	Arsenic	NS1	DMW-14A	SO	0	5	mg/Kg	=	2.6	1	
DMS-55	6/11/1985	SW6010	Arsenic	NS1	DMS-55	SO	0	6	mg/Kg	=	88	1	
DMS-57	6/11/1985	SW6010	Arsenic	NS1	DMS-57	SO	0	6	mg/Kg	=	11	1	
DMS-61	6/18/1985	SW6010	Arsenic	NS1	DMS-61	SO	0	6	mg/Kg	=	16	1	
DMS-59	6/10/1985	SW6010	Arsenic	NS1	DMS-59	SO	0	8	mg/Kg	=	14	1	
DMS-60	6/10/1985	SW6010	Arsenic	NS1	DMS-60	SO	0	8	mg/Kg	=	2.6	1	
DMS-53	6/12/1985	SW6010	Arsenic	NS1	DMS-53	SO	0	8	mg/Kg	=	34	1	
DMS-56	6/12/1985	SW6010	Arsenic	NS1	DMS-56	SO	0	8	mg/Kg	=	23	1	
DMS-52	6/19/1985	SW6010	Arsenic	NS1	DMS-52	SO	0	8	mg/Kg	=	17	1	
DMS-54	6/19/1985	SW6010	Arsenic	NS1	DMS-54	SO	0	10	mg/Kg	=	1.3	1	
DMW-18A	11/9/1986	SW6010	Arsenic	NS1	DMW-18A	SO	0	10	mg/Kg	=	1.8	1	
DMW-14E	10/6/1988	SW6010	Arsenic	NS1	DMW-14E	SO	0	10	mg/Kg	=	1.2	1	JQF
DMW-17A	11/3/1986	SW6010	Arsenic	NS1	DMW-17A	SO	0	15	mg/Kg	=	4.2	1	
DMW-17A	11/3/1986	SW6010	Arsenic	NS1	DMW-17A	SO	0	15	mg/Kg	=	4.2	1	
DMS-61	6/18/1985	SW6010	Arsenic	NS1	DMS-61	SO	0	18	mg/Kg	=	28	1	
DMS-54	6/19/1985	SW6010	Arsenic	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1	

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DMS-90	4/28/1988	SW6010	Arsenic	NS1	DMS-90	SO	0	19	mg/Kg	=	20	1	
DMS-96	5/3/1988	SW6010	Arsenic	NS1	DMS-96	SO	0	19	mg/Kg	=	5	1	F
DMW-16A	10/27/1986	SW6010	Arsenic	NS1	DMW-16A	SO	0	20	mg/Kg	=	2.1	1	
DMS-94	5/2/1988	SW6010	Arsenic	NS1	DMS-94	SO	0	24	mg/Kg	=	4.1	1	F
DMW-16B	10/22/1986	SW6010	Arsenic	NS1	DMW-16B	SO	0	25	mg/Kg	=	11	1	
DMW-16C	11/9/1986	SW6010	Arsenic	NS1	DMW-16C	SO	0	56	mg/Kg	=	9.4	1	
DMS-59	6/10/1985	SW6010	Barium	NS1	DMS-59	SO	0	1	mg/Kg	=	21	20	
DMS-60	6/10/1985	SW6010	Barium	NS1	DMS-60	SO	0	1	mg/Kg	=	27	20	
DMS-55	6/11/1985	SW6010	Barium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	20	
DMS-53	6/12/1985	SW6010	Barium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	20	
DMS-56	6/12/1985	SW6010	Barium	NS1	DMS-56	SO	0	1	mg/Kg	=	21	20	
DMS-58	6/12/1985	SW6010	Barium	NS1	DMS-58	SO	0	1	mg/Kg	=	33	20	
DMS-61	6/18/1985	SW6010	Barium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	20	
DMS-52	6/19/1985	SW6010	Barium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	20	
DMS-54	6/19/1985	SW6010	Barium	NS1	DMS-54	SO	0	1	mg/Kg	=	31	20	
DMS-57	6/24/1985	SW6010	Barium	NS1	DMS-57	SO	0	1	mg/Kg	=	51	20	
DMW-15A	11/8/1986	SW6010	Barium	NS1	DMW-15A	SO	0	1	mg/Kg	=	31	20	
DMW-15A	11/8/1986	SW6010	Barium	NS1	DMW-15A	SO	0	1	mg/Kg	=	31	20	
DMS-89	4/28/1988	SW6010	Barium	NS1	DMS-89	SO	0	1	mg/Kg	=	27	20	JQ
DMS-98	5/3/1988	SW6010	Barium	NS1	DMS-98	SO	0	1	mg/Kg	=	24	20	JQ
DMS-100	5/5/1988	SW6010	Barium	NS1	DMS-100	SO	0	1	mg/Kg	=	32	20	JQ
DMS-103	5/9/1988	SW6010	Barium	NS1	DMS-103	SO	0	1	mg/Kg	=	30	20	JQ
DMS-58	6/12/1985	SW6010	Barium	NS1	DMS-58	SO	0	2	mg/Kg	=	25	20	
DMS-82	4/25/1988	SW6010	Barium	NS1	DMS-82	SO	0	2	mg/Kg	=	27	20	JQ
DMS-83	4/25/1988	SW6010	Barium	NS1	DMS-83	SO	0	2	mg/Kg	=	20	20	JQ
DMS-85	4/26/1988	SW6010	Barium	NS1	DMS-85	SO	0	2	mg/Kg	=	23	20	JQ
DMS-86	4/26/1988	SW6010	Barium	NS1	DMS-86	SO	0	2	mg/Kg	=	18	20	JQ
DMS-88	4/28/1988	SW6010	Barium	NS1	DMS-88	SO	0	2	mg/Kg	=	23	20	JQ
DMS-91	5/2/1988	SW6010	Barium	NS1	DMS-91	SO	0	2	mg/Kg	=	29	20	JQ
DMS-92	5/2/1988	SW6010	Barium	NS1	DMS-92	SO	0	2	mg/Kg	=	23	20	JQ
DMS-93	5/2/1988	SW6010	Barium	NS1	DMS-93	SO	0	2	mg/Kg	=	32	20	JQ
DMS-97	5/3/1988	SW6010	Barium	NS1	DMS-97	SO	0	2	mg/Kg	=	27	20	JQ
DMS-99	5/5/1988	SW6010	Barium	NS1	DMS-99	SO	0	2	mg/Kg	=	31	20	JQ
DMS-102	5/9/1988	SW6010	Barium	NS1	DMS-102	SO	0	2	mg/Kg	=	19	20	JQ
DMS-104	5/9/1988	SW6010	Barium	NS1	DMS-104	SO	0	2	mg/Kg	=	29	20	JQ
DMS-105	5/9/1988	SW6010	Barium	NS1	DMS-105	SO	0	2	mg/Kg	=	28	20	JQ
DMS-84	4/26/1988	SW6010	Barium	NS1	DMS-84	SO	0	4	mg/Kg	=	15	20	JQ
DMS-87	4/28/1988	SW6010	Barium	NS1	DMS-87	SO	0	4	mg/Kg	=	35	20	JQ
DMS-95	5/3/1988	SW6010	Barium	NS1	DMS-95	SO	0	4	mg/Kg	=	22	20	JQ
DMS-101	5/5/1988	SW6010	Barium	NS1	DMS-101	SO	0	4	mg/Kg	=	18	20	JQ
DMW-14A	11/9/1986	SW6010	Barium	NS1	DMW-14A	SO	0	5	mg/Kg	=	21	20	
DMS-55	6/11/1985	SW6010	Barium	NS1	DMS-55	SO	0	6	mg/Kg	=	27	20	
DMS-57	6/11/1985	SW6010	Barium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	20	
DMS-61	6/18/1985	SW6010	Barium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	20	
DMS-59	6/10/1985	SW6010	Barium	NS1	DMS-59	SO	0	8	mg/Kg	=	21	20	
DMS-60	6/10/1985	SW6010	Barium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	20	
DMS-53	6/12/1985	SW6010	Barium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	20	
DMS-56	6/12/1985	SW6010	Barium	NS1	DMS-56	SO	0	8	mg/Kg	=	21	20	

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DMS-52	6/19/1985	SW6010	Barium	NS1	DMS-52	SO	0	8	mg/Kg	=	22	20	
DMS-54	6/19/1985	SW6010	Barium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	20	
DMW-18A	11/9/1986	SW6010	Barium	NS1	DMW-18A	SO	0	10	mg/Kg	=	12	20	
DMW-14E	10/6/1988	SW6010	Barium	NS1	DMW-14E	SO	0	10	mg/Kg	=	27	20	JQ
DMW-17A	11/3/1986	SW6010	Barium	NS1	DMW-17A	SO	0	15	mg/Kg	=	18	20	
DMW-17A	11/3/1986	SW6010	Barium	NS1	DMW-17A	SO	0	15	mg/Kg	=	18	20	
DMS-61	6/18/1985	SW6010	Barium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	20	
DMS-54	6/19/1985	SW6010	Barium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	20	
DMS-90	4/28/1988	SW6010	Barium	NS1	DMS-90	SO	0	19	mg/Kg	=	9.4	20	JQ
DMS-96	5/3/1988	SW6010	Barium	NS1	DMS-96	SO	0	19	mg/Kg	=	29	20	JQ
DMW-16A	10/27/1986	SW6010	Barium	NS1	DMW-16A	SO	0	20	mg/Kg	=	11	20	
DMS-94	5/2/1988	SW6010	Barium	NS1	DMS-94	SO	0	24	mg/Kg	=	117	20	
DMW-16B	10/22/1986	SW6010	Barium	NS1	DMW-16B	SO	0	25	mg/Kg	=	259	20	
DMW-16C	11/9/1986	SW6010	Barium	NS1	DMW-16C	SO	0	56	mg/Kg	=	16	20	
DMS-59	6/10/1985	SW8260	Benzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Benzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Benzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Benzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Benzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Benzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Benzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Benzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Benzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005	
DMS-57	6/24/1985	SW8260	Benzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Benzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Benzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMS-89	4/28/1988	SW8260	Benzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005	
DMS-98	5/3/1988	SW8260	Benzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005	
DMS-100	5/5/1988	SW8260	Benzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005	
DMS-103	5/9/1988	SW8260	Benzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Benzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005	
DMS-82	4/25/1988	SW8260	Benzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005	
DMS-83	4/25/1988	SW8260	Benzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005	
DMS-85	4/26/1988	SW8260	Benzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005	
DMS-86	4/26/1988	SW8260	Benzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005	
DMS-88	4/28/1988	SW8260	Benzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005	
DMS-91	5/2/1988	SW8260	Benzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005	
DMS-92	5/2/1988	SW8260	Benzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005	
DMS-93	5/2/1988	SW8260	Benzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005	
DMS-97	5/3/1988	SW8260	Benzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005	
DMS-99	5/5/1988	SW8260	Benzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005	
DMS-102	5/9/1988	SW8260	Benzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005	
DMS-104	5/9/1988	SW8260	Benzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005	
DMS-105	5/9/1988	SW8260	Benzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005	
DMS-84	4/26/1988	SW8260	Benzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005	
DMS-87	4/28/1988	SW8260	Benzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005	
DMS-95	5/3/1988	SW8260	Benzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005	
DMS-101	5/5/1988	SW8260	Benzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005	

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DMW-14A	11/9/1986	SW8260	Benzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Benzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005	
DMS-57	6/11/1985	SW8260	Benzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Benzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8260	Benzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Benzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Benzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Benzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Benzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Benzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005	
DMW-18A	11/9/1986	SW8260	Benzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005	
DMW-14E	10/6/1988	SW8260	Benzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Benzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Benzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Benzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Benzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005	
DMS-90	4/28/1988	SW8260	Benzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005	
DMS-96	5/3/1988	SW8260	Benzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005	
DMW-16A	10/27/1986	SW8260	Benzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005	
DMS-94	5/2/1988	SW8260	Benzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005	
DMW-16B	10/22/1986	SW8260	Benzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005	
DMW-16C	11/9/1986	SW8260	Benzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8270	Benzo(a)anthracene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(a)anthracene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(a)anthracene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(a)anthracene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(a)anthracene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(a)anthracene	NS1	DMS-54	SO	0	1	mg/Kg	=	0.35	0.33	J
DMS-57	6/24/1985	SW8270	Benzo(a)anthracene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(a)anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.2	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(a)anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.2	0.33	
DMS-89	4/28/1988	SW8270	Benzo(a)anthracene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Benzo(a)anthracene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Benzo(a)anthracene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Benzo(a)anthracene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.18	0.33	J
DMS-58	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Benzo(a)anthracene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Benzo(a)anthracene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Benzo(a)anthracene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Benzo(a)anthracene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Benzo(a)anthracene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Benzo(a)anthracene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Benzo(a)anthracene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Benzo(a)anthracene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Benzo(a)anthracene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	

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DMS-99	5/5/1988	SW8270	Benzo(a)anthracene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Benzo(a)anthracene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Benzo(a)anthracene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Benzo(a)anthracene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33	
DMS-84	4/26/1988	SW8270	Benzo(a)anthracene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Benzo(a)anthracene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Benzo(a)anthracene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Benzo(a)anthracene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Benzo(a)anthracene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(a)anthracene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Benzo(a)anthracene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(a)anthracene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(a)anthracene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(a)anthracene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(a)anthracene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(a)anthracene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(a)anthracene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Benzo(a)anthracene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Benzo(a)anthracene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(a)anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(a)anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(a)anthracene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(a)anthracene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Benzo(a)anthracene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Benzo(a)anthracene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Benzo(a)anthracene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Benzo(a)anthracene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Benzo(a)anthracene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Benzo(a)anthracene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(a)pyrene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(a)pyrene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(a)pyrene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(a)pyrene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(a)pyrene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(a)pyrene	NS1	DMS-54	SO	0	1	mg/Kg	=	0.3	0.33	J
DMS-57	6/24/1985	SW8270	Benzo(a)pyrene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(a)pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.17	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(a)pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.17	0.33	
DMS-89	4/28/1988	SW8270	Benzo(a)pyrene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Benzo(a)pyrene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Benzo(a)pyrene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Benzo(a)pyrene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.19	0.33	J
DMS-58	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Benzo(a)pyrene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	

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DMS-83	4/25/1988	SW8270	Benzo(a)pyrene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Benzo(a)pyrene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Benzo(a)pyrene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Benzo(a)pyrene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Benzo(a)pyrene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Benzo(a)pyrene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Benzo(a)pyrene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Benzo(a)pyrene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Benzo(a)pyrene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Benzo(a)pyrene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Benzo(a)pyrene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Benzo(a)pyrene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Benzo(a)pyrene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Benzo(a)pyrene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Benzo(a)pyrene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Benzo(a)pyrene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Benzo(a)pyrene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Benzo(a)pyrene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Benzo(a)pyrene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Benzo(a)pyrene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Benzo(a)pyrene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Benzo(a)pyrene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Benzo(a)pyrene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Benzo(a)pyrene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzo(a)pyrene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Benzo(a)pyrene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Benzo(a)pyrene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Benzo(a)pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Benzo(a)pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Benzo(a)pyrene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzo(a)pyrene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Benzo(a)pyrene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Benzo(a)pyrene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Benzo(a)pyrene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Benzo(a)pyrene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Benzo(a)pyrene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Benzo(a)pyrene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-54	SO	0	1	mg/Kg	=	1.5	0.33
DMS-57	6/24/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33

TABLE E-1

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DMW-15A	11/8/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.34	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.34	0.33	
DMS-89	4/28/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-89	SO	0	1	mg/Kg	=	0.058	0.33	JQ
DMS-98	5/3/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.5	0.33	
DMS-58	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.052	0.33	J
DMS-84	4/26/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Benzo(b)fluoranthene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(b)fluoranthene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Benzo(b)fluoranthene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Benzo(b)fluoranthene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	

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DMS-55	6/11/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-54	SO	0	1	mg/Kg	=	0.22	0.33	J
DMS-57	6/24/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.089	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.089	0.33	
DMS-89	4/28/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.14	0.33	J
DMS-58	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33	
DMS-84	4/26/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Benzo(ghi)perylene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(ghi)perylene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	

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DMS-90	4/28/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Benzo(ghi)perylene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Benzo(ghi)perylene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33	
DMS-57	6/24/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.34	0.33	
DMW-15A	11/8/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.34	0.33	
DMS-89	4/28/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-89	SO	0	1	mg/Kg	=	0.058	0.33	JQ
DMS-98	5/3/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.5	0.33	
DMS-58	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.052	0.33	J
DMS-84	4/26/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	

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DMS-52	6/19/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Benzo(k)fluoranthene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzo(k)fluoranthene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Benzo(k)fluoranthene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Benzo(k)fluoranthene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Benzoic acid	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	Benzoic acid	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	Benzoic acid	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	Benzoic acid	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	Benzoic acid	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	Benzoic acid	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Benzoic acid	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	Benzoic acid	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Benzoic acid	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1.6
DMS-57	6/24/1985	SW8270	Benzoic acid	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1.6
DMW-15A	11/8/1986	SW8270	Benzoic acid	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMW-15A	11/8/1986	SW8270	Benzoic acid	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMS-89	4/28/1988	SW8270	Benzoic acid	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1.6
DMS-98	5/3/1988	SW8270	Benzoic acid	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1.6
DMS-100	5/5/1988	SW8270	Benzoic acid	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1.6
DMS-103	5/9/1988	SW8270	Benzoic acid	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	Benzoic acid	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1.6
DMS-82	4/25/1988	SW8270	Benzoic acid	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1.6
DMS-83	4/25/1988	SW8270	Benzoic acid	NS1	DMS-83	SO	0	2	mg/Kg	=	0.055	1.6
DMS-85	4/26/1988	SW8270	Benzoic acid	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1.6
DMS-86	4/26/1988	SW8270	Benzoic acid	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1.6
DMS-88	4/28/1988	SW8270	Benzoic acid	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	1.6
DMS-91	5/2/1988	SW8270	Benzoic acid	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1.6
DMS-92	5/2/1988	SW8270	Benzoic acid	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1.6
DMS-93	5/2/1988	SW8270	Benzoic acid	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1.6
DMS-97	5/3/1988	SW8270	Benzoic acid	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1.6
DMS-99	5/5/1988	SW8270	Benzoic acid	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1.6
DMS-102	5/9/1988	SW8270	Benzoic acid	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	1.6
DMS-104	5/9/1988	SW8270	Benzoic acid	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	1.6
DMS-105	5/9/1988	SW8270	Benzoic acid	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	1.6
DMS-84	4/26/1988	SW8270	Benzoic acid	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1.6
DMS-87	4/28/1988	SW8270	Benzoic acid	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1.6
DMS-95	5/3/1988	SW8270	Benzoic acid	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1.6
DMS-101	5/5/1988	SW8270	Benzoic acid	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	1.6

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DMW-14A	11/9/1986	SW8270	Benzoic acid	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	Benzoic acid	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1.6
DMS-57	6/11/1985	SW8270	Benzoic acid	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Benzoic acid	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1.6
DMS-59	6/10/1985	SW8270	Benzoic acid	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	Benzoic acid	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	Benzoic acid	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	Benzoic acid	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	Benzoic acid	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Benzoic acid	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1.6
DMW-18A	11/9/1986	SW8270	Benzoic acid	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	1.6
DMW-14E	10/6/1988	SW8270	Benzoic acid	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	Benzoic acid	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	Benzoic acid	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Benzoic acid	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Benzoic acid	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1.6
DMS-90	4/28/1988	SW8270	Benzoic acid	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1.6
DMS-96	5/3/1988	SW8270	Benzoic acid	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1.6
DMW-16A	10/27/1986	SW8270	Benzoic acid	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1.6
DMS-94	5/2/1988	SW8270	Benzoic acid	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1.6
DMW-16B	10/22/1986	SW8270	Benzoic acid	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1.6
DMW-16C	11/9/1986	SW8270	Benzoic acid	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	1.6
DMS-59	6/10/1985	SW8270	Benzyl alcohol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Benzyl alcohol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Benzyl alcohol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Benzyl alcohol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Benzyl alcohol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Benzyl alcohol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Benzyl alcohol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Benzyl alcohol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Benzyl alcohol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Benzyl alcohol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Benzyl alcohol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Benzyl alcohol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Benzyl alcohol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Benzyl alcohol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Benzyl alcohol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Benzyl alcohol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Benzyl alcohol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Benzyl alcohol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Benzyl alcohol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Benzyl alcohol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Benzyl alcohol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Benzyl alcohol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33

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DMS-99	5/5/1988	SW8270	Benzyl alcohol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Benzyl alcohol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Benzyl alcohol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Benzyl alcohol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33	
DMS-84	4/26/1988	SW8270	Benzyl alcohol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Benzyl alcohol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Benzyl alcohol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Benzyl alcohol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Benzyl alcohol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Benzyl alcohol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Benzyl alcohol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzyl alcohol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Benzyl alcohol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Benzyl alcohol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Benzyl alcohol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Benzyl alcohol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzyl alcohol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Benzyl alcohol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Benzyl alcohol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzyl alcohol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Benzyl alcohol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Benzyl alcohol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Benzyl alcohol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Benzyl alcohol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Benzyl alcohol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Benzyl alcohol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Benzyl alcohol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Benzyl alcohol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Benzyl alcohol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW6010	Beryllium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.5	
DMS-60	6/10/1985	SW6010	Beryllium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.5	
DMS-55	6/11/1985	SW6010	Beryllium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.5	
DMS-53	6/12/1985	SW6010	Beryllium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.5	
DMS-56	6/12/1985	SW6010	Beryllium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.5	
DMS-58	6/12/1985	SW6010	Beryllium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.5	
DMS-61	6/18/1985	SW6010	Beryllium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.5	
DMS-52	6/19/1985	SW6010	Beryllium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.5	
DMS-54	6/19/1985	SW6010	Beryllium	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.5	
DMS-57	6/24/1985	SW6010	Beryllium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.5	
DMW-15A	11/8/1986	SW6010	Beryllium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5	
DMW-15A	11/8/1986	SW6010	Beryllium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5	
DMS-89	4/28/1988	SW6010	Beryllium	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.5	
DMS-98	5/3/1988	SW6010	Beryllium	NS1	DMS-98	SO	0	1	mg/Kg	=	0.4	0.5	JQ
DMS-100	5/5/1988	SW6010	Beryllium	NS1	DMS-100	SO	0	1	mg/Kg	=	0.57	0.5	JQ
DMS-103	5/9/1988	SW6010	Beryllium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.5	
DMS-58	6/12/1985	SW6010	Beryllium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.5	
DMS-82	4/25/1988	SW6010	Beryllium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.5	

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DMS-83	4/25/1988	SW6010	Beryllium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.5	
DMS-85	4/26/1988	SW6010	Beryllium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.5	
DMS-86	4/26/1988	SW6010	Beryllium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.5	
DMS-88	4/28/1988	SW6010	Beryllium	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.5	
DMS-91	5/2/1988	SW6010	Beryllium	NS1	DMS-91	SO	0	2	mg/Kg	=	0.45	0.5	JQ
DMS-92	5/2/1988	SW6010	Beryllium	NS1	DMS-92	SO	0	2	mg/Kg	=	0.83	0.5	JQ
DMS-93	5/2/1988	SW6010	Beryllium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.5	
DMS-97	5/3/1988	SW6010	Beryllium	NS1	DMS-97	SO	0	2	mg/Kg	=	0.83	0.5	JQ
DMS-99	5/5/1988	SW6010	Beryllium	NS1	DMS-99	SO	0	2	mg/Kg	=	0.65	0.5	JQ
DMS-102	5/9/1988	SW6010	Beryllium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.5	
DMS-104	5/9/1988	SW6010	Beryllium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.5	
DMS-105	5/9/1988	SW6010	Beryllium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.5	
DMS-84	4/26/1988	SW6010	Beryllium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.5	
DMS-87	4/28/1988	SW6010	Beryllium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.5	
DMS-95	5/3/1988	SW6010	Beryllium	NS1	DMS-95	SO	0	4	mg/Kg	=	1	0.5	JQ
DMS-101	5/5/1988	SW6010	Beryllium	NS1	DMS-101	SO	0	4	mg/Kg	=	0.74	0.5	JQ
DMW-14A	11/9/1986	SW6010	Beryllium	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.5	
DMS-55	6/11/1985	SW6010	Beryllium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.5	
DMS-57	6/11/1985	SW6010	Beryllium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.5	
DMS-61	6/18/1985	SW6010	Beryllium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.5	
DMS-59	6/10/1985	SW6010	Beryllium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.5	
DMS-60	6/10/1985	SW6010	Beryllium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.5	
DMS-53	6/12/1985	SW6010	Beryllium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.5	
DMS-56	6/12/1985	SW6010	Beryllium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.5	
DMS-52	6/19/1985	SW6010	Beryllium	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.5	
DMS-54	6/19/1985	SW6010	Beryllium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.5	
DMW-18A	11/9/1986	SW6010	Beryllium	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.5	
DMW-14E	10/6/1988	SW6010	Beryllium	NS1	DMW-14E	SO	0	10	mg/Kg	=	0.51	0.5	JQ
DMW-17A	11/3/1986	SW6010	Beryllium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5	
DMW-17A	11/3/1986	SW6010	Beryllium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5	
DMS-61	6/18/1985	SW6010	Beryllium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.5	
DMS-54	6/19/1985	SW6010	Beryllium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.5	
DMS-90	4/28/1988	SW6010	Beryllium	NS1	DMS-90	SO	0	19	mg/Kg	=	2.9	0.5	
DMS-96	5/3/1988	SW6010	Beryllium	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.5	
DMW-16A	10/27/1986	SW6010	Beryllium	NS1	DMW-16A	SO	0	20	mg/Kg	=	0.17	0.5	
DMS-94	5/2/1988	SW6010	Beryllium	NS1	DMS-94	SO	0	24	mg/Kg	=	1.2	0.5	JQ
DMW-16B	10/22/1986	SW6010	Beryllium	NS1	DMW-16B	SO	0	25	mg/Kg	=	0.31	0.5	
DMW-16C	11/9/1986	SW6010	Beryllium	NS1	DMW-16C	SO	0	56	mg/Kg	=	1.3	0.5	
DMS-59	6/10/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-59	SO	0	1	mg/Kg	=	0.87	0.33	B
DMS-60	6/10/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-60	SO	0	1	mg/Kg	=	0.2	0.33	JB
DMS-55	6/11/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-56	SO	0	1	mg/Kg	=	0.86	0.33	
DMS-58	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33	
DMS-57	6/24/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	

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DMW-15A	11/8/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33	
DMS-89	4/28/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-82	SO	0	2	mg/Kg	=	0.067	0.33	J
DMS-83	4/25/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-83	SO	0	2	mg/Kg	=	0.2	0.33	J
DMS-85	4/26/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33	
DMS-84	4/26/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-59	SO	0	8	mg/Kg	=	0.26	0.33	JB
DMS-60	6/10/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-60	SO	0	8	mg/Kg	=	0.33	0.33	J
DMS-53	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-53	SO	0	8	mg/Kg	=	0.2	0.33	
DMS-56	6/12/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.051	0.33	
DMW-17A	11/3/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.051	0.33	
DMS-61	6/18/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-96	SO	0	19	mg/Kg	=	0.058	0.33	J
DMW-16A	10/27/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-16A	SO	0	20	mg/Kg	=	0.17	0.33	
DMS-94	5/2/1988	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-16B	SO	0	25	mg/Kg	=	0.33	0.33	
DMW-16C	11/9/1986	SW8270	bis(2-Ethylhexyl)phthala	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8260	Bromodichloromethane	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Bromodichloromethane	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005	

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DMS-55	6/11/1985	SW8260	Bromodichloromethane	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Bromodichloromethane	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Bromodichloromethane	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Bromodichloromethane	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Bromodichloromethane	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Bromodichloromethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Bromodichloromethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Bromodichloromethane	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Bromodichloromethane	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Bromodichloromethane	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Bromodichloromethane	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Bromodichloromethane	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Bromodichloromethane	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Bromodichloromethane	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Bromodichloromethane	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Bromodichloromethane	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Bromodichloromethane	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Bromodichloromethane	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Bromodichloromethane	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Bromodichloromethane	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Bromodichloromethane	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Bromodichloromethane	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Bromodichloromethane	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Bromodichloromethane	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Bromodichloromethane	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Bromodichloromethane	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Bromodichloromethane	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Bromodichloromethane	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Bromodichloromethane	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Bromodichloromethane	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Bromodichloromethane	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Bromodichloromethane	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Bromodichloromethane	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Bromodichloromethane	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Bromodichloromethane	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Bromodichloromethane	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Bromodichloromethane	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Bromodichloromethane	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Bromodichloromethane	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Bromodichloromethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Bromodichloromethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Bromodichloromethane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Bromodichloromethane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005

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DMS-90	4/28/1988	SW8260	Bromodichloromethane	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Bromodichloromethane	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	Bromodichloromethane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	Bromodichloromethane	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	Bromodichloromethane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	Bromodichloromethane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW6010	Cadmium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.5
DMS-60	6/10/1985	SW6010	Cadmium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.5
DMS-55	6/11/1985	SW6010	Cadmium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.5
DMS-53	6/12/1985	SW6010	Cadmium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.5
DMS-56	6/12/1985	SW6010	Cadmium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.5
DMS-58	6/12/1985	SW6010	Cadmium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.5
DMS-61	6/18/1985	SW6010	Cadmium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.5
DMS-52	6/19/1985	SW6010	Cadmium	NS1	DMS-52	SO	0	1	mg/Kg	=	5	0.5
DMS-54	6/19/1985	SW6010	Cadmium	NS1	DMS-54	SO	0	1	mg/Kg	=	4.6	0.5
DMS-57	6/24/1985	SW6010	Cadmium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.5
DMW-15A	11/8/1986	SW6010	Cadmium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5
DMW-15A	11/8/1986	SW6010	Cadmium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5
DMS-89	4/28/1988	SW6010	Cadmium	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.5
DMS-98	5/3/1988	SW6010	Cadmium	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.5
DMS-100	5/5/1988	SW6010	Cadmium	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.5
DMS-103	5/9/1988	SW6010	Cadmium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.5
DMS-58	6/12/1985	SW6010	Cadmium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.5
DMS-82	4/25/1988	SW6010	Cadmium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.5
DMS-83	4/25/1988	SW6010	Cadmium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.5
DMS-85	4/26/1988	SW6010	Cadmium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.5
DMS-86	4/26/1988	SW6010	Cadmium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.5
DMS-88	4/28/1988	SW6010	Cadmium	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.5
DMS-91	5/2/1988	SW6010	Cadmium	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.5
DMS-92	5/2/1988	SW6010	Cadmium	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.5
DMS-93	5/2/1988	SW6010	Cadmium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.5
DMS-97	5/3/1988	SW6010	Cadmium	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.5
DMS-99	5/5/1988	SW6010	Cadmium	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.5
DMS-102	5/9/1988	SW6010	Cadmium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.5
DMS-104	5/9/1988	SW6010	Cadmium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.5
DMS-105	5/9/1988	SW6010	Cadmium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.5
DMS-84	4/26/1988	SW6010	Cadmium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.5
DMS-87	4/28/1988	SW6010	Cadmium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.5
DMS-95	5/3/1988	SW6010	Cadmium	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.5
DMS-101	5/5/1988	SW6010	Cadmium	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.5
DMW-14A	11/9/1986	SW6010	Cadmium	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.5
DMS-55	6/11/1985	SW6010	Cadmium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.5
DMS-57	6/11/1985	SW6010	Cadmium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.5
DMS-61	6/18/1985	SW6010	Cadmium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.5
DMS-59	6/10/1985	SW6010	Cadmium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.5
DMS-60	6/10/1985	SW6010	Cadmium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.5
DMS-53	6/12/1985	SW6010	Cadmium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.5
DMS-56	6/12/1985	SW6010	Cadmium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.5

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DMS-52	6/19/1985	SW6010	Cadmium	NS1	DMS-52	SO	0	8	mg/Kg	=	1	0.5		
DMS-54	6/19/1985	SW6010	Cadmium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.5		
DMW-18A	11/9/1986	SW6010	Cadmium	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.5		
DMW-14E	10/6/1988	SW6010	Cadmium	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.5		
DMW-17A	11/3/1986	SW6010	Cadmium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5		
DMW-17A	11/3/1986	SW6010	Cadmium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5		
DMS-61	6/18/1985	SW6010	Cadmium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.5		
DMS-54	6/19/1985	SW6010	Cadmium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.5		
DMS-90	4/28/1988	SW6010	Cadmium	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.5		
DMS-96	5/3/1988	SW6010	Cadmium	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.5		
DMW-16A	10/27/1986	SW6010	Cadmium	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.5		
DMS-94	5/2/1988	SW6010	Cadmium	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.5		
DMW-16B	10/22/1986	SW6010	Cadmium	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.5		
DMW-16C	11/9/1986	SW6010	Cadmium	NS1	DMW-16C	SO	0	56	mg/Kg	=	1.2	0.5		
DMS-59	6/10/1985	SW6010	Calcium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	500		
DMS-60	6/10/1985	SW6010	Calcium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	500		
DMS-55	6/11/1985	SW6010	Calcium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	500		
DMS-53	6/12/1985	SW6010	Calcium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	500		
DMS-56	6/12/1985	SW6010	Calcium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	500		
DMS-58	6/12/1985	SW6010	Calcium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	500		
DMS-61	6/18/1985	SW6010	Calcium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	500		
DMS-52	6/19/1985	SW6010	Calcium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	500		
DMS-54	6/19/1985	SW6010	Calcium	NS1	DMS-54	SO	0	1	mg/Kg	=	43.6	500		
DMS-57	6/24/1985	SW6010	Calcium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	500		
DMW-15A	11/8/1986	SW6010	Calcium	NS1	DMW-15A	SO	0	1	mg/Kg	=	1760	500		
DMW-15A	11/8/1986	SW6010	Calcium	NS1	DMW-15A	SO	0	1	mg/Kg	=	1760	500		
DMS-89	4/28/1988	SW6010	Calcium	NS1	DMS-89	SO	0	1	mg/Kg	=	99	500		JQE
DMS-98	5/3/1988	SW6010	Calcium	NS1	DMS-98	SO	0	1	mg/Kg	=	254	500		JQ
DMS-100	5/5/1988	SW6010	Calcium	NS1	DMS-100	SO	0	1	mg/Kg	=	496	500		JQ
DMS-103	5/9/1988	SW6010	Calcium	NS1	DMS-103	SO	0	1	mg/Kg	=	6590	500		
DMS-58	6/12/1985	SW6010	Calcium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	500		
DMS-82	4/25/1988	SW6010	Calcium	NS1	DMS-82	SO	0	2	mg/Kg	=	281	500		JQE
DMS-83	4/25/1988	SW6010	Calcium	NS1	DMS-83	SO	0	2	mg/Kg	=	79	500		JQE
DMS-85	4/26/1988	SW6010	Calcium	NS1	DMS-85	SO	0	2	mg/Kg	=	67	500		JQE
DMS-86	4/26/1988	SW6010	Calcium	NS1	DMS-86	SO	0	2	mg/Kg	=	376	500		JQE
DMS-88	4/28/1988	SW6010	Calcium	NS1	DMS-88	SO	0	2	mg/Kg	=	33	500		JQE
DMS-91	5/2/1988	SW6010	Calcium	NS1	DMS-91	SO	0	2	mg/Kg	=	235	500		JQ
DMS-92	5/2/1988	SW6010	Calcium	NS1	DMS-92	SO	0	2	mg/Kg	=	117	500		JQ
DMS-93	5/2/1988	SW6010	Calcium	NS1	DMS-93	SO	0	2	mg/Kg	=	1150	500		JQ
DMS-97	5/3/1988	SW6010	Calcium	NS1	DMS-97	SO	0	2	mg/Kg	=	476	500		JQ
DMS-99	5/5/1988	SW6010	Calcium	NS1	DMS-99	SO	0	2	mg/Kg	=	62	500		JQ
DMS-102	5/9/1988	SW6010	Calcium	NS1	DMS-102	SO	0	2	mg/Kg	=	103	500		JQ
DMS-104	5/9/1988	SW6010	Calcium	NS1	DMS-104	SO	0	2	mg/Kg	=	136	500		JQ
DMS-105	5/9/1988	SW6010	Calcium	NS1	DMS-105	SO	0	2	mg/Kg	=	61	500		JQ
DMS-84	4/26/1988	SW6010	Calcium	NS1	DMS-84	SO	0	4	mg/Kg	=	97	500		JQE
DMS-87	4/28/1988	SW6010	Calcium	NS1	DMS-87	SO	0	4	mg/Kg	=	153	500		JQE
DMS-95	5/3/1988	SW6010	Calcium	NS1	DMS-95	SO	0	4	mg/Kg	=	159	500		JQ
DMS-101	5/5/1988	SW6010	Calcium	NS1	DMS-101	SO	0	4	mg/Kg	=	114	500		JQ

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DMW-14A	11/9/1986	SW6010	Calcium	NS1	DMW-14A	SO	0	5	mg/Kg	=	41	500	
DMS-55	6/11/1985	SW6010	Calcium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	500	
DMS-57	6/11/1985	SW6010	Calcium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Calcium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	500	
DMS-59	6/10/1985	SW6010	Calcium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Calcium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Calcium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Calcium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	500	
DMS-52	6/19/1985	SW6010	Calcium	NS1	DMS-52	SO	0	8	mg/Kg	=	11	500	
DMS-54	6/19/1985	SW6010	Calcium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	500	
DMW-18A	11/9/1986	SW6010	Calcium	NS1	DMW-18A	SO	0	10	mg/Kg	=	120	500	
DMW-14E	10/6/1988	SW6010	Calcium	NS1	DMW-14E	SO	0	10	mg/Kg	=	23	500	JQ
DMW-17A	11/3/1986	SW6010	Calcium	NS1	DMW-17A	SO	0	15	mg/Kg	=	63	500	
DMW-17A	11/3/1986	SW6010	Calcium	NS1	DMW-17A	SO	0	15	mg/Kg	=	63	500	
DMS-61	6/18/1985	SW6010	Calcium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	500	
DMS-54	6/19/1985	SW6010	Calcium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	500	
DMS-90	4/28/1988	SW6010	Calcium	NS1	DMS-90	SO	0	19	mg/Kg	=	155	500	JQE
DMS-96	5/3/1988	SW6010	Calcium	NS1	DMS-96	SO	0	19	mg/Kg	=	868	500	JQ
DMW-16A	10/27/1986	SW6010	Calcium	NS1	DMW-16A	SO	0	20	mg/Kg	=	44	500	
DMS-94	5/2/1988	SW6010	Calcium	NS1	DMS-94	SO	0	24	mg/Kg	=	473	500	JQ
DMW-16B	10/22/1986	SW6010	Calcium	NS1	DMW-16B	SO	0	25	mg/Kg	=	667	500	
DMW-16C	11/9/1986	SW6010	Calcium	NS1	DMW-16C	SO	0	56	mg/Kg	=	964	500	
DMS-59	6/10/1985	SW8260	Carbon disulfide	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Carbon disulfide	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Carbon disulfide	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Carbon disulfide	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Carbon disulfide	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Carbon disulfide	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005	
DMS-57	6/24/1985	SW8260	Carbon disulfide	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Carbon disulfide	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Carbon disulfide	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMS-89	4/28/1988	SW8260	Carbon disulfide	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005	
DMS-98	5/3/1988	SW8260	Carbon disulfide	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005	
DMS-100	5/5/1988	SW8260	Carbon disulfide	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005	
DMS-103	5/9/1988	SW8260	Carbon disulfide	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005	
DMS-82	4/25/1988	SW8260	Carbon disulfide	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005	
DMS-83	4/25/1988	SW8260	Carbon disulfide	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005	
DMS-85	4/26/1988	SW8260	Carbon disulfide	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005	
DMS-86	4/26/1988	SW8260	Carbon disulfide	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005	
DMS-88	4/28/1988	SW8260	Carbon disulfide	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005	
DMS-91	5/2/1988	SW8260	Carbon disulfide	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005	
DMS-92	5/2/1988	SW8260	Carbon disulfide	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005	
DMS-93	5/2/1988	SW8260	Carbon disulfide	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005	
DMS-97	5/3/1988	SW8260	Carbon disulfide	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005	

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DMS-99	5/5/1988	SW8260	Carbon disulfide	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005	
DMS-102	5/9/1988	SW8260	Carbon disulfide	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005	
DMS-104	5/9/1988	SW8260	Carbon disulfide	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005	
DMS-105	5/9/1988	SW8260	Carbon disulfide	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005	
DMS-84	4/26/1988	SW8260	Carbon disulfide	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005	
DMS-87	4/28/1988	SW8260	Carbon disulfide	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005	
DMS-95	5/3/1988	SW8260	Carbon disulfide	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005	
DMS-101	5/5/1988	SW8260	Carbon disulfide	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005	
DMW-14A	11/9/1986	SW8260	Carbon disulfide	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Carbon disulfide	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005	
DMS-57	6/11/1985	SW8260	Carbon disulfide	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Carbon disulfide	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8260	Carbon disulfide	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Carbon disulfide	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Carbon disulfide	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Carbon disulfide	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Carbon disulfide	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005	
DMW-18A	11/9/1986	SW8260	Carbon disulfide	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005	
DMW-14E	10/6/1988	SW8260	Carbon disulfide	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Carbon disulfide	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Carbon disulfide	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Carbon disulfide	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Carbon disulfide	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005	
DMS-90	4/28/1988	SW8260	Carbon disulfide	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005	
DMS-96	5/3/1988	SW8260	Carbon disulfide	NS1	DMS-96	SO	0	19	mg/Kg	=	0.003	0.005	J
DMW-16A	10/27/1986	SW8260	Carbon disulfide	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005	
DMS-94	5/2/1988	SW8260	Carbon disulfide	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005	
DMW-16B	10/22/1986	SW8260	Carbon disulfide	NS1	DMW-16B	SO	0	25	mg/Kg	=	0.033	0.005	
DMW-16C	11/9/1986	SW8260	Carbon disulfide	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8260	Carbon tetrachloride	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Carbon tetrachloride	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Carbon tetrachloride	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Carbon tetrachloride	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Carbon tetrachloride	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Carbon tetrachloride	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005	
DMS-57	6/24/1985	SW8260	Carbon tetrachloride	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Carbon tetrachloride	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMW-15A	11/8/1986	SW8260	Carbon tetrachloride	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005	
DMS-89	4/28/1988	SW8260	Carbon tetrachloride	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005	
DMS-98	5/3/1988	SW8260	Carbon tetrachloride	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005	
DMS-100	5/5/1988	SW8260	Carbon tetrachloride	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005	
DMS-103	5/9/1988	SW8260	Carbon tetrachloride	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005	
DMS-58	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005	
DMS-82	4/25/1988	SW8260	Carbon tetrachloride	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005	

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DMS-83	4/25/1988	SW8260	Carbon tetrachloride	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Carbon tetrachloride	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Carbon tetrachloride	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Carbon tetrachloride	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Carbon tetrachloride	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Carbon tetrachloride	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Carbon tetrachloride	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Carbon tetrachloride	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Carbon tetrachloride	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Carbon tetrachloride	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Carbon tetrachloride	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Carbon tetrachloride	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Carbon tetrachloride	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Carbon tetrachloride	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Carbon tetrachloride	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Carbon tetrachloride	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Carbon tetrachloride	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Carbon tetrachloride	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Carbon tetrachloride	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Carbon tetrachloride	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Carbon tetrachloride	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Carbon tetrachloride	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Carbon tetrachloride	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Carbon tetrachloride	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Carbon tetrachloride	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Carbon tetrachloride	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Carbon tetrachloride	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Carbon tetrachloride	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Carbon tetrachloride	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Carbon tetrachloride	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Carbon tetrachloride	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	Carbon tetrachloride	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Carbon tetrachloride	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	Carbon tetrachloride	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	Carbon tetrachloride	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	Carbon tetrachloride	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	Carbon tetrachloride	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Chlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Chlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Chlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Chlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Chlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Chlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Chlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005

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DMW-15A	11/8/1986	SW8260	Chlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Chlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Chlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Chlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Chlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Chlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Chlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Chlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Chlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Chlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Chlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Chlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Chlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Chlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Chlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Chlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Chlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Chlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Chlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Chlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Chlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Chlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Chlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Chlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Chlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Chlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Chlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Chlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Chlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Chlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Chlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Chlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Chlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Chlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Chlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Chlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Chlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Chlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	Chlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Chlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	Chlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	Chlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	Chlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	Chlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Chloroform	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Chloroform	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005

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DMS-55	6/11/1985	SW8260	Chloroform	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005		
DMS-53	6/12/1985	SW8260	Chloroform	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005		
DMS-56	6/12/1985	SW8260	Chloroform	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	Chloroform	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	Chloroform	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005		
DMS-52	6/19/1985	SW8260	Chloroform	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005		
DMS-54	6/19/1985	SW8260	Chloroform	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005		
DMS-57	6/24/1985	SW8260	Chloroform	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	Chloroform	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	Chloroform	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005		
DMS-89	4/28/1988	SW8260	Chloroform	NS1	DMS-89	SO	0	1	mg/Kg	=	0.013	0.005		
DMS-98	5/3/1988	SW8260	Chloroform	NS1	DMS-98	SO	0	1	mg/Kg	=	0.003	0.005		BJ
DMS-100	5/5/1988	SW8260	Chloroform	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005		
DMS-103	5/9/1988	SW8260	Chloroform	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	Chloroform	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005		
DMS-82	4/25/1988	SW8260	Chloroform	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005		
DMS-83	4/25/1988	SW8260	Chloroform	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005		
DMS-85	4/26/1988	SW8260	Chloroform	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005		
DMS-86	4/26/1988	SW8260	Chloroform	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005		
DMS-88	4/28/1988	SW8260	Chloroform	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005		
DMS-91	5/2/1988	SW8260	Chloroform	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005		
DMS-92	5/2/1988	SW8260	Chloroform	NS1	DMS-92	SO	0	2	mg/Kg	=	0.003	0.005		J
DMS-93	5/2/1988	SW8260	Chloroform	NS1	DMS-93	SO	0	2	mg/Kg	=	0.004	0.005		J
DMS-97	5/3/1988	SW8260	Chloroform	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005		
DMS-99	5/5/1988	SW8260	Chloroform	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005		
DMS-102	5/9/1988	SW8260	Chloroform	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005		
DMS-104	5/9/1988	SW8260	Chloroform	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005		
DMS-105	5/9/1988	SW8260	Chloroform	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005		
DMS-84	4/26/1988	SW8260	Chloroform	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005		
DMS-87	4/28/1988	SW8260	Chloroform	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005		
DMS-95	5/3/1988	SW8260	Chloroform	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005		
DMS-101	5/5/1988	SW8260	Chloroform	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005		
DMW-14A	11/9/1986	SW8260	Chloroform	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005		
DMS-55	6/11/1985	SW8260	Chloroform	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005		
DMS-57	6/11/1985	SW8260	Chloroform	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	Chloroform	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005		
DMS-59	6/10/1985	SW8260	Chloroform	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005		
DMS-60	6/10/1985	SW8260	Chloroform	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005		
DMS-53	6/12/1985	SW8260	Chloroform	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005		
DMS-56	6/12/1985	SW8260	Chloroform	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005		
DMS-52	6/19/1985	SW8260	Chloroform	NS1	DMS-52	SO	0	8	mg/Kg	=	0.0031	0.005		
DMS-54	6/19/1985	SW8260	Chloroform	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005		
DMW-18A	11/9/1986	SW8260	Chloroform	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005		
DMW-14E	10/6/1988	SW8260	Chloroform	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005		
DMW-17A	11/3/1986	SW8260	Chloroform	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005		
DMW-17A	11/3/1986	SW8260	Chloroform	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	Chloroform	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005		
DMS-54	6/19/1985	SW8260	Chloroform	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005		

TABLE E-1

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DMS-90	4/28/1988	SW8260	Chloroform	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005		
DMS-96	5/3/1988	SW8260	Chloroform	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005		
DMW-16A	10/27/1986	SW8260	Chloroform	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005		
DMS-94	5/2/1988	SW8260	Chloroform	NS1	DMS-94	SO	0	24	mg/Kg	=	0.002	0.005	J	
DMW-16B	10/22/1986	SW8260	Chloroform	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005		
DMW-16C	11/9/1986	SW8260	Chloroform	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005		
DMS-59	6/10/1985	SW6010	Chromium	NS1	DMS-59	SO	0	1	mg/Kg	=	45	1		
DMS-60	6/10/1985	SW6010	Chromium	NS1	DMS-60	SO	0	1	mg/Kg	=	26	1		
DMS-55	6/11/1985	SW6010	Chromium	NS1	DMS-55	SO	0	1	mg/Kg	=	20	1		
DMS-53	6/12/1985	SW6010	Chromium	NS1	DMS-53	SO	0	1	mg/Kg	=	10	1		
DMS-56	6/12/1985	SW6010	Chromium	NS1	DMS-56	SO	0	1	mg/Kg	=	25	1		
DMS-58	6/12/1985	SW6010	Chromium	NS1	DMS-58	SO	0	1	mg/Kg	=	17	1		
DMS-61	6/18/1985	SW6010	Chromium	NS1	DMS-61	SO	0	1	mg/Kg	=	12	1		
DMS-52	6/19/1985	SW6010	Chromium	NS1	DMS-52	SO	0	1	mg/Kg	=	24	1		
DMS-54	6/19/1985	SW6010	Chromium	NS1	DMS-54	SO	0	1	mg/Kg	=	32	1		
DMS-57	6/24/1985	SW6010	Chromium	NS1	DMS-57	SO	0	1	mg/Kg	=	7	1		
DMW-15A	11/8/1986	SW6010	Chromium	NS1	DMW-15A	SO	0	1	mg/Kg	=	14	1		
DMW-15A	11/8/1986	SW6010	Chromium	NS1	DMW-15A	SO	0	1	mg/Kg	=	14	1		
DMS-89	4/28/1988	SW6010	Chromium	NS1	DMS-89	SO	0	1	mg/Kg	=	14	1		
DMS-98	5/3/1988	SW6010	Chromium	NS1	DMS-98	SO	0	1	mg/Kg	=	20	1		
DMS-100	5/5/1988	SW6010	Chromium	NS1	DMS-100	SO	0	1	mg/Kg	=	14	1		
DMS-103	5/9/1988	SW6010	Chromium	NS1	DMS-103	SO	0	1	mg/Kg	=	11	1		
DMS-58	6/12/1985	SW6010	Chromium	NS1	DMS-58	SO	0	2	mg/Kg	=	11	1		
DMS-82	4/25/1988	SW6010	Chromium	NS1	DMS-82	SO	0	2	mg/Kg	=	12	1	E	
DMS-83	4/25/1988	SW6010	Chromium	NS1	DMS-83	SO	0	2	mg/Kg	=	9.2	1	E	
DMS-85	4/26/1988	SW6010	Chromium	NS1	DMS-85	SO	0	2	mg/Kg	=	13	1	E	
DMS-86	4/26/1988	SW6010	Chromium	NS1	DMS-86	SO	0	2	mg/Kg	=	7.4	1	E	
DMS-88	4/28/1988	SW6010	Chromium	NS1	DMS-88	SO	0	2	mg/Kg	=	20	1		
DMS-91	5/2/1988	SW6010	Chromium	NS1	DMS-91	SO	0	2	mg/Kg	=	8.4	1		
DMS-92	5/2/1988	SW6010	Chromium	NS1	DMS-92	SO	0	2	mg/Kg	=	13	1		
DMS-93	5/2/1988	SW6010	Chromium	NS1	DMS-93	SO	0	2	mg/Kg	=	8.3	1		
DMS-97	5/3/1988	SW6010	Chromium	NS1	DMS-97	SO	0	2	mg/Kg	=	25	1		
DMS-99	5/5/1988	SW6010	Chromium	NS1	DMS-99	SO	0	2	mg/Kg	=	36	1		
DMS-102	5/9/1988	SW6010	Chromium	NS1	DMS-102	SO	0	2	mg/Kg	=	23	1		
DMS-104	5/9/1988	SW6010	Chromium	NS1	DMS-104	SO	0	2	mg/Kg	=	15	1		
DMS-105	5/9/1988	SW6010	Chromium	NS1	DMS-105	SO	0	2	mg/Kg	=	13	1		
DMS-84	4/26/1988	SW6010	Chromium	NS1	DMS-84	SO	0	4	mg/Kg	=	10	1	E	
DMS-87	4/28/1988	SW6010	Chromium	NS1	DMS-87	SO	0	4	mg/Kg	=	31	1		
DMS-95	5/3/1988	SW6010	Chromium	NS1	DMS-95	SO	0	4	mg/Kg	=	15	1		
DMS-101	5/5/1988	SW6010	Chromium	NS1	DMS-101	SO	0	4	mg/Kg	=	9.4	1		
DMW-14A	11/9/1986	SW6010	Chromium	NS1	DMW-14A	SO	0	5	mg/Kg	=	12	1		
DMS-55	6/11/1985	SW6010	Chromium	NS1	DMS-55	SO	0	6	mg/Kg	=	11	1		
DMS-57	6/11/1985	SW6010	Chromium	NS1	DMS-57	SO	0	6	mg/Kg	=	18	1		
DMS-61	6/18/1985	SW6010	Chromium	NS1	DMS-61	SO	0	6	mg/Kg	=	10	1		
DMS-59	6/10/1985	SW6010	Chromium	NS1	DMS-59	SO	0	8	mg/Kg	=	10	1		
DMS-60	6/10/1985	SW6010	Chromium	NS1	DMS-60	SO	0	8	mg/Kg	=	20	1		
DMS-53	6/12/1985	SW6010	Chromium	NS1	DMS-53	SO	0	8	mg/Kg	=	28	1		
DMS-56	6/12/1985	SW6010	Chromium	NS1	DMS-56	SO	0	8	mg/Kg	=	12	1		

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DMS-52	6/19/1985	SW6010	Chromium	NS1	DMS-52	SO	0	8	mg/Kg	=	7.1	1	
DMS-54	6/19/1985	SW6010	Chromium	NS1	DMS-54	SO	0	10	mg/Kg	=	3.8	1	
DMW-18A	11/9/1986	SW6010	Chromium	NS1	DMW-18A	SO	0	10	mg/Kg	=	3	1	
DMW-14E	10/6/1988	SW6010	Chromium	NS1	DMW-14E	SO	0	10	mg/Kg	=	12	1	
DMW-17A	11/3/1986	SW6010	Chromium	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	1	
DMW-17A	11/3/1986	SW6010	Chromium	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	1	
DMS-61	6/18/1985	SW6010	Chromium	NS1	DMS-61	SO	0	18	mg/Kg	=	4	1	
DMS-54	6/19/1985	SW6010	Chromium	NS1	DMS-54	SO	0	18	mg/Kg	=	4.6	1	
DMS-90	4/28/1988	SW6010	Chromium	NS1	DMS-90	SO	0	19	mg/Kg	=	42	1	
DMS-96	5/3/1988	SW6010	Chromium	NS1	DMS-96	SO	0	19	mg/Kg	=	16	1	
DMW-16A	10/27/1986	SW6010	Chromium	NS1	DMW-16A	SO	0	20	mg/Kg	=	3.8	1	
DMS-94	5/2/1988	SW6010	Chromium	NS1	DMS-94	SO	0	24	mg/Kg	=	17	1	
DMW-16B	10/22/1986	SW6010	Chromium	NS1	DMW-16B	SO	0	25	mg/Kg	=	15	1	
DMW-16C	11/9/1986	SW6010	Chromium	NS1	DMW-16C	SO	0	56	mg/Kg	=	3.5	1	
DMS-59	6/10/1985	SW8270	Chrysene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Chrysene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Chrysene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Chrysene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Chrysene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Chrysene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Chrysene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Chrysene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Chrysene	NS1	DMS-54	SO	0	1	mg/Kg	=	0.98	0.33	
DMS-57	6/24/1985	SW8270	Chrysene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Chrysene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.21	0.33	
DMW-15A	11/8/1986	SW8270	Chrysene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.21	0.33	
DMS-89	4/28/1988	SW8270	Chrysene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Chrysene	NS1	DMS-98	SO	0	1	mg/Kg	=	0.043	0.33	J
DMS-100	5/5/1988	SW8270	Chrysene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Chrysene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.25	0.33	J
DMS-58	6/12/1985	SW8270	Chrysene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Chrysene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Chrysene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Chrysene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Chrysene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Chrysene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Chrysene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Chrysene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Chrysene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Chrysene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Chrysene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Chrysene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Chrysene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Chrysene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.095	0.33	J
DMS-84	4/26/1988	SW8270	Chrysene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Chrysene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Chrysene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Chrysene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	

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DMW-14A	11/9/1986	SW8270	Chrysene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Chrysene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Chrysene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Chrysene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Chrysene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Chrysene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Chrysene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Chrysene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Chrysene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Chrysene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Chrysene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Chrysene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Chrysene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Chrysene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Chrysene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Chrysene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Chrysene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Chrysene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Chrysene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Chrysene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Chrysene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Chrysene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW6010	Cobalt	NS1	DMS-59	SO	0	1	mg/Kg	=	54	5	
DMS-60	6/10/1985	SW6010	Cobalt	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	5	
DMS-55	6/11/1985	SW6010	Cobalt	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	5	
DMS-53	6/12/1985	SW6010	Cobalt	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	5	
DMS-56	6/12/1985	SW6010	Cobalt	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	5	
DMS-58	6/12/1985	SW6010	Cobalt	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	5	
DMS-61	6/18/1985	SW6010	Cobalt	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	5	
DMS-52	6/19/1985	SW6010	Cobalt	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	5	
DMS-54	6/19/1985	SW6010	Cobalt	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	5	
DMS-57	6/24/1985	SW6010	Cobalt	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	5	
DMW-15A	11/8/1986	SW6010	Cobalt	NS1	DMW-15A	SO	0	1	mg/Kg	=	3.2	5	
DMW-15A	11/8/1986	SW6010	Cobalt	NS1	DMW-15A	SO	0	1	mg/Kg	=	3.2	5	
DMS-89	4/28/1988	SW6010	Cobalt	NS1	DMS-89	SO	0	1	mg/Kg	=	2.9	5	JQ
DMS-98	5/3/1988	SW6010	Cobalt	NS1	DMS-98	SO	0	1	mg/Kg	=	1.5	5	JQ
DMS-100	5/5/1988	SW6010	Cobalt	NS1	DMS-100	SO	0	1	mg/Kg	=	2.6	5	JQ
DMS-103	5/9/1988	SW6010	Cobalt	NS1	DMS-103	SO	0	1	mg/Kg	=	4.7	5	JQ
DMS-58	6/12/1985	SW6010	Cobalt	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	5	
DMS-82	4/25/1988	SW6010	Cobalt	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	5	
DMS-83	4/25/1988	SW6010	Cobalt	NS1	DMS-83	SO	0	2	mg/Kg	=	1.4	5	JQ
DMS-85	4/26/1988	SW6010	Cobalt	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	5	
DMS-86	4/26/1988	SW6010	Cobalt	NS1	DMS-86	SO	0	2	mg/Kg	=	1.2	5	JQ
DMS-88	4/28/1988	SW6010	Cobalt	NS1	DMS-88	SO	0	2	mg/Kg	=	2.1	5	JQ
DMS-91	5/2/1988	SW6010	Cobalt	NS1	DMS-91	SO	0	2	mg/Kg	=	0.97	5	JQ
DMS-92	5/2/1988	SW6010	Cobalt	NS1	DMS-92	SO	0	2	mg/Kg	=	1.4	5	JQ
DMS-93	5/2/1988	SW6010	Cobalt	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	5	
DMS-97	5/3/1988	SW6010	Cobalt	NS1	DMS-97	SO	0	2	mg/Kg	=	1.5	5	JQ

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DMS-99	5/5/1988	SW6010	Cobalt	NS1	DMS-99	SO	0	2	mg/Kg	=	1.9	5	JQ
DMS-102	5/9/1988	SW6010	Cobalt	NS1	DMS-102	SO	0	2	mg/Kg	=	1.7	5	JQ
DMS-104	5/9/1988	SW6010	Cobalt	NS1	DMS-104	SO	0	2	mg/Kg	=	1.7	5	JQ
DMS-105	5/9/1988	SW6010	Cobalt	NS1	DMS-105	SO	0	2	mg/Kg	=	1.1	5	JQ
DMS-84	4/26/1988	SW6010	Cobalt	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	5	
DMS-87	4/28/1988	SW6010	Cobalt	NS1	DMS-87	SO	0	4	mg/Kg	=	3	5	JQ
DMS-95	5/3/1988	SW6010	Cobalt	NS1	DMS-95	SO	0	4	mg/Kg	=	1.1	5	JQ
DMS-101	5/5/1988	SW6010	Cobalt	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	5	
DMW-14A	11/9/1986	SW6010	Cobalt	NS1	DMW-14A	SO	0	5	mg/Kg	=	2	5	
DMS-55	6/11/1985	SW6010	Cobalt	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	5	
DMS-57	6/11/1985	SW6010	Cobalt	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	5	
DMS-61	6/18/1985	SW6010	Cobalt	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	5	
DMS-59	6/10/1985	SW6010	Cobalt	NS1	DMS-59	SO	0	8	mg/Kg	=	7	5	
DMS-60	6/10/1985	SW6010	Cobalt	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	5	
DMS-53	6/12/1985	SW6010	Cobalt	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	5	
DMS-56	6/12/1985	SW6010	Cobalt	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	5	
DMS-52	6/19/1985	SW6010	Cobalt	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	5	
DMS-54	6/19/1985	SW6010	Cobalt	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	5	
DMW-18A	11/9/1986	SW6010	Cobalt	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	5	
DMW-14E	10/6/1988	SW6010	Cobalt	NS1	DMW-14E	SO	0	10	mg/Kg	=	1.6	5	JQ
DMW-17A	11/3/1986	SW6010	Cobalt	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	5	
DMW-17A	11/3/1986	SW6010	Cobalt	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	5	
DMS-61	6/18/1985	SW6010	Cobalt	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	5	
DMS-54	6/19/1985	SW6010	Cobalt	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	5	
DMS-90	4/28/1988	SW6010	Cobalt	NS1	DMS-90	SO	0	19	mg/Kg	=	2.7	5	JQ
DMS-96	5/3/1988	SW6010	Cobalt	NS1	DMS-96	SO	0	19	mg/Kg	=	10	5	JQ
DMW-16A	10/27/1986	SW6010	Cobalt	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	5	
DMS-94	5/2/1988	SW6010	Cobalt	NS1	DMS-94	SO	0	24	mg/Kg	=	2.6	5	JQ
DMW-16B	10/22/1986	SW6010	Cobalt	NS1	DMW-16B	SO	0	25	mg/Kg	=	17	5	
DMW-16C	11/9/1986	SW6010	Cobalt	NS1	DMW-16C	SO	0	56	mg/Kg	=	12	5	
DMS-59	6/10/1985	SW6010	Copper	NS1	DMS-59	SO	0	1	mg/Kg	=	9	2.5	
DMS-60	6/10/1985	SW6010	Copper	NS1	DMS-60	SO	0	1	mg/Kg	=	6	2.5	
DMS-55	6/11/1985	SW6010	Copper	NS1	DMS-55	SO	0	1	mg/Kg	=	6	2.5	
DMS-53	6/12/1985	SW6010	Copper	NS1	DMS-53	SO	0	1	mg/Kg	=	4	2.5	
DMS-56	6/12/1985	SW6010	Copper	NS1	DMS-56	SO	0	1	mg/Kg	=	11	2.5	
DMS-58	6/12/1985	SW6010	Copper	NS1	DMS-58	SO	0	1	mg/Kg	=	5	2.5	
DMS-61	6/18/1985	SW6010	Copper	NS1	DMS-61	SO	0	1	mg/Kg	=	4	2.5	
DMS-52	6/19/1985	SW6010	Copper	NS1	DMS-52	SO	0	1	mg/Kg	=	7	2.5	
DMS-54	6/19/1985	SW6010	Copper	NS1	DMS-54	SO	0	1	mg/Kg	=	6.88	2.5	
DMS-57	6/24/1985	SW6010	Copper	NS1	DMS-57	SO	0	1	mg/Kg	=	4	2.5	
DMW-15A	11/8/1986	SW6010	Copper	NS1	DMW-15A	SO	0	1	mg/Kg	=	7.9	2.5	
DMW-15A	11/8/1986	SW6010	Copper	NS1	DMW-15A	SO	0	1	mg/Kg	=	7.9	2.5	
DMS-89	4/28/1988	SW6010	Copper	NS1	DMS-89	SO	0	1	mg/Kg	=	8.5	2.5	
DMS-98	5/3/1988	SW6010	Copper	NS1	DMS-98	SO	0	1	mg/Kg	=	4.3	2.5	JQ
DMS-100	5/5/1988	SW6010	Copper	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	2.5	
DMS-103	5/9/1988	SW6010	Copper	NS1	DMS-103	SO	0	1	mg/Kg	=	3.7	2.5	JQ
DMS-58	6/12/1985	SW6010	Copper	NS1	DMS-58	SO	0	2	mg/Kg	=	3	2.5	
DMS-82	4/25/1988	SW6010	Copper	NS1	DMS-82	SO	0	2	mg/Kg	=	8.1	2.5	

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DMS-83	4/25/1988	SW6010	Copper	NS1	DMS-83	SO	0	2	mg/Kg	=	5	2.5	JQ
DMS-85	4/26/1988	SW6010	Copper	NS1	DMS-85	SO	0	2	mg/Kg	=	3.9	2.5	JQ
DMS-86	4/26/1988	SW6010	Copper	NS1	DMS-86	SO	0	2	mg/Kg	=	4	2.5	JQ
DMS-88	4/28/1988	SW6010	Copper	NS1	DMS-88	SO	0	2	mg/Kg	=	11	2.5	
DMS-91	5/2/1988	SW6010	Copper	NS1	DMS-91	SO	0	2	mg/Kg	=	4.8	2.5	JQ
DMS-92	5/2/1988	SW6010	Copper	NS1	DMS-92	SO	0	2	mg/Kg	=	4.9	2.5	JQ
DMS-93	5/2/1988	SW6010	Copper	NS1	DMS-93	SO	0	2	mg/Kg	=	4.9	2.5	JQ
DMS-97	5/3/1988	SW6010	Copper	NS1	DMS-97	SO	0	2	mg/Kg	=	11	2.5	
DMS-99	5/5/1988	SW6010	Copper	NS1	DMS-99	SO	0	2	mg/Kg	=	7.4	2.5	
DMS-102	5/9/1988	SW6010	Copper	NS1	DMS-102	SO	0	2	mg/Kg	=	4	2.5	JQ
DMS-104	5/9/1988	SW6010	Copper	NS1	DMS-104	SO	0	2	mg/Kg	=	3.9	2.5	JQ
DMS-105	5/9/1988	SW6010	Copper	NS1	DMS-105	SO	0	2	mg/Kg	=	3.6	2.5	JQ
DMS-84	4/26/1988	SW6010	Copper	NS1	DMS-84	SO	0	4	mg/Kg	=	3.9	2.5	JQ
DMS-87	4/28/1988	SW6010	Copper	NS1	DMS-87	SO	0	4	mg/Kg	=	16	2.5	
DMS-95	5/3/1988	SW6010	Copper	NS1	DMS-95	SO	0	4	mg/Kg	=	6.7	2.5	
DMS-101	5/5/1988	SW6010	Copper	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	2.5	
DMW-14A	11/9/1986	SW6010	Copper	NS1	DMW-14A	SO	0	5	mg/Kg	=	5.5	2.5	
DMS-55	6/11/1985	SW6010	Copper	NS1	DMS-55	SO	0	6	mg/Kg	=	4	2.5	
DMS-57	6/11/1985	SW6010	Copper	NS1	DMS-57	SO	0	6	mg/Kg	=	3	2.5	
DMS-61	6/18/1985	SW6010	Copper	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	2.5	
DMS-59	6/10/1985	SW6010	Copper	NS1	DMS-59	SO	0	8	mg/Kg	=	4	2.5	
DMS-60	6/10/1985	SW6010	Copper	NS1	DMS-60	SO	0	8	mg/Kg	=	7	2.5	
DMS-53	6/12/1985	SW6010	Copper	NS1	DMS-53	SO	0	8	mg/Kg	=	6	2.5	
DMS-56	6/12/1985	SW6010	Copper	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	2.5	
DMS-52	6/19/1985	SW6010	Copper	NS1	DMS-52	SO	0	8	mg/Kg	=	1	2.5	
DMS-54	6/19/1985	SW6010	Copper	NS1	DMS-54	SO	0	10	mg/Kg	=	2.5	2.5	
DMW-18A	11/9/1986	SW6010	Copper	NS1	DMW-18A	SO	0	10	mg/Kg	=	1.6	2.5	
DMW-14E	10/6/1988	SW6010	Copper	NS1	DMW-14E	SO	0	10	mg/Kg	=	11	2.5	
DMW-17A	11/3/1986	SW6010	Copper	NS1	DMW-17A	SO	0	15	mg/Kg	=	3.4	2.5	
DMW-17A	11/3/1986	SW6010	Copper	NS1	DMW-17A	SO	0	15	mg/Kg	=	3.4	2.5	
DMS-61	6/18/1985	SW6010	Copper	NS1	DMS-61	SO	0	18	mg/Kg	=	3	2.5	
DMS-54	6/19/1985	SW6010	Copper	NS1	DMS-54	SO	0	18	mg/Kg	=	1.1	2.5	
DMS-90	4/28/1988	SW6010	Copper	NS1	DMS-90	SO	0	19	mg/Kg	=	24	2.5	
DMS-96	5/3/1988	SW6010	Copper	NS1	DMS-96	SO	0	19	mg/Kg	=	14	2.5	
DMW-16A	10/27/1986	SW6010	Copper	NS1	DMW-16A	SO	0	20	mg/Kg	=	3.3	2.5	
DMS-94	5/2/1988	SW6010	Copper	NS1	DMS-94	SO	0	24	mg/Kg	=	4.4	2.5	JQ
DMW-16B	10/22/1986	SW6010	Copper	NS1	DMW-16B	SO	0	25	mg/Kg	=	7.2	2.5	
DMW-16C	11/9/1986	SW6010	Copper	NS1	DMW-16C	SO	0	56	mg/Kg	=	9.6	2.5	
DMS-59	6/10/1985	SW6010	Cyanide	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1.3	
DMS-60	6/10/1985	SW6010	Cyanide	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1.3	
DMS-55	6/11/1985	SW6010	Cyanide	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1.3	
DMS-53	6/12/1985	SW6010	Cyanide	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1.3	
DMS-56	6/12/1985	SW6010	Cyanide	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1.3	
DMS-58	6/12/1985	SW6010	Cyanide	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1.3	
DMS-61	6/18/1985	SW6010	Cyanide	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1.3	
DMS-52	6/19/1985	SW6010	Cyanide	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1.3	
DMS-54	6/19/1985	SW6010	Cyanide	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1.3	
DMS-57	6/24/1985	SW6010	Cyanide	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1.3	

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DMW-15A	11/8/1986	SW6010	Cyanide	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.3
DMW-15A	11/8/1986	SW6010	Cyanide	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.3
DMS-89	4/28/1988	SW6010	Cyanide	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1.3
DMS-98	5/3/1988	SW6010	Cyanide	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1.3
DMS-100	5/5/1988	SW6010	Cyanide	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1.3
DMS-103	5/9/1988	SW6010	Cyanide	NS1	DMS-103	SO	0	1	mg/Kg	=	3.4	1.3
DMS-58	6/12/1985	SW6010	Cyanide	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1.3
DMS-82	4/25/1988	SW6010	Cyanide	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1.3
DMS-83	4/25/1988	SW6010	Cyanide	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	1.3
DMS-85	4/26/1988	SW6010	Cyanide	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1.3
DMS-86	4/26/1988	SW6010	Cyanide	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1.3
DMS-88	4/28/1988	SW6010	Cyanide	NS1	DMS-88	SO	0	2	mg/Kg	=	1.3	1.3
DMS-91	5/2/1988	SW6010	Cyanide	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1.3
DMS-92	5/2/1988	SW6010	Cyanide	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1.3
DMS-93	5/2/1988	SW6010	Cyanide	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1.3
DMS-97	5/3/1988	SW6010	Cyanide	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1.3
DMS-99	5/5/1988	SW6010	Cyanide	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1.3
DMS-102	5/9/1988	SW6010	Cyanide	NS1	DMS-102	SO	0	2	mg/Kg	=	7.2	1.3
DMS-104	5/9/1988	SW6010	Cyanide	NS1	DMS-104	SO	0	2	mg/Kg	=	3.3	1.3
DMS-105	5/9/1988	SW6010	Cyanide	NS1	DMS-105	SO	0	2	mg/Kg	=	4.2	1.3
DMS-84	4/26/1988	SW6010	Cyanide	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1.3
DMS-87	4/28/1988	SW6010	Cyanide	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1.3
DMS-95	5/3/1988	SW6010	Cyanide	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1.3
DMS-101	5/5/1988	SW6010	Cyanide	NS1	DMS-101	SO	0	4	mg/Kg	=	12	1.3
DMW-14A	11/9/1986	SW6010	Cyanide	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1.3
DMS-55	6/11/1985	SW6010	Cyanide	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1.3
DMS-57	6/11/1985	SW6010	Cyanide	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1.3
DMS-61	6/18/1985	SW6010	Cyanide	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1.3
DMS-59	6/10/1985	SW6010	Cyanide	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1.3
DMS-60	6/10/1985	SW6010	Cyanide	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1.3
DMS-53	6/12/1985	SW6010	Cyanide	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1.3
DMS-56	6/12/1985	SW6010	Cyanide	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1.3
DMS-52	6/19/1985	SW6010	Cyanide	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1.3
DMS-54	6/19/1985	SW6010	Cyanide	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1.3
DMW-18A	11/9/1986	SW6010	Cyanide	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	1.3
DMW-14E	10/6/1988	SW6010	Cyanide	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1.3
DMW-17A	11/3/1986	SW6010	Cyanide	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.3
DMW-17A	11/3/1986	SW6010	Cyanide	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.3
DMS-61	6/18/1985	SW6010	Cyanide	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1.3
DMS-54	6/19/1985	SW6010	Cyanide	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1.3
DMS-90	4/28/1988	SW6010	Cyanide	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1.3
DMS-96	5/3/1988	SW6010	Cyanide	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1.3
DMW-16A	10/27/1986	SW6010	Cyanide	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1.3
DMS-94	5/2/1988	SW6010	Cyanide	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1.3
DMW-16B	10/22/1986	SW6010	Cyanide	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1.3
DMW-16C	11/9/1986	SW6010	Cyanide	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	1.3
DMS-59	6/10/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33

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DMS-55	6/11/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.046	0.33
DMW-15A	11/8/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.046	0.33
DMS-89	4/28/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33

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DMS-90	4/28/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Dibenzo(a,h)anthracene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Dibenzo(a,h)anthracene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Dibenzofuran	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Dibenzofuran	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Dibenzofuran	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzofuran	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Dibenzofuran	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzofuran	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Dibenzofuran	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Dibenzofuran	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Dibenzofuran	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Dibenzofuran	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Dibenzofuran	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Dibenzofuran	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Dibenzofuran	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Dibenzofuran	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Dibenzofuran	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Dibenzofuran	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Dibenzofuran	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Dibenzofuran	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Dibenzofuran	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Dibenzofuran	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Dibenzofuran	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Dibenzofuran	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Dibenzofuran	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Dibenzofuran	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Dibenzofuran	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Dibenzofuran	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Dibenzofuran	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Dibenzofuran	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Dibenzofuran	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Dibenzofuran	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Dibenzofuran	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Dibenzofuran	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Dibenzofuran	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzofuran	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Dibenzofuran	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Dibenzofuran	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Dibenzofuran	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33

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DMS-52	6/19/1985	SW8270	Dibenzofuran	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzofuran	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Dibenzofuran	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Dibenzofuran	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Dibenzofuran	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Dibenzofuran	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Dibenzofuran	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Dibenzofuran	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Dibenzofuran	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Dibenzofuran	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Dibenzofuran	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Dibenzofuran	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Dibenzofuran	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Dibenzofuran	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8080	Dieldrin	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	Dieldrin	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	Dieldrin	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	Dieldrin	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	Dieldrin	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	Dieldrin	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Dieldrin	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	Dieldrin	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Dieldrin	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.004
DMS-57	6/24/1985	SW8080	Dieldrin	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	Dieldrin	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	Dieldrin	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMS-89	4/28/1988	SW8080	Dieldrin	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.004
DMS-98	5/3/1988	SW8080	Dieldrin	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.004
DMS-100	5/5/1988	SW8080	Dieldrin	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.004
DMS-103	5/9/1988	SW8080	Dieldrin	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	Dieldrin	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.004
DMS-82	4/25/1988	SW8080	Dieldrin	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.004
DMS-83	4/25/1988	SW8080	Dieldrin	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.004
DMS-85	4/26/1988	SW8080	Dieldrin	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.004
DMS-86	4/26/1988	SW8080	Dieldrin	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.004
DMS-88	4/28/1988	SW8080	Dieldrin	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.004
DMS-91	5/2/1988	SW8080	Dieldrin	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.004
DMS-92	5/2/1988	SW8080	Dieldrin	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.004
DMS-93	5/2/1988	SW8080	Dieldrin	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.004
DMS-97	5/3/1988	SW8080	Dieldrin	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.004
DMS-99	5/5/1988	SW8080	Dieldrin	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.004
DMS-102	5/9/1988	SW8080	Dieldrin	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.004
DMS-104	5/9/1988	SW8080	Dieldrin	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.004
DMS-105	5/9/1988	SW8080	Dieldrin	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.004
DMS-84	4/26/1988	SW8080	Dieldrin	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.004
DMS-87	4/28/1988	SW8080	Dieldrin	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.004
DMS-95	5/3/1988	SW8080	Dieldrin	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.004
DMS-101	5/5/1988	SW8080	Dieldrin	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.004

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DMW-14A	11/9/1986	SW8080	Dieldrin	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	Dieldrin	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.004
DMS-57	6/11/1985	SW8080	Dieldrin	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Dieldrin	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	Dieldrin	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	Dieldrin	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	Dieldrin	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	Dieldrin	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	Dieldrin	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Dieldrin	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.004
DMW-18A	11/9/1986	SW8080	Dieldrin	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.004
DMW-14E	10/6/1988	SW8080	Dieldrin	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	Dieldrin	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	Dieldrin	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Dieldrin	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Dieldrin	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.004
DMS-90	4/28/1988	SW8080	Dieldrin	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.004
DMS-96	5/3/1988	SW8080	Dieldrin	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.004
DMW-16A	10/27/1986	SW8080	Dieldrin	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.004
DMS-94	5/2/1988	SW8080	Dieldrin	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.004
DMW-16B	10/22/1986	SW8080	Dieldrin	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.004
DMW-16C	11/9/1986	SW8080	Dieldrin	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8270	Diethylphthalate	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Diethylphthalate	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Diethylphthalate	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Diethylphthalate	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Diethylphthalate	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Diethylphthalate	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Diethylphthalate	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Diethylphthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Diethylphthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Diethylphthalate	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Diethylphthalate	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Diethylphthalate	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Diethylphthalate	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Diethylphthalate	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Diethylphthalate	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Diethylphthalate	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Diethylphthalate	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Diethylphthalate	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Diethylphthalate	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Diethylphthalate	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Diethylphthalate	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Diethylphthalate	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33

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DMS-99	5/5/1988	SW8270	Diethylphthalate	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Diethylphthalate	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Diethylphthalate	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Diethylphthalate	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Diethylphthalate	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Diethylphthalate	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Diethylphthalate	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Diethylphthalate	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Diethylphthalate	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Diethylphthalate	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Diethylphthalate	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Diethylphthalate	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Diethylphthalate	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Diethylphthalate	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Diethylphthalate	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Diethylphthalate	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Diethylphthalate	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Diethylphthalate	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Diethylphthalate	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Diethylphthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Diethylphthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Diethylphthalate	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Diethylphthalate	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Diethylphthalate	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Diethylphthalate	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Diethylphthalate	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Diethylphthalate	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Diethylphthalate	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Diethylphthalate	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	di-n-butyl phthalate	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	di-n-butyl phthalate	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	di-n-butyl phthalate	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-56	SO	0	1	mg/Kg	=	0.23	0.33
DMS-58	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	di-n-butyl phthalate	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	di-n-butyl phthalate	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	di-n-butyl phthalate	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	di-n-butyl phthalate	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	di-n-butyl phthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	di-n-butyl phthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	di-n-butyl phthalate	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	di-n-butyl phthalate	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	di-n-butyl phthalate	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	di-n-butyl phthalate	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	di-n-butyl phthalate	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33

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DMS-83	4/25/1988	SW8270	di-n-butyl phthalate	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	di-n-butyl phthalate	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	di-n-butyl phthalate	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	di-n-butyl phthalate	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	di-n-butyl phthalate	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	di-n-butyl phthalate	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	di-n-butyl phthalate	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	di-n-butyl phthalate	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	di-n-butyl phthalate	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	di-n-butyl phthalate	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	di-n-butyl phthalate	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	di-n-butyl phthalate	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	di-n-butyl phthalate	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	di-n-butyl phthalate	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	di-n-butyl phthalate	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	di-n-butyl phthalate	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	di-n-butyl phthalate	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	di-n-butyl phthalate	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	di-n-butyl phthalate	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	di-n-butyl phthalate	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	di-n-butyl phthalate	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	di-n-butyl phthalate	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	di-n-butyl phthalate	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	di-n-butyl phthalate	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	di-n-butyl phthalate	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	di-n-butyl phthalate	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	di-n-butyl phthalate	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	di-n-butyl phthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	di-n-butyl phthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	di-n-butyl phthalate	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	di-n-butyl phthalate	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	di-n-butyl phthalate	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	di-n-butyl phthalate	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	di-n-butyl phthalate	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	di-n-butyl phthalate	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	di-n-butyl phthalate	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	di-n-butyl phthalate	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	di-n-octyl phthalate	NS1	DMS-59	SO	0	1	mg/Kg	=	1.4	0.33
DMS-60	6/10/1985	SW8270	di-n-octyl phthalate	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	di-n-octyl phthalate	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	di-n-octyl phthalate	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	di-n-octyl phthalate	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	di-n-octyl phthalate	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	di-n-octyl phthalate	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33

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DMW-15A	11/8/1986	SW8270	di-n-octyl phthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	di-n-octyl phthalate	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33	
DMS-89	4/28/1988	SW8270	di-n-octyl phthalate	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	di-n-octyl phthalate	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	di-n-octyl phthalate	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	di-n-octyl phthalate	NS1	DMS-103	SO	0	1	mg/Kg	=	0.13	0.33	J
DMS-58	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	di-n-octyl phthalate	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	di-n-octyl phthalate	NS1	DMS-83	SO	0	2	mg/Kg	=	0.076	0.33	J
DMS-85	4/26/1988	SW8270	di-n-octyl phthalate	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	di-n-octyl phthalate	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	di-n-octyl phthalate	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	di-n-octyl phthalate	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	di-n-octyl phthalate	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	di-n-octyl phthalate	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	di-n-octyl phthalate	NS1	DMS-97	SO	0	2	mg/Kg	=	0.065	0.33	J
DMS-99	5/5/1988	SW8270	di-n-octyl phthalate	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	di-n-octyl phthalate	NS1	DMS-102	SO	0	2	mg/Kg	=	0.074	0.33	J
DMS-104	5/9/1988	SW8270	di-n-octyl phthalate	NS1	DMS-104	SO	0	2	mg/Kg	=	0.04	0.33	J
DMS-105	5/9/1988	SW8270	di-n-octyl phthalate	NS1	DMS-105	SO	0	2	mg/Kg	=	0.15	0.33	J
DMS-84	4/26/1988	SW8270	di-n-octyl phthalate	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	di-n-octyl phthalate	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	di-n-octyl phthalate	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	di-n-octyl phthalate	NS1	DMS-101	SO	0	4	mg/Kg	=	0.051	0.33	J
DMW-14A	11/9/1986	SW8270	di-n-octyl phthalate	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	di-n-octyl phthalate	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	di-n-octyl phthalate	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	di-n-octyl phthalate	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	di-n-octyl phthalate	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	di-n-octyl phthalate	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	di-n-octyl phthalate	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	di-n-octyl phthalate	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	di-n-octyl phthalate	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	di-n-octyl phthalate	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	di-n-octyl phthalate	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	di-n-octyl phthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	di-n-octyl phthalate	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	di-n-octyl phthalate	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	di-n-octyl phthalate	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	di-n-octyl phthalate	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	di-n-octyl phthalate	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	di-n-octyl phthalate	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	di-n-octyl phthalate	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	di-n-octyl phthalate	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	di-n-octyl phthalate	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8080	Endrin	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.004	
DMS-60	6/10/1985	SW8080	Endrin	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.004	

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DMS-55	6/11/1985	SW8080	Endrin	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	Endrin	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	Endrin	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	Endrin	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Endrin	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	Endrin	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Endrin	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.004
DMS-57	6/24/1985	SW8080	Endrin	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	Endrin	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMW-15A	11/8/1986	SW8080	Endrin	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.004
DMS-89	4/28/1988	SW8080	Endrin	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.004
DMS-98	5/3/1988	SW8080	Endrin	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.004
DMS-100	5/5/1988	SW8080	Endrin	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.004
DMS-103	5/9/1988	SW8080	Endrin	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.004
DMS-58	6/12/1985	SW8080	Endrin	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.004
DMS-82	4/25/1988	SW8080	Endrin	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.004
DMS-83	4/25/1988	SW8080	Endrin	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.004
DMS-85	4/26/1988	SW8080	Endrin	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.004
DMS-86	4/26/1988	SW8080	Endrin	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.004
DMS-88	4/28/1988	SW8080	Endrin	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.004
DMS-91	5/2/1988	SW8080	Endrin	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.004
DMS-92	5/2/1988	SW8080	Endrin	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.004
DMS-93	5/2/1988	SW8080	Endrin	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.004
DMS-97	5/3/1988	SW8080	Endrin	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.004
DMS-99	5/5/1988	SW8080	Endrin	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.004
DMS-102	5/9/1988	SW8080	Endrin	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.004
DMS-104	5/9/1988	SW8080	Endrin	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.004
DMS-105	5/9/1988	SW8080	Endrin	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.004
DMS-84	4/26/1988	SW8080	Endrin	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.004
DMS-87	4/28/1988	SW8080	Endrin	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.004
DMS-95	5/3/1988	SW8080	Endrin	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.004
DMS-101	5/5/1988	SW8080	Endrin	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.004
DMW-14A	11/9/1986	SW8080	Endrin	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.004
DMS-55	6/11/1985	SW8080	Endrin	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.004
DMS-57	6/11/1985	SW8080	Endrin	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Endrin	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8080	Endrin	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.004
DMS-60	6/10/1985	SW8080	Endrin	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.004
DMS-53	6/12/1985	SW8080	Endrin	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.004
DMS-56	6/12/1985	SW8080	Endrin	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.004
DMS-52	6/19/1985	SW8080	Endrin	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Endrin	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.004
DMW-18A	11/9/1986	SW8080	Endrin	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.004
DMW-14E	10/6/1988	SW8080	Endrin	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	Endrin	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMW-17A	11/3/1986	SW8080	Endrin	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.004
DMS-61	6/18/1985	SW8080	Endrin	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.004
DMS-54	6/19/1985	SW8080	Endrin	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.004

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DMS-90	4/28/1988	SW8080	Endrin	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.004
DMS-96	5/3/1988	SW8080	Endrin	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.004
DMW-16A	10/27/1986	SW8080	Endrin	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.004
DMS-94	5/2/1988	SW8080	Endrin	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.004
DMW-16B	10/22/1986	SW8080	Endrin	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.004
DMW-16C	11/9/1986	SW8080	Endrin	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.004
DMS-59	6/10/1985	SW8260	Ethylbenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Ethylbenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Ethylbenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Ethylbenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Ethylbenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Ethylbenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Ethylbenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Ethylbenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Ethylbenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Ethylbenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Ethylbenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Ethylbenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Ethylbenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Ethylbenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Ethylbenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Ethylbenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Ethylbenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Ethylbenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Ethylbenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Ethylbenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Ethylbenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Ethylbenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Ethylbenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Ethylbenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Ethylbenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Ethylbenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Ethylbenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Ethylbenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Ethylbenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Ethylbenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Ethylbenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Ethylbenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Ethylbenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Ethylbenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Ethylbenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Ethylbenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Ethylbenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005

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DMS-52	6/19/1985	SW8260	Ethylbenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Ethylbenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005	
DMW-18A	11/9/1986	SW8260	Ethylbenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005	
DMW-14E	10/6/1988	SW8260	Ethylbenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Ethylbenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Ethylbenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Ethylbenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Ethylbenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005	
DMS-90	4/28/1988	SW8260	Ethylbenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005	
DMS-96	5/3/1988	SW8260	Ethylbenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005	
DMW-16A	10/27/1986	SW8260	Ethylbenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005	
DMS-94	5/2/1988	SW8260	Ethylbenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005	
DMW-16B	10/22/1986	SW8260	Ethylbenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005	
DMW-16C	11/9/1986	SW8260	Ethylbenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8270	Fluoranthene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Fluoranthene	NS1	DMS-60	SO	0	1	mg/Kg	=	0.26	0.33	J
DMS-55	6/11/1985	SW8270	Fluoranthene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Fluoranthene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Fluoranthene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Fluoranthene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Fluoranthene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Fluoranthene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Fluoranthene	NS1	DMS-54	SO	0	1	mg/Kg	=	1	0.33	
DMS-57	6/24/1985	SW8270	Fluoranthene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.32	0.33	
DMW-15A	11/8/1986	SW8270	Fluoranthene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.32	0.33	
DMS-89	4/28/1988	SW8270	Fluoranthene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Fluoranthene	NS1	DMS-98	SO	0	1	mg/Kg	=	0.11	0.33	J
DMS-100	5/5/1988	SW8270	Fluoranthene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Fluoranthene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.42	0.33	
DMS-58	6/12/1985	SW8270	Fluoranthene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Fluoranthene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Fluoranthene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Fluoranthene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Fluoranthene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Fluoranthene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Fluoranthene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Fluoranthene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Fluoranthene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Fluoranthene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Fluoranthene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Fluoranthene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Fluoranthene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Fluoranthene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.27	0.33	J
DMS-84	4/26/1988	SW8270	Fluoranthene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Fluoranthene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Fluoranthene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Fluoranthene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	

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DMW-14A	11/9/1986	SW8270	Fluoranthene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Fluoranthene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Fluoranthene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Fluoranthene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Fluoranthene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Fluoranthene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Fluoranthene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Fluoranthene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Fluoranthene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Fluoranthene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Fluoranthene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Fluoranthene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Fluoranthene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Fluoranthene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Fluoranthene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Fluoranthene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Fluoranthene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Fluoranthene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Fluoranthene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Fluoranthene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Fluoranthene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Fluorene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Fluorene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Fluorene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Fluorene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Fluorene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Fluorene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Fluorene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Fluorene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Fluorene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Fluorene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Fluorene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Fluorene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Fluorene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Fluorene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Fluorene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Fluorene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Fluorene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Fluorene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Fluorene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Fluorene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Fluorene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Fluorene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Fluorene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Fluorene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Fluorene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Fluorene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33

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DMS-99	5/5/1988	SW8270	Fluorene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Fluorene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Fluorene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Fluorene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Fluorene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Fluorene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Fluorene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Fluorene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Fluorene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Fluorene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Fluorene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Fluorene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Fluorene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Fluorene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Fluorene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Fluorene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Fluorene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Fluorene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Fluorene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Fluorene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Fluorene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Fluorene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Fluorene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Fluorene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Fluorene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Fluorene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Fluorene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Fluorene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Fluorene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Fluorene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8080	gamma-BHC	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.002
DMS-60	6/10/1985	SW8080	gamma-BHC	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.002
DMS-55	6/11/1985	SW8080	gamma-BHC	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.002
DMS-53	6/12/1985	SW8080	gamma-BHC	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.002
DMS-56	6/12/1985	SW8080	gamma-BHC	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.002
DMS-58	6/12/1985	SW8080	gamma-BHC	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.002
DMS-61	6/18/1985	SW8080	gamma-BHC	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.002
DMS-52	6/19/1985	SW8080	gamma-BHC	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.002
DMS-54	6/19/1985	SW8080	gamma-BHC	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.002
DMS-57	6/24/1985	SW8080	gamma-BHC	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.002
DMW-15A	11/8/1986	SW8080	gamma-BHC	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.002
DMW-15A	11/8/1986	SW8080	gamma-BHC	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.002
DMS-89	4/28/1988	SW8080	gamma-BHC	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.002
DMS-98	5/3/1988	SW8080	gamma-BHC	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.002
DMS-100	5/5/1988	SW8080	gamma-BHC	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.002
DMS-103	5/9/1988	SW8080	gamma-BHC	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.002
DMS-58	6/12/1985	SW8080	gamma-BHC	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.002
DMS-82	4/25/1988	SW8080	gamma-BHC	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.002

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DMS-83	4/25/1988	SW8080	gamma-BHC	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.002
DMS-85	4/26/1988	SW8080	gamma-BHC	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.002
DMS-86	4/26/1988	SW8080	gamma-BHC	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.002
DMS-88	4/28/1988	SW8080	gamma-BHC	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.002
DMS-91	5/2/1988	SW8080	gamma-BHC	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.002
DMS-92	5/2/1988	SW8080	gamma-BHC	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.002
DMS-93	5/2/1988	SW8080	gamma-BHC	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.002
DMS-97	5/3/1988	SW8080	gamma-BHC	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.002
DMS-99	5/5/1988	SW8080	gamma-BHC	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.002
DMS-102	5/9/1988	SW8080	gamma-BHC	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.002
DMS-104	5/9/1988	SW8080	gamma-BHC	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.002
DMS-105	5/9/1988	SW8080	gamma-BHC	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.002
DMS-84	4/26/1988	SW8080	gamma-BHC	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.002
DMS-87	4/28/1988	SW8080	gamma-BHC	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.002
DMS-95	5/3/1988	SW8080	gamma-BHC	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.002
DMS-101	5/5/1988	SW8080	gamma-BHC	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.002
DMW-14A	11/9/1986	SW8080	gamma-BHC	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.002
DMS-55	6/11/1985	SW8080	gamma-BHC	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.002
DMS-57	6/11/1985	SW8080	gamma-BHC	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.002
DMS-61	6/18/1985	SW8080	gamma-BHC	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.002
DMS-59	6/10/1985	SW8080	gamma-BHC	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.002
DMS-60	6/10/1985	SW8080	gamma-BHC	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.002
DMS-53	6/12/1985	SW8080	gamma-BHC	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.002
DMS-56	6/12/1985	SW8080	gamma-BHC	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.002
DMS-52	6/19/1985	SW8080	gamma-BHC	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.002
DMS-54	6/19/1985	SW8080	gamma-BHC	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.002
DMW-18A	11/9/1986	SW8080	gamma-BHC	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.002
DMW-14E	10/6/1988	SW8080	gamma-BHC	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.002
DMW-17A	11/3/1986	SW8080	gamma-BHC	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.002
DMW-17A	11/3/1986	SW8080	gamma-BHC	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.002
DMS-61	6/18/1985	SW8080	gamma-BHC	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.002
DMS-54	6/19/1985	SW8080	gamma-BHC	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.002
DMS-90	4/28/1988	SW8080	gamma-BHC	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.002
DMS-96	5/3/1988	SW8080	gamma-BHC	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.002
DMW-16A	10/27/1986	SW8080	gamma-BHC	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.002
DMS-94	5/2/1988	SW8080	gamma-BHC	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.002
DMW-16B	10/22/1986	SW8080	gamma-BHC	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.002
DMW-16C	11/9/1986	SW8080	gamma-BHC	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.002
DMS-59	6/10/1985	SW8270	Hexachlorobenzene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Hexachlorobenzene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Hexachlorobenzene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Hexachlorobenzene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Hexachlorobenzene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Hexachlorobenzene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Hexachlorobenzene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33

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DMW-15A	11/8/1986	SW8270	Hexachlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Hexachlorobenzene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Hexachlorobenzene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Hexachlorobenzene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Hexachlorobenzene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Hexachlorobenzene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Hexachlorobenzene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Hexachlorobenzene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Hexachlorobenzene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Hexachlorobenzene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Hexachlorobenzene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Hexachlorobenzene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Hexachlorobenzene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Hexachlorobenzene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Hexachlorobenzene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Hexachlorobenzene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Hexachlorobenzene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Hexachlorobenzene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Hexachlorobenzene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Hexachlorobenzene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Hexachlorobenzene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Hexachlorobenzene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Hexachlorobenzene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Hexachlorobenzene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Hexachlorobenzene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Hexachlorobenzene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Hexachlorobenzene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Hexachlorobenzene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Hexachlorobenzene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Hexachlorobenzene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Hexachlorobenzene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Hexachlorobenzene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Hexachlorobenzene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Hexachlorobenzene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Hexachlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Hexachlorobenzene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Hexachlorobenzene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Hexachlorobenzene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Hexachlorobenzene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Hexachlorobenzene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Hexachlorobenzene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Hexachlorobenzene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Hexachlorobenzene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Hexachlorobenzene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Hexavalent Chromium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1
DMS-60	6/10/1985	SW6010	Hexavalent Chromium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1

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DMS-55	6/11/1985	SW6010	Hexavalent Chromium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1	
DMS-53	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1	
DMS-56	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1	
DMS-58	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-58	SO	0	1	mg/Kg	=	0.43	1	
DMS-61	6/18/1985	SW6010	Hexavalent Chromium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1	
DMS-52	6/19/1985	SW6010	Hexavalent Chromium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1	
DMS-54	6/19/1985	SW6010	Hexavalent Chromium	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1	
DMS-57	6/24/1985	SW6010	Hexavalent Chromium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1	
DMS-58	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-58	SO	0	2	mg/Kg	=	0.36	1	
DMS-55	6/11/1985	SW6010	Hexavalent Chromium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1	
DMS-57	6/11/1985	SW6010	Hexavalent Chromium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1	
DMS-61	6/18/1985	SW6010	Hexavalent Chromium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1	
DMS-59	6/10/1985	SW6010	Hexavalent Chromium	NS1	DMS-59	SO	0	8	mg/Kg	=	0.71	1	
DMS-60	6/10/1985	SW6010	Hexavalent Chromium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1	
DMS-53	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1	
DMS-56	6/12/1985	SW6010	Hexavalent Chromium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1	
DMS-52	6/19/1985	SW6010	Hexavalent Chromium	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1	
DMS-54	6/19/1985	SW6010	Hexavalent Chromium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1	
DMS-61	6/18/1985	SW6010	Hexavalent Chromium	NS1	DMS-61	SO	0	18	mg/Kg	=	0.58	1	
DMS-54	6/19/1985	SW6010	Hexavalent Chromium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1	
DMS-59	6/10/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-54	SO	0	1	mg/Kg	=	0.2	0.33	J
DMS-57	6/24/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.081	0.33	
DMW-15A	11/8/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.081	0.33	
DMS-89	4/28/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33	
DMS-100	5/5/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.12	0.33	J
DMS-58	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	

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DMS-104	5/9/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Indeno(1,2,3-cd)pyrene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Iron	NS1	DMS-59	SO	0	1	mg/Kg	=	52143	10
DMS-60	6/10/1985	SW6010	Iron	NS1	DMS-60	SO	0	1	mg/Kg	=	28444	10
DMS-55	6/11/1985	SW6010	Iron	NS1	DMS-55	SO	0	1	mg/Kg	=	20428	10
DMS-53	6/12/1985	SW6010	Iron	NS1	DMS-53	SO	0	1	mg/Kg	=	9325	10
DMS-56	6/12/1985	SW6010	Iron	NS1	DMS-56	SO	0	1	mg/Kg	=	33810	10
DMS-58	6/12/1985	SW6010	Iron	NS1	DMS-58	SO	0	1	mg/Kg	=	11119	10
DMS-61	6/18/1985	SW6010	Iron	NS1	DMS-61	SO	0	1	mg/Kg	=	11778	10
DMS-52	6/19/1985	SW6010	Iron	NS1	DMS-52	SO	0	1	mg/Kg	=	25941	10
DMS-54	6/19/1985	SW6010	Iron	NS1	DMS-54	SO	0	1	mg/Kg	=	32690	10
DMS-57	6/24/1985	SW6010	Iron	NS1	DMS-57	SO	0	1	mg/Kg	=	9113	10
DMW-15A	11/8/1986	SW6010	Iron	NS1	DMW-15A	SO	0	1	mg/Kg	=	12700	10
DMW-15A	11/8/1986	SW6010	Iron	NS1	DMW-15A	SO	0	1	mg/Kg	=	12700	10
DMS-89	4/28/1988	SW6010	Iron	NS1	DMS-89	SO	0	1	mg/Kg	=	16800	10
DMS-98	5/3/1988	SW6010	Iron	NS1	DMS-98	SO	0	1	mg/Kg	=	12200	10
DMS-100	5/5/1988	SW6010	Iron	NS1	DMS-100	SO	0	1	mg/Kg	=	15900	10
DMS-103	5/9/1988	SW6010	Iron	NS1	DMS-103	SO	0	1	mg/Kg	=	15300	10
DMS-58	6/12/1985	SW6010	Iron	NS1	DMS-58	SO	0	2	mg/Kg	=	12014	10
DMS-82	4/25/1988	SW6010	Iron	NS1	DMS-82	SO	0	2	mg/Kg	=	19700	10
DMS-83	4/25/1988	SW6010	Iron	NS1	DMS-83	SO	0	2	mg/Kg	=	12400	10
DMS-85	4/26/1988	SW6010	Iron	NS1	DMS-85	SO	0	2	mg/Kg	=	14800	10

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DMS-86	4/26/1988	SW6010	Iron	NS1	DMS-86	SO	0	2	mg/Kg	=	9850	10
DMS-88	4/28/1988	SW6010	Iron	NS1	DMS-88	SO	0	2	mg/Kg	=	26000	10
DMS-91	5/2/1988	SW6010	Iron	NS1	DMS-91	SO	0	2	mg/Kg	=	11800	10
DMS-92	5/2/1988	SW6010	Iron	NS1	DMS-92	SO	0	2	mg/Kg	=	15300	10
DMS-93	5/2/1988	SW6010	Iron	NS1	DMS-93	SO	0	2	mg/Kg	=	7560	10
DMS-97	5/3/1988	SW6010	Iron	NS1	DMS-97	SO	0	2	mg/Kg	=	36500	10
DMS-99	5/5/1988	SW6010	Iron	NS1	DMS-99	SO	0	2	mg/Kg	=	40100	10
DMS-102	5/9/1988	SW6010	Iron	NS1	DMS-102	SO	0	2	mg/Kg	=	27300	10
DMS-104	5/9/1988	SW6010	Iron	NS1	DMS-104	SO	0	2	mg/Kg	=	25100	10
DMS-105	5/9/1988	SW6010	Iron	NS1	DMS-105	SO	0	2	mg/Kg	=	18900	10
DMS-84	4/26/1988	SW6010	Iron	NS1	DMS-84	SO	0	4	mg/Kg	=	10600	10
DMS-87	4/28/1988	SW6010	Iron	NS1	DMS-87	SO	0	4	mg/Kg	=	36200	10
DMS-95	5/3/1988	SW6010	Iron	NS1	DMS-95	SO	0	4	mg/Kg	=	22800	10
DMS-101	5/5/1988	SW6010	Iron	NS1	DMS-101	SO	0	4	mg/Kg	=	9900	10
DMW-14A	11/9/1986	SW6010	Iron	NS1	DMW-14A	SO	0	5	mg/Kg	=	8540	10
DMS-55	6/11/1985	SW6010	Iron	NS1	DMS-55	SO	0	6	mg/Kg	=	5727	10
DMS-57	6/11/1985	SW6010	Iron	NS1	DMS-57	SO	0	6	mg/Kg	=	35540	10
DMS-61	6/18/1985	SW6010	Iron	NS1	DMS-61	SO	0	6	mg/Kg	=	11587	10
DMS-59	6/10/1985	SW6010	Iron	NS1	DMS-59	SO	0	8	mg/Kg	=	6181	10
DMS-60	6/10/1985	SW6010	Iron	NS1	DMS-60	SO	0	8	mg/Kg	=	39985	10
DMS-53	6/12/1985	SW6010	Iron	NS1	DMS-53	SO	0	8	mg/Kg	=	45042	10
DMS-56	6/12/1985	SW6010	Iron	NS1	DMS-56	SO	0	8	mg/Kg	=	8054	10
DMS-52	6/19/1985	SW6010	Iron	NS1	DMS-52	SO	0	8	mg/Kg	=	21275	10
DMS-54	6/19/1985	SW6010	Iron	NS1	DMS-54	SO	0	10	mg/Kg	=	2034	10
DMW-18A	11/9/1986	SW6010	Iron	NS1	DMW-18A	SO	0	10	mg/Kg	=	1900	10
DMW-14E	10/6/1988	SW6010	Iron	NS1	DMW-14E	SO	0	10	mg/Kg	=	16100	10
DMW-17A	11/3/1986	SW6010	Iron	NS1	DMW-17A	SO	0	15	mg/Kg	=	4030	10
DMW-17A	11/3/1986	SW6010	Iron	NS1	DMW-17A	SO	0	15	mg/Kg	=	4030	10
DMS-61	6/18/1985	SW6010	Iron	NS1	DMS-61	SO	0	18	mg/Kg	=	3279	10
DMS-54	6/19/1985	SW6010	Iron	NS1	DMS-54	SO	0	18	mg/Kg	=	3914	10
DMS-90	4/28/1988	SW6010	Iron	NS1	DMS-90	SO	0	19	mg/Kg	=	95800	10
DMS-96	5/3/1988	SW6010	Iron	NS1	DMS-96	SO	0	19	mg/Kg	=	13300	10
DMW-16A	10/27/1986	SW6010	Iron	NS1	DMW-16A	SO	0	20	mg/Kg	=	1260	10
DMS-94	5/2/1988	SW6010	Iron	NS1	DMS-94	SO	0	24	mg/Kg	=	33600	10
DMW-16B	10/22/1986	SW6010	Iron	NS1	DMW-16B	SO	0	25	mg/Kg	=	12500	10
DMW-16C	11/9/1986	SW6010	Iron	NS1	DMW-16C	SO	0	56	mg/Kg	=	3490	10
DMS-59	6/10/1985	SW8270	Isophorone	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Isophorone	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Isophorone	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Isophorone	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Isophorone	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Isophorone	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Isophorone	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Isophorone	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Isophorone	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Isophorone	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Isophorone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Isophorone	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33

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DMS-89	4/28/1988	SW8270	Isophorone	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Isophorone	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Isophorone	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Isophorone	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Isophorone	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Isophorone	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Isophorone	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Isophorone	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Isophorone	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Isophorone	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Isophorone	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Isophorone	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Isophorone	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Isophorone	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Isophorone	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Isophorone	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Isophorone	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Isophorone	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Isophorone	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Isophorone	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Isophorone	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Isophorone	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Isophorone	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Isophorone	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Isophorone	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Isophorone	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Isophorone	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Isophorone	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Isophorone	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Isophorone	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Isophorone	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Isophorone	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Isophorone	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Isophorone	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Isophorone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Isophorone	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Isophorone	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Isophorone	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Isophorone	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Isophorone	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Isophorone	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Isophorone	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Isophorone	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Isophorone	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Lead	NS1	DMS-59	SO	0	1	mg/Kg	=	69	0.5
DMS-60	6/10/1985	SW6010	Lead	NS1	DMS-60	SO	0	1	mg/Kg	=	43	0.5
DMS-55	6/11/1985	SW6010	Lead	NS1	DMS-55	SO	0	1	mg/Kg	=	47	0.5
DMS-53	6/12/1985	SW6010	Lead	NS1	DMS-53	SO	0	1	mg/Kg	=	23	0.5

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DMS-56	6/12/1985	SW6010	Lead	NS1	DMS-56	SO	0	1	mg/Kg	=	56	0.5	
DMS-58	6/12/1985	SW6010	Lead	NS1	DMS-58	SO	0	1	mg/Kg	=	36	0.5	
DMS-61	6/18/1985	SW6010	Lead	NS1	DMS-61	SO	0	1	mg/Kg	=	32	0.5	
DMS-52	6/19/1985	SW6010	Lead	NS1	DMS-52	SO	0	1	mg/Kg	=	47	0.5	
DMS-54	6/19/1985	SW6010	Lead	NS1	DMS-54	SO	0	1	mg/Kg	=	70	0.5	
DMS-57	6/24/1985	SW6010	Lead	NS1	DMS-57	SO	0	1	mg/Kg	=	39	0.5	
DMW-15A	11/8/1986	SW6010	Lead	NS1	DMW-15A	SO	0	1	mg/Kg	=	6.9	0.5	
DMW-15A	11/8/1986	SW6010	Lead	NS1	DMW-15A	SO	0	1	mg/Kg	=	6.9	0.5	
DMS-89	4/28/1988	SW6010	Lead	NS1	DMS-89	SO	0	1	mg/Kg	=	16	0.5	
DMS-98	5/3/1988	SW6010	Lead	NS1	DMS-98	SO	0	1	mg/Kg	=	28	0.5	
DMS-100	5/5/1988	SW6010	Lead	NS1	DMS-100	SO	0	1	mg/Kg	=	7.5	0.5	
DMS-103	5/9/1988	SW6010	Lead	NS1	DMS-103	SO	0	1	mg/Kg	=	22	0.5	
DMS-58	6/12/1985	SW6010	Lead	NS1	DMS-58	SO	0	2	mg/Kg	=	39	0.5	
DMS-82	4/25/1988	SW6010	Lead	NS1	DMS-82	SO	0	2	mg/Kg	=	15	0.5	F
DMS-83	4/25/1988	SW6010	Lead	NS1	DMS-83	SO	0	2	mg/Kg	=	6.6	0.5	F
DMS-85	4/26/1988	SW6010	Lead	NS1	DMS-85	SO	0	2	mg/Kg	=	6.3	0.5	F
DMS-86	4/26/1988	SW6010	Lead	NS1	DMS-86	SO	0	2	mg/Kg	=	9.4	0.5	F
DMS-88	4/28/1988	SW6010	Lead	NS1	DMS-88	SO	0	2	mg/Kg	=	18	0.5	F
DMS-91	5/2/1988	SW6010	Lead	NS1	DMS-91	SO	0	2	mg/Kg	=	9.1	0.5	F
DMS-92	5/2/1988	SW6010	Lead	NS1	DMS-92	SO	0	2	mg/Kg	=	11	0.5	F
DMS-93	5/2/1988	SW6010	Lead	NS1	DMS-93	SO	0	2	mg/Kg	=	13	0.5	F
DMS-97	5/3/1988	SW6010	Lead	NS1	DMS-97	SO	0	2	mg/Kg	=	11	0.5	F
DMS-99	5/5/1988	SW6010	Lead	NS1	DMS-99	SO	0	2	mg/Kg	=	16	0.5	
DMS-102	5/9/1988	SW6010	Lead	NS1	DMS-102	SO	0	2	mg/Kg	=	12	0.5	F
DMS-104	5/9/1988	SW6010	Lead	NS1	DMS-104	SO	0	2	mg/Kg	=	13	0.5	F
DMS-105	5/9/1988	SW6010	Lead	NS1	DMS-105	SO	0	2	mg/Kg	=	12	0.5	F
DMS-84	4/26/1988	SW6010	Lead	NS1	DMS-84	SO	0	4	mg/Kg	=	5.8	0.5	F
DMS-87	4/28/1988	SW6010	Lead	NS1	DMS-87	SO	0	4	mg/Kg	=	17	0.5	
DMS-95	5/3/1988	SW6010	Lead	NS1	DMS-95	SO	0	4	mg/Kg	=	11	0.5	F
DMS-101	5/5/1988	SW6010	Lead	NS1	DMS-101	SO	0	4	mg/Kg	=	4.2	0.5	F
DMW-14A	11/9/1986	SW6010	Lead	NS1	DMW-14A	SO	0	5	mg/Kg	=	4.5	0.5	
DMS-55	6/11/1985	SW6010	Lead	NS1	DMS-55	SO	0	6	mg/Kg	=	35	0.5	
DMS-57	6/11/1985	SW6010	Lead	NS1	DMS-57	SO	0	6	mg/Kg	=	30	0.5	
DMS-61	6/18/1985	SW6010	Lead	NS1	DMS-61	SO	0	6	mg/Kg	=	33	0.5	
DMS-59	6/10/1985	SW6010	Lead	NS1	DMS-59	SO	0	8	mg/Kg	=	42	0.5	
DMS-60	6/10/1985	SW6010	Lead	NS1	DMS-60	SO	0	8	mg/Kg	=	40	0.5	
DMS-53	6/12/1985	SW6010	Lead	NS1	DMS-53	SO	0	8	mg/Kg	=	49	0.5	
DMS-56	6/12/1985	SW6010	Lead	NS1	DMS-56	SO	0	8	mg/Kg	=	27	0.5	
DMS-52	6/19/1985	SW6010	Lead	NS1	DMS-52	SO	0	8	mg/Kg	=	26	0.5	
DMS-54	6/19/1985	SW6010	Lead	NS1	DMS-54	SO	0	10	mg/Kg	=	3	0.5	
DMW-18A	11/9/1986	SW6010	Lead	NS1	DMW-18A	SO	0	10	mg/Kg	=	3.1	0.5	
DMW-14E	10/6/1988	SW6010	Lead	NS1	DMW-14E	SO	0	10	mg/Kg	=	13	0.5	F
DMW-17A	11/3/1986	SW6010	Lead	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	0.5	
DMW-17A	11/3/1986	SW6010	Lead	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	0.5	
DMS-61	6/18/1985	SW6010	Lead	NS1	DMS-61	SO	0	18	mg/Kg	=	15	0.5	
DMS-54	6/19/1985	SW6010	Lead	NS1	DMS-54	SO	0	18	mg/Kg	=	2	0.5	
DMS-90	4/28/1988	SW6010	Lead	NS1	DMS-90	SO	0	19	mg/Kg	=	7.2	0.5	F
DMS-96	5/3/1988	SW6010	Lead	NS1	DMS-96	SO	0	19	mg/Kg	=	11	0.5	F

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DMW-16A	10/27/1986	SW6010	Lead	NS1	DMW-16A	SO	0	20	mg/Kg	=	1.7	0.5	
DMS-94	5/2/1988	SW6010	Lead	NS1	DMS-94	SO	0	24	mg/Kg	=	21	0.5	F
DMW-16B	10/22/1986	SW6010	Lead	NS1	DMW-16B	SO	0	25	mg/Kg	=	6.7	0.5	
DMW-16C	11/9/1986	SW6010	Lead	NS1	DMW-16C	SO	0	56	mg/Kg	=	1.4	0.5	
DMS-59	6/10/1985	SW6010	Magnesium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Magnesium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	500	
DMS-55	6/11/1985	SW6010	Magnesium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Magnesium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Magnesium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	500	
DMS-58	6/12/1985	SW6010	Magnesium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Magnesium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	500	
DMS-52	6/19/1985	SW6010	Magnesium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	500	
DMS-54	6/19/1985	SW6010	Magnesium	NS1	DMS-54	SO	0	1	mg/Kg	=	355	500	
DMS-57	6/24/1985	SW6010	Magnesium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	500	
DMW-15A	11/8/1986	SW6010	Magnesium	NS1	DMW-15A	SO	0	1	mg/Kg	=	585	500	
DMW-15A	11/8/1986	SW6010	Magnesium	NS1	DMW-15A	SO	0	1	mg/Kg	=	585	500	
DMS-89	4/28/1988	SW6010	Magnesium	NS1	DMS-89	SO	0	1	mg/Kg	=	240	500	JQE
DMS-98	5/3/1988	SW6010	Magnesium	NS1	DMS-98	SO	0	1	mg/Kg	=	213	500	JQ
DMS-100	5/5/1988	SW6010	Magnesium	NS1	DMS-100	SO	0	1	mg/Kg	=	594	500	JQ
DMS-103	5/9/1988	SW6010	Magnesium	NS1	DMS-103	SO	0	1	mg/Kg	=	4070	500	E
DMS-58	6/12/1985	SW6010	Magnesium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	500	
DMS-82	4/25/1988	SW6010	Magnesium	NS1	DMS-82	SO	0	2	mg/Kg	=	518	500	JQE
DMS-83	4/25/1988	SW6010	Magnesium	NS1	DMS-83	SO	0	2	mg/Kg	=	127	500	JQE
DMS-85	4/26/1988	SW6010	Magnesium	NS1	DMS-85	SO	0	2	mg/Kg	=	221	500	JQE
DMS-86	4/26/1988	SW6010	Magnesium	NS1	DMS-86	SO	0	2	mg/Kg	=	212	500	JQE
DMS-88	4/28/1988	SW6010	Magnesium	NS1	DMS-88	SO	0	2	mg/Kg	=	316	500	JQE
DMS-91	5/2/1988	SW6010	Magnesium	NS1	DMS-91	SO	0	2	mg/Kg	=	250	500	JQ
DMS-92	5/2/1988	SW6010	Magnesium	NS1	DMS-92	SO	0	2	mg/Kg	=	201	500	JQ
DMS-93	5/2/1988	SW6010	Magnesium	NS1	DMS-93	SO	0	2	mg/Kg	=	225	500	JQ
DMS-97	5/3/1988	SW6010	Magnesium	NS1	DMS-97	SO	0	2	mg/Kg	=	353	500	JQ
DMS-99	5/5/1988	SW6010	Magnesium	NS1	DMS-99	SO	0	2	mg/Kg	=	355	500	JQ
DMS-102	5/9/1988	SW6010	Magnesium	NS1	DMS-102	SO	0	2	mg/Kg	=	477	500	JQ
DMS-104	5/9/1988	SW6010	Magnesium	NS1	DMS-104	SO	0	2	mg/Kg	=	524	500	JQ
DMS-105	5/9/1988	SW6010	Magnesium	NS1	DMS-105	SO	0	2	mg/Kg	=	380	500	JQ
DMS-84	4/26/1988	SW6010	Magnesium	NS1	DMS-84	SO	0	4	mg/Kg	=	96	500	JQE
DMS-87	4/28/1988	SW6010	Magnesium	NS1	DMS-87	SO	0	4	mg/Kg	=	504	500	JQE
DMS-95	5/3/1988	SW6010	Magnesium	NS1	DMS-95	SO	0	4	mg/Kg	=	246	500	JQ
DMS-101	5/5/1988	SW6010	Magnesium	NS1	DMS-101	SO	0	4	mg/Kg	=	165	500	JQ
DMW-14A	11/9/1986	SW6010	Magnesium	NS1	DMW-14A	SO	0	5	mg/Kg	=	179	500	
DMS-55	6/11/1985	SW6010	Magnesium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	500	
DMS-57	6/11/1985	SW6010	Magnesium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Magnesium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	500	
DMS-59	6/10/1985	SW6010	Magnesium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Magnesium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Magnesium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Magnesium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	500	
DMS-52	6/19/1985	SW6010	Magnesium	NS1	DMS-52	SO	0	8	mg/Kg	=	278	500	
DMS-54	6/19/1985	SW6010	Magnesium	NS1	DMS-54	SO	0	10	mg/Kg	=	96	500	

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DMW-18A	11/9/1986	SW6010	Magnesium	NS1	DMW-18A	SO	0	10	mg/Kg	=	95	500		
DMW-14E	10/6/1988	SW6010	Magnesium	NS1	DMW-14E	SO	0	10	mg/Kg	=	230	500	JQ	
DMW-17A	11/3/1986	SW6010	Magnesium	NS1	DMW-17A	SO	0	15	mg/Kg	=	73	500		
DMW-17A	11/3/1986	SW6010	Magnesium	NS1	DMW-17A	SO	0	15	mg/Kg	=	73	500		
DMS-61	6/18/1985	SW6010	Magnesium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	500		
DMS-54	6/19/1985	SW6010	Magnesium	NS1	DMS-54	SO	0	18	mg/Kg	=	70	500		
DMS-90	4/28/1988	SW6010	Magnesium	NS1	DMS-90	SO	0	19	mg/Kg	=	522	500	JQE	
DMS-96	5/3/1988	SW6010	Magnesium	NS1	DMS-96	SO	0	19	mg/Kg	=	798	500	JQ	
DMW-16A	10/27/1986	SW6010	Magnesium	NS1	DMW-16A	SO	0	20	mg/Kg	=	40	500		
DMS-94	5/2/1988	SW6010	Magnesium	NS1	DMS-94	SO	0	24	mg/Kg	=	616	500	JQ	
DMW-16B	10/22/1986	SW6010	Magnesium	NS1	DMW-16B	SO	0	25	mg/Kg	=	859	500		
DMW-16C	11/9/1986	SW6010	Magnesium	NS1	DMW-16C	SO	0	56	mg/Kg	=	844	500		
DMS-59	6/10/1985	SW6010	Manganese	NS1	DMS-59	SO	0	1	mg/Kg	=	16	1.5		
DMS-60	6/10/1985	SW6010	Manganese	NS1	DMS-60	SO	0	1	mg/Kg	=	19	1.5		
DMS-55	6/11/1985	SW6010	Manganese	NS1	DMS-55	SO	0	1	mg/Kg	=	28	1.5		
DMS-53	6/12/1985	SW6010	Manganese	NS1	DMS-53	SO	0	1	mg/Kg	=	19	1.5		
DMS-56	6/12/1985	SW6010	Manganese	NS1	DMS-56	SO	0	1	mg/Kg	=	38	1.5		
DMS-58	6/12/1985	SW6010	Manganese	NS1	DMS-58	SO	0	1	mg/Kg	=	85	1.5		
DMS-61	6/18/1985	SW6010	Manganese	NS1	DMS-61	SO	0	1	mg/Kg	=	61	1.5		
DMS-52	6/19/1985	SW6010	Manganese	NS1	DMS-52	SO	0	1	mg/Kg	=	65	1.5		
DMS-54	6/19/1985	SW6010	Manganese	NS1	DMS-54	SO	0	1	mg/Kg	=	63	1.5		
DMS-57	6/24/1985	SW6010	Manganese	NS1	DMS-57	SO	0	1	mg/Kg	=	66	1.5		
DMW-15A	11/8/1986	SW6010	Manganese	NS1	DMW-15A	SO	0	1	mg/Kg	=	39	1.5		
DMW-15A	11/8/1986	SW6010	Manganese	NS1	DMW-15A	SO	0	1	mg/Kg	=	39	1.5		
DMS-89	4/28/1988	SW6010	Manganese	NS1	DMS-89	SO	0	1	mg/Kg	=	67	1.5		
DMS-98	5/3/1988	SW6010	Manganese	NS1	DMS-98	SO	0	1	mg/Kg	=	62	1.5		
DMS-100	5/5/1988	SW6010	Manganese	NS1	DMS-100	SO	0	1	mg/Kg	=	98	1.5	E	
DMS-103	5/9/1988	SW6010	Manganese	NS1	DMS-103	SO	0	1	mg/Kg	=	130	1.5		
DMS-58	6/12/1985	SW6010	Manganese	NS1	DMS-58	SO	0	2	mg/Kg	=	15	1.5		
DMS-82	4/25/1988	SW6010	Manganese	NS1	DMS-82	SO	0	2	mg/Kg	=	40	1.5		
DMS-83	4/25/1988	SW6010	Manganese	NS1	DMS-83	SO	0	2	mg/Kg	=	59	1.5		
DMS-85	4/26/1988	SW6010	Manganese	NS1	DMS-85	SO	0	2	mg/Kg	=	11	1.5		
DMS-86	4/26/1988	SW6010	Manganese	NS1	DMS-86	SO	0	2	mg/Kg	=	27	1.5		
DMS-88	4/28/1988	SW6010	Manganese	NS1	DMS-88	SO	0	2	mg/Kg	=	36	1.5		
DMS-91	5/2/1988	SW6010	Manganese	NS1	DMS-91	SO	0	2	mg/Kg	=	45	1.5		
DMS-92	5/2/1988	SW6010	Manganese	NS1	DMS-92	SO	0	2	mg/Kg	=	36	1.5		
DMS-93	5/2/1988	SW6010	Manganese	NS1	DMS-93	SO	0	2	mg/Kg	=	25	1.5		
DMS-97	5/3/1988	SW6010	Manganese	NS1	DMS-97	SO	0	2	mg/Kg	=	33	1.5		
DMS-99	5/5/1988	SW6010	Manganese	NS1	DMS-99	SO	0	2	mg/Kg	=	58	1.5		
DMS-102	5/9/1988	SW6010	Manganese	NS1	DMS-102	SO	0	2	mg/Kg	=	20	1.5		
DMS-104	5/9/1988	SW6010	Manganese	NS1	DMS-104	SO	0	2	mg/Kg	=	14	1.5		
DMS-105	5/9/1988	SW6010	Manganese	NS1	DMS-105	SO	0	2	mg/Kg	=	12	1.5		
DMS-84	4/26/1988	SW6010	Manganese	NS1	DMS-84	SO	0	4	mg/Kg	=	6.1	1.5		
DMS-87	4/28/1988	SW6010	Manganese	NS1	DMS-87	SO	0	4	mg/Kg	=	37	1.5		
DMS-95	5/3/1988	SW6010	Manganese	NS1	DMS-95	SO	0	4	mg/Kg	=	39	1.5		
DMS-101	5/5/1988	SW6010	Manganese	NS1	DMS-101	SO	0	4	mg/Kg	=	9.9	1.5		
DMW-14A	11/9/1986	SW6010	Manganese	NS1	DMW-14A	SO	0	5	mg/Kg	=	4.5	1.5		
DMS-55	6/11/1985	SW6010	Manganese	NS1	DMS-55	SO	0	6	mg/Kg	=	4	1.5		

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DMS-57	6/11/1985	SW6010	Manganese	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1.5	
DMS-61	6/18/1985	SW6010	Manganese	NS1	DMS-61	SO	0	6	mg/Kg	=	5	1.5	
DMS-59	6/10/1985	SW6010	Manganese	NS1	DMS-59	SO	0	8	mg/Kg	=	158	1.5	
DMS-60	6/10/1985	SW6010	Manganese	NS1	DMS-60	SO	0	8	mg/Kg	=	2	1.5	
DMS-53	6/12/1985	SW6010	Manganese	NS1	DMS-53	SO	0	8	mg/Kg	=	10	1.5	
DMS-56	6/12/1985	SW6010	Manganese	NS1	DMS-56	SO	0	8	mg/Kg	=	80	1.5	
DMS-52	6/19/1985	SW6010	Manganese	NS1	DMS-52	SO	0	8	mg/Kg	=	10	1.5	
DMS-54	6/19/1985	SW6010	Manganese	NS1	DMS-54	SO	0	10	mg/Kg	=	5	1.5	
DMW-18A	11/9/1986	SW6010	Manganese	NS1	DMW-18A	SO	0	10	mg/Kg	=	4.4	1.5	
DMW-14E	10/6/1988	SW6010	Manganese	NS1	DMW-14E	SO	0	10	mg/Kg	=	6.2	1.5	E
DMW-17A	11/3/1986	SW6010	Manganese	NS1	DMW-17A	SO	0	15	mg/Kg	=	4.8	1.5	
DMW-17A	11/3/1986	SW6010	Manganese	NS1	DMW-17A	SO	0	15	mg/Kg	=	4.8	1.5	
DMS-61	6/18/1985	SW6010	Manganese	NS1	DMS-61	SO	0	18	mg/Kg	=	11	1.5	
DMS-54	6/19/1985	SW6010	Manganese	NS1	DMS-54	SO	0	18	mg/Kg	=	18	1.5	
DMS-90	4/28/1988	SW6010	Manganese	NS1	DMS-90	SO	0	19	mg/Kg	=	118	1.5	
DMS-96	5/3/1988	SW6010	Manganese	NS1	DMS-96	SO	0	19	mg/Kg	=	44	1.5	
DMW-16A	10/27/1986	SW6010	Manganese	NS1	DMW-16A	SO	0	20	mg/Kg	=	2.8	1.5	
DMS-94	5/2/1988	SW6010	Manganese	NS1	DMS-94	SO	0	24	mg/Kg	=	31	1.5	
DMW-16B	10/22/1986	SW6010	Manganese	NS1	DMW-16B	SO	0	25	mg/Kg	=	29	1.5	
DMW-16C	11/9/1986	SW6010	Manganese	NS1	DMW-16C	SO	0	56	mg/Kg	=	26	1.5	
DMS-59	6/10/1985	SW6010	Mercury	NS1	DMS-59	SO	0	1	mg/Kg	=	0.43	0.02	
DMS-60	6/10/1985	SW6010	Mercury	NS1	DMS-60	SO	0	1	mg/Kg	=	0.19	0.02	
DMS-55	6/11/1985	SW6010	Mercury	NS1	DMS-55	SO	0	1	mg/Kg	=	0.07	0.02	
DMS-53	6/12/1985	SW6010	Mercury	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.02	
DMS-56	6/12/1985	SW6010	Mercury	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.02	
DMS-58	6/12/1985	SW6010	Mercury	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.02	
DMS-61	6/18/1985	SW6010	Mercury	NS1	DMS-61	SO	0	1	mg/Kg	=	0.07	0.02	
DMS-52	6/19/1985	SW6010	Mercury	NS1	DMS-52	SO	0	1	mg/Kg	=	1.24	0.02	
DMS-54	6/19/1985	SW6010	Mercury	NS1	DMS-54	SO	0	1	mg/Kg	=	0.2	0.02	
DMS-57	6/24/1985	SW6010	Mercury	NS1	DMS-57	SO	0	1	mg/Kg	=	0.11	0.02	
DMW-15A	11/8/1986	SW6010	Mercury	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.02	
DMW-15A	11/8/1986	SW6010	Mercury	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.02	
DMS-89	4/28/1988	SW6010	Mercury	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.02	
DMS-98	5/3/1988	SW6010	Mercury	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.02	
DMS-100	5/5/1988	SW6010	Mercury	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.02	
DMS-103	5/9/1988	SW6010	Mercury	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.02	
DMS-58	6/12/1985	SW6010	Mercury	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.02	
DMS-82	4/25/1988	SW6010	Mercury	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.02	
DMS-83	4/25/1988	SW6010	Mercury	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.02	
DMS-85	4/26/1988	SW6010	Mercury	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.02	
DMS-86	4/26/1988	SW6010	Mercury	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.02	
DMS-88	4/28/1988	SW6010	Mercury	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.02	
DMS-91	5/2/1988	SW6010	Mercury	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.02	
DMS-92	5/2/1988	SW6010	Mercury	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.02	
DMS-93	5/2/1988	SW6010	Mercury	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.02	
DMS-97	5/3/1988	SW6010	Mercury	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.02	
DMS-99	5/5/1988	SW6010	Mercury	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.02	
DMS-102	5/9/1988	SW6010	Mercury	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.02	

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DMS-104	5/9/1988	SW6010	Mercury	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.02		
DMS-105	5/9/1988	SW6010	Mercury	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.02		
DMS-84	4/26/1988	SW6010	Mercury	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.02		
DMS-87	4/28/1988	SW6010	Mercury	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.02		
DMS-95	5/3/1988	SW6010	Mercury	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.02		
DMS-101	5/5/1988	SW6010	Mercury	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.02		
DMW-14A	11/9/1986	SW6010	Mercury	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.02		
DMS-55	6/11/1985	SW6010	Mercury	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.02		
DMS-57	6/11/1985	SW6010	Mercury	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.02		
DMS-61	6/18/1985	SW6010	Mercury	NS1	DMS-61	SO	0	6	mg/Kg	=	0.024	0.02		
DMS-59	6/10/1985	SW6010	Mercury	NS1	DMS-59	SO	0	8	mg/Kg	=	0.17	0.02		
DMS-60	6/10/1985	SW6010	Mercury	NS1	DMS-60	SO	0	8	mg/Kg	=	0.19	0.02		
DMS-53	6/12/1985	SW6010	Mercury	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.02		
DMS-56	6/12/1985	SW6010	Mercury	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.02		
DMS-52	6/19/1985	SW6010	Mercury	NS1	DMS-52	SO	0	8	mg/Kg	=	0.14	0.02		
DMS-54	6/19/1985	SW6010	Mercury	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.02		
DMW-18A	11/9/1986	SW6010	Mercury	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.02		
DMW-14E	10/6/1988	SW6010	Mercury	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.02		
DMW-17A	11/3/1986	SW6010	Mercury	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.02		
DMW-17A	11/3/1986	SW6010	Mercury	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.02		
DMS-61	6/18/1985	SW6010	Mercury	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.02		
DMS-54	6/19/1985	SW6010	Mercury	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.02		
DMS-90	4/28/1988	SW6010	Mercury	NS1	DMS-90	SO	0	19	mg/Kg	=	0.28	0.02		
DMS-96	5/3/1988	SW6010	Mercury	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.02		
DMW-16A	10/27/1986	SW6010	Mercury	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.02		
DMS-94	5/2/1988	SW6010	Mercury	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.02		
DMW-16B	10/22/1986	SW6010	Mercury	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.02		
DMW-16C	11/9/1986	SW6010	Mercury	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.02		
DMS-59	6/10/1985	SW8260	Methylene chloride	NS1	DMS-59	SO	0	1	mg/Kg	=	0.011	0.005	B	
DMS-60	6/10/1985	SW8260	Methylene chloride	NS1	DMS-60	SO	0	1	mg/Kg	=	0.031	0.005	B	
DMS-55	6/11/1985	SW8260	Methylene chloride	NS1	DMS-55	SO	0	1	mg/Kg	=	0.0079	0.005		
DMS-53	6/12/1985	SW8260	Methylene chloride	NS1	DMS-53	SO	0	1	mg/Kg	=	0.0095	0.005		
DMS-56	6/12/1985	SW8260	Methylene chloride	NS1	DMS-56	SO	0	1	mg/Kg	=	0.012	0.005		
DMS-58	6/12/1985	SW8260	Methylene chloride	NS1	DMS-58	SO	0	1	mg/Kg	=	0.007	0.005	B	
DMS-61	6/18/1985	SW8260	Methylene chloride	NS1	DMS-61	SO	0	1	mg/Kg	=	0.018	0.005	B	
DMS-52	6/19/1985	SW8260	Methylene chloride	NS1	DMS-52	SO	0	1	mg/Kg	=	0.021	0.005	B	
DMS-54	6/19/1985	SW8260	Methylene chloride	NS1	DMS-54	SO	0	1	mg/Kg	=	0.024	0.005	B	
DMS-57	6/24/1985	SW8260	Methylene chloride	NS1	DMS-57	SO	0	1	mg/Kg	=	0.008	0.005		
DMW-15A	11/8/1986	SW8260	Methylene chloride	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.012	0.005		
DMW-15A	11/8/1986	SW8260	Methylene chloride	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.012	0.005		
DMS-89	4/28/1988	SW8260	Methylene chloride	NS1	DMS-89	SO	0	1	mg/Kg	=	0.018	0.005	B	
DMS-98	5/3/1988	SW8260	Methylene chloride	NS1	DMS-98	SO	0	1	mg/Kg	=	0.014	0.005	B	
DMS-100	5/5/1988	SW8260	Methylene chloride	NS1	DMS-100	SO	0	1	mg/Kg	=	0.012	0.005	B	
DMS-103	5/9/1988	SW8260	Methylene chloride	NS1	DMS-103	SO	0	1	mg/Kg	=	0.025	0.005	B	
DMS-58	6/12/1985	SW8260	Methylene chloride	NS1	DMS-58	SO	0	2	mg/Kg	=	0.016	0.005	B	
DMS-82	4/25/1988	SW8260	Methylene chloride	NS1	DMS-82	SO	0	2	mg/Kg	=	0.011	0.005	B	
DMS-83	4/25/1988	SW8260	Methylene chloride	NS1	DMS-83	SO	0	2	mg/Kg	=	0.011	0.005	B	
DMS-85	4/26/1988	SW8260	Methylene chloride	NS1	DMS-85	SO	0	2	mg/Kg	=	0.013	0.005	B	

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DMS-86	4/26/1988	SW8260	Methylene chloride	NS1	DMS-86	SO	0	2	mg/Kg	=	0.015	0.005	B
DMS-88	4/28/1988	SW8260	Methylene chloride	NS1	DMS-88	SO	0	2	mg/Kg	=	0.007	0.005	B
DMS-91	5/2/1988	SW8260	Methylene chloride	NS1	DMS-91	SO	0	2	mg/Kg	=	0.023	0.005	B
DMS-92	5/2/1988	SW8260	Methylene chloride	NS1	DMS-92	SO	0	2	mg/Kg	=	0.013	0.005	B
DMS-93	5/2/1988	SW8260	Methylene chloride	NS1	DMS-93	SO	0	2	mg/Kg	=	0.019	0.005	B
DMS-97	5/3/1988	SW8260	Methylene chloride	NS1	DMS-97	SO	0	2	mg/Kg	=	0.014	0.005	B
DMS-99	5/5/1988	SW8260	Methylene chloride	NS1	DMS-99	SO	0	2	mg/Kg	=	0.017	0.005	B
DMS-102	5/9/1988	SW8260	Methylene chloride	NS1	DMS-102	SO	0	2	mg/Kg	=	0.027	0.005	B
DMS-104	5/9/1988	SW8260	Methylene chloride	NS1	DMS-104	SO	0	2	mg/Kg	=	0.022	0.005	B
DMS-105	5/9/1988	SW8260	Methylene chloride	NS1	DMS-105	SO	0	2	mg/Kg	=	0.017	0.005	B
DMS-84	4/26/1988	SW8260	Methylene chloride	NS1	DMS-84	SO	0	4	mg/Kg	=	0.011	0.005	B
DMS-87	4/28/1988	SW8260	Methylene chloride	NS1	DMS-87	SO	0	4	mg/Kg	=	0.05	0.005	B
DMS-95	5/3/1988	SW8260	Methylene chloride	NS1	DMS-95	SO	0	4	mg/Kg	=	0.019	0.005	B
DMS-101	5/5/1988	SW8260	Methylene chloride	NS1	DMS-101	SO	0	4	mg/Kg	=	0.016	0.005	B
DMW-14A	11/9/1986	SW8260	Methylene chloride	NS1	DMW-14A	SO	0	5	mg/Kg	=	0.016	0.005	
DMS-55	6/11/1985	SW8260	Methylene chloride	NS1	DMS-55	SO	0	6	mg/Kg	=	0.011	0.005	
DMS-57	6/11/1985	SW8260	Methylene chloride	NS1	DMS-57	SO	0	6	mg/Kg	=	0.011	0.005	
DMS-61	6/18/1985	SW8260	Methylene chloride	NS1	DMS-61	SO	0	6	mg/Kg	=	0.01	0.005	B
DMS-59	6/10/1985	SW8260	Methylene chloride	NS1	DMS-59	SO	0	8	mg/Kg	=	0.014	0.005	B
DMS-60	6/10/1985	SW8260	Methylene chloride	NS1	DMS-60	SO	0	8	mg/Kg	=	0.027	0.005	B
DMS-53	6/12/1985	SW8260	Methylene chloride	NS1	DMS-53	SO	0	8	mg/Kg	=	0.019	0.005	
DMS-56	6/12/1985	SW8260	Methylene chloride	NS1	DMS-56	SO	0	8	mg/Kg	=	0.022	0.005	
DMS-52	6/19/1985	SW8260	Methylene chloride	NS1	DMS-52	SO	0	8	mg/Kg	=	0.025	0.005	
DMS-54	6/19/1985	SW8260	Methylene chloride	NS1	DMS-54	SO	0	10	mg/Kg	=	0.025	0.005	B
DMW-18A	11/9/1986	SW8260	Methylene chloride	NS1	DMW-18A	SO	0	10	mg/Kg	=	0.03	0.005	
DMW-14E	10/6/1988	SW8260	Methylene chloride	NS1	DMW-14E	SO	0	10	mg/Kg	=	0.018	0.005	B
DMW-17A	11/3/1986	SW8260	Methylene chloride	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.011	0.005	
DMW-17A	11/3/1986	SW8260	Methylene chloride	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.011	0.005	
DMS-61	6/18/1985	SW8260	Methylene chloride	NS1	DMS-61	SO	0	18	mg/Kg	=	0.031	0.005	B
DMS-54	6/19/1985	SW8260	Methylene chloride	NS1	DMS-54	SO	0	18	mg/Kg	=	0.047	0.005	B
DMS-90	4/28/1988	SW8260	Methylene chloride	NS1	DMS-90	SO	0	19	mg/Kg	=	0.017	0.005	B
DMS-96	5/3/1988	SW8260	Methylene chloride	NS1	DMS-96	SO	0	19	mg/Kg	=	0.034	0.005	B
DMW-16A	10/27/1986	SW8260	Methylene chloride	NS1	DMW-16A	SO	0	20	mg/Kg	=	0.053	0.005	
DMS-94	5/2/1988	SW8260	Methylene chloride	NS1	DMS-94	SO	0	24	mg/Kg	=	0.019	0.005	B
DMW-16B	10/22/1986	SW8260	Methylene chloride	NS1	DMW-16B	SO	0	25	mg/Kg	=	0.054	0.005	
DMW-16C	11/9/1986	SW8260	Methylene chloride	NS1	DMW-16C	SO	0	56	mg/Kg	=	0.063	0.005	
DMS-56	6/12/1985	SW8260	m-Xylene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8270	Naphthalene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Naphthalene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Naphthalene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Naphthalene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Naphthalene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Naphthalene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Naphthalene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Naphthalene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Naphthalene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33	
DMS-57	6/24/1985	SW8270	Naphthalene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Naphthalene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33	

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DMW-15A	11/8/1986	SW8270	Naphthalene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Naphthalene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Naphthalene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Naphthalene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Naphthalene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Naphthalene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Naphthalene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Naphthalene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Naphthalene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Naphthalene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Naphthalene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Naphthalene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Naphthalene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Naphthalene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Naphthalene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Naphthalene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Naphthalene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Naphthalene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Naphthalene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Naphthalene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Naphthalene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Naphthalene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Naphthalene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Naphthalene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Naphthalene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Naphthalene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Naphthalene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Naphthalene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Naphthalene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Naphthalene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Naphthalene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Naphthalene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Naphthalene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Naphthalene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Naphthalene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Naphthalene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Naphthalene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Naphthalene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Naphthalene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Naphthalene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Naphthalene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Naphthalene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Naphthalene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Naphthalene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Naphthalene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Nickel	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	4
DMS-60	6/10/1985	SW6010	Nickel	NS1	DMS-60	SO	0	1	mg/Kg	=	6	4
DMS-55	6/11/1985	SW6010	Nickel	NS1	DMS-55	SO	0	1	mg/Kg	=	4	4

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DMS-53	6/12/1985	SW6010	Nickel	NS1	DMS-53	SO	0	1	mg/Kg	=	5	4
DMS-56	6/12/1985	SW6010	Nickel	NS1	DMS-56	SO	0	1	mg/Kg	=	7	4
DMS-58	6/12/1985	SW6010	Nickel	NS1	DMS-58	SO	0	1	mg/Kg	=	6	4
DMS-61	6/18/1985	SW6010	Nickel	NS1	DMS-61	SO	0	1	mg/Kg	=	4	4
DMS-52	6/19/1985	SW6010	Nickel	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	4
DMS-54	6/19/1985	SW6010	Nickel	NS1	DMS-54	SO	0	1	mg/Kg	=	3.4	4
DMS-57	6/24/1985	SW6010	Nickel	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	4
DMW-15A	11/8/1986	SW6010	Nickel	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	4
DMW-15A	11/8/1986	SW6010	Nickel	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	4
DMS-89	4/28/1988	SW6010	Nickel	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	4
DMS-98	5/3/1988	SW6010	Nickel	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	4
DMS-100	5/5/1988	SW6010	Nickel	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	4
DMS-103	5/9/1988	SW6010	Nickel	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	4
DMS-58	6/12/1985	SW6010	Nickel	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	4
DMS-82	4/25/1988	SW6010	Nickel	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	4
DMS-83	4/25/1988	SW6010	Nickel	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	4
DMS-85	4/26/1988	SW6010	Nickel	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	4
DMS-86	4/26/1988	SW6010	Nickel	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	4
DMS-88	4/28/1988	SW6010	Nickel	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	4
DMS-91	5/2/1988	SW6010	Nickel	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	4
DMS-92	5/2/1988	SW6010	Nickel	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	4
DMS-93	5/2/1988	SW6010	Nickel	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	4
DMS-97	5/3/1988	SW6010	Nickel	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	4
DMS-99	5/5/1988	SW6010	Nickel	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	4
DMS-102	5/9/1988	SW6010	Nickel	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	4
DMS-104	5/9/1988	SW6010	Nickel	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	4
DMS-105	5/9/1988	SW6010	Nickel	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	4
DMS-84	4/26/1988	SW6010	Nickel	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	4
DMS-87	4/28/1988	SW6010	Nickel	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	4
DMS-95	5/3/1988	SW6010	Nickel	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	4
DMS-101	5/5/1988	SW6010	Nickel	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	4
DMW-14A	11/9/1986	SW6010	Nickel	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	4
DMS-55	6/11/1985	SW6010	Nickel	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	4
DMS-57	6/11/1985	SW6010	Nickel	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	4
DMS-61	6/18/1985	SW6010	Nickel	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	4
DMS-59	6/10/1985	SW6010	Nickel	NS1	DMS-59	SO	0	8	mg/Kg	=	5	4
DMS-60	6/10/1985	SW6010	Nickel	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	4
DMS-53	6/12/1985	SW6010	Nickel	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	4
DMS-56	6/12/1985	SW6010	Nickel	NS1	DMS-56	SO	0	8	mg/Kg	=	7	4
DMS-52	6/19/1985	SW6010	Nickel	NS1	DMS-52	SO	0	8	mg/Kg	=	1	4
DMS-54	6/19/1985	SW6010	Nickel	NS1	DMS-54	SO	0	10	mg/Kg	=	1.3	4
DMW-18A	11/9/1986	SW6010	Nickel	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	4
DMW-14E	10/6/1988	SW6010	Nickel	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	4
DMW-17A	11/3/1986	SW6010	Nickel	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	4
DMW-17A	11/3/1986	SW6010	Nickel	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	4
DMS-61	6/18/1985	SW6010	Nickel	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	4
DMS-54	6/19/1985	SW6010	Nickel	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	4
DMS-90	4/28/1988	SW6010	Nickel	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	4

DMS-96	5/3/1988	SW6010	Nickel	NS1	DMS-96	SO	0	19	mg/Kg	=	11	4
DMW-16A	10/27/1986	SW6010	Nickel	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	4
DMS-94	5/2/1988	SW6010	Nickel	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	4
DMW-16B	10/22/1986	SW6010	Nickel	NS1	DMW-16B	SO	0	25	mg/Kg	=	22	4
DMW-16C	11/9/1986	SW6010	Nickel	NS1	DMW-16C	SO	0	56	mg/Kg	=	11	4
DMS-59	6/10/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33

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DMS-54	6/19/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	n-Nitroso-di-n-propylam	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	n-Nitroso-di-n-propylam	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33

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DMS-55	6/11/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	N-Nitrosodiphenylamine	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	N-Nitrosodiphenylamine	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	N-Nitrosodiphenylamine	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8260	o-Xylene & p-Xylene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8080	PCB-1260	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.04
DMS-60	6/10/1985	SW8080	PCB-1260	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.04
DMS-55	6/11/1985	SW8080	PCB-1260	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.04
DMS-53	6/12/1985	SW8080	PCB-1260	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.04
DMS-56	6/12/1985	SW8080	PCB-1260	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.04
DMS-58	6/12/1985	SW8080	PCB-1260	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.04
DMS-61	6/18/1985	SW8080	PCB-1260	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.04
DMS-52	6/19/1985	SW8080	PCB-1260	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.04
DMS-54	6/19/1985	SW8080	PCB-1260	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.04
DMS-57	6/24/1985	SW8080	PCB-1260	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.04
DMW-15A	11/8/1986	SW8080	PCB-1260	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.04
DMW-15A	11/8/1986	SW8080	PCB-1260	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.04
DMS-89	4/28/1988	SW8080	PCB-1260	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.04
DMS-98	5/3/1988	SW8080	PCB-1260	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.04
DMS-100	5/5/1988	SW8080	PCB-1260	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.04
DMS-103	5/9/1988	SW8080	PCB-1260	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.04
DMS-58	6/12/1985	SW8080	PCB-1260	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.04
DMS-82	4/25/1988	SW8080	PCB-1260	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.04
DMS-83	4/25/1988	SW8080	PCB-1260	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.04
DMS-85	4/26/1988	SW8080	PCB-1260	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.04
DMS-86	4/26/1988	SW8080	PCB-1260	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.04
DMS-88	4/28/1988	SW8080	PCB-1260	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.04
DMS-91	5/2/1988	SW8080	PCB-1260	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.04
DMS-92	5/2/1988	SW8080	PCB-1260	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.04
DMS-93	5/2/1988	SW8080	PCB-1260	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.04
DMS-97	5/3/1988	SW8080	PCB-1260	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.04

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DMS-99	5/5/1988	SW8080	PCB-1260	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.04
DMS-102	5/9/1988	SW8080	PCB-1260	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.04
DMS-104	5/9/1988	SW8080	PCB-1260	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.04
DMS-105	5/9/1988	SW8080	PCB-1260	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.04
DMS-84	4/26/1988	SW8080	PCB-1260	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.04
DMS-87	4/28/1988	SW8080	PCB-1260	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.04
DMS-95	5/3/1988	SW8080	PCB-1260	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.04
DMS-101	5/5/1988	SW8080	PCB-1260	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.04
DMW-14A	11/9/1986	SW8080	PCB-1260	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.04
DMS-55	6/11/1985	SW8080	PCB-1260	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.04
DMS-57	6/11/1985	SW8080	PCB-1260	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.04
DMS-61	6/18/1985	SW8080	PCB-1260	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.04
DMS-59	6/10/1985	SW8080	PCB-1260	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.04
DMS-60	6/10/1985	SW8080	PCB-1260	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.04
DMS-53	6/12/1985	SW8080	PCB-1260	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.04
DMS-56	6/12/1985	SW8080	PCB-1260	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.04
DMS-52	6/19/1985	SW8080	PCB-1260	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.04
DMS-54	6/19/1985	SW8080	PCB-1260	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.04
DMW-18A	11/9/1986	SW8080	PCB-1260	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.04
DMW-14E	10/6/1988	SW8080	PCB-1260	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.04
DMW-17A	11/3/1986	SW8080	PCB-1260	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.04
DMW-17A	11/3/1986	SW8080	PCB-1260	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.04
DMS-61	6/18/1985	SW8080	PCB-1260	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.04
DMS-54	6/19/1985	SW8080	PCB-1260	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.04
DMS-90	4/28/1988	SW8080	PCB-1260	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.04
DMS-96	5/3/1988	SW8080	PCB-1260	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.04
DMW-16A	10/27/1986	SW8080	PCB-1260	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.04
DMS-94	5/2/1988	SW8080	PCB-1260	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.04
DMW-16B	10/22/1986	SW8080	PCB-1260	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.04
DMW-16C	11/9/1986	SW8080	PCB-1260	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.04
DMS-59	6/10/1985	SW8270	Pentachlorophenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	Pentachlorophenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	Pentachlorophenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Pentachlorophenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	Pentachlorophenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Pentachlorophenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1.6
DMS-57	6/24/1985	SW8270	Pentachlorophenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1.6
DMW-15A	11/8/1986	SW8270	Pentachlorophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMW-15A	11/8/1986	SW8270	Pentachlorophenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1.6
DMS-89	4/28/1988	SW8270	Pentachlorophenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1.6
DMS-98	5/3/1988	SW8270	Pentachlorophenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1.6
DMS-100	5/5/1988	SW8270	Pentachlorophenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1.6
DMS-103	5/9/1988	SW8270	Pentachlorophenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	1.6
DMS-58	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1.6
DMS-82	4/25/1988	SW8270	Pentachlorophenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1.6

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DMS-83	4/25/1988	SW8270	Pentachlorophenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	1.6
DMS-85	4/26/1988	SW8270	Pentachlorophenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1.6
DMS-86	4/26/1988	SW8270	Pentachlorophenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1.6
DMS-88	4/28/1988	SW8270	Pentachlorophenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	1.6
DMS-91	5/2/1988	SW8270	Pentachlorophenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1.6
DMS-92	5/2/1988	SW8270	Pentachlorophenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1.6
DMS-93	5/2/1988	SW8270	Pentachlorophenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1.6
DMS-97	5/3/1988	SW8270	Pentachlorophenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1.6
DMS-99	5/5/1988	SW8270	Pentachlorophenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1.6
DMS-102	5/9/1988	SW8270	Pentachlorophenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	1.6
DMS-104	5/9/1988	SW8270	Pentachlorophenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	1.6
DMS-105	5/9/1988	SW8270	Pentachlorophenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	1.6
DMS-84	4/26/1988	SW8270	Pentachlorophenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1.6
DMS-87	4/28/1988	SW8270	Pentachlorophenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1.6
DMS-95	5/3/1988	SW8270	Pentachlorophenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1.6
DMS-101	5/5/1988	SW8270	Pentachlorophenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	1.6
DMW-14A	11/9/1986	SW8270	Pentachlorophenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1.6
DMS-55	6/11/1985	SW8270	Pentachlorophenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1.6
DMS-57	6/11/1985	SW8270	Pentachlorophenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Pentachlorophenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1.6
DMS-59	6/10/1985	SW8270	Pentachlorophenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1.6
DMS-60	6/10/1985	SW8270	Pentachlorophenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1.6
DMS-53	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1.6
DMS-56	6/12/1985	SW8270	Pentachlorophenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1.6
DMS-52	6/19/1985	SW8270	Pentachlorophenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Pentachlorophenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1.6
DMW-18A	11/9/1986	SW8270	Pentachlorophenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	1.6
DMW-14E	10/6/1988	SW8270	Pentachlorophenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	Pentachlorophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMW-17A	11/3/1986	SW8270	Pentachlorophenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1.6
DMS-61	6/18/1985	SW8270	Pentachlorophenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1.6
DMS-54	6/19/1985	SW8270	Pentachlorophenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1.6
DMS-90	4/28/1988	SW8270	Pentachlorophenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1.6
DMS-96	5/3/1988	SW8270	Pentachlorophenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1.6
DMW-16A	10/27/1986	SW8270	Pentachlorophenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1.6
DMS-94	5/2/1988	SW8270	Pentachlorophenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1.6
DMW-16B	10/22/1986	SW8270	Pentachlorophenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1.6
DMW-16C	11/9/1986	SW8270	Pentachlorophenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	1.6
DMS-59	6/10/1985	SW8270	Phenanthrene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Phenanthrene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Phenanthrene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Phenanthrene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Phenanthrene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Phenanthrene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Phenanthrene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Phenanthrene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Phenanthrene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Phenanthrene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33

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DMW-15A	11/8/1986	SW8270	Phenanthrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.15	0.33	
DMW-15A	11/8/1986	SW8270	Phenanthrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.15	0.33	
DMS-89	4/28/1988	SW8270	Phenanthrene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Phenanthrene	NS1	DMS-98	SO	0	1	mg/Kg	=	0.098	0.33	J
DMS-100	5/5/1988	SW8270	Phenanthrene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Phenanthrene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.17	0.33	J
DMS-58	6/12/1985	SW8270	Phenanthrene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Phenanthrene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Phenanthrene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Phenanthrene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Phenanthrene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Phenanthrene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Phenanthrene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Phenanthrene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Phenanthrene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Phenanthrene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Phenanthrene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Phenanthrene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Phenanthrene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Phenanthrene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.067	0.33	J
DMS-84	4/26/1988	SW8270	Phenanthrene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Phenanthrene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Phenanthrene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Phenanthrene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	
DMW-14A	11/9/1986	SW8270	Phenanthrene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33	
DMS-55	6/11/1985	SW8270	Phenanthrene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33	
DMS-57	6/11/1985	SW8270	Phenanthrene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Phenanthrene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Phenanthrene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Phenanthrene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Phenanthrene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Phenanthrene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Phenanthrene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Phenanthrene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33	
DMW-18A	11/9/1986	SW8270	Phenanthrene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33	
DMW-14E	10/6/1988	SW8270	Phenanthrene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Phenanthrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMW-17A	11/3/1986	SW8270	Phenanthrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Phenanthrene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Phenanthrene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33	
DMS-90	4/28/1988	SW8270	Phenanthrene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Phenanthrene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Phenanthrene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Phenanthrene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Phenanthrene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Phenanthrene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW8270	Phenol	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Phenol	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.33	

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DMS-55	6/11/1985	SW8270	Phenol	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Phenol	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Phenol	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Phenol	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Phenol	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Phenol	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Phenol	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.33
DMS-57	6/24/1985	SW8270	Phenol	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Phenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMW-15A	11/8/1986	SW8270	Phenol	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.33
DMS-89	4/28/1988	SW8270	Phenol	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33
DMS-98	5/3/1988	SW8270	Phenol	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.33
DMS-100	5/5/1988	SW8270	Phenol	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33
DMS-103	5/9/1988	SW8270	Phenol	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.33
DMS-58	6/12/1985	SW8270	Phenol	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33
DMS-82	4/25/1988	SW8270	Phenol	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33
DMS-83	4/25/1988	SW8270	Phenol	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33
DMS-85	4/26/1988	SW8270	Phenol	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33
DMS-86	4/26/1988	SW8270	Phenol	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33
DMS-88	4/28/1988	SW8270	Phenol	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33
DMS-91	5/2/1988	SW8270	Phenol	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33
DMS-92	5/2/1988	SW8270	Phenol	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33
DMS-93	5/2/1988	SW8270	Phenol	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33
DMS-97	5/3/1988	SW8270	Phenol	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33
DMS-99	5/5/1988	SW8270	Phenol	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33
DMS-102	5/9/1988	SW8270	Phenol	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33
DMS-104	5/9/1988	SW8270	Phenol	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33
DMS-105	5/9/1988	SW8270	Phenol	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.33
DMS-84	4/26/1988	SW8270	Phenol	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33
DMS-87	4/28/1988	SW8270	Phenol	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33
DMS-95	5/3/1988	SW8270	Phenol	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33
DMS-101	5/5/1988	SW8270	Phenol	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33
DMW-14A	11/9/1986	SW8270	Phenol	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Phenol	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Phenol	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Phenol	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Phenol	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Phenol	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Phenol	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Phenol	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Phenol	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Phenol	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Phenol	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Phenol	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Phenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Phenol	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Phenol	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Phenol	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33

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DMS-90	4/28/1988	SW8270	Phenol	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33	
DMS-96	5/3/1988	SW8270	Phenol	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33	
DMW-16A	10/27/1986	SW8270	Phenol	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33	
DMS-94	5/2/1988	SW8270	Phenol	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33	
DMW-16B	10/22/1986	SW8270	Phenol	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33	
DMW-16C	11/9/1986	SW8270	Phenol	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33	
DMS-59	6/10/1985	SW6010	Potassium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Potassium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	500	
DMS-55	6/11/1985	SW6010	Potassium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Potassium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Potassium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	500	
DMS-58	6/12/1985	SW6010	Potassium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Potassium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	500	
DMS-52	6/19/1985	SW6010	Potassium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	500	
DMS-54	6/19/1985	SW6010	Potassium	NS1	DMS-54	SO	0	1	mg/Kg	=	332	500	
DMS-57	6/24/1985	SW6010	Potassium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	500	
DMW-15A	11/8/1986	SW6010	Potassium	NS1	DMW-15A	SO	0	1	mg/Kg	=	408	500	
DMW-15A	11/8/1986	SW6010	Potassium	NS1	DMW-15A	SO	0	1	mg/Kg	=	408	500	
DMS-89	4/28/1988	SW6010	Potassium	NS1	DMS-89	SO	0	1	mg/Kg	=	601	500	JQ
DMS-98	5/3/1988	SW6010	Potassium	NS1	DMS-98	SO	0	1	mg/Kg	=	748	500	JQ
DMS-100	5/5/1988	SW6010	Potassium	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	500	
DMS-103	5/9/1988	SW6010	Potassium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	500	
DMS-58	6/12/1985	SW6010	Potassium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	500	
DMS-82	4/25/1988	SW6010	Potassium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	500	
DMS-83	4/25/1988	SW6010	Potassium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	500	
DMS-85	4/26/1988	SW6010	Potassium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	500	
DMS-86	4/26/1988	SW6010	Potassium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	500	
DMS-88	4/28/1988	SW6010	Potassium	NS1	DMS-88	SO	0	2	mg/Kg	=	685	500	JQ
DMS-91	5/2/1988	SW6010	Potassium	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	500	
DMS-92	5/2/1988	SW6010	Potassium	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	500	
DMS-93	5/2/1988	SW6010	Potassium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	500	
DMS-97	5/3/1988	SW6010	Potassium	NS1	DMS-97	SO	0	2	mg/Kg	=	583	500	JQ
DMS-99	5/5/1988	SW6010	Potassium	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	500	
DMS-102	5/9/1988	SW6010	Potassium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	500	
DMS-104	5/9/1988	SW6010	Potassium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	500	
DMS-105	5/9/1988	SW6010	Potassium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	500	
DMS-84	4/26/1988	SW6010	Potassium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	500	
DMS-87	4/28/1988	SW6010	Potassium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	500	
DMS-95	5/3/1988	SW6010	Potassium	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	500	
DMS-101	5/5/1988	SW6010	Potassium	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	500	
DMW-14A	11/9/1986	SW6010	Potassium	NS1	DMW-14A	SO	0	5	mg/Kg	=	256	500	
DMS-55	6/11/1985	SW6010	Potassium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	500	
DMS-57	6/11/1985	SW6010	Potassium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Potassium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	500	
DMS-59	6/10/1985	SW6010	Potassium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Potassium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Potassium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Potassium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	500	

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DMS-52	6/19/1985	SW6010	Potassium	NS1	DMS-52	SO	0	8	mg/Kg	=	161	500	
DMS-54	6/19/1985	SW6010	Potassium	NS1	DMS-54	SO	0	10	mg/Kg	=	88	500	
DMW-18A	11/9/1986	SW6010	Potassium	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	500	
DMW-14E	10/6/1988	SW6010	Potassium	NS1	DMW-14E	SO	0	10	mg/Kg	=	881	500	JQ
DMW-17A	11/3/1986	SW6010	Potassium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	500	
DMW-17A	11/3/1986	SW6010	Potassium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Potassium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	500	
DMS-54	6/19/1985	SW6010	Potassium	NS1	DMS-54	SO	0	18	mg/Kg	=	57	500	
DMS-90	4/28/1988	SW6010	Potassium	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	500	
DMS-96	5/3/1988	SW6010	Potassium	NS1	DMS-96	SO	0	19	mg/Kg	=	1560	500	
DMW-16A	10/27/1986	SW6010	Potassium	NS1	DMW-16A	SO	0	20	mg/Kg	=	235	500	
DMS-94	5/2/1988	SW6010	Potassium	NS1	DMS-94	SO	0	24	mg/Kg	=	1050	500	JQ
DMW-16B	10/22/1986	SW6010	Potassium	NS1	DMW-16B	SO	0	25	mg/Kg	=	1160	500	
DMW-16C	11/9/1986	SW6010	Potassium	NS1	DMW-16C	SO	0	56	mg/Kg	=	608	500	
DMS-59	6/10/1985	SW8270	Pyrene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.33	
DMS-60	6/10/1985	SW8270	Pyrene	NS1	DMS-60	SO	0	1	mg/Kg	=	0.22	0.33	J
DMS-55	6/11/1985	SW8270	Pyrene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.33	
DMS-53	6/12/1985	SW8270	Pyrene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.33	
DMS-56	6/12/1985	SW8270	Pyrene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.33	
DMS-58	6/12/1985	SW8270	Pyrene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.33	
DMS-61	6/18/1985	SW8270	Pyrene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.33	
DMS-52	6/19/1985	SW8270	Pyrene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.33	
DMS-54	6/19/1985	SW8270	Pyrene	NS1	DMS-54	SO	0	1	mg/Kg	=	1	0.33	
DMS-57	6/24/1985	SW8270	Pyrene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.33	
DMW-15A	11/8/1986	SW8270	Pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.32	0.33	
DMW-15A	11/8/1986	SW8270	Pyrene	NS1	DMW-15A	SO	0	1	mg/Kg	=	0.32	0.33	
DMS-89	4/28/1988	SW8270	Pyrene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.33	
DMS-98	5/3/1988	SW8270	Pyrene	NS1	DMS-98	SO	0	1	mg/Kg	=	0.11	0.33	J
DMS-100	5/5/1988	SW8270	Pyrene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.33	
DMS-103	5/9/1988	SW8270	Pyrene	NS1	DMS-103	SO	0	1	mg/Kg	=	0.35	0.33	J
DMS-58	6/12/1985	SW8270	Pyrene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.33	
DMS-82	4/25/1988	SW8270	Pyrene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.33	
DMS-83	4/25/1988	SW8270	Pyrene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.33	
DMS-85	4/26/1988	SW8270	Pyrene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.33	
DMS-86	4/26/1988	SW8270	Pyrene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.33	
DMS-88	4/28/1988	SW8270	Pyrene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.33	
DMS-91	5/2/1988	SW8270	Pyrene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.33	
DMS-92	5/2/1988	SW8270	Pyrene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.33	
DMS-93	5/2/1988	SW8270	Pyrene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.33	
DMS-97	5/3/1988	SW8270	Pyrene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.33	
DMS-99	5/5/1988	SW8270	Pyrene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.33	
DMS-102	5/9/1988	SW8270	Pyrene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.33	
DMS-104	5/9/1988	SW8270	Pyrene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.33	
DMS-105	5/9/1988	SW8270	Pyrene	NS1	DMS-105	SO	0	2	mg/Kg	=	0.19	0.33	J
DMS-84	4/26/1988	SW8270	Pyrene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.33	
DMS-87	4/28/1988	SW8270	Pyrene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.33	
DMS-95	5/3/1988	SW8270	Pyrene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.33	
DMS-101	5/5/1988	SW8270	Pyrene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.33	

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DMW-14A	11/9/1986	SW8270	Pyrene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.33
DMS-55	6/11/1985	SW8270	Pyrene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.33
DMS-57	6/11/1985	SW8270	Pyrene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Pyrene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW8270	Pyrene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.33
DMS-60	6/10/1985	SW8270	Pyrene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.33
DMS-53	6/12/1985	SW8270	Pyrene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.33
DMS-56	6/12/1985	SW8270	Pyrene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.33
DMS-52	6/19/1985	SW8270	Pyrene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Pyrene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.33
DMW-18A	11/9/1986	SW8270	Pyrene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.33
DMW-14E	10/6/1988	SW8270	Pyrene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMW-17A	11/3/1986	SW8270	Pyrene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.33
DMS-61	6/18/1985	SW8270	Pyrene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.33
DMS-54	6/19/1985	SW8270	Pyrene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.33
DMS-90	4/28/1988	SW8270	Pyrene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.33
DMS-96	5/3/1988	SW8270	Pyrene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.33
DMW-16A	10/27/1986	SW8270	Pyrene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.33
DMS-94	5/2/1988	SW8270	Pyrene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.33
DMW-16B	10/22/1986	SW8270	Pyrene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.33
DMW-16C	11/9/1986	SW8270	Pyrene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.33
DMS-59	6/10/1985	SW6010	Selenium	NS1	DMS-59	SO	0	1	mg/Kg	=	0.6	0.5
DMS-60	6/10/1985	SW6010	Selenium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.5
DMS-55	6/11/1985	SW6010	Selenium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.5
DMS-53	6/12/1985	SW6010	Selenium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.5
DMS-56	6/12/1985	SW6010	Selenium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.5
DMS-58	6/12/1985	SW6010	Selenium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.5
DMS-61	6/18/1985	SW6010	Selenium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.5
DMS-52	6/19/1985	SW6010	Selenium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.5
DMS-54	6/19/1985	SW6010	Selenium	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.5
DMS-57	6/24/1985	SW6010	Selenium	NS1	DMS-57	SO	0	1	mg/Kg	=	0.5	0.5
DMW-15A	11/8/1986	SW6010	Selenium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5
DMW-15A	11/8/1986	SW6010	Selenium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.5
DMS-89	4/28/1988	SW6010	Selenium	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.5
DMS-98	5/3/1988	SW6010	Selenium	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.5
DMS-100	5/5/1988	SW6010	Selenium	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.5
DMS-103	5/9/1988	SW6010	Selenium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.5
DMS-58	6/12/1985	SW6010	Selenium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.5
DMS-82	4/25/1988	SW6010	Selenium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.5
DMS-83	4/25/1988	SW6010	Selenium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.5
DMS-85	4/26/1988	SW6010	Selenium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.5
DMS-86	4/26/1988	SW6010	Selenium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.5
DMS-88	4/28/1988	SW6010	Selenium	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.5
DMS-91	5/2/1988	SW6010	Selenium	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.5
DMS-92	5/2/1988	SW6010	Selenium	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.5
DMS-93	5/2/1988	SW6010	Selenium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.5
DMS-97	5/3/1988	SW6010	Selenium	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.5

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DMS-99	5/5/1988	SW6010	Selenium	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.5
DMS-102	5/9/1988	SW6010	Selenium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.5
DMS-104	5/9/1988	SW6010	Selenium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.5
DMS-105	5/9/1988	SW6010	Selenium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.5
DMS-84	4/26/1988	SW6010	Selenium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.5
DMS-87	4/28/1988	SW6010	Selenium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.5
DMS-101	5/5/1988	SW6010	Selenium	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.5
DMW-14A	11/9/1986	SW6010	Selenium	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.5
DMS-55	6/11/1985	SW6010	Selenium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.5
DMS-57	6/11/1985	SW6010	Selenium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.5
DMS-61	6/18/1985	SW6010	Selenium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.5
DMS-59	6/10/1985	SW6010	Selenium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.5
DMS-60	6/10/1985	SW6010	Selenium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.5
DMS-53	6/12/1985	SW6010	Selenium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.5
DMS-56	6/12/1985	SW6010	Selenium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.5
DMS-52	6/19/1985	SW6010	Selenium	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.5
DMS-54	6/19/1985	SW6010	Selenium	NS1	DMS-54	SO	0	10	mg/Kg	=	0.34	0.5
DMW-18A	11/9/1986	SW6010	Selenium	NS1	DMW-18A	SO	0	10	mg/Kg	=	1.2	0.5
DMW-14E	10/6/1988	SW6010	Selenium	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.5
DMW-17A	11/3/1986	SW6010	Selenium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5
DMW-17A	11/3/1986	SW6010	Selenium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.5
DMS-61	6/18/1985	SW6010	Selenium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.5
DMS-54	6/19/1985	SW6010	Selenium	NS1	DMS-54	SO	0	18	mg/Kg	=	1.8	0.5
DMS-90	4/28/1988	SW6010	Selenium	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.5
DMW-16A	10/27/1986	SW6010	Selenium	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.5
DMS-94	5/2/1988	SW6010	Selenium	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.5
DMW-16B	10/22/1986	SW6010	Selenium	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.5
DMW-16C	11/9/1986	SW6010	Selenium	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.5
DMS-59	6/10/1985	SW6010	Silver	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1
DMS-60	6/10/1985	SW6010	Silver	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1
DMS-55	6/11/1985	SW6010	Silver	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1
DMS-53	6/12/1985	SW6010	Silver	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1
DMS-56	6/12/1985	SW6010	Silver	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1
DMS-58	6/12/1985	SW6010	Silver	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1
DMS-61	6/18/1985	SW6010	Silver	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1
DMS-52	6/19/1985	SW6010	Silver	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	1
DMS-54	6/19/1985	SW6010	Silver	NS1	DMS-54	SO	0	1	mg/Kg	=	1.2	1
DMS-57	6/24/1985	SW6010	Silver	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1
DMW-15A	11/8/1986	SW6010	Silver	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1
DMW-15A	11/8/1986	SW6010	Silver	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1
DMS-89	4/28/1988	SW6010	Silver	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1
DMS-98	5/3/1988	SW6010	Silver	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1
DMS-100	5/5/1988	SW6010	Silver	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1
DMS-103	5/9/1988	SW6010	Silver	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	1
DMS-58	6/12/1985	SW6010	Silver	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1
DMS-82	4/25/1988	SW6010	Silver	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1
DMS-83	4/25/1988	SW6010	Silver	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	1
DMS-85	4/26/1988	SW6010	Silver	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1

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DMS-86	4/26/1988	SW6010	Silver	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1	
DMS-88	4/28/1988	SW6010	Silver	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	1	
DMS-91	5/2/1988	SW6010	Silver	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1	
DMS-92	5/2/1988	SW6010	Silver	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1	
DMS-93	5/2/1988	SW6010	Silver	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1	
DMS-97	5/3/1988	SW6010	Silver	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1	
DMS-99	5/5/1988	SW6010	Silver	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1	
DMS-102	5/9/1988	SW6010	Silver	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	1	
DMS-104	5/9/1988	SW6010	Silver	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	1	
DMS-105	5/9/1988	SW6010	Silver	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	1	
DMS-84	4/26/1988	SW6010	Silver	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1	
DMS-87	4/28/1988	SW6010	Silver	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1	
DMS-95	5/3/1988	SW6010	Silver	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1	
DMS-101	5/5/1988	SW6010	Silver	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	1	
DMW-14A	11/9/1986	SW6010	Silver	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1	
DMS-55	6/11/1985	SW6010	Silver	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1	
DMS-57	6/11/1985	SW6010	Silver	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1	
DMS-61	6/18/1985	SW6010	Silver	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1	
DMS-59	6/10/1985	SW6010	Silver	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1	
DMS-60	6/10/1985	SW6010	Silver	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1	
DMS-53	6/12/1985	SW6010	Silver	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1	
DMS-56	6/12/1985	SW6010	Silver	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1	
DMS-52	6/19/1985	SW6010	Silver	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1	
DMS-54	6/19/1985	SW6010	Silver	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1	
DMW-18A	11/9/1986	SW6010	Silver	NS1	DMW-18A	SO	0	10	mg/Kg	=	0.98	1	
DMW-14E	10/6/1988	SW6010	Silver	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1	
DMW-17A	11/3/1986	SW6010	Silver	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.88	1	
DMW-17A	11/3/1986	SW6010	Silver	NS1	DMW-17A	SO	0	15	mg/Kg	=	0.88	1	
DMS-61	6/18/1985	SW6010	Silver	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1	
DMS-54	6/19/1985	SW6010	Silver	NS1	DMS-54	SO	0	18	mg/Kg	=	1.1	1	
DMS-90	4/28/1988	SW6010	Silver	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1	
DMS-96	5/3/1988	SW6010	Silver	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1	
DMW-16A	10/27/1986	SW6010	Silver	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1	
DMS-94	5/2/1988	SW6010	Silver	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1	
DMW-16B	10/22/1986	SW6010	Silver	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1	
DMW-16C	11/9/1986	SW6010	Silver	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	1	
DMS-59	6/10/1985	SW6010	Sodium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	500	
DMS-60	6/10/1985	SW6010	Sodium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	500	
DMS-55	6/11/1985	SW6010	Sodium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	500	
DMS-53	6/12/1985	SW6010	Sodium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	500	
DMS-56	6/12/1985	SW6010	Sodium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	500	
DMS-58	6/12/1985	SW6010	Sodium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	500	
DMS-61	6/18/1985	SW6010	Sodium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	500	
DMS-52	6/19/1985	SW6010	Sodium	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	500	
DMS-54	6/19/1985	SW6010	Sodium	NS1	DMS-54	SO	0	1	mg/Kg	=	69	500	
DMS-57	6/24/1985	SW6010	Sodium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	500	
DMW-15A	11/8/1986	SW6010	Sodium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	500	
DMW-15A	11/8/1986	SW6010	Sodium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	500	

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DMS-89	4/28/1988	SW6010	Sodium	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	500
DMS-98	5/3/1988	SW6010	Sodium	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	500
DMS-100	5/5/1988	SW6010	Sodium	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	500
DMS-103	5/9/1988	SW6010	Sodium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	500
DMS-58	6/12/1985	SW6010	Sodium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	500
DMS-82	4/25/1988	SW6010	Sodium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	500
DMS-83	4/25/1988	SW6010	Sodium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	500
DMS-85	4/26/1988	SW6010	Sodium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	500
DMS-86	4/26/1988	SW6010	Sodium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	500
DMS-88	4/28/1988	SW6010	Sodium	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	500
DMS-91	5/2/1988	SW6010	Sodium	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	500
DMS-92	5/2/1988	SW6010	Sodium	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	500
DMS-93	5/2/1988	SW6010	Sodium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	500
DMS-97	5/3/1988	SW6010	Sodium	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	500
DMS-99	5/5/1988	SW6010	Sodium	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	500
DMS-102	5/9/1988	SW6010	Sodium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	500
DMS-104	5/9/1988	SW6010	Sodium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	500
DMS-105	5/9/1988	SW6010	Sodium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	500
DMS-84	4/26/1988	SW6010	Sodium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	500
DMS-87	4/28/1988	SW6010	Sodium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	500
DMS-95	5/3/1988	SW6010	Sodium	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	500
DMS-101	5/5/1988	SW6010	Sodium	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	500
DMW-14A	11/9/1986	SW6010	Sodium	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	500
DMS-55	6/11/1985	SW6010	Sodium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	500
DMS-57	6/11/1985	SW6010	Sodium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	500
DMS-61	6/18/1985	SW6010	Sodium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	500
DMS-59	6/10/1985	SW6010	Sodium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	500
DMS-60	6/10/1985	SW6010	Sodium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	500
DMS-53	6/12/1985	SW6010	Sodium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	500
DMS-56	6/12/1985	SW6010	Sodium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	500
DMS-52	6/19/1985	SW6010	Sodium	NS1	DMS-52	SO	0	8	mg/Kg	=	50	500
DMS-54	6/19/1985	SW6010	Sodium	NS1	DMS-54	SO	0	10	mg/Kg	=	50	500
DMW-18A	11/9/1986	SW6010	Sodium	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	500
DMW-14E	10/6/1988	SW6010	Sodium	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	500
DMW-17A	11/3/1986	SW6010	Sodium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	500
DMW-17A	11/3/1986	SW6010	Sodium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	500
DMS-61	6/18/1985	SW6010	Sodium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	500
DMS-54	6/19/1985	SW6010	Sodium	NS1	DMS-54	SO	0	18	mg/Kg	=	46	500
DMS-90	4/28/1988	SW6010	Sodium	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	500
DMS-96	5/3/1988	SW6010	Sodium	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	500
DMW-16A	10/27/1986	SW6010	Sodium	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	500
DMS-94	5/2/1988	SW6010	Sodium	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	500
DMW-16B	10/22/1986	SW6010	Sodium	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	500
DMW-16C	11/9/1986	SW6010	Sodium	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	500
DMS-59	6/10/1985	SW8080	Technical Chlordane	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.02
DMS-60	6/10/1985	SW8080	Technical Chlordane	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.02
DMS-55	6/11/1985	SW8080	Technical Chlordane	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.02
DMS-53	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.02

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DMS-56	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.02
DMS-58	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.02
DMS-61	6/18/1985	SW8080	Technical Chlordane	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.02
DMS-52	6/19/1985	SW8080	Technical Chlordane	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.02
DMS-54	6/19/1985	SW8080	Technical Chlordane	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.02
DMS-57	6/24/1985	SW8080	Technical Chlordane	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.02
DMW-15A	11/8/1986	SW8080	Technical Chlordane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.02
DMW-15A	11/8/1986	SW8080	Technical Chlordane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.02
DMS-58	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.02
DMS-55	6/11/1985	SW8080	Technical Chlordane	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.02
DMS-57	6/11/1985	SW8080	Technical Chlordane	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.02
DMS-61	6/18/1985	SW8080	Technical Chlordane	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.02
DMS-59	6/10/1985	SW8080	Technical Chlordane	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.02
DMS-60	6/10/1985	SW8080	Technical Chlordane	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.02
DMS-53	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.02
DMS-56	6/12/1985	SW8080	Technical Chlordane	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.02
DMS-52	6/19/1985	SW8080	Technical Chlordane	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.02
DMS-54	6/19/1985	SW8080	Technical Chlordane	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.02
DMW-18A	11/9/1986	SW8080	Technical Chlordane	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.02
DMW-17A	11/3/1986	SW8080	Technical Chlordane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.02
DMW-17A	11/3/1986	SW8080	Technical Chlordane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.02
DMS-61	6/18/1985	SW8080	Technical Chlordane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.02
DMS-54	6/19/1985	SW8080	Technical Chlordane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.02
DMW-16A	10/27/1986	SW8080	Technical Chlordane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.02
DMW-16B	10/22/1986	SW8080	Technical Chlordane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.02
DMW-16C	11/9/1986	SW8080	Technical Chlordane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.02
DMS-59	6/10/1985	SW8260	Tetrachloroethane	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Tetrachloroethane	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Tetrachloroethane	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Tetrachloroethane	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Tetrachloroethane	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Tetrachloroethane	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Tetrachloroethane	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Tetrachloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Tetrachloroethane	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Tetrachloroethane	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Tetrachloroethane	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Tetrachloroethane	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Tetrachloroethane	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Tetrachloroethane	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Tetrachloroethane	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Tetrachloroethane	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Tetrachloroethane	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Tetrachloroethane	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005

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DMS-91	5/2/1988	SW8260	Tetrachloroethane	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Tetrachloroethane	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Tetrachloroethane	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Tetrachloroethane	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Tetrachloroethane	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Tetrachloroethane	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Tetrachloroethane	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Tetrachloroethane	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Tetrachloroethane	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Tetrachloroethane	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Tetrachloroethane	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Tetrachloroethane	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Tetrachloroethane	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Tetrachloroethane	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Tetrachloroethane	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Tetrachloroethane	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Tetrachloroethane	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Tetrachloroethane	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Tetrachloroethane	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Tetrachloroethane	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Tetrachloroethane	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Tetrachloroethane	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Tetrachloroethane	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Tetrachloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Tetrachloroethane	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Tetrachloroethane	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Tetrachloroethane	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	Tetrachloroethane	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Tetrachloroethane	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	Tetrachloroethane	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	Tetrachloroethane	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	Tetrachloroethane	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	Tetrachloroethane	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW6010	Thallium	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	1
DMS-60	6/10/1985	SW6010	Thallium	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	1
DMS-55	6/11/1985	SW6010	Thallium	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	1
DMS-53	6/12/1985	SW6010	Thallium	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	1
DMS-56	6/12/1985	SW6010	Thallium	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	1
DMS-58	6/12/1985	SW6010	Thallium	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	1
DMS-61	6/18/1985	SW6010	Thallium	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	1
DMS-52	6/19/1985	SW6010	Thallium	NS1	DMS-52	SO	0	1	mg/Kg	=	1	1
DMS-54	6/19/1985	SW6010	Thallium	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	1
DMS-57	6/24/1985	SW6010	Thallium	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	1
DMW-15A	11/8/1986	SW6010	Thallium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1
DMW-15A	11/8/1986	SW6010	Thallium	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	1
DMS-89	4/28/1988	SW6010	Thallium	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	1
DMS-98	5/3/1988	SW6010	Thallium	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	1

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DMS-100	5/5/1988	SW6010	Thallium	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	1
DMS-103	5/9/1988	SW6010	Thallium	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	1
DMS-58	6/12/1985	SW6010	Thallium	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	1
DMS-82	4/25/1988	SW6010	Thallium	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	1
DMS-83	4/25/1988	SW6010	Thallium	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	1
DMS-85	4/26/1988	SW6010	Thallium	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	1
DMS-86	4/26/1988	SW6010	Thallium	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	1
DMS-88	4/28/1988	SW6010	Thallium	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	1
DMS-91	5/2/1988	SW6010	Thallium	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	1
DMS-92	5/2/1988	SW6010	Thallium	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	1
DMS-93	5/2/1988	SW6010	Thallium	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	1
DMS-97	5/3/1988	SW6010	Thallium	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	1
DMS-99	5/5/1988	SW6010	Thallium	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	1
DMS-102	5/9/1988	SW6010	Thallium	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	1
DMS-104	5/9/1988	SW6010	Thallium	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	1
DMS-105	5/9/1988	SW6010	Thallium	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	1
DMS-84	4/26/1988	SW6010	Thallium	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	1
DMS-87	4/28/1988	SW6010	Thallium	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	1
DMS-95	5/3/1988	SW6010	Thallium	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	1
DMS-101	5/5/1988	SW6010	Thallium	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	1
DMW-14A	11/9/1986	SW6010	Thallium	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	1
DMS-55	6/11/1985	SW6010	Thallium	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	1
DMS-57	6/11/1985	SW6010	Thallium	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	1
DMS-61	6/18/1985	SW6010	Thallium	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	1
DMS-59	6/10/1985	SW6010	Thallium	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	1
DMS-60	6/10/1985	SW6010	Thallium	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	1
DMS-53	6/12/1985	SW6010	Thallium	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	1
DMS-56	6/12/1985	SW6010	Thallium	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	1
DMS-52	6/19/1985	SW6010	Thallium	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	1
DMS-54	6/19/1985	SW6010	Thallium	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	1
DMW-18A	11/9/1986	SW6010	Thallium	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	1
DMW-14E	10/6/1988	SW6010	Thallium	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	1
DMW-17A	11/3/1986	SW6010	Thallium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1
DMW-17A	11/3/1986	SW6010	Thallium	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	1
DMS-61	6/18/1985	SW6010	Thallium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	1
DMS-54	6/19/1985	SW6010	Thallium	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	1
DMS-90	4/28/1988	SW6010	Thallium	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	1
DMS-96	5/3/1988	SW6010	Thallium	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	1
DMW-16A	10/27/1986	SW6010	Thallium	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	1
DMS-94	5/2/1988	SW6010	Thallium	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	1
DMW-16B	10/22/1986	SW6010	Thallium	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	1
DMW-16C	11/9/1986	SW6010	Thallium	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	1
DMS-59	6/10/1985	SW6010	Tin	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	4
DMS-60	6/10/1985	SW6010	Tin	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	4
DMS-55	6/11/1985	SW6010	Tin	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	4
DMS-53	6/12/1985	SW6010	Tin	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	4
DMS-56	6/12/1985	SW6010	Tin	NS1	DMS-56	SO	0	1	mg/Kg	=	4	4
DMS-58	6/12/1985	SW6010	Tin	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	4

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DMS-61	6/18/1985	SW6010	Tin	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	4
DMS-52	6/19/1985	SW6010	Tin	NS1	DMS-52	SO	0	1	mg/Kg	=	13	4
DMS-54	6/19/1985	SW6010	Tin	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	4
DMS-57	6/24/1985	SW6010	Tin	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	4
DMS-58	6/12/1985	SW6010	Tin	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	4
DMS-55	6/11/1985	SW6010	Tin	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	4
DMS-57	6/11/1985	SW6010	Tin	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	4
DMS-61	6/18/1985	SW6010	Tin	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	4
DMS-59	6/10/1985	SW6010	Tin	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	4
DMS-60	6/10/1985	SW6010	Tin	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	4
DMS-53	6/12/1985	SW6010	Tin	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	4
DMS-56	6/12/1985	SW6010	Tin	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	4
DMS-52	6/19/1985	SW6010	Tin	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	4
DMS-54	6/19/1985	SW6010	Tin	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	4
DMS-61	6/18/1985	SW6010	Tin	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	4
DMS-54	6/19/1985	SW6010	Tin	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	4
DMS-59	6/10/1985	SW8260	Toluene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Toluene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Toluene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Toluene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Toluene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Toluene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Toluene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Toluene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Toluene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Toluene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Toluene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Toluene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Toluene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Toluene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Toluene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Toluene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Toluene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Toluene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Toluene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Toluene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Toluene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Toluene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Toluene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Toluene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Toluene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Toluene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Toluene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Toluene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Toluene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Toluene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Toluene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Toluene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005

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DMS-95	5/3/1988	SW8260	Toluene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Toluene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Toluene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Toluene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Toluene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Toluene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Toluene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Toluene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Toluene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Toluene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Toluene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Toluene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Toluene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Toluene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Toluene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Toluene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Toluene	NS1	DMS-61	SO	0	18	mg/Kg	=	0.0064	0.005
DMS-54	6/19/1985	SW8260	Toluene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	Toluene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Toluene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	Toluene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMS-94	5/2/1988	SW8260	Toluene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	Toluene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	Toluene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	50
DMS-60	6/10/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	50
DMS-55	6/11/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	50
DMS-53	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	50
DMS-56	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	50
DMS-58	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	50
DMS-61	6/18/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	50
DMS-52	6/19/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	50
DMS-54	6/19/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	50
DMS-57	6/24/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	50
DMW-15A	11/8/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	50
DMW-15A	11/8/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	50
DMS-58	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	50
DMW-14A	11/9/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	50
DMS-55	6/11/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	50
DMS-57	6/11/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	50
DMS-61	6/18/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	50
DMS-59	6/10/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	50
DMS-60	6/10/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	50
DMS-53	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	50
DMS-56	6/12/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	50
DMS-52	6/19/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	50
DMS-54	6/19/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	50
DMW-18A	11/9/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	50

DMW-17A	11/3/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	50
DMW-17A	11/3/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	50
DMS-61	6/18/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	50
DMS-54	6/19/1985	E418.1	Total Petroleum Hydroc	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	50
DMW-16A	10/27/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	50
DMW-16B	10/22/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	50
DMW-16C	11/9/1986	E418.1	Total Petroleum Hydroc	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	50
DMS-59	6/10/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	trans-1,2-Dichloroethen	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	trans-1,2-Dichloroethen	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMW-16A	10/27/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005
DMW-16B	10/22/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005
DMW-16C	11/9/1986	SW8260	trans-1,2-Dichloroethen	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Trichloroethene	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Trichloroethene	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Trichloroethene	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Trichloroethene	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005

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DMS-56	6/12/1985	SW8260	Trichloroethene	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Trichloroethene	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Trichloroethene	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Trichloroethene	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Trichloroethene	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005
DMS-57	6/24/1985	SW8260	Trichloroethene	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Trichloroethene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMW-15A	11/8/1986	SW8260	Trichloroethene	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005
DMS-89	4/28/1988	SW8260	Trichloroethene	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005
DMS-98	5/3/1988	SW8260	Trichloroethene	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005
DMS-100	5/5/1988	SW8260	Trichloroethene	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005
DMS-103	5/9/1988	SW8260	Trichloroethene	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005
DMS-58	6/12/1985	SW8260	Trichloroethene	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.005
DMS-82	4/25/1988	SW8260	Trichloroethene	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005
DMS-83	4/25/1988	SW8260	Trichloroethene	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005
DMS-85	4/26/1988	SW8260	Trichloroethene	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005
DMS-86	4/26/1988	SW8260	Trichloroethene	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005
DMS-88	4/28/1988	SW8260	Trichloroethene	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005
DMS-91	5/2/1988	SW8260	Trichloroethene	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005
DMS-92	5/2/1988	SW8260	Trichloroethene	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005
DMS-93	5/2/1988	SW8260	Trichloroethene	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005
DMS-97	5/3/1988	SW8260	Trichloroethene	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005
DMS-99	5/5/1988	SW8260	Trichloroethene	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005
DMS-102	5/9/1988	SW8260	Trichloroethene	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005
DMS-104	5/9/1988	SW8260	Trichloroethene	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005
DMS-105	5/9/1988	SW8260	Trichloroethene	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005
DMS-84	4/26/1988	SW8260	Trichloroethene	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005
DMS-87	4/28/1988	SW8260	Trichloroethene	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005
DMS-95	5/3/1988	SW8260	Trichloroethene	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005
DMS-101	5/5/1988	SW8260	Trichloroethene	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005
DMW-14A	11/9/1986	SW8260	Trichloroethene	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005
DMS-55	6/11/1985	SW8260	Trichloroethene	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005
DMS-57	6/11/1985	SW8260	Trichloroethene	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Trichloroethene	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005
DMS-59	6/10/1985	SW8260	Trichloroethene	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005
DMS-60	6/10/1985	SW8260	Trichloroethene	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005
DMS-53	6/12/1985	SW8260	Trichloroethene	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005
DMS-56	6/12/1985	SW8260	Trichloroethene	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005
DMS-52	6/19/1985	SW8260	Trichloroethene	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Trichloroethene	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005
DMW-18A	11/9/1986	SW8260	Trichloroethene	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005
DMW-14E	10/6/1988	SW8260	Trichloroethene	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Trichloroethene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMW-17A	11/3/1986	SW8260	Trichloroethene	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005
DMS-61	6/18/1985	SW8260	Trichloroethene	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005
DMS-54	6/19/1985	SW8260	Trichloroethene	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005
DMS-90	4/28/1988	SW8260	Trichloroethene	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005
DMS-96	5/3/1988	SW8260	Trichloroethene	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005

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DMW-16A	10/27/1986	SW8260	Trichloroethene	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005		
DMS-94	5/2/1988	SW8260	Trichloroethene	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005		
DMW-16B	10/22/1986	SW8260	Trichloroethene	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005		
DMW-16C	11/9/1986	SW8260	Trichloroethene	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005		
DMS-59	6/10/1985	SW6010	Vanadium	NS1	DMS-59	SO	0	1	mg/Kg	=	79	5		
DMS-60	6/10/1985	SW6010	Vanadium	NS1	DMS-60	SO	0	1	mg/Kg	=	41	5		
DMS-55	6/11/1985	SW6010	Vanadium	NS1	DMS-55	SO	0	1	mg/Kg	=	35	5		
DMS-53	6/12/1985	SW6010	Vanadium	NS1	DMS-53	SO	0	1	mg/Kg	=	17	5		
DMS-56	6/12/1985	SW6010	Vanadium	NS1	DMS-56	SO	0	1	mg/Kg	=	47	5		
DMS-58	6/12/1985	SW6010	Vanadium	NS1	DMS-58	SO	0	1	mg/Kg	=	18	5		
DMS-61	6/18/1985	SW6010	Vanadium	NS1	DMS-61	SO	0	1	mg/Kg	=	20	5		
DMS-52	6/19/1985	SW6010	Vanadium	NS1	DMS-52	SO	0	1	mg/Kg	=	41	5		
DMS-54	6/19/1985	SW6010	Vanadium	NS1	DMS-54	SO	0	1	mg/Kg	=	60	5		
DMS-57	6/24/1985	SW6010	Vanadium	NS1	DMS-57	SO	0	1	mg/Kg	=	14	5		
DMW-15A	11/8/1986	SW6010	Vanadium	NS1	DMW-15A	SO	0	1	mg/Kg	=	26	5		
DMW-15A	11/8/1986	SW6010	Vanadium	NS1	DMW-15A	SO	0	1	mg/Kg	=	26	5		
DMS-89	4/28/1988	SW6010	Vanadium	NS1	DMS-89	SO	0	1	mg/Kg	=	24	5	E	
DMS-98	5/3/1988	SW6010	Vanadium	NS1	DMS-98	SO	0	1	mg/Kg	=	16	5	E	
DMS-100	5/5/1988	SW6010	Vanadium	NS1	DMS-100	SO	0	1	mg/Kg	=	22	5	E	
DMS-103	5/9/1988	SW6010	Vanadium	NS1	DMS-103	SO	0	1	mg/Kg	=	22	5		
DMS-58	6/12/1985	SW6010	Vanadium	NS1	DMS-58	SO	0	2	mg/Kg	=	21	5		
DMS-82	4/25/1988	SW6010	Vanadium	NS1	DMS-82	SO	0	2	mg/Kg	=	22	5	E	
DMS-83	4/25/1988	SW6010	Vanadium	NS1	DMS-83	SO	0	2	mg/Kg	=	18	5	E	
DMS-85	4/26/1988	SW6010	Vanadium	NS1	DMS-85	SO	0	2	mg/Kg	=	23	5	E	
DMS-86	4/26/1988	SW6010	Vanadium	NS1	DMS-86	SO	0	2	mg/Kg	=	16	5	E	
DMS-88	4/28/1988	SW6010	Vanadium	NS1	DMS-88	SO	0	2	mg/Kg	=	41	5	E	
DMS-91	5/2/1988	SW6010	Vanadium	NS1	DMS-91	SO	0	2	mg/Kg	=	15	5	E	
DMS-92	5/2/1988	SW6010	Vanadium	NS1	DMS-92	SO	0	2	mg/Kg	=	22	5	E	
DMS-93	5/2/1988	SW6010	Vanadium	NS1	DMS-93	SO	0	2	mg/Kg	=	14	5	E	
DMS-97	5/3/1988	SW6010	Vanadium	NS1	DMS-97	SO	0	2	mg/Kg	=	52	5	E	
DMS-99	5/5/1988	SW6010	Vanadium	NS1	DMS-99	SO	0	2	mg/Kg	=	65	5		
DMS-102	5/9/1988	SW6010	Vanadium	NS1	DMS-102	SO	0	2	mg/Kg	=	52	5		
DMS-104	5/9/1988	SW6010	Vanadium	NS1	DMS-104	SO	0	2	mg/Kg	=	59	5		
DMS-105	5/9/1988	SW6010	Vanadium	NS1	DMS-105	SO	0	2	mg/Kg	=	33	5		
DMS-84	4/26/1988	SW6010	Vanadium	NS1	DMS-84	SO	0	4	mg/Kg	=	16	5	E	
DMS-87	4/28/1988	SW6010	Vanadium	NS1	DMS-87	SO	0	4	mg/Kg	=	57	5	E	
DMS-95	5/3/1988	SW6010	Vanadium	NS1	DMS-95	SO	0	4	mg/Kg	=	30	5	E	
DMS-101	5/5/1988	SW6010	Vanadium	NS1	DMS-101	SO	0	4	mg/Kg	=	20	5	E	
DMW-14A	11/9/1986	SW6010	Vanadium	NS1	DMW-14A	SO	0	5	mg/Kg	=	14	5		
DMS-55	6/11/1985	SW6010	Vanadium	NS1	DMS-55	SO	0	6	mg/Kg	=	17	5		
DMS-57	6/11/1985	SW6010	Vanadium	NS1	DMS-57	SO	0	6	mg/Kg	=	27	5		
DMS-61	6/18/1985	SW6010	Vanadium	NS1	DMS-61	SO	0	6	mg/Kg	=	20	5		
DMS-59	6/10/1985	SW6010	Vanadium	NS1	DMS-59	SO	0	8	mg/Kg	=	11	5		
DMS-60	6/10/1985	SW6010	Vanadium	NS1	DMS-60	SO	0	8	mg/Kg	=	65	5		
DMS-53	6/12/1985	SW6010	Vanadium	NS1	DMS-53	SO	0	8	mg/Kg	=	53	5		
DMS-56	6/12/1985	SW6010	Vanadium	NS1	DMS-56	SO	0	8	mg/Kg	=	13	5		
DMS-52	6/19/1985	SW6010	Vanadium	NS1	DMS-52	SO	0	8	mg/Kg	=	8.1	5		
DMS-54	6/19/1985	SW6010	Vanadium	NS1	DMS-54	SO	0	10	mg/Kg	=	2.5	5		

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DMW-18A	11/9/1986	SW6010	Vanadium	NS1	DMW-18A	SO	0	10	mg/Kg	=	0.6	5	
DMW-14E	10/6/1988	SW6010	Vanadium	NS1	DMW-14E	SO	0	10	mg/Kg	=	27	5	
DMW-17A	11/3/1986	SW6010	Vanadium	NS1	DMW-17A	SO	0	15	mg/Kg	=	14	5	
DMW-17A	11/3/1986	SW6010	Vanadium	NS1	DMW-17A	SO	0	15	mg/Kg	=	14	5	
DMS-61	6/18/1985	SW6010	Vanadium	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	5	
DMS-54	6/19/1985	SW6010	Vanadium	NS1	DMS-54	SO	0	18	mg/Kg	=	3.4	5	
DMS-90	4/28/1988	SW6010	Vanadium	NS1	DMS-90	SO	0	19	mg/Kg	=	65	5	E
DMS-96	5/3/1988	SW6010	Vanadium	NS1	DMS-96	SO	0	19	mg/Kg	=	19	5	E
DMW-16A	10/27/1986	SW6010	Vanadium	NS1	DMW-16A	SO	0	20	mg/Kg	=	5.5	5	
DMS-94	5/2/1988	SW6010	Vanadium	NS1	DMS-94	SO	0	24	mg/Kg	=	15	5	E
DMW-16B	10/22/1986	SW6010	Vanadium	NS1	DMW-16B	SO	0	25	mg/Kg	=	11	5	
DMW-16C	11/9/1986	SW6010	Vanadium	NS1	DMW-16C	SO	0	56	mg/Kg	=	4.9	5	
DMS-59	6/10/1985	SW8260	Vinyl chloride	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.01	
DMS-60	6/10/1985	SW8260	Vinyl chloride	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.01	
DMS-55	6/11/1985	SW8260	Vinyl chloride	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.01	
DMS-53	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.01	
DMS-56	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.01	
DMS-58	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.01	
DMS-61	6/18/1985	SW8260	Vinyl chloride	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.01	
DMS-52	6/19/1985	SW8260	Vinyl chloride	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.01	
DMS-54	6/19/1985	SW8260	Vinyl chloride	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.01	
DMS-57	6/24/1985	SW8260	Vinyl chloride	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.01	
DMW-15A	11/8/1986	SW8260	Vinyl chloride	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01	
DMW-15A	11/8/1986	SW8260	Vinyl chloride	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.01	
DMS-89	4/28/1988	SW8260	Vinyl chloride	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.01	
DMS-98	5/3/1988	SW8260	Vinyl chloride	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.01	
DMS-100	5/5/1988	SW8260	Vinyl chloride	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.01	
DMS-103	5/9/1988	SW8260	Vinyl chloride	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.01	
DMS-58	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-58	SO	0	2	mg/Kg	ND	0	0.01	
DMS-82	4/25/1988	SW8260	Vinyl chloride	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.01	
DMS-83	4/25/1988	SW8260	Vinyl chloride	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.01	
DMS-85	4/26/1988	SW8260	Vinyl chloride	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.01	
DMS-86	4/26/1988	SW8260	Vinyl chloride	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.01	
DMS-88	4/28/1988	SW8260	Vinyl chloride	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.01	
DMS-91	5/2/1988	SW8260	Vinyl chloride	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.01	
DMS-92	5/2/1988	SW8260	Vinyl chloride	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.01	
DMS-93	5/2/1988	SW8260	Vinyl chloride	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.01	
DMS-97	5/3/1988	SW8260	Vinyl chloride	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.01	
DMS-99	5/5/1988	SW8260	Vinyl chloride	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.01	
DMS-102	5/9/1988	SW8260	Vinyl chloride	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.01	
DMS-104	5/9/1988	SW8260	Vinyl chloride	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.01	
DMS-105	5/9/1988	SW8260	Vinyl chloride	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.01	
DMS-84	4/26/1988	SW8260	Vinyl chloride	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.01	
DMS-87	4/28/1988	SW8260	Vinyl chloride	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.01	
DMS-95	5/3/1988	SW8260	Vinyl chloride	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.01	
DMS-101	5/5/1988	SW8260	Vinyl chloride	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.01	
DMW-14A	11/9/1986	SW8260	Vinyl chloride	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.01	
DMS-55	6/11/1985	SW8260	Vinyl chloride	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.01	

TABLE E-1

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DMS-57	6/11/1985	SW8260	Vinyl chloride	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.01		
DMS-61	6/18/1985	SW8260	Vinyl chloride	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.01		
DMS-59	6/10/1985	SW8260	Vinyl chloride	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.01		
DMS-60	6/10/1985	SW8260	Vinyl chloride	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.01		
DMS-53	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.01		
DMS-56	6/12/1985	SW8260	Vinyl chloride	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.01		
DMS-52	6/19/1985	SW8260	Vinyl chloride	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.01		
DMS-54	6/19/1985	SW8260	Vinyl chloride	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.01		
DMW-18A	11/9/1986	SW8260	Vinyl chloride	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.01		
DMW-14E	10/6/1988	SW8260	Vinyl chloride	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.01		
DMW-17A	11/3/1986	SW8260	Vinyl chloride	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01		
DMW-17A	11/3/1986	SW8260	Vinyl chloride	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.01		
DMS-61	6/18/1985	SW8260	Vinyl chloride	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.01		
DMS-54	6/19/1985	SW8260	Vinyl chloride	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.01		
DMS-90	4/28/1988	SW8260	Vinyl chloride	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.01		
DMS-96	5/3/1988	SW8260	Vinyl chloride	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.01		
DMW-16A	10/27/1986	SW8260	Vinyl chloride	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.01		
DMS-94	5/2/1988	SW8260	Vinyl chloride	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.01		
DMW-16B	10/22/1986	SW8260	Vinyl chloride	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.01		
DMW-16C	11/9/1986	SW8260	Vinyl chloride	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.01		
DMS-59	6/10/1985	SW8260	Xylenes, Total	NS1	DMS-59	SO	0	1	mg/Kg	ND	0	0.005		
DMS-60	6/10/1985	SW8260	Xylenes, Total	NS1	DMS-60	SO	0	1	mg/Kg	ND	0	0.005		
DMS-55	6/11/1985	SW8260	Xylenes, Total	NS1	DMS-55	SO	0	1	mg/Kg	ND	0	0.005		
DMS-53	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-53	SO	0	1	mg/Kg	ND	0	0.005		
DMS-56	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-56	SO	0	1	mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-58	SO	0	1	mg/Kg	ND	0	0.005		
DMS-61	6/18/1985	SW8260	Xylenes, Total	NS1	DMS-61	SO	0	1	mg/Kg	ND	0	0.005		
DMS-52	6/19/1985	SW8260	Xylenes, Total	NS1	DMS-52	SO	0	1	mg/Kg	ND	0	0.005		
DMS-54	6/19/1985	SW8260	Xylenes, Total	NS1	DMS-54	SO	0	1	mg/Kg	ND	0	0.005		
DMS-57	6/24/1985	SW8260	Xylenes, Total	NS1	DMS-57	SO	0	1	mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	Xylenes, Total	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005		
DMW-15A	11/8/1986	SW8260	Xylenes, Total	NS1	DMW-15A	SO	0	1	mg/Kg	ND	0	0.005		
DMS-89	4/28/1988	SW8260	Xylenes, Total	NS1	DMS-89	SO	0	1	mg/Kg	ND	0	0.005		
DMS-98	5/3/1988	SW8260	Xylenes, Total	NS1	DMS-98	SO	0	1	mg/Kg	ND	0	0.005		
DMS-100	5/5/1988	SW8260	Xylenes, Total	NS1	DMS-100	SO	0	1	mg/Kg	ND	0	0.005		
DMS-103	5/9/1988	SW8260	Xylenes, Total	NS1	DMS-103	SO	0	1	mg/Kg	ND	0	0.005		
DMS-58	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-58	SO	0	2	mg/Kg	=	0.0028	0.005	J	
DMS-82	4/25/1988	SW8260	Xylenes, Total	NS1	DMS-82	SO	0	2	mg/Kg	ND	0	0.005		
DMS-83	4/25/1988	SW8260	Xylenes, Total	NS1	DMS-83	SO	0	2	mg/Kg	ND	0	0.005		
DMS-85	4/26/1988	SW8260	Xylenes, Total	NS1	DMS-85	SO	0	2	mg/Kg	ND	0	0.005		
DMS-86	4/26/1988	SW8260	Xylenes, Total	NS1	DMS-86	SO	0	2	mg/Kg	ND	0	0.005		
DMS-88	4/28/1988	SW8260	Xylenes, Total	NS1	DMS-88	SO	0	2	mg/Kg	ND	0	0.005		
DMS-91	5/2/1988	SW8260	Xylenes, Total	NS1	DMS-91	SO	0	2	mg/Kg	ND	0	0.005		
DMS-92	5/2/1988	SW8260	Xylenes, Total	NS1	DMS-92	SO	0	2	mg/Kg	ND	0	0.005		
DMS-93	5/2/1988	SW8260	Xylenes, Total	NS1	DMS-93	SO	0	2	mg/Kg	ND	0	0.005		
DMS-97	5/3/1988	SW8260	Xylenes, Total	NS1	DMS-97	SO	0	2	mg/Kg	ND	0	0.005		
DMS-99	5/5/1988	SW8260	Xylenes, Total	NS1	DMS-99	SO	0	2	mg/Kg	ND	0	0.005		
DMS-102	5/9/1988	SW8260	Xylenes, Total	NS1	DMS-102	SO	0	2	mg/Kg	ND	0	0.005		

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DMS-104	5/9/1988	SW8260	Xylenes, Total	NS1	DMS-104	SO	0	2	mg/Kg	ND	0	0.005	
DMS-105	5/9/1988	SW8260	Xylenes, Total	NS1	DMS-105	SO	0	2	mg/Kg	ND	0	0.005	
DMS-84	4/26/1988	SW8260	Xylenes, Total	NS1	DMS-84	SO	0	4	mg/Kg	ND	0	0.005	
DMS-87	4/28/1988	SW8260	Xylenes, Total	NS1	DMS-87	SO	0	4	mg/Kg	ND	0	0.005	
DMS-95	5/3/1988	SW8260	Xylenes, Total	NS1	DMS-95	SO	0	4	mg/Kg	ND	0	0.005	
DMS-101	5/5/1988	SW8260	Xylenes, Total	NS1	DMS-101	SO	0	4	mg/Kg	ND	0	0.005	
DMW-14A	11/9/1986	SW8260	Xylenes, Total	NS1	DMW-14A	SO	0	5	mg/Kg	ND	0	0.005	
DMS-55	6/11/1985	SW8260	Xylenes, Total	NS1	DMS-55	SO	0	6	mg/Kg	ND	0	0.005	
DMS-57	6/11/1985	SW8260	Xylenes, Total	NS1	DMS-57	SO	0	6	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Xylenes, Total	NS1	DMS-61	SO	0	6	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW8260	Xylenes, Total	NS1	DMS-59	SO	0	8	mg/Kg	ND	0	0.005	
DMS-60	6/10/1985	SW8260	Xylenes, Total	NS1	DMS-60	SO	0	8	mg/Kg	ND	0	0.005	
DMS-53	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-53	SO	0	8	mg/Kg	ND	0	0.005	
DMS-56	6/12/1985	SW8260	Xylenes, Total	NS1	DMS-56	SO	0	8	mg/Kg	ND	0	0.005	
DMS-52	6/19/1985	SW8260	Xylenes, Total	NS1	DMS-52	SO	0	8	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Xylenes, Total	NS1	DMS-54	SO	0	10	mg/Kg	ND	0	0.005	
DMW-18A	11/9/1986	SW8260	Xylenes, Total	NS1	DMW-18A	SO	0	10	mg/Kg	ND	0	0.005	
DMW-14E	10/6/1988	SW8260	Xylenes, Total	NS1	DMW-14E	SO	0	10	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Xylenes, Total	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMW-17A	11/3/1986	SW8260	Xylenes, Total	NS1	DMW-17A	SO	0	15	mg/Kg	ND	0	0.005	
DMS-61	6/18/1985	SW8260	Xylenes, Total	NS1	DMS-61	SO	0	18	mg/Kg	ND	0	0.005	
DMS-54	6/19/1985	SW8260	Xylenes, Total	NS1	DMS-54	SO	0	18	mg/Kg	ND	0	0.005	
DMS-90	4/28/1988	SW8260	Xylenes, Total	NS1	DMS-90	SO	0	19	mg/Kg	ND	0	0.005	
DMS-96	5/3/1988	SW8260	Xylenes, Total	NS1	DMS-96	SO	0	19	mg/Kg	ND	0	0.005	
DMW-16A	10/27/1986	SW8260	Xylenes, Total	NS1	DMW-16A	SO	0	20	mg/Kg	ND	0	0.005	
DMS-94	5/2/1988	SW8260	Xylenes, Total	NS1	DMS-94	SO	0	24	mg/Kg	ND	0	0.005	
DMW-16B	10/22/1986	SW8260	Xylenes, Total	NS1	DMW-16B	SO	0	25	mg/Kg	ND	0	0.005	
DMW-16C	11/9/1986	SW8260	Xylenes, Total	NS1	DMW-16C	SO	0	56	mg/Kg	ND	0	0.005	
DMS-59	6/10/1985	SW6010	Zinc	NS1	DMS-59	SO	0	1	mg/Kg	=	15	2	
DMS-60	6/10/1985	SW6010	Zinc	NS1	DMS-60	SO	0	1	mg/Kg	=	11	2	
DMS-55	6/11/1985	SW6010	Zinc	NS1	DMS-55	SO	0	1	mg/Kg	=	9	2	
DMS-53	6/12/1985	SW6010	Zinc	NS1	DMS-53	SO	0	1	mg/Kg	=	7	2	
DMS-56	6/12/1985	SW6010	Zinc	NS1	DMS-56	SO	0	1	mg/Kg	=	19	2	
DMS-58	6/12/1985	SW6010	Zinc	NS1	DMS-58	SO	0	1	mg/Kg	=	11	2	
DMS-61	6/18/1985	SW6010	Zinc	NS1	DMS-61	SO	0	1	mg/Kg	=	7	2	
DMS-52	6/19/1985	SW6010	Zinc	NS1	DMS-52	SO	0	1	mg/Kg	=	13	2	
DMS-54	6/19/1985	SW6010	Zinc	NS1	DMS-54	SO	0	1	mg/Kg	=	17	2	
DMS-57	6/24/1985	SW6010	Zinc	NS1	DMS-57	SO	0	1	mg/Kg	=	10	2	
DMW-15A	11/8/1986	SW6010	Zinc	NS1	DMW-15A	SO	0	1	mg/Kg	=	12	2	
DMW-15A	11/8/1986	SW6010	Zinc	NS1	DMW-15A	SO	0	1	mg/Kg	=	12	2	
DMS-89	4/28/1988	SW6010	Zinc	NS1	DMS-89	SO	0	1	mg/Kg	=	35	2	
DMS-98	5/3/1988	SW6010	Zinc	NS1	DMS-98	SO	0	1	mg/Kg	=	12	2	
DMS-100	5/5/1988	SW6010	Zinc	NS1	DMS-100	SO	0	1	mg/Kg	=	12	2	E
DMS-103	5/9/1988	SW6010	Zinc	NS1	DMS-103	SO	0	1	mg/Kg	=	20	2	
DMS-58	6/12/1985	SW6010	Zinc	NS1	DMS-58	SO	0	2	mg/Kg	=	10	2	
DMS-82	4/25/1988	SW6010	Zinc	NS1	DMS-82	SO	0	2	mg/Kg	=	8.5	2	E
DMS-83	4/25/1988	SW6010	Zinc	NS1	DMS-83	SO	0	2	mg/Kg	=	11	2	E
DMS-85	4/26/1988	SW6010	Zinc	NS1	DMS-85	SO	0	2	mg/Kg	=	7.5	2	E

TABLE E-1

PRE-1992 SOIL DATA OPERABLE UNIT 1
Revised Human Health Baseline Risk Assessment
Defense Supply Center Richmond
Richmond, Virginia

DMS-86	4/26/1988	SW6010	Zinc	NS1	DMS-86	SO	0	2	mg/Kg	=	7.6	2	E
DMS-88	4/28/1988	SW6010	Zinc	NS1	DMS-88	SO	0	2	mg/Kg	=	15	2	
DMS-91	5/2/1988	SW6010	Zinc	NS1	DMS-91	SO	0	2	mg/Kg	=	13	2	
DMS-92	5/2/1988	SW6010	Zinc	NS1	DMS-92	SO	0	2	mg/Kg	=	16	2	
DMS-93	5/2/1988	SW6010	Zinc	NS1	DMS-93	SO	0	2	mg/Kg	=	14	2	
DMS-97	5/3/1988	SW6010	Zinc	NS1	DMS-97	SO	0	2	mg/Kg	=	15	2	
DMS-99	5/5/1988	SW6010	Zinc	NS1	DMS-99	SO	0	2	mg/Kg	=	14	2	
DMS-102	5/9/1988	SW6010	Zinc	NS1	DMS-102	SO	0	2	mg/Kg	=	21	2	
DMS-104	5/9/1988	SW6010	Zinc	NS1	DMS-104	SO	0	2	mg/Kg	=	12	2	
DMS-105	5/9/1988	SW6010	Zinc	NS1	DMS-105	SO	0	2	mg/Kg	=	19	2	
DMS-84	4/26/1988	SW6010	Zinc	NS1	DMS-84	SO	0	4	mg/Kg	=	5.3	2	E
DMS-87	4/28/1988	SW6010	Zinc	NS1	DMS-87	SO	0	4	mg/Kg	=	23	2	E
DMS-95	5/3/1988	SW6010	Zinc	NS1	DMS-95	SO	0	4	mg/Kg	=	10	2	E
DMS-101	5/5/1988	SW6010	Zinc	NS1	DMS-101	SO	0	4	mg/Kg	=	4.1	2	JQ
DMW-14A	11/9/1986	SW6010	Zinc	NS1	DMW-14A	SO	0	5	mg/Kg	=	7.8	2	
DMS-55	6/11/1985	SW6010	Zinc	NS1	DMS-55	SO	0	6	mg/Kg	=	4	2	
DMS-57	6/11/1985	SW6010	Zinc	NS1	DMS-57	SO	0	6	mg/Kg	=	8	2	
DMS-61	6/18/1985	SW6010	Zinc	NS1	DMS-61	SO	0	6	mg/Kg	=	6	2	
DMS-59	6/10/1985	SW6010	Zinc	NS1	DMS-59	SO	0	8	mg/Kg	=	20	2	
DMS-60	6/10/1985	SW6010	Zinc	NS1	DMS-60	SO	0	8	mg/Kg	=	10	2	
DMS-53	6/12/1985	SW6010	Zinc	NS1	DMS-53	SO	0	8	mg/Kg	=	9	2	
DMS-56	6/12/1985	SW6010	Zinc	NS1	DMS-56	SO	0	8	mg/Kg	=	11	2	
DMS-52	6/19/1985	SW6010	Zinc	NS1	DMS-52	SO	0	8	mg/Kg	=	4	2	
DMS-54	6/19/1985	SW6010	Zinc	NS1	DMS-54	SO	0	10	mg/Kg	=	3.8	2	
DMW-18A	11/9/1986	SW6010	Zinc	NS1	DMW-18A	SO	0	10	mg/Kg	=	4.7	2	
DMW-14E	10/6/1988	SW6010	Zinc	NS1	DMW-14E	SO	0	10	mg/Kg	=	29	2	E
DMW-17A	11/3/1986	SW6010	Zinc	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	2	
DMW-17A	11/3/1986	SW6010	Zinc	NS1	DMW-17A	SO	0	15	mg/Kg	=	5.9	2	
DMS-61	6/18/1985	SW6010	Zinc	NS1	DMS-61	SO	0	18	mg/Kg	=	9	2	
DMS-54	6/19/1985	SW6010	Zinc	NS1	DMS-54	SO	0	18	mg/Kg	=	6	2	
DMS-90	4/28/1988	SW6010	Zinc	NS1	DMS-90	SO	0	19	mg/Kg	=	35	2	
DMS-96	5/3/1988	SW6010	Zinc	NS1	DMS-96	SO	0	19	mg/Kg	=	11	2	
DMW-16A	10/27/1986	SW6010	Zinc	NS1	DMW-16A	SO	0	20	mg/Kg	=	4	2	
DMS-94	5/2/1988	SW6010	Zinc	NS1	DMS-94	SO	0	24	mg/Kg	=	22	2	
DMW-16B	10/22/1986	SW6010	Zinc	NS1	DMW-16B	SO	0	25	mg/Kg	=	36	2	
DMW-16C	11/9/1986	SW6010	Zinc	NS1	DMW-16C	SO	0	56	mg/Kg	=	40	2	

APPENDIX F
RAGS, PART D RISK SUMMARY TABLES

TABLE OF CONTENTS

TABLE F-1

RISK SUMMARY

Defense Supply Center Richmond

Operable Unit 1

Scenario Timeframe:	Current
Receptor Population:	Outdoor Industrial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
	Surface Soil	OU-1	PAHs										
			Benzo(a)anthracene	2E-06	5E-11	7E-06	-	9E-06		-	-	-	
			Benzo(a)pyrene	2E-05	5E-10	6E-05	-	8E-05		-	-	-	
			Dibenzo(a,h)anthracene	4E-06	9E-11	1E-05	-	2E-05		-	-	-	
			Metals										
			Arsenic	4E-05	2E-08	7E-06	-	4E-05		2E-01	-	1E-01	3E-01
			Chemical Total	6E-05	2E-08	9E-05		2E-04		2E-01		1E-01	3E-01
		Exposure Point Total						2E-04					3E-01
	Exposure Medium Total							2E-04					3E-01
Medium Total								2E-04					3E-01

NA - Target organ segregation not needed since total HI is less than 1.

Total Organ 1 HI Across All Media =	NA
Total Organ 2 HI Across All Media =	NA

TABLE F-2

RISK SUMMARY

Defense Supply Center Richmond

Operable Unit 1

Scenario Timeframe	Future
Receptor Population:	Outdoor Industrial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
	Subsurface Soil	OU-1	PAHs										
			Benzo(a)anthracene	2E-06	5E-11	2E-06	-	4E-06		-	-	-	
			Benzo(a)pyrene	2E-05	5E-10	2E-05	-	4E-05		-	-	-	
			Benzo(b)fluoranthene	2E-06	5E-11	2E-06	-	4E-06		-	-	-	
			Dibenzo(a,h)anthracene	4E-06	9E-11	4E-06	-	8E-06		-	-	-	
			Metals										
			Arsenic	3E-05	1E-08	6E-06	-	3E-05		2E-01	-	8E-02	3E-01
			Chemical Total	6E-05	1E-08	3E-05		9E-05		2E-01		8E-02	3E-01
		Exposure Point Total						9E-05					3E-01
	Exposure Medium Total							9E-05					3E-01
Medium Total								9E-05					3E-01

NA - Target organ segregation not needed since total HI is less than 1

Total Organ 1 HI Across All Media =	NA
Total Organ 2 HI Across All Media =	NA

TABLE F-3

RISK SUMMARY

Defense Supply Center Richmond

Operable Unit 1

Scenario Timeframe:	Future
Receptor Population:	Indoor Industrial Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
	Subsurface Soil	OU-1	PAHs										
			Benzo(b)fluoranthene	-	2E-09	-	-	2E-09		-	-	-	
			VOCs										
			Chloroform	-	2E-08	-	-	2E-08		-	4E-05	-	4E-05
			TCE	-	9E-08	-	-	9E-08		-	6E-05	-	6E-05
			Naphthalene	-	-	-	-	-		-	2E-01	-	2E-01
			Chemical Total		1E-07			1E-07			2E-01		2E-01
		Exposure Point Total						1E-07					2E-01
	Exposure Medium Total							1E-07					2E-01
Medium Total								1E-07					2E-01

NA - Target organ segregation not needed since total HI is less than 1.

Total Organ 1 HI Across All Media =	NA
Total Organ 2 HI Across All Media =	NA

TABLE F-4

RISK SUMMARY

Defense Supply Center Richmond

Operable Unit 1

Scenario Timeframe:	Future
Receptor Population:	Construction Worker
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
	Subsurface Soil	OU-1	Metals										
			Arsenic	2E-06	6E-08	2.E-07		2E-06	Skin, Vascular	6E-01	-	1E-01	8E-01
			Iron	-	-	-	-	-	GI Tract	2E-01	-	4E-02	3E-01
			Thallium	-	-	-	-	-	Liver	1E-01	-	3E-02	2E-01
			PAHs										
			Benzo(a)pyrene	2E-06	2E-09	6E-07	-	2E-06		-	-	-	
			Chemical Total	4E-06	6E-08	1E-06		5E-06		1E+00	0E+00	2E-01	1E+00
		Exposure Point Total						5E-06					1E+00
	Exposure Medium Total							5E-06					1E+00
Medium Total								5E-06					1E+00

Note: Target organ segregation conducted only for exposure media with hazard indices greater than 1. The uncertainty associated with this procedure is presented in the Uncertainty Section of the text.

5.5E-06

Total Skin HI Across All Media =	8E-01
Total Vascular HI Across All Media =	8E-01
Total Liver HI Across All Media =	2E-01
Total GI Tract HI Across All Media =	3E-01

APPENDIX G
COMMENT RESPONSE MATRIX

DOCUMENT RESPONSE TO COMMENT FORM	Date: 10 July 2006	Defense Supply Center Richmond Richmond, VA
To: Defense Supply Center Richmond (DSCR) Steve Edlavitch, Project Manager	From: U.S. EPA Region 3 Mr. Jack Potosnak, Remedial Project Manager Nancy Rios-Jafolla	
Document Title & Location: **TECHNICAL REVIEW OF THE REVISED HUMAN HEALTH BASELINE RISK ASSESSMENT OPERABLE UNIT 1 – OPEN STORAGE AREA DEFENSE SUPPLY CENTER RICHMOND, RICHMOND, VIRGINIA DATED 12 MAY 2006**	Contract No.: FA8903-04-D-8671 Task Order No.: 0016	Response Status: DSCR Response

Type of Action: *(Check appropriate boxes)*

- ☐ Draft Document
- ☒ Pre-Final Document
- ☐ Final Document
- ☐ Other _____
- ☐ Chemistry
- ☐ Geology/Hydrogeology
- ☐ Safety & Health
- ☐ Engineering
- ☒ Risk Assessment
- ☐ Other _____

Cmt. No.	Page No./ Section No.	EPA Comment:	DSCR Response:	EPA- Review Action & Date
1	Section 2.1.0.5. Page 2-2.	Since there are toxicity criteria available for alpha- and gamma-chlordane, they should be used in the risk assessment.	The most recent version of the EPA Region 3 RBC table (April 2006) does not provide a separate RBC or associated toxicity information for alpha- and gamma-chlordane. Additionally, no toxicity information for these two chlordane congeners have been identified in the Oak Ridge National Laboratory Risk Assessment Information System, the latest Minimal Risk Levels (December 2005) provided by the Agency for Toxic Substances and Disease Registry or the California Office of Environmental Health Hazard Assessment . Therefore, the toxicity information for chlordane will continue to be used for alpha-chlordane and gamma-chlordane.	
2	Section 2.2.1.1. Page 2-4.	Inside workers should also be evaluated for incidental ingestion, dermal and inhalation exposures to soils. The risks calculated for outside workers can be added to the risk for indoor workers and at least assess qualitatively in the risk assessment.	Exposure for indoor workers was purposely restricted to the inhalation of indoor VOCs during a complete day's work to maximize potential chemical intake from this exposure pathway. For an indoor worker to be significantly exposed to soils would require less time spent indoors and the same amount of time spent outdoors. Thus, the additional chemical intake that could occur from exposure to soils would be countered by the reduction of intake through the inhalation of indoor VOCs. The addition of intake from exposure to soil to that from indoor inhalation of VOCs is not appropriate since each is based on a complete work day; their addition essentially adds the two work days together creating an unlikely exposure setting. A clearer rationale for keeping the exposure for indoor workers and outdoor workers has been provided.	

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Cmt. No.	Page No./ Section No.	EPA Comment:	DSCR Response:	EPA- Review Action & Date
3	Section 2.2.2.2. Page 2-5.	The additional risks that will be calculated for the groundwater pathway should be added to the soil pathway when they become available. This will ascertain that the total risk at the site is taken into consideration.	DSCR agrees that the total risk at OU-1 could include exposure to groundwater, and such statements have been added to more clearly explain the relationship of groundwater, with its associated potential risks, to OU-1 and the estimated risks from exposure to chemicals in soil. The groundwater underlying OU-1 is a separate OU (OU-6) at DSCR, and its evaluation is separated from the evaluation of all other OUs. Groundwater is evaluated as a separate OU in order to streamline the assessment and potential delisting of surface OUs.	
4	Section 2.2.2.3. Page 2-6 and Section 3.1.0.4. Page 3-2.	Inhalation of VOCs in ambient air from soils should be evaluated in the risk assessment.	Few VOCs have been detected in subsurface soils and none have been detected in surface soils. This suggests that VOCs, if present in surface soil, are mostly volatilized such that chemical intake from exposure to VOCs in ambient air is minimal. Therefore, this exposure pathway will remain as insignificant and not evaluated at OU-1. The approved Human Health Baseline Risk Assessment work plan for DSCR (Mactec, 2005) specifically excludes this exposure pathway.	
5	Section 2.3.2.6. and 2.3.2.7. Page 2-9.	Note that the use of the paired T-test is not appropriate for background comparison, since the data set are not paired. Also, the use of the T-test for log-transformed data is no longer recommended, since the statistics are not valid when the data are back-transformed.	DSCR agrees that the data used for the statistical background comparisons are not paired. Background comparisons were made using the Student-t test where appropriate which was an unpaired t-test. The proper label for these tests has been included in the text and Tables 2-3, 2-4, 2-6, 2-7 and Tables ES-1 and ES-2. DSCR disagrees that the unpaired T-test is inappropriate for log-normally distributed populations. The log-transformation of data provides a simple method of direct comparison (via a T-test) of two log-normal populations. No population statistic such as the mean is taken form this comparison and back-transformed.	
6	Section 2.3.4. Page 2-11, Section 2.3.5. Page 2-12, Section 3.1.0.5. Page 3-2 and Appendices A and C, Table A-3.	Patricia Flores-Brown should review the indoor /outdoor worker exposure concentration air modeling results that were used in the risk assessment. Also, Patricia may want to comment on the summa canister data that were used in the risk assessment to ascertain that the data are adequate for this site.	Upon receipt, DSCR will respond to Ms. Flores-Brown's comments.	

☒ Continued on Next Page ☐ End of Comments

Cmt. No.	Page No./ Section No.	EPA Comment:	DSCR Response:	EPA- Review Action & Date
7	Section 3.1.0.2. Page 3-1.	Note that the ProUCL can calculate UCLs for n>5. Please explain why there is deviation from the guidance.	Because of the uncertainty associated with small sample sizes, the selection of 11 minimum detections was chosen to reduce bias associated with smaller data sets and is based, in part, on the EPA 1992 guidance Calculating the Concentration Term (OSWER Publication 9285.7-08I) in which data sets with fewer than 10 results is stated as providing a poor estimate of the mean concentration. The guidance states that for data sets of 10 – 20 samples, estimates of the mean are only somewhat better, and that only when there are greater than 20 samples are estimates close to the true mean. Uncertainty also increases as the number of non-detected results increase. ProUCL makes no evaluation of non-detected results; professional judgment is needed in selecting the minimum number of detections to run ProUCL with minimal influence of non-detected results. The choice of 11 detections is a compromise between having sufficient number of samples to accurately estimate a mean value and minimizing the number of non-detections that would otherwise bias the statistic. A clearer rationale for the choice of 11 minimum detections has been added.	
8	Section 4.2.0.5. Page 4-4.	Again, note that EPA Region 3 recommends that the higher slope factor for TCE be used in the risk assessment while the mid-range TCE slope factor can be used in the uncertainty analysis.	Previous explanation during the approval of the Human Health Baseline Risk Assessment Work Plan (Mactec, 2005) specified that the most conservative slope factor is to be used during selection of the COPCs and the mid-point of the range for risk calculations. The use of the mid-point slope factor is consistent with the formulation of long-term remediation goals and has had prior EPA acceptance. The uncertainty associated with the mid-point value in risk estimates is included in the report.	
9	Section 6.1.0.12. Page 6-3.	It is difficult to make any qualitative statements regarding the 1992 data that were omitted from the risk assessment because of uncertainty associated with the quality of the data. Therefore, it appears that there is a data gap and that further sampling of the drum recoupment and storage areas at OU-1 without sampling coverage should be considered further.	The risk assessment for OU-1 was conducted per the approved Work Plan, which specifies no pre-1992 data in the quantitation of risk. The preferred approach is to keep these data sets separate per EPA 1992 Data Usability Guidance. Though the pre-1992 data does not meet the same usability requirements as subsequent data, the pre-1992 data set is not without utility. The qualitative assessment was included to determine the likelihood whether the exclusion of the data from the quantitative evaluation has any real significance in the overall risk at the site. While the omission of pre-1992 data resulted in less coverage of soils samples, the qualitative assessment suggests that risks were not likely compromised by this omission. With the qualitative assessment of pre-1992 data, no significant gap in data is present and further sampling of additional areas of OU-1 is unwarranted.	

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Cmt. No.	Page No./ Section No.	EPA Comment:	DSCR Response:	EPA- Review Action & Date
10	Table 4-1.	Note that RAGS-E does not recommend adjustment in the toxicity criteria for the dermal route based on GI absorption for arsenic, PAHs and volatiles such as chloroform and TCE.	EPA RAGS E Guidance suggests that no adjustment be conducted for chemicals with GI absorption efficiencies of 50% or greater. The adjustment of the dermal toxicities of these chemicals was conducted because the values for GI absorption for all of the listed chemicals (less than 50 %) was taken from the Oak Ridge National Laboratory Risk Assessment Information System. Values of GI absorption, as recommended from RAGS Part E, have been incorporated into the risk assessment. Because the values for these chemicals all exceed 50%, dermal toxicity values have not been adjusted. The uncertainty associated with various values of GI absorption is discussed in the uncertainty section.	

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DOCUMENT RESPONSE TO COMMENT FORM	Date: 30 October 2006	Defense Supply Center Richmond Richmond, VA
To: Defense Supply Center Richmond (DSCR) Steve Edlavitch, Project Manager	From: U.S. EPA Region 3 Mr. Jack Potosnak, Remedial Project Manager Nancy Rios-Jafolla; Patricia Flores-Brown	
Document Title & Location: **TECHNICAL REVIEW OF THE DRAFT FINAL REVISED HUMAN HEALTH BASELINE RISK ASSESSMENT OPERABLE UNIT 1 – OPEN STORAGE AREA DEFENSE SUPPLY CENTER RICHMOND, RICHMOND, VIRGINIA DATED MAY 2006**	Contract No.: FA8903-04-D-8671 Task Order No.: 0016	Response Status: DSCR Response

Type of Action: *(Check appropriate boxes)*

- ☐ Draft Document
- ☒ Pre-Final Document
- ☐ Final Document
- ☐ Other _____
- ☐ Chemistry
- ☐ Geology/Hydrogeology
- ☐ Safety & Health
- ☐ Engineering
- ☒ Risk Assessment
- ☐ Other _____

Cmt. No.	Page No./ Section No.	EPA Comment (Nancy Rios-Jafolla) on RTC via email August 11, 2006:	DSCR Response:	EPA- Review Action & Date
1	1. Page 1, Response 2.	Incidental ingestion to office workers is always considered for indoor workers, since they are assumed to track contaminated soil in the office from the outside.	The risk to the indoor worker from incidental ingestion of chemicals in soil was considered insignificant and excluded from the quantitation of risks for the following reasons: a) Any soil adhered to shoes or clothing would likely be a combination of soils between the home residence and the site, and not restricted to site-related soils; b) Walkways into existing buildings are over an improved surface such as concrete or asphalt, which limits the opportunity for site-related soils to adhere to clothing; c) Entrances into work buildings include mats for wiping soles of shoes, which limit the amount of soil that adheres to shoes. Any quantitation of the additional risk associated with the incidental ingestion of site-related soils is fraught with too much uncertainty to be included in the risk estimates that are presented in the main text for the indoor worker; however, the potential underestimation of risk due to this omission will be presented in the Uncertainty Section. The degree of this underestimation will assume the worse-case scenario, namely, that the additional intake from incidental ingestion could be as high as that for the outdoor worker.	

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Cmt. No.	Page No./ Section No.	EPA Comment:	DSCR Response:	EPA- Review Action & Date
2	Page 2, Response 4.	The soil-to-air screening results should be provided as justification that the soil-to-air route is insignificant.	The soil-to-air screening results have now been included in the report as an appendix to provide justification that the exposure pathway is insignificant.	
3.	Page 2, Response 5.	EPA disagrees. Further consultation with a Vegas statistician is recommended.	As stated in the recent EPA guidance document Data Quality Assessment: Statistical Methods for Practitioners, EPA QA/G-9S (EPA 2006), two-sample t-tests compare mean concentrations of two sample populations to determine whether they are statistically distinct. The two methods used for this comparison are the Student's Two-Sample t-Test and the Satterthwaite's Two-Sample t-Test. The Student's t-Test assumes the data variability (as measured by the variance) of the two samples are similar or equal, while the Satterthwaite's t-Test assumes the data variances are unequal. Applied to the situation at OU1, a two sample t-test helps to determine whether the mean chemical concentration from site soil is statistically higher than the mean concentration in background soil. This was correctly applied to data at OU-1, but was improperly labeled as a paired t-test. The term has been replaced with "two sample t-test". These two-sample t-tests assume the data are normally distributed. At OU-1, the data distributions for several chemicals in both the site data and background data were lognormally distributed. The guidance (EPA 2006) also states that the logarithmic transformation of the data that are lognormally distributed is permissible in order to apply "normal-theory procedures" (p. 128, EPA 2006). The log-transformation was used at OU-1 only to test for differences in mean concentrations; no statistical measure of central position such as the mean or median value was derived and back-transformed.	

4	Page 3. Response 7.	The current PRoUCL Version 3 takes into account both sample number (as few as 5), standard deviation and data distribution and calculates both parametric and nonparametric UCLs. Also, a newer version of PRoUCL (not yet available) will take censored data into account.	All data sets at OU-1 have at least 15 samples. The use of 11 detections at a minimum for using ProUCL was based on professional judgment and was a compromise between small data sets for which mean concentrations cannot be accurately estimated and data sets with high number of non-detected results. Until the time when a newer version of ProUCL can take into account censored data, ProUCL Version 3 will be applied to all chemicals (retained after the original risk screening) having a frequency of non-detection of less than or equal to 15 percent. For all other chemicals having a frequency of non-detection greater than 15 percent, no upper confidence limit (UCL) of the mean will be calculated and the maximum detected concentration will be used as the exposure point concentration.	
5	Page 3, Response 8.	It was previously agreed that the higher slope factor will be used in the risk assessment and the mid-point slope factor will be used in the uncertainty section in order to provide the range of possible risk values.	The higher slope factor for TCE has been incorporated into the risk estimates at OU-1, and the uncertainty associated with its use is included in the Uncertainty Section.	
6	Page 3, Response 9.	There is still uncertainty related to data gap due to insufficient samples collected at the site that meet the QA/QC requirements. The 1992 data is not of sufficient quality to fill in the data gap which is why as indicated in the response here not used in the risk assessment.	The uncertainty related to exclusion of the pre-1992 data is discussed in the uncertainty section. Exclusion of the 1992 data does not impact COCs or the risk estimates to any significant degree. In addition, a qualitative assessment of the pre-1992 data was conducted in this revised HHBRA. This assessment indicated that the post-1992 data set appropriately represents the COCs and in all likelihood adequately characterizes the risk associated with exposure at OU-1. Risk managers for this site (DSCR, US EPA, VDEQ) have reviewed the site data and the uncertainties and have determined that: • The site remains and will continue to remain an access-restricted industrial fenced area with no significant change in site use; • The current remedy continues to be protective (1997 and 2002 five-year reviews); • Potential leaching to ground water and potential vapor intrusion is addressed in this revised HHBRA; and • This remedy will continue to be protective in the future.	

☐ Continued on Next Page ☒ End of Comments

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE